Psych 2270, Developmental: Infant, Child Adolescent or Psych 2272, Developmental: Adulthood \& Aging

Finally, at least three other courses totaling a minimum of nine credit hours must be taken at the 3000-4000 level. Note: Students must satisfy the current University mathematical skills requirement before taking Psych 2201, Psychological Statistics. Psych 2201 is a prerequisite for Psych 2219, and hence, Psych 2201 must be completed with a grade of C - or higher prior to enrollment in Psych 2219.

Also, multiple enrollments in Psych 3390, Directed Studies, count as no more than one advanced course. No more than six hours of independent study courses (Psych 3295, Selected Projects in Field Placement; and Psych 3390 , Directed Studies) may be counted toward the 31 hour minimum needed for graduation.

## Graduate School Preparation

In addition to the required courses listed above, students interested in applying to graduate school in Psychology are strongly encouraged to become involved in a research project with a psychology faculty member by enrolling in Psych 3390, Directed Studies. These positions are available on a limited and competitive basis.

Students who plan to apply to graduate school in clinical psychology, counseling, or social work should also enroll in Psych 3295, Field Placement, to gain experience in a "helping role" before apply to graduate programs in one of the human services professions.

## Graduate Programs in Depth

## Admission Requirements

In addition to meeting the general admission requirements of the Graduate School, applicants should have completed undergraduate courses in general psychology, psychological statistics, and research methods. Each doctoral program has additional admission requirements specific to the program.

## Applications:

Each program has independent deadlines for completed applications. They are as follows:

## M.A. in General Psychology--February 1

## Ph.D. in Psychology:

Clinical Psychology--January 15
Industrial/Organizational Psychology--February I
Experimental Psychology--February 1

## Teaching Assistantships

Stipends for teaching and research assistantships are available for the doctoral programs only.

Description of Master of Arts in Psychology
The psychology department at the University of MissouriSt. Louis devotes most of its graduate level training to its three doctoral programs. However, the department does offer a flexible program of studies leading to the Master of Arts degree in general psychology. Only a few students are admitted to this program each year. Course work is possible, depending on student demand and course availability in Behavioral Neuroscience and in Industrial/Organizational Psychology. The M.A. degree does not constitute a license to practice in Missouri or elsewhere as a professional psychologist. The M.A. program does not offer course work in Counseling or Clinical Psychology.

There is no thesis or language requirement. Part-time or full-time enrollment is permissible. The M.A. degree is a terminal degree and is separate from the $\mathrm{Ph} . \mathrm{D}$. program in Psychology.

The M.A. in Psychology requires a total of 32 semester hours of course work in Behavioral neuroscience or 45 semester hours of course work in Industrial/Organizational Psychology, depending on the option chosen. Before applying for admission to the Masters Program, interested applicants are encouraged to discuss their interest with either the Director of the Behavioral Neuroscience program or the Director of the Industrial/Organizational Psychology program.

All students in the masters program must take the following set of quantitative courses:

7421, Quantitative Methods I
7422, Quantitative Methods II

Elective courses will constitute the remaining hours needed for the degree. All programs of study for M.A. students require the approval of a member of the departmental M.A. advisory committee.

## Description of Ph.D. Programs/Options

There are three distinct programs: Clinical Psychology, Behavioral Neuroscience, and Industrial/Organizational Psychology. Each has its own specific curricular and research requirements. Handouts describing these requirements are available from the department on request. The following briefly describes each program.

## Clinical Psychology

The Clinical Psychology program has been fully accredited by the American Psychological Association since 1977 and is patterned upon the scientist-practitioner model of clinical training. The Clinical Psychology program requires five years of full-time study. Students are not considered for admission on a part-time basis. Through the medium of courses, practicum, and research experiences, this emphasis area prepares clinical psychologists for careers in research, teaching, and clinical practice.

Students in the Clinical Psychology program participate for three years in the Psychology Department's Community Psychological Service. This facility provides psychological services to the public and consultation to outside agencies. Students also receive clinical experience in clerkships and during a full-time year-long internship. Research requirements include an initial independent research project, a major critical review of research in a specialty area, and a dissertation.

## Behavioral Neuroscience

The Behavioral Neuroscience program provides opportunities for study, research, and training in various areas including psychophysiology, psychopharmacology, neuroendocrinology, cognitive neuroscience, and neuropsychology. This program prepares students for research careers in academia or industry, such as pharmaceutical firms and medical schools. Full-time enrollment is encouraged, although part-time enrollment is possible.

## Industrial/Organizational Psychology

The industrial/organizational psychology program is offered in cooperation with selected faculty from the College of Business to prepare students for careers in industry or academia. This emphasis provides "industrial" training in areas such as personnel selection, training, and test development/validation, as well as "organizational" training in areas such as work motivation, leadership, and group processes. Research and other training experiences in various settings are also incorporated.

## Graduate Certificate Programs

## Clinical Psychology Respecialization-Advanced Graduate Certificate Program

This program is designed for graduates of accredited doctoral programs in psychology who wish to receive training in the specialty field of clinical psychology. Respecialization students are trained within the context of the UM-St. Louis Clinical Psychology Doctoral Program, which is accredited by the American Psychological Association. The program provides an integrated sequence of training experiences, including didactic course work and practicum placements. Core graduate-level psychology educational requirements not completed elsewhere are included in the respecialization student's course of study.

## Graduate Certificate in Trauma Studies

The graduate certificate is awarded upon the completion of 18 credit hours of coursework on the topic of trauma studies. No more than nine hours of graduate level independent research or fieldwork may be used for the certificate. The coursework for the certificate must be taken in at least two departments and may include no more than three hours at the undergraduate 3000 or 4000 level.

## Course Descriptions

Students who have earned 24 or more semester hours of credit at any accredited post-secondary institutions(s) before the start of the fall 2002 semester must meet the general education requirements stipulated in the UM-St Louis 2001-2002 Bulletin. The following courses fulfill the Social Sciences and in that Bulletin: 1003, 1268, 2102, $2140,2160,2161,2200,2201,2211,2212,2216,2219$, $2222,2225,2230,2232,2245,2256,2270,2272,3205$, $3302,3316,3317,3318,3320,3340,3345,3346,42: 5$, $4300,4305,4306,4307,4308,4310,4311,4312,43: 4$, $4330,4349,4356,4357,4361,4365,4373,4374,43^{\prime} 5$, $4376,4380,4392,4398$.

## 1000 Careers in Psychology (1)

This course is an orientation to the field of psychology for majors and for students who are considering declaring the major. Students will be engaged in activities that wil help them to develop and identify their professional goals, learn about the various specialties and careers available w.thin the field of psychology, understand the education an 1 skills necessary for various careers, learn the requirements for a psychology major, become familiar with minors that are available at UMSL, encourage them to think about a possible choice of minor, and acquaint them with so ne of the UMSL Psychology faculty and specialties.

## 1003 General Psychology (3) [SS]

A broad introductory survey of the general principles of human behavior.

## 1268 Human Growth and Behavior (3) [SS]

Prerequisite: Psych 1003. A survey course, designed for non-majors, of development over the lifespan, with in emphasis on the developmental tasks and hazards of each age period. Majors in psychology and students plaming to pursue a career in psychology research, teaching, or practice are strongly encouraged to take Psych 227C and/or Psych 2272 instead of this course.

## 2140 Female Sexuality (3)

Same as WGS 2140. Prerequisites: Psych 1003, or 13io 1012 , or its equivalent. This course will present a biological-psychological orientation toward the study of female sexuality. Topics include: sexual anatomy, hormonal influences on sexual behavior, psychosexual development, sexual attraction and relationships, sexual response and dysfunction, menstruation, pregnancy. menopause, reproductive health issues, and social i:sues in sexuality.

## 2160 Social Psychology (3)

Same as Sociol 2160. Prerequisite: Psych 1003 or Sociol 1010. Study of interaction between individuals and their social environment. Examination of basic principle; concepts, and methods.

2161 Helping Relationships (3)
Prerequisites: Psych 1003 and consent of instructor. Exploration of the basic elements contributing to effective helping skills. Course assignments include keeping a journal, writing papers, and a final exam. Readings, discussion, and guided experiences will be used to instill active listening and communication skills. Ethics of helping relationships will be emphasized.

2170 Aging in America: Concepts and Controversies (3) Same as Geron 2170, ID 2170, Social Welfare 2170, and Sociology 2170. This course examines the major theoretical and service issues connected to the study of older adults and their families, using multidisciplinary perspectives. Students are provided with an introduction to the field of aging through an examination of current social issues and controversies. This course emphasizes student involvement through class discussion, and is appropriate for students in the arts and sciences, business, communication, education, and nursing.

## 2200 Drugs and Behavior (3)

Prerequisites: Psych 1003 and three other hours in psychology or biology. The course is designed to provide an introduction to the relationship between drugs and behavior. The emphasis will be on psychoactive drugs, alcohol, nicotine, as well as drug-like substances produced naturally in the body.

## 2201 Psychological Statistics (4)

(With Laboratory) Prerequisites: Psych 1003 and satisfaction of the university's mathematical skills requirement. Statistical methods in psychological measurement and analysis of psychological data. Frequency distribution analysis, sampling, test of significance, and correlation methods.

2205 Human Sexuality: Psychological Perspectives (3) Prerequisites: Psychology 1003: General Psychology This course is a comprehensive overview of human sexuality from the standpoint of the behavioral science of psychology. This course includes a study of sexual physiology and anatomy, sex differences, sexual orientation, interpersonal and intrapersonal aspects of human sexuality, classification and treatment of sexual dysfunction and sexual disorders, and the methods employed for the scientific examination of human sexual behavior.

2211 Introduction to Biological Psychology (3) Prerequisites: Psych 1003, Biol 1012 and 3 additional hours in Psychology or Biol. A fundamental course designed to introduce psychology students to the new findings for the biological bases of human behavior.

## 2212 Principles of Learning (3)

Prerequisite: Psych 1003. A consideration of critical findings in learning.

## 2216 Personality Theory (3)

Prerequisite: Six hours of psychology. Structural and dynamic aspects of the human personality considered in the context of selected theoretical systems.

## 2219 Research Methods (3)

(With laboratory.) Prerequisite: Psych 2201. Research methods and analysis techniques used in psychological inquiry. Special emphasis placed on the logic of research design. Includes laboratory study of, and analysis of, selected methods.

## 2222 Group Processes in Organizations (3)

Prerequisite: Psych 1003or BA 3600. Topics include theory, research, and practice in coordination, conflict, and decision making in groups and organizations, as well as the role of influence, power, and leadership effectiveness in understanding interpersonal and group relations.

## 2225 Behavior Modification (3)

Prerequisite: Nine hours of psychology or consent of instructor. Methods, applications, and ethics of the use of behavior theory (primarily Skinner's operant conditioning) to the control of human behavior in a variety of settings including mental institutions, grade schools, universities, individual treatment, and communal living.

## 2230 Psychology of Women (3)

Same as WGS 2230. Prerequisite: Psych 1003. Evaluation of psychological theories and research regarding physiological, cognitive, and personality sex differences, female problems in adjustment, and clinical interventions for women.

## 2232 Psychology of Victims (3)

Same as WGS 2232. Prerequisite: Psych 1003. A review of the effects of crime, violence, natural disasters, and other traumas on psychological functioning with attention to the relationship between gender and victimization. Prevention and therapy techniques will also be discussed.

## 2245 Abnormal Psychology (3)

Prerequisite: Psych 1003. Introduction to major symptom complexes, theories of etiology, and treatment of behavior disorders.

## 2270 Developmental Psychology: Infancy, Childhood \&

 Adolescence (3)Prerequisite: Psych 1003. The theory and research surrounding cognitive, social, emotional, and physical development from conception through adolescence. Intended for students with career interests in the study, education, and/or treatment of children.

## 2272 Developmental Psychology: Adulthood and Aging

(3)

Same as Ger 4280. Prerequisite: Psych 1003. Personality, social, and physiological development from the onset of early adulthood through maturity and old age.

2280 Psychology of Death and Dying (3)
Same as Ger 2280. Prerequisites: Psych 1003. A beginning exploration of end-of-life issues.

## 3256 Environmental Psychology (3)

Prerequisite: Psych 2160 or Sociol 2160. Analysis of environmental influences on behavior and man's influence, in turn, on the environment. Topics will include a consideration of both individual processes relating to the environment (such as the perception, evaluation, and adaptation to the environment) and social processes relating to the environment (such as privacy, territoriality, and crowding).

## 3295 Selected Projects in Field Placement (3)

Prerequisites: Junior standing, fifteen hours of psychology, and departmental approval. Selected options in field work placement experiences in various local agencies with training and supervision by faculty. May be repeated once for credit.

## 3302 Computers in Psychology (3)

Prerequisites: Nine hours of psychology including Psych 2201 and junior or senior standing. The course is organized around computer applications in the behavioral sciences for the Macintosh machine. The goals for the course include familiarization with (1) MAC environment to prepare the student for the explosion of computer applications now and in the future, (2) the hardware and software products available for the working psychologist, and (3) the software programs of choice in the field through hands-on, individual use of the MAC. Some modest level of computer (MAC, PC, or mainframe) experience is recommended.

## 3316 Fundamentals of Leadership (3)

Prerequisites: 9 hours of Psychology or consent of instructor. This course addresses concepts and methods for developing leadership skills in work and everyday settings. Contemporary approaches to leadership development are reviewed in relation to psychological and organizational theory. This course is designed to be relevant to the wide range of leadership opportunities that arise in work and daily life. Experiential exercises are used to help students discover and develop new leadership skills.

3317 Social Psychology of Conflict and Negotiation (3) Same as Soc 3317. Prerequisite: nine hours of psychology or nine (9) hours of sociology, including Psych 2160 or Soc 2160. The purpose of this course is to understand how social psychological phenomena affect the processes and outcomes of negotiation and other forms of social conflict. The course is designed to be relevant to the broad spectrum of conflict situations people face in their work and daily lives. A basic premise of this course is that while analytical skills are needed to discover solutions to social
problems, negotiation skills are needed in order for these solutions to be accepted and implemented.

## 3318 Industrial and Organizational Psychology (3)

Same as BA 3623. Prerequisites: Psych 2201 or BA 3600. This course introduces the student to psychological research and theories pertaining to human behavior in the work setting. Topics covered include: selection, performance appraisal, training, leadership, motivation, job satisfaction, and organizational design.

## 3320 Personnel Assessment (3)

Prerequisite: Psych 3318 or BA 3621. This course will provide an in-depth study of several topics in the area of personnel psychology. Consideration will be given $n$ ) issues such as assessment centers, employment interviewing, personnel appraisal, employment test validity, and legal issues relevant to personnel assessment.

## 3340 Clinical Problems of Childhood (3)

Prerequisites: A total of twelve hours of psychology including Psych 1003 and Psych 2270. This course will address the clinical disorders and difficulties of children and the treatment of these disorders. Topics that wil be addressed include autism, childhood schizophrenia, behavior disorders, drug abuse, euresis, encopresis, and childhood co-compulsive and phobic reactions. Treatments designed for specific use with children, including behavioral, drug, and community mental health approaches will be addressed.

## 3345 Lesbian Psychology (3)

Same as WGS 3345. Prerequisites: Junior standing, 9 hours of psychology or consent of instructor. Explores psychological, social, cultural, and historical aspect: of lesbianism. Topics include development of lesbian identity historically and individually, causes of sexual orientation, coming out, relationships and friendship, sexuality, roles, prejudice and discrimination, race and class, legal and economic issues, politics and feminism, health, and community.

## 3346 Introduction to Clinical Psychology (3)

 Prerequisites: Nine hours of Psychology, including Psych 2216 or Psych 2245. A conceptual framework for research, description, and understanding of clinical phenomena. Assessment, interviewing, the clinical use of tests, and psychological approaches to treatment.
## 3390 Directed Studies (1-5)

Prerequisite: Consent of instructor. Directed reading and research. May be repeated for a maximum total of ten hours.

## 4235 Community Psychology (3)

Prerequisite: Psych 1003. The analysis of psychological problems in terms of the social and situational forces that produce them. Community psychology analyzes the:
situational problems in living. Epidemiology of mental illness; group, family, and crisis intervention; mental health-care delivery; program evaluation and demonstration project research; role of psychologist as consultant and change agent; and utilization of nonprofessional manpower

## 4300 Introduction to Psychopharmacology: Drugs and Mental Illness (3)

Prerequisites: Psych 2211 or Psych 2200, and Psych 2240. The course is designed to provide an introduction to drugs used to treat anxiety disorders, major depression, schizophrenia, and other psychopathologies. The emphasis will be on understanding neural mechanisms related to psychological disorders and to the effectiveness of current drug treatments.

4301 Advanced Statistics and Experimental Design (3) Prerequisites: Twelve hours of psychology, including Psych 2201. Statistical methods which are particularly useful in psychological research and the design of experiments appropriate to these methods.

## 4305 Cognitive Development (3)

Prerequisites: Junior standing and Psych 2270, or consent of instructor. Data and theory concerned with how children's thinking changes over time. Discussion will include domain-general versus domain-specific theories, social and cultural influences on cognition, gains in memory, attention, problem solving, and metacognition, conceptual development, children's naïve theories, schooling, and various definitions and measures of intelligence.

## 4306 Social Development (3)

Prerequisites: Junior standing and Psych 2270, or consent of instructor. Data and theory concerned with social behavior in infants, preschoolers, and school-aged children. Discussion will include emotional regulation, measurement and nature of temperament, formation and maintenance of attachment relationships, sex-role development, theories of aggression and the effects of socializing agents such as family, peers, media, and culture on development.

## 4307 Psychology of Oppression (3)

Prerequisite: Nine (9) hours of psychology. Surveys the concept of oppression and psychology's contribution to an understanding of this human reality. Definitions and the assumptions, liabilities, and contributions of specific theories of oppression are considered. Finally, the course examines the psychological and mental health consequences of the individual's experience of oppression.

## 4308 African American Psychology (3)

Prerequisites: 9 hours of Psychology or 6 hours of Black Studies minor, or consent of instructor. Provides an overview of the emergence of contemporary African American Psychology. It explores the implications of a
psychological perspective specific to African Americans. Traditional research theories are explored from a historical perspective. African American identity, socialization, personality, cognitive development, and mental health are discussed. Contemporary issues which impact African American behaviors and attitudes are also addressed.

## 4310 Motivation Theory (3)

Prerequisites: Junior standing and twelve hours of Psychology, or consent of instructor. Survey of current theoretical material in the area of motivation.

## 4311 Psychology of Nonverbal Behavior (3)

Prerequisite: Psych 2160 or Sociol 2160. Psychological perspective on the role of nonverbal behavior in social settings. Primary concerns of the course will include an analysis of a) functions of nonverbal behavior (e.g., communication, intimacy exchange, control), b) factors influencing nonverbal expression (e.g., culture, personality, relationships), and c) various theoretical views on nonverbal behavior and communication. Applications to various problems and settings in everyday life will also be pursued.

## 4312 Social Cognition (3)

Prerequisites: Psych 2160 or Soc 2160 . Research and theory on the role of cognitive processes in social behavior. Topics include attitudes and attitude change, social inference, schemas, and cognitive links to behavior and affect.

## 4314 Behavioral Neuroscience (3)

Prerequisites: 9 hours of Psych and/or Biology: Psych 2211 is recommended but not required. A neuroscience course focusing on behavioral outcomes of brain function and dysfunction. Emphasis will be on modern research methods with animal models and humans. Topics discussed will include the classic findings in the field, but the emphasis will be on recent findings from human neuropsychology, neuroimaging, cognitive neuroscience, neuropharmacology and neuroendocrinology.

## 4330 Hormones, the Brain and Behavior (3)

Prerequisites: 9 hours of Psychology or Biology, including at least one of the following: either Psych. 2200, Psych. 2211 , Psych. 4300 or Psych 4314 or permission of instructor. Can be taken for graduate credit. It is now clear that the endocrine system influences a notable range of reproductive and non-reproductive behaviors including mood, stress responses, cognition, memory, violence, attachment, aging, weight control and athletic prowess. Emphasis of the class is on hormonal contribution to reproductive and non-reproductive behaviors and sex steroids influences on the brain from prenatal life to old age as well as their contribution to gender behavioral differences.

## 4349 Human Learning and Memory (3)

Prerequisites: Nine hours of psychology or consent of instructor. A survey of contemporary research, theory, and facts pertaining to the acquisition, retention, and forgetting of information.

## 4356 Thinking and Cognition (3)

Prerequisites: Nine hours of psychology or consent of instructor. An introduction to modern analytical approaches to the psychology of thinking: problem solving, reasoning, categorizing, judgment, attention, and consciousness. Particular attention is paid to the mental structures and operations involved in the encoding, abstraction, representation, transformation, and retrieval of knowledge.

## 4357 Psychology of Learning (3)

(With laboratory.) Prerequisite: Psych 2219. Major theoretical positions and experimental conditions of leaming. Includes laboratory study of selected problems.

## 4361 History and Systems of Psychology (3)

Prerequisites: At least fifteen hours of psychology. The course should be taken no sooner than the winter term of the junior year. Historical antecedents of contemporary psychology, including a survey of systems and schools of psychology.

## 4365 Psychological Tests and Measurements (3)

Prerequisites: Psych 2201 and Psych 2219, or consent of instructor. Survey of psychological tests and principles of reliability, validity, test construction, and test evaluation.

## 4373 Psychology of Aging (3)

Same as Ger 4373. Prerequisite: Nine hours of psychology or consent of instructor. This course focuses on the developmental changes associated with aging including sensation, memory, emotions, and attitudes.

## 4374 Introduction to Clinical NeuroPsychology (3)

Prerequisite: Nine hours of psychology. A survey of neuropsychological findings concerning relationships between brain and behavior. Topics will include brain function, neuroanatomy, neurological syndromes, and methods of neuropsychological assessment.

4375 The Social Psychology of Disabilities (3) Prerequisite: Sociol 2160 or Psych 2160 or consent of instructor. Same as Sociol 4375. A social psychological and micro-sociological examination of attitudes and behaviors affecting persons with disabilities. Topics include stigma and empowerment, adaptive behaviors, stereotypes and prejudices, and images of disabilities in popular culture and mythology. The course will address the experience of disability and its social consequences for the lives of persons with disabilities.

4376 Mental Health and Aging (3)
Prerequisites: 9 hours of psychology, graduate standing, or consent of instructor. (Same as Ger 4376 and SW 4376). (MSW students normally take all foundat on courses prior to enrolling in this course.) A survey of recent theory and research in mental health issues for older populations. The primary focus is on major psycholo zical disorders prevalent among the elderly and on treatment approaches for elders.

4380 Psychology of Death, Dying, and End-of-Life Concerns (3)
Prerequisite: Nine hours of psychology. Same as Ge : 4380. This course will address the psychological aspects of and current research on, a variety of end-of-life issues, including death attitudes, funeral practices, ethics, grief theory, family communication practices, health care system approaches.

## 4392 Selected Topics in Psychology (1-3)

Prerequisites: Twelve hours of psychology and consent of instructor. A seminar of selected issues and methods in psychology. May be repeated once for credit.

## 4398 Child Maltreatment: A Multidisciplinary Approach (3)

Same as SW 4398. Focuses on clinical aspects of ch ld abuse with attention to identification, reporting, intervention, and prevention. Perspectives from the disciplines of psychology and social work are proviced.

## 4399 Seminar: Child Sexual Abuse (1)

Same as SW 4399. Provides intensive study in interviewing, legal issues, assessment, medial issues, and therapeutic intervention in cases of child sexual abuse.

## 4999 Integrated Psychology (2)

Prerequisites: This course is restricted to psycholog. majors who plan to graduate during the current semester or the next. This capstone course serves as a review of the primary fields of psychology. It will be taken typically during the last semester prior to graduation. An advanced general psychology textbook will guide the class through important contemporary topics in behavioral neuros cience, learning \& memory, cognition, psychopathologies $d x$ their treatments, developmental and social psychology. Students will take the required major field test in psychology that will serve as the final exam for the course.

## 5407 Psychopharmacology (3)

Prerequisite: 12 units of graduate-level psychology zourses and consent of instructor. An examination of the effects of drugs on the brain and on behavior. Primary empha sis is on those drugs used in the treatment of affective disorders, schizophrenia, and anxiety.

5461 Seminar: Learning (3)
A critical examination of contemporary problems in learning.

## 5465 Seminar: Physiological Psychology (3)

A critical examination of contemporary problems in physiological psychology.

## 5468 Seminar: Cognitive Processes (3)

Prerequisite: Admittance to doctoral program in psychology or consent of instructor. A critical examination of contemporary problems in cognitive processes

## 5475 Introduction to Evaluation Research Methods (3)

 Same as Sociol 5475, PPA 6750, and CCJ 5475. Prerequisite: At least one course in research design and statistics at the graduate level. A comparative study of research strategies with regard to data sources, data collection, and modes of analysis that are appropriate for program evaluation research. Attention is given to observational, survey, and quasi-experimental methodologies.
## 5610 Mechanisms of Aging I: The Aging Body (1)

 Prerequisite: Admission to Clinical Psychology program or permission of the instructor.. A critical examination of the clinical-experimental literature on psychopathology. Etiologies of cognitive/affective functions and Prerequisites: Graduate standing and Biol 1102 or equivalent. (Same as SW 5610 and Ger 5610). (MSW students normally take all foundation courses prior to enrolling in this course.) Introduces students with a social sciences/humanities background to the normal changes in the biology and chemistry of the aging human body and how these changes affect behavior.5611 Mechanisms of Aging II: The Aging Brain (1) Prerequisites: Ger 5610 or SW 5610 or Psych 5610 or equivalent or consent of instructor. (Same as SW 5611 and Ger 5611. (MSW students normally take all foundation courses prior to enrolling in this course.) Provides students with a social sciences/humanities background a basic introduction to the biology and chemistry of the aging human brain and nervous system and how these systems impact behavior.

5612 Mechanisms of Aging III: Diseases of Aging (1) Prerequisites: Ger 5610 and Ger 5611 or SW 5610 and 5611 or Psych 5610 and Psych 5611 or equivalent or consent of instructor. Same as SW 5612 and Ger 5612. (MSW students normally take all foundation courses prior to enrolling in this course.) Provides students with a social sciences/humanities background with information on how diseases associated with aging exacerbate the effects of aging on the human body, mind, and behavior.

## 6441 Aging and Health Behavior (3)

Prerequisites: Graduate standing. Same as Ger 6441. This course examines sociocultural influences on health care practices of older adults. The role of social support and other social resources in the health behavior of older adults is emphasized. Topics include self care decisions, formal service utilization, family caregiving, and planned interventions for older adults.

## 6444 Clinical Geropsychology (3)

Prerequisite: Graduate standing or consent of instructor. This course examines major predictors of Psychosocial functioning in older adults. The emphasis is on assessment and research methods appropriate to studying developmental issues in late life. Topics include interpersonal relationships, mental health, and a critique of interventions designed to increase life satisfaction.

6448 Multicultural Issues in Clinical Psychology (3) Prerequisite: Admission to the doctoral program in Clinical Psychology or consent of instructor. A survey of theoretical perspectives utilized in the treatment of various cultural groups. Their relationship to and implications for the treatment of members of various cultural groups will be explored. Strategies and ethical concerns in diagnosis, test interpretation, and treatment are considered.

6466 Seminar: Developmental Psychology (3) A critical examination of contemporary problems in developmental psychology.

## 7403 Psychopathology (3)

Prerequisite: Admission to Clinical Psychology program or permission of the instructor. A critical examination of the clinical-experimental literature on psychopathology. Etiologies of cognitive/affective functions and dysfunctions are explored, and implications for therapeutic intervention are considered.

## 7404 Introduction to Clinical Assessment I (4)

Prerequisite: Admission to Clinical Psychology program. Fundamentals of clinical assessment with emphasis on interviewing and the measurement of cognitive functioning. This course includes a laboratory.

## 7405 History and Systems in Psychology (3)

Prerequisite: Admission to Clinical Psychology program or consent of the instructor. A comprehensive overview of the history of psychology with an emphasis on the systems of thought that have shaped contemporary psychological theory and research.

## 7406 Introduction to Clinical Assessment II (4)

 Prerequisite: Psych 7404. Theory and techniques of personality assessment with emphasis on projective personality tests. This course includes a laboratory.7408 Psychological Perspectives on Death and Dying (3) Prerequisite: Graduate standing. Addresses a variety of end-of-life issues including death attitudes, funeral practices, ethics, grief theory, family communication patterns, and health care systems. Research findings and theoretical approaches will be emphasized.

## 7410 Women and Mental Health (3)

Prerequisite: Admission to the doctoral program in Clinical Psychology or consent of instructor. This course will focus on contemporary research on the psychology of women pertaining to mental health issues. Etiology and treatment of disorders disproportionately affecting women will be emphasized.

## 7412 Social Psychology (3)

Prerequisite: Admittance to psychology doctoral program or consent of instructor. A review of key areas in contemporary theory and research in social psychology.

## 7418 Seminar in Human Sexuality (3)

Prerequisite: Admission to the doctoral program in Clinical Psychology or consent of instructor. Review of theory and research in human sexuality from physiological, psychological, and social perspectives. Implications for the assessment and treatment of sexual dysfunction are considered.

7419 Existential Issues in Clinical Psychology (3) Prerequisite: Admission to the doctoral program in Clinical Psychology or consent of instructor. This course will review existential thought in psychology and its application to understanding clinical problems and treatment. Particular attention will be given to how Psychotherapy can be understood within an existential framework that focuses on the issues of death, freedom, responsibility, and isolation.

## 7421 Quantitative Methods I (4)

(With laboratory) A comprehensive study of the use of analysis of variance procedures in analyzing data. Topics include completely randomized designs, randomized blocks, factorial designs, and the analysis of covariance.

## 7422 Quantitative Methods II (4)

Prerequisites: Psych 742 land consent of instructor. (With laboratory) A comprehensive study of the use of multivariate statistics in data analysis. Topics include the general linear model, multiple regression, factor analysis, and multivariate analysis of variance.

## 7423 Quantitative Methods III (3)

Prerequisites: Psych 7422 and Psych 7429 and consent of instructor. A selective study of the use of multivariate statistics in data analysis. Topics include structural equation modeling, multilevel modeling, and analysis of longitudinal data.

7429 Psychometric Theory (3)
Prerequisite: Psych 7421, Psych 7422 and consent of instructor. A consideration of classical and modern theories of psychological testing. Topics include test reliability, validity and construction.

## 7431 Clinical Supervision (1-3)

Prerequisite: Admission to Clinical Psychology program. Supervised experience in clinical practice. Maybe repeated six times for credit.

7432 Ethics and Professional Issues (3)
A study of issues in professional development, clinical supervision, risk management, and ethical standards is they relate to teaching, research, and professional prastice.

7434 Seminar: Introduction to Psychotherapy (3) Prerequisite: Admittance to Clinical Psychology program and Psych 7406. This course considers theories of personal change and their practical application in psychotherayy. Topics include the development of the therapist-cliert relationship, case management, process and outcome research, and ethical principles for the psychotherapist.

## 7439 Summer Supervision (1)

Prerequisite: Psych 7431. Supervision experience in clinical practice at all graduate year levels during the summer months. Can be repeated for credit.

7440 Principles of Family Therapy (3)
Prerequisite: Psych 7434. Survey of research and theory underlying models of family interaction. Practical application of specific techniques to the family system is emphasized.

7441 Seminar: Cognitive and Behavior Theories 3)
Prerequisite: Admission to Clinical Psychology program or permission of instructor. A course on cognitive and behavioral theories and their applications to clinical populations. Emphasis is on a critical review of research on cognitive and behavioral therapy procedures.

7442 Seminar: Cognitive and Behavior Therapy (3) Prerequisites: Psych. 7434. The practice of behavior therapy. Students will leam to implement behavioral assessment and therapy strategies in clinical settings..

## 7447 Trauma and Recovery (3)

Prerequisites: Graduate Trauma Studies Certificate. A comprehensive seminar on the psychological effect: associated with exposure to potentially traumatic events. The course will include information on the history of trauma studies; definitions of stressful and traumatiz events; common responses to these events; theoretical models for conceptualizing traumatic responses; information on specific types of traumatic events: and issues in treatment.

7449 Research Methods in Applied Psychology (3)
Prerequisite: One graduate course in statistics. This course focuses on the basics of conducting research in applied psychology. Topics include: philosophy of science; reliability and validity; experimental, quasi-experimental, and nonexperimental designs; power; and meta-analysis.

7450 Clinical Internship I (1)
Prerequisite: Consent of adviser. Supervised training in an affiliated agency or organization following completion of two years of course work.

## 7451 Clinical Internship II (1)

Prerequisites: Psych 7450 and consent of adviser. Supervised training in an affiliated agency or organization following completion of two years of course work.

7454 Seminar: Personnel Psychology (3)
An analysis of theories and research in personnel and industrial psychology. Topics include testing, assessment centers, performance appraisal, and interviewing.

## 7455 Seminar: Organizational Psychology (3)

 An analysis of theories and research in organizational psychology. Topics include theories of motivation, leadership, job design, group process decision making, organizational effectiveness, and the relation between organizations and their environment.
## 7457 Seminar: Special Topics in Industrial Psychology

 (3)A seminar of selected issues and methods in personnel psychology.

## 7458 Seminar: Special Topics in Organizational

 Psychology (3)A seminar of selected issues and methods in organizational psychology.

## 7459 Practicum in Industrial/Organizational Psychology (1-4)

Supervised experience in personnel or human resource management.

## 7460 Internship in Industrial/Organizational

 Psychology (1-4)Prerequisite: Consent of adviser and admission to the graduate program in I/O Psychology. Supervised field experience in human resource management or organizational psychology areas following completion of at least two years of course work.

7465 Applied Issues in Organizational Psychology (3)
Prerequisites: Psych 7455 or consent of instructor. This course focuses on the application of psychological theory and principles to organizational development consulting. While such consulting is ultimately intended to enhance organizational level functioning, applications of this approach begin with learning at the individual and small
group levels. In this course, students work through realworld cases that address real organizational problems. In addition to this casework, the readings and class discussions will address the theoretical and practical links between individual/team leaming and organizational development.

## 7469 I/O Professional issues \& Ethics (3)

Prerequisites: Consent of instructor. In this course, students learn the ethical standards as they relate to teaching, research, and professional practice in industrial/organizational psychology. Other professional and career issues are also discussed.

7472 Special Topics in Psychology (3)
A seminar of selected issues and methods in psychology.

## 7474 Clinical Research in Applied Settings (3)

Prerequisite: Psych 7421 and 7422. This course provides information on the design and implementation of research in applied settings (e.g., human service agencies). Topics include program evaluation, consultation models, risk factor analysis, presentation and health promotion, and quality control.

## 7476 Seminar in Clinical Child Psychology (3)

Prerequisite: Admission to the doctoral program in Clinical Psychology or consent of instructor. Introduction to principles, theory, and methods of study in the field of clinical child psychology. Emotional and behavioral dysfunctions are considered from developmental and socialization perspectives.

7477 Principles of Child Psychotherapy (3)
Prerequisites: Psych 7434 and 7476. The course will focus on treatments for children with clinical problems. Play therapy, family therapy, and behavioral therapy techniques will be reviewed. Special attention will be given to differentiating when to use each modality, as well as how they can be effectively combined.

## 7478 Directed Research in Industrial/Organizational Psychology (1-4)

Independent study of an issue in industrial/ organizational psychology through the application of research techniques.

## 7479 Directed Readings in Industrial/Organizational Psychology (1-4)

Independent literature review of a topic in industrial/ organizational psychology.

7480 Research Methods in Clinical Psychology (3) Prerequisite: Psych 7421 or equivalent. An overview of research methods that are appropriate for clinical and other nonlaboratory settings.

7483 Directed Research (1-10)

## 7484 Directed Readings (1-10)

7485 Research Team I (2)
Prerequisite: Admittance to doctoral program in Clinical Psychology. Group supervision of beginning research leading to the Independent Research Project.

## 7486 Research Team II (1)

Prerequisite: Completion of Independent Research Project or Third Year standing in doctoral program in Clinical Psychology. Group supervision of advanced research leading to the dissertation proposal.

## 7487 Independent Research Project (1-6)

Prerequisites: Admission to the doctoral program in Clinical Psychology. Supervised original research project of a clinically-related topic.

7488 Specialty Examination Research (1-6)
Prerequisites: Admission to the doctoral program in Clinical Psychology. Supervised original review and analysis of a clinically-related topic.

7491 M.A. Thesis Research (1-10)
7492 Ph.D. Thesis Research (1-10)
7494 Integrative Research Seminar in Gerontology (3)
Same as Ger 6494, Prerequisite: A graduate level research methods course (e.g., PPA 6010). This seminar requires students to critically examine research in gerontology in terms of methodology. Topics covered include: reliability and validity of measures; internal and external validity; needs assessment; treatment implementation and process evaluation; and qualitative methods.

## School of Social Work

## Faculty

Lois Pierce, Professor*, Director
Ph.D., Washington University
Uma Segal, Professor*
Ph.D., Washington University
Margaret Sherraden, Professor*
Ph.D., Washington University
Norman Flax, Associate Professor Emeritus*
Ph.D., Saint Louis University
Joan Hashimi, Associate Professor Emeritus*,
Ph.D., Washington University
Sharon Johnson, Associate Professor
Ph.D., Washington University
Lia Nower, Associate Professor
Ph.D., Washington University
Shirley Porterfield, Associate Professor
Ph.D., University of Wisconsin - Madison
Baorong Guo, Assistant Professor
Ph.D., Washington University
Joseph Pickard, Assistant Professor
Ph.D., Washington University
Patricia Saleeby, Assistant Professor
Ph.D., Washington University
Lori Curtis, Lecturer
M.S.W., Washington University

Patricia Rosenthal, Lecturer
M.S.W., Washington University

Beverly Sporleder, Lecturer
M.S.W., Washington University

Linda Vawter, Lecturer
M.S.W., Washington University

Linda Wells-Glover, Lecturer
M.S.W., Washington University

* members of Graduate Faculty

The School of Social Work faculty is committed to excellence in teaching and scholarly research in a wide range of specialties. These include child welfare, gerontology, community organization, addictions, social service policy, and international social work. Faculty also serve on the executive and advisory boards of many area social service agencies.

## General Information

## Degrees and Areas of Concentration

The School of Social Work offers courses leading to a bachelor of social work (B.S.W.), a master of social work (M.S.W.), and a minor in social work. The B.S.W. and the M.S.W. programs are fully accredited by the Council on Social Work Education. The programs stress the critical, empirical, and applied aspects of social work, incorporating a liberal arts perspective throughout the curriculum. There is a strong accent on community and agency field work as an integral part of the program. Professional social work
education enables students to integrate the knowledge, values, and skills of the profession into competent practice.

Students must apply for admission into the B.S.W. and the M.S.W. programs. Undergraduate social work majors and Master's students should obtain a copy of the Student Handbook (available on the social work department's Web page http://www.umsl.edu/~socialwk). BSW students must meet with a social work adviser for advisement each semester. Students in the B.S.W. or the M.S.W. program must set up an appointment with the practicum office one semester prior to enrolling in the practicum and attend a series of pre-practicum orientation sessions.

## Undergraduate Studies

## General Education Requirements

Majors must satisfy the university and college general education requirements, except that proficiency in a foreign language is recommended but not required.

Courses required for the B.S.W. degree may not be taken on a satisfactory/unsatisfactory basis except Social Work 4800 and Soc Wk 4850.

## Admission Requirements

Students entering UM-St. Louis as freshman and as transfer students should indicate a pre-social work major. Students must apply to the program concurrently with SW 3100. Admission to the program is conditional upon the successful completion of all necessary requirements.

Requirements for Admission to the Social Work program:
Junior standing
Submission of:
Application for admission to social work program
Transcripts of all university work
Two letters of reference: one from a college or university professor and one other, preferably from a work or volunteer experience supervisor.
Completion of Social Work 2000, 2200, and 2201 or their equivalents or completion of an A.A. in Human Services. Satisfactory completion of all courses listed as prerequisites for Soc Wk 3100, 3510, and 3210.
Applicants may be asked to meet with the social work admissions committee.

## Undergraduate Studies

## Bachelor of Social Work

Students must have a minimum GPA of 2.5 in social work and related-area requirement courses to enter field practicum. Candidates for this degree program must complete the core requirements including the following social work courses:
2000, Social Work and Social Problems
2200, Social Welfare as a Social Institution
2201, Social Welfare as a Social Institution Laboratory 3100, Introduction to Interventive Strategies for Social Work Practices

3210, Social Issues and Social Policy Development
3510, Human Behavior in the Social Environment 3700, Diversity and Social Justice
4110, Interventive Strategies for Social Work with Individuals, Families, and Groups
4300, Interventive Strategies for Social Work with Organizations and Communities
4800 and 4850, Supervised Field Experience in Social Work I and II
4801 and 4851, Integrative Field Experience Seminar I and II

A minimum of 37 hours or a maximum of 50 hours must be taken in social work. A minimum of 30 hours is required in related area departments.

Evaluation of social work transfer credits will be done by a social work adviser on an individual basis.

## Related Area Requirements

The following courses, or their altematives, are required:

## Biology:

One course from the following:
1102, Human Biology
1131, Human Physiology and Anatomy I
1141, Human Physiology and Anatomy II
1202, Environmental Biology
Econ 1000, Introduction to the American Economy
Pol Sci 1100, Introduction to American Politics
Psych 1003, General Psychology
Sociology:
1010, Introduction to Sociology
2160, Social Psychology
3220, Sociological Statistics, 2201 or Psychology Stats, or CCJ Stats
Social Work 3410, Research Design in Social Work, or Sociology 3230, Research Methods or 2219 Psychology, 2210 Criminology

At least 9 additional hours must be taken in social work, sociology, political science, psychology, women's and gender studies, anthropology, criminology and criminal justice, or economics at the 2000 level or above. Hours taken in social work will apply toward the maximum of 50 hours that may be taken in social work courses. The social work department may require students to pass a placement test to enroll in the next level course, provided this test or its equivalent is administered to all students seeking to enroll in that course.

Social work majors must have a cumulative grade point average of 2.5 or better in all course work specifically required for the major, with satisfactory grades in practicum.

Note: Taking anthropology, biological sciences, economics, and Spanish courses is strongly recommended by graduate schools of social work.

## Requirements for the Minor in Social Work

Candidates must complete the following social work courses:
2000, Social Work and Social Problems
2200, Social Welfare as a Social Institution
3100, Interventive Strategies in Social Work Practice
3210, Social Issues and Social Policy Development
and one additional social work course at the 3000 level or above.

## Graduate Studies

## Master of Social Work

## Admission Requirements

Admission to the M.S.W. Program requires admission :o the University of Missouri-St. Louis Graduate School and acceptance by the School of Social Work. Applicants to the program must meet the following requirements to be considered for admission:

Completion of a bachelor's degree from a college or university accredited by a recognized regional accrediting organization.
Completion of a liberal arts education including courses in the humanities, the social and behavioral sciences, and the physical sciences, including a course in human biology' and a course in statistics.
Attainment of a cumulative grade point average of at l:ast 2.75 on a 4.0 scale for all undergraduate course work end attainment of at least a grade point average of 2.75 on a 4.0 scale in the major field.
Submission of the following documents by the admission deadline:
A completed application to the UM-St. Louis Graduat School and a completed M.S.W. supplement application. Three written essays.
Three letters of reference. - One from a professor in the undergraduate field of study, one from a work or voluateer supervisor or other professional reference.
Official transcripts from all colleges and university anended. Applicable fees.

## Application Deadline

The deadline for application to the MSW program is February 15 for admission in the following fall semester. See http://www.umsl.edu/~socialwk, for more details

## Admissions to the Advanced Standing Program

 Applicants with a B.S.W., B.A.S.W., or B.S.S.W., from an accredited social work program may be given up to 24 credit hours of advanced standing for foundation social work courses. Admission to the advanced standing progranı is available to applicants who meet the general admission requirements and who: (1) have earned a bachelor's degree in social work accredited by the Council on Social Wors Education within five years of applying to the M.S.W: Program, and (2) have earned a grade point average of at least 3.0 on a 4.0 scale in the social work foundationcurriculum, and no less than a B in all courses that are applicable.

## Course Waivers

A student who does not have a bachelor's degree in social work but who can document successful completion (with at least a B) of foundation courses from an accredited B.S.W. program within the last five years will be given course waivers and be allowed to replace these courses with electives.

Students from nonaccredited B.S.W. programs or students who have taken comparable course work in other undergraduate programs may take place-out examinations for select foundation courses; waivers will be given if students successfully pass place-out examinations. The waiver does not provide graduate credit; it is a mechanism for allowing elective courses to be substituted for required foundation courses.

Academic credit cannot be given for life experience and previous work experience, in whole or in part, in lieu of field practicum or foundation year courses.

## Degree Requirements

The M.S.W. is a two-year program comprising a foundation year and a concentration year. All students are required to take the foundation year courses. These provide a common base of knowledge across all practice settings and populations. Beyond the general requirements of the Graduate School, the department requires a minimum of 60 semester hours of course work, of which 45 must be at the 4000 or 5000 level and 45 must be in social work or crosslisted with social work, including the following foundation courses:

5700, Diversity, Social Justice \& Social Work Practice 5500, Foundations of Human Behavior in the Social Environment
5350, Social Work and Human Service Organizations
5410, Research Methods and Analysis I
5100, Generalist Social Work Practice
5200, Social Policy and Social Services
5300, Community Practice and Social Change
5450, Research Methods and Analysis II
5801, Graduate Field Practicum Seminar
5800, Graduate Field Practicum I
Upon completion of the 30 credits of foundation year requirements, students move into a year of specialization, called the concentration. The concentration year requires 30 hours of course work that includes 9 hours of elective graduate-level courses approved by the adviser. Students plan their degree program to reflect their career interests in the following concentration areas:
Family Practice
Social Work Leadership and Management Gerontology

To remain in good standing, students must maintain a cumulative GPA of 3.0 or better.
The field practicum is an integral part of the concentration year. Students will complete 300 hours (two days of full-time work each week) of M.S.W. supervised practice in an agency during the Winter semester of the foundation year, and 660 hours total (three days of full-time work per week) in the concentration year.
A student must receive a grade of $B$ or better in the first-year field practicum course in order to be eligible to enter the second year field practicum.

## Part Time Status

Students who enter the program as part-time students complete the foundation year in two years and the concentration course work in an additional two years. All students must complete the M.S.W. in four years.

## Career Outlook

The bachelor of social work program prepares persons for entry-level employment in social welfare agencies, schools, hospitals, correctional institutions, social action and community organizations, and day care, geriatric, or rehabilitation and residential centers. The master of social work program prepares professionals for advanced social work practice with individuals, families, groups, organizations, and communities. Individuals currently working in social welfare can develop skills and increase employment and job advancement opportunities with the B.S.W. and M.S.W. degrees.

## Course Descriptions

Students who have eamed 24 or more semester hours of credit at any accredited post-secondary institutions(s) before the start of the fall 2002 semester must meet the general education requirements stipulated in the UM-St Louis 20012002 Bulletin. The following social work courses fulfill the Social Sciences breadth of study requirements as described in that Bulletin:
$2000,2200,3100,3510,3210,4602,3900,3700,4601$, 4900, 4950, 5700

## 2000 Social Work and Social Problems (3)

Prerequisites: Soc 1010 or Psych 1003. Examination of the network of social programs and services developed in response to social problems in modern urban communities and the various roles and functions performed by helping professions. Introduction to basic values, skills, and training involved in a helping relationship, as well as characteristics of clients seeking help and professional engaged in the helping process.

## 2102 Introduction to Women's and Gender Studies (3)

 Same as Hist 2102, Soc 2102 and WGS 2102. This core class is required for all Women's and Gender Studies Certificate earners. This class introduces students to cultural, political and historical issues that shape gender. Through a variety of disciplinary perspectives in the humanities, social sciences, and natural sciences, the course familiarizes students withdiverse female and male experiences and gendered power relationships.

## 2200 Social Welfare as a Social Institution (3)

Prerequisite: Soc Wk 2000 or consent of instructor. A study of the: 1) development of social welfare services and the philosophy underlying the present practices and systems; 2) present social welfare programs with particular emphasis given to public income-maintenance provisions; 3) special welfare needs of blacks, aged, women, Hispanics, and Native Americans; and 4) the development of social work as a profession. This course may be taken by non-social work majors.

## 2201 Social Welfare as a Social Institution Laboratory (1)

 Prerequisites: Simultaneous with Soc Wk 2200. The lab session will be used for field trips to social agencies. This course is required for all Social Work majors.
## 2670 Aging in America: Concepts and Controversies (3)

Same as ID 2170, Sociology 2170, and Ger 2170. This course examines the major theoretical and service issues connected to the study of older adults and their families, using multidisciplinary perspectives. Students are provided with an introduction to the field of aging through an examination of current social issues and controversies. This course emphasizes student involvement through class discussion, and is appropriate for students in the arts and sciences, business, communication, education, and nursing.

## 3100 Introduction to Interventive Strategies for Social Work Practice (3)

Prerequisites: Soc Wk 2200, Soc 1010 and Psych 1003, or permission of instructor. A presentation of basic knowledge, skills, and theory used for entry-level professional practice, such as problem assessment, interviewing skills, crisis intervention, and referral procedures. The course objectives also will be to teach students how to help clients negotiate systems effectively, and to use resources, services, and opportunities.

## 3210 Social Issues and Social Policy Development (3)

 Prerequisites: Soc Wk 2200, Pol Sci 1100, and Econ 1000. The identification of issues concerning governmental provisions to meet contemporary social needs, with analysis of the principles and values underlying alternative solutions. A study of the processes by which citizen opinions and public policies evolve and are implemented in areas such as income maintenance, crime and delinquency, employment, family and child welfare, and public mental health.
## 3410 Research Design in Social Work (3)

Prerequisites: Satisfaction of Math Proficiency requirement and either Soc 3220, CCJ 2220, or Psych 2201. Students explore research concepts and procedures (hypothesis testing, sampling, measurement, and design) emphasizing issues in social work research. Students learn to collect, analyze and present data.

3510 Human Behavior in the Social Environment (3) Prerequisite: Biol 1012 and Soc 2160 or Psych 2160 or permission of instructor. This course will focus on the normative stages in the life span, specifically how humzn development is affected by the physical environment and social status characteristics. Empirical information and theoretical views on human development will be includ $>\mathrm{d}$. Human development will be viewed as a complex interaction of individual developmental stages with family, social, and community systems.

## 3700 Diversity and Social Justice (3)

Same as WGS 3700. Prerequisite: Soc 1010 or equivalent. Analyzes the structure, dynamics, and consequences of social and economic injustice, and the impact on diverse grours in American society. Examines theoretical models and prectice principles for work with diverse groups.

3900 Selected Topics in Social Work Practice (3) Prerequisite: Soc Wk 3100 or Soc Wk 3210 , or consent of instructor. A course examining special topics in social work practice. Relative theories, strategies, and skills will be presented for topics selected. Course may be taken more than once for credit as different topics are offered.

## 4110 Interventive Strategies for Social Work with Individuals, Families, and Groups (3)

Prerequisites: Soc Wk 3100, and Soc Wk 3510. This course continues the presentation of basic knowledge and practice skills for entry level professional practice begun in SW 3100. It builds on the generalized helping model, incorporating specialized skills for working with specific groups of c .ients (e.g., children, aged, mentally ill, and physically handicapped), with families and small groups.

## 4300 Interventive Strategies for Social Work with Organizations and Communities (3)

Prerequisites: Soc Wk 3210 taken prior to or concurrertly, senior standing. Continuation of basic practice skills with emphasis given to analysis and intervention at the organization and community levels. Includes assessment of available services, organization of client groups, effort; to modify resources for a client group unable to intervent effectively on its own behalf. Also emphasis on helping the practitioner evaluate the impact of intervention.

## 4376 Mental Health and Aging (3)

Same as Ger and Psych 4376. Prerequisites: 9 hours of psychology, graduate standing, or consent of instructo: (MSW students normally take all foundation courses prior to enrolling in this course.) A survey of recent theory anc research in mental health issues for older populations. The primary focus is on major Psychological disorders pre ialent among the elderly and in treatment approaches for elders.

## 4398 Child Maltreatment: A Multidisciplinary Approach

 (3)Same as Psych 4398. Focuses on clinical aspects of child abuse with attention to identification, reporting, intervention,
and prevention. Perspectives from the disciplines of Psychology and social work are provided.

4399 Seminar: Child Sexual Abuse (1)
Same as Psych 4399. Provides intensive study in interviewing, legal issues, assessment, medical issues, and therapeutic intervention in cases of child sexual abuse.

4601 Abused and Neglected Children (3)
Prerequisite: Soc Wk 3510 or equivalent. This course explores the major concepts necessary for understanding abused and neglected children and their families. Emphasis is placed on (1) defining the problem, including societal stresses which contribute to the abuse and neglect; (2) examining existing practice methods; and (3) understanding the role of the social worker on interdisciplinary teams.

## 4602 Child Welfare Practicum Seminar (3)

Prerequisites: Soc Wk 4800, and consent of instructor. This seminar allows students to integrate previous course work with their experience in child welfare agencies. Classroom discussion will emphasize core competencies needed for child welfare practice.

4610 Domestic Violence: Theory, Problems \& Practice (3) Same as WGS 4610. Prerequisites: Soc Wk 3510 Focuses on theoretical and empirical understanding of domestic violence in US society and social work practice with battered women and their families. This course addresses direct services, community organizing, and public policy changes to help end violence against women. Relationships between violence against women and other forms of oppression (e.g., racism, economic exploitation, heterosexism and social class) are explored.

## 4630 Women's Social Issues (3)

Same as WGS 4630. Prerequisite: Soc Wk 3510 or equivalent. This course will help students become more sensitive to the social and welfare concerns of women. The topics include work, education, family responsibilities, violence against women, and special health and mental health service needs. Emphasis will be placed on understanding how social action can be used to bring about positive change.

## 4650 Forensic Issues in Mental Health (3)

Same as CCJ 4650. This is an intensive course, investigating the intersection between the legal system and mental health. Students will explore issues involved in civil and criminal trial proceedings such as insanity defenses, diminished capacity, and competency to stand trial, civil commitment, battered women and rape trauma syndrome, sexual abuse of children, child custody, and domestic violence. In addition, the course will examine the roles of mental health practitioners as forensic evaluators, trial consultants, and expert witnesses in a variety of mental health related cases.

4800 Supervised Field Experience in Social Work I (4) Prerequisites: Soc Wk 4110 must be taken prior to or concurrently, Soc Wk 4801 must be taken concurrently, consent of instructor. This course provides students practice experience in social service agencies. Students work at the agencies approximately 20 hours per week. The purpose of this experience is to familiarize students with agency operations. Selection of the agency is based on student education needs.

## 4801 Integrative Field Experience Seminar I (2)

Prerequisites: Consent of instructor and concurrent registration in Soc Wk 4800. This seminar provides an opportunity for students to integrate previous course work with their experience in social work agencies. Classroom discussion will emphasize direct practice issues.

4850 Supervised Field Experience in Social Work II (4) Prerequisites: Soc Wk 4800, Soc Wk 4801, and consent of instructor. This is a continuation of agency practice experience. Students work at the agency approximately 20 hours per week and may continue at the same agency as Soc Wk 4801, or change agencies with the consent of the instructor.

## 4851 Integrative Field Experience Seminar II (2)

Prerequisites: Consent of instructor and concurrent registration in Soc Wk 4850. This seminar is a continuation of Soc Wk 4801. Classroom discussion will emphasize administration and community organization issues.

## 4900 Special Study (1-10)

Prerequisite: Consent of instructor. Independent study through advanced readings in method and philosophy on a topic of particular interest, or field research in an agency.

## 4911 Management Issues in Nonprofit Organizations: Staff Management Issues (1)

Prerequisite: Junior Standing. Same as Pol Sci 4911 and PPA 4911. This course addresses issues involved in managing staff in nonprofit organizations. The course will cover the following topics: fundamentals of staff supervision; balancing supervisory processes with counseling and coaching; selecting, hiring, evaluating, and terminating staff; legal issues that affect these processes.

4912 Management Issues in Nonprofit Organizations: Legal Issues in Governing and Managing Nonprofit Organizations (1)
Prerequisite: Junior Standing. Same as Pol Sci 4912 and PPA 4912. This course addresses legal issues involved in managing and governing nonprofit organizations. The course will cover the following topics: The Board as steward of the organization; Director and officer liability; tax laws concerning charitable giving; legal issues in managing staff and volunteers (e.g., hiring, evaluating, and terminating employees); Missouri nonprofit law.

## 4913 Management Issues in Nonprofit Organizations: Financial Issues (1)

Prerequisite: Junior Standing. Same as Pol Sci 4913 and PPA 4913. This course addresses financial issues involved in governing and managing nonprofit organizations. The course will cover the following topics: Cash flow analysis; budgeting; fund accounting; cost accounting (determining costs for programs and services); understanding and using standard financial statements, including balance sheets, cash flow statements, statements of activity, and operating and capital budgets.

4940 Leadership and Management in Nonprofit Organizations (3)
Prerequisite: Junior standing. Same as PPA 4940, Pol Sci 4940 , Soc 4940 . Addresses the role and scope of the independent sector in the United States, as well as the leadership and management of nonprofit organizations within that sector. Topics include the economic and political scope of the independent sector, the role of volunteerism in a democratic society, and the role and scope of philanthropy. Topics in voluntary organization management and leadership include: the dynamics, functions and membership structure of NPOs, especially
staff-board and other volunteer relations; governance and management of NPOs; resource mobilization; and program development management and evaluation.

## 4950 Seminar in Social Work Issues (1-3)

Prerequisite: Consent of instructor. A variable-credit course examining current and future considerations in designing and implementing social work service and delivery arrangements. Issues will be selected according to interests of the class. Course may be taken more than once for credit as different topics are offered.

## 4960 American Philanthropy and Nonprofit Resources Development (3)

Prerequisite: Junior standing or consent of instructor. Same as Pol Sci 4960 and PPA 4960. This course addresses the history, philosophy, roles and scope of philanthropy in the United States, including its role in the nonprofit, voluntary sector. It further examines the contemporary forces which impact philanthropy and charitable giving, both by institutions and individuals. The course examines the effective planning and management of development programs (e.g., annual giving), fund raising vehicles (e.g., mail solicitations) and the fund raising process, from planning through donor relations.

## 5100 Generalist Social Work Practice (3)

Prerequisite: SW 4110 or equivalent or admission to the MSW program. Using a problem-solving approach, students develop theoretical and empirical understanding and practical application of generalist social work methods. Students gain knowledge and skills that include interviewing, assessment, crisis and short-term intervention, contracting, resource development, and case documentation needed for competent direct practice with diverse populations.

5200 Social Policy and Social Services (3)
Prerequisite: Soc Wk 3210 or Pol Sci 2420 or Pol Sci 3460 or equivalent or admission to the MSW program. Covers the history and development of social welfare policies, legislative processes, and existing social welfare prograns. Examines frameworks for social policy analysis, analyzes how social and economic conditions impact the process of social policy development and implementation, and introduces policy practice in social work.

## 5300 Community Practice and Social Change (3)

Prerequisites: Soc Wk 4300 or Soc 4344 or equivalent or admission to the MSW program. Focuses on economic, social, and political theory and research on communities and social change. Examines conceptual models of community practice within the generalist model and develops skills in organizing, advocacy, and planning.

5350 Social Work and Human Service Organizations (3) Prerequisites: Soc Wk 3510 and 4300 or Psych 3318 or BA 3611 or equivalent or admission to the MSW program. Students develop theoretical and empirical understanding of groups and organizations, including concepts such as power and authority, structure, goals, membership, leadership, motivation, technology and organizational culture. Usiag organizations as settings for social work practice and as targets for change, students learn strategies and skills for assessment and intervention.

5410 Social Work Research Methods and Analysis Prerequisites: Soc Wk 3410 or Soc 3230 and 3231 or equivalent and Soc 3220 or equivalent or admission to the MSW program. The first of a two-course sequence designed to provide students with the knowledge base and skills for using scientific method to advance social practice, knowledge and theory. Focuses on research methods at different levels (e.g., individual, group, organization, end community). Covers quantitative and qualitative methods, research design, sampling, measurement, use of result; impact of research, and ethical considerations.

5450 Social Work Research Methods and Analysis II (3) Prerequisites: Soc Wk 5410 or equivalent. Advanced course, focusing on analysis of qualitative and quantitative data to advance social work practice, knowledge and theory. Students learn to use and interpret various statistical procedures for analyzing quantitative data, including bivariate and multivariate analysis, and content and statistical analysis for qualitative data. Students apply these ana ytic techniques to social work case material using computer software applications.

## 5500 Foundations of Human Behavior in the Social

 Environment (3)Same as WGS 5500. Prerequisites: Soc Wk 3150 or equivalent or admission to the MSW program. Focusts on theoretical and empirical understanding of human behavior in the social environment using a life-span perspective. Introduces biological, behavioral, cognitive, and
sociocultural theories of individuals, families, and small groups, and their implications for the professional social worker's understanding of socioeconomic status, gender, disability, ethnicity, race, and sexual orientation.

5610 Mechanisms of Aging I: The Aging Body (1) Prerequisites: Graduate standing and Biol 1102 or equivalent. Same as Ger 5610 and Psych 5610. (MSW Students normally take all foundation courses prior to enrolling in this course.) Introduces students with a social sciences/humanities background to the normal changes in the biology and chemistry of the aging human body and how these changes affect behavior.

5611 Mechanisms of Aging II: The Aging Brain (1) Prerequisites: Soc Wk 5610, Ger 5610, Psych 5610 or equivalent or consent of instructor. (Same as Ger 5611 and Psych 5611 . (MSW students normally take all foundation courses prior to enrolling in this course.) Provides students with a social sciences/humanities background a basic introduction to the biology and chemistry of the aging human brain and nervous system and how these systems impact behavior.

## 5612 Mechanisms of Aging III: Diseases of Aging (1)

 Prerequisites: Soc Wk 5610 and Soc Wk 5611 or Ger 5610 and Ger 5611 or Psych 5610 and Psych 5611 or equivalent or consent of instructor. Same as Ger 5612 and Psych 5612. (MSW students normally take all foundation courses prior to enrolling in this course.) Provides students with a social sciences/humanities background with information on how diseases associated with aging exacerbate the effects of aging on the human body, mind, behavior.
## 5700 Diversity, Social Justice \& Social Practice (3)

 Same as WGS 5700. Prerequisites: Graduate standing. Analyzes the structure, dynamics, and consequences of social and economic injustice, and the impact on diverse groups in American society. Examines theoretical models and practice principles for work with diverse groups.
## 5800 Graduate Field Practicum I (2-4)

Prerequisites: Graduate standing and consent of instructor. Provides integrative field experience in generalist social work practice. May be taken for 2 or 4 credit hours depending on time in agency during semester; 75 contact hours $=1$ credit hour. May be repeated once. A maximum of 4 credit hours will apply to the M.S.W. degree.

## 5801 Foundation Field Practicum Seminar (2)

Prerequisite: Graduate standing and consent of instructor. Integrates academic content from foundation course work and experiential learning in field placements. Goals are to conceptualize the problem solving process in field practice, synthesize theory into a social work approach that encourages creative use of self, and underscore ethics and service to diverse groups in practice.

6100 Theory and Practice with Children and Youth (3) Prerequisite: Soc Wk 5100 or equivalent or consent of instructor and graduate standing. Examines theory and empirically-based assessment and intervention models for work with children and adolescents. The effects of family, peers, and societal context (e.g., poverty, racism) will be stressed in understanding youth problems such as drug abuse, academic failure, delinquency, adolescent pregnancy, and gang participation. The course will emphasize a multidisciplinary approach using inter-agency collaboration and negotiation skills.

## 6120 Theory and Practice with Older Adults (3)

 Prerequisites: Soc Wk 5410 or equivalent.(MSW students normally take all foundation courses prior to enrolling in this course.) Examines theory and empiricallybased assessment and intervention models for work with the elderly. It includes the life circumstances of older adults and how that differs from younger adult populations; how ethnicity, gender, social class, and sexual orientation interact with age and create special intervention issues; discussion of ethical and value issues (e.g., client autonomy, rationing of health care); examination of family and community resources in providing care, and interventions with physically or mentally disabled elders and elders in residential settings.

6150 Theory and Practice with Families (3)
Prerequisites: Soc Wk 5100 or equivalent, graduate standing and departmental approval. Examines theoretical approaches to social work with families, including the impact of the social environment. Skills will include assessment, and multidisciplinary intervention with multi-problem families. Special emphasis will be given to poverty, chemical dependency, intra-familial violence, physical and mental illnesses, and working with family members of diverse cultures, socioeconomic backgrounds, races, sexual orientation, and ability. Values and ethics will be emphasized.

## 6160 Advanced Interventive Strategies Across the Life

 Span (3)Prerequisites: Soc Wk 5100 or equivalent or consent of instructor. Examines theory and empirically-based assessment and intervention strategies for diverse populations across the life span. Students will gain basic mastery of behavioral, cognitive-behavioral, brief therapeutic and supportive psychotherapeutic techniques and their appropriate use with children, adolescents, and young, middle, and older adults. The course will also consider the effects of family, peers and societal context (e.g., poverty, racism, and ageism) in understanding psycho-social stressors particular to each life era, including academic failure and delinquency, substance abuse, physical and mental illness, family disruption and instability, and grief and loss issues.

## 6200 Family Policy (3)

Prerequisites: Soc Wk 5200 or equivalent or consent of instructor and graduate standing. Same as Pol Sci 6416 and Soc 6200. Examines policy development, implementation
and impact of social policies on children, youth, and families. International, focus, including topics such as economic support, health national, and state policies that affect basic family needs will be the care, child care and protection, and child and youth development. Intended and unintended consequences of existing policies on the family will be examined as well as future policy directions.

## 6250 Social and Economic Development Policy (3)

 Prerequisites: Soc Wk 5200 or equivalent or consent of instructor and graduate standing. Same as Pol Sci 6418. Examines major trends and alternatives in social and economic development policy and practice in state, national, and international perspectives. Students will develop skills in policy analysis and development.
## 6400 Practice and Program Evaluation (3)

Prerequisites: Soc Wk 5410 and 5450 or equivalent or consent of instructor and graduate standing. Provides specialized knowledge in the use of qualitative and quantitative research skills to evaluate the effectiveness of social work practice. Topics will include single system design, group designs, and program evaluation. Students will design and conduct a research project associated with their advanced social work practicum. Results will be presented to the class and the agency. Value and ethical issues, particularly those relevant to client race and gender, will be emphasized as students develop and conduct their research.

## 6417 Income \& Pension Policy for the Aged (3)

Prerequisites: Graduate standing or consent of instructor. Same as PPA 6417, Ger 6417 and Pol Sci 6417. (MSW students normally take the social policy foundation course prior to enrolling in this course.) Examination of federal, state, and local policies that affect the economic well-being of the elderly. The development of social security programs and pension programs is explored within a historical context. Emphasis is placed on the analysis of current policy problems and proposed solutions.

## 6443 Health Care Policy (3)

Prerequisites: Graduate standing or consent of instructor. Same as Pol Sci 6443, Ger 6443 and PPA 6430. (MSW students will normally take the social policy foundation course prior to enrolling in this course.) Survey course examining current issues in health policy that face the nation. Policies are placed in a historical context to show how issues have been influenced by different political and economic conditions. Secondary consequences and limitations of current trends in health policy are explored.

## 6449 Human Resources in the Public Sector (3)

Prerequisites: PPA 6600 or consent of instructor. Same as Pol Sci 6449 and PPA 6490. Presents an overview of personnel and labor relations in the public sector. Particular emphasis placed on issues which are unique to the public sector, such as the merit system, the questions of representative bureaucracy and the constraints of personnel in the nonprofit sector. The topics include personnel reforms
in the federal sector, equal employment and affirmative action policies, testing, selection, hiring, comparable worth, job evaluation, and labor relations including grievance arbitration and collective bargaining.

## 6491 Strategic and Program Planning for Nonprofit Organizations (3)

Prerequisites: Graduate standing or consent of instructor. Same as Pol Sci 6490 and PPA 6550. Strategic and program planning enable an organization to concentrate on efforts and set priorities guided by a mission, vision, and an understanding of its environment. Focus is on preparing a strategic plan and a program plan for a nonprofit organization and analyzing an organization's ability to deliver goods and/or services to its constituents in today's economic, social and political climate.

## 6630 Diagnosis and Related Pharmacology for Social Work Practice (3)

Prerequisites: Soc Wk 5100 or equivalent or consent of instructor. Designed for social work students, course w.ll provide overview of development and treatment of selezted mental health disorders classified by the Diagnostic and Statistical Manual of Mental Disorders. In particular, c surse will examine, from a systems perspective, psychological and neuropsychological etiologies of mood, psychotic, personality, and other disorders and their preferred pharmacological treatment.

## 6640 School Social Work (3)

Prerequisites: Soc Wk 5100 or equivalent or graduate standing and consent of instructor. Examines role of social worker in school settings and includes work with youtt., families, and communities in relation to the child or adolescent's functioning in school.

## 6650 Gerontological Assessment (3)

Prerequisites: Graduate Standing. This course provide; an overview of psychosocial assessment with older adults and their family caregivers. Major areas of gerontological assessment practice are considered, including dementiti, mood disorders, suicide, grief, alcoholism, elder abuse/neglect, family caregiving, and interdisciplinary team issues.

## 6800 Graduate Field Practicum II (2-6)

Prerequisites: Soc Wk 5801 and Soc Wk 5800. Providss integrative field experience in students' graduate socia. work practice concentration. May be taken for 2 to 6 hours' ,redit depending on time in agency during semester; 55 contict hours $=1$ credit hour. May be repeated once and/or taken concurrently with Soc Wk 6850.

## 6850 Graduate Field Practicum III (2-6)

Prerequisites: Soc Wk 6800. Provides advanced integrative field experience in students' graduate social work practice concentration. May be taken for 2 to 6 hours' credit depending on time in agency during semester; 55 contact
hours $=1$ credit hour. May be repeated once and/or taken concurrently with SW 6800 .

6900 Directed Study in Professional Social Work (1-10) Prerequisites: Graduate standing and consent of instructor. Independent graduate-level study on a topic of particular interest through readings, reports, and field work under faculty supervision.

6950 Advanced Seminar in Professional Social Work (13)

Prerequisites: Graduate standing and consent of instructor. Focused study on selected issues, concepts, and methods of professional social work practice. May be taken more than once for credit provided the course topic is different each time.

## Department of Sociology

Faculty<br>Chikako Usui, Associate Professor*, Chairperson Ph.D., Stanford University<br>George J. McCall, Professor Emeritus*<br>Ph.D., Harvard University<br>Herman W. Smith, Professor Emeritus*<br>Ph.D., Northwestern University<br>Harry H. Bash, Associate Professor Emeritus*<br>Ph.D., University of Pennsylvania<br>Sarah L. Boggs, Associate Professor Emerita*<br>Ph.D., Washington University<br>Nancy Shields, Associate Professor*<br>Ph.D., Southern Illinois University-Carbondale<br>Teresa J. Guess, Associate Professor<br>Ph.D., University of Missouri-Columbia<br>Susan Tuteur, Adjunct Assistant Professor<br>Ph.D., University of Chicago<br>Larry Irons, Adjunct Assistant Professor<br>Ph.D., Washington University<br>Linda Benson, Lecturer<br>M.A., UM-St. Louis<br>Robert Keel, Senior Lecturer<br>M.A., Washington University<br>Kathy Furgason, Lecturer<br>M.Ed., Maryville University<br>*members of Graduate Faculty

The faculty prides itself on its commitment to high standards of teaching and sound scholarly research. Systematic course evaluations by students each semester are taken seriously, and individual faculty have been singled out as nominees and recipients of university Excellence in Teaching awards. The ongoing scholarly research of the faculty is reflected in the department's upper-level and graduate courses, as well as in the numerous publications in journals and books or presentations at national and international meetings. Information on current academic activities of the faculty is posted on the departmental Web page http://www.umsl.edu/sociolog.

## General Information

## Degrees and Areas of Concentration

The sociology department offers courses leading to the B.A. in sociology and the B.S. in sociology; in cooperation with the College of Education, the B.A. in sociology with teacher certification; in cooperation with the College of Business Administration, the B.A. in sociology with a business option; and cooperative minor or certificate programs in American studies, black studies, legal studies, urban studies, religious studies, women's and gender studies, and international studies.

Students completing the B.A. or B.S. degree in sociology are well-prepared for graduate study in sociology or careers in
industry, health and social services, and urban, intergroup, political, or community issues. Since the sociology department also offers work leading to the M.A. degree in sociology (see below), opportunities are available for graduate-level instruction to selected undergraduate students.

In addition to a balanced program of basic undergraduate to advanced graduate courses, the department provides a range of opportunities for students to develop specialized restarch methods. Seminars, and internship placements are offered in support of this goal and are typically designed around tie ongoing research interests of department faculty. The department provides students with opportunities for intensive direction and guidance from faculty. Students and facuty working in particular subject areas consult freely with members working in other areas. Research interests of sociology faculty extend beyond the department into a wide variety of joint projects with faculty in other departmerts and programs, including criminology and criminal justice, engineering, political science, trauma studies, women's and gender studies, gerontology, public policy research centers, and the Center for International Studies.

A minor in sociology at UM-St. Louis is available to students majoring in related areas.

## Undergraduate Studies

## General Education Requirements

Students must satisfy the university and college general education requirements. Courses in sociology may be used to meet the social science requirement. The foreign
language requirement for the B.A. degree may be satisfied in any language. Not more than 12-15 hours of communi.y college transfer credit may be applied toward the combined minimum of required credit hours for the B.A. ( 30 credit hours) or B.S. ( 36 credit hours) major. No course in which a grade below a C - is received will count toward satisfying the core requirement.

## Satisfactory/Unsatisfactory Restrictions

Sociology majors may not take courses counting towad their major requirements on a satisfactory/unsatisfactory basis.

## Degree Requirements

## Bachelor of Arts in Sociology

In addition to specific baccalaureate degree requirements of the College of Arts and Sciences, candidates must conplete 30 hours of sociology course credit including the follcwing required core courses:

1010, Introduction to Sociology
3210, Sociological Theory
3220, Sociological Statistics, or
Math 1310, Elementary Statistical Methods, or
Math 1102, Finite Mathematics I, or Math 1105, Basic
Probability and Statistics
3230, Research Methods

Note: The core requirements should be completed as early as possible, preferably by the end of the junior year. Sociological Statistics is a prerequisite for research methods. Only 45 hours of sociology can be applied to the 120 hour total required for a degree from the University of MissouriSt. Louis.

For the B.A. in sociology candidates are required to take the core courses ( 12 hours) and at least 18 additional hours of sociology courses, selected according to career objectives, with at least six hours at the 4000 level (no more than three hours of either Soc 4350, Special Study or Soc 4385, Internship in Sociology may be applied to this 4000 level requirement). No more than three hours in sociology below the 2000 level can count towards this 18 -hour requirement. Applied training through one or more research courses may be used as part of the requirement for the major.

## Bachelor of Science in Sociology

For the B.S. in Sociology, candidates are required to take the core courses ( 12 hours) and complete the following requirements.

Eight additional sociology courses ( 24 hours), chosen with the approval of the student's faculty advisor, are required for the B.S. in Sociology, including a minimum of four courses (twelve hours) at the 4000 or 5000 level (no more than three hours of either Soc 4350 Special Study or Soc 4385, Internship in Sociology may be applied to the 4000 or 5000 level requirement). No more than three hours in sociology below the 2000 level can count toward this 24 -hour requirement.

## Related Area Requirements:

Candidates for the B.S. in sociology also must complete five courses from at least four of the following nine areas: computer science, economics, mathematics, philosophy, political science, probability and statistics, psychology, public policy administration, and international studies. Specific course selections must be approved by a faculty advisor.

## Combined Degree: Bachelor of Science in Civil Engineering and Bachelor of Science in Sociology

Students pursuing the combined degree are simultaneously enrolled in the College of Arts and Sciences and the Joint Undergraduate Engineering Program. They have an engineering faculty adviser as well as a faculty adviser in the Department of Sociology.

A program of 159 semester hours is required for the B.S. in civil engineering and the B.S. in sociology. Earned alone, the B.S. in engineering requires 137 semester hours. Because of the overlap in required courses for the two curricula, the combined degree program requires only 22 additional semester hours.

For additional information, see the section in this Bulletin labeled UM-St. Louis/Washington University Joint Undergraduate Engineering Program or contact:

Associate Dean of the Joint Undergraduate
Engineering Program, 228 Benton Hall
University of Missouri-St. Louis
One University Blvd., St. Louis, MO 63121.

## B.A. or B.S. in Sociology with Teacher Certification Students must complete the B.A. or B.S. in sociology requirements, as well as the requirements for teacher certification. (See the College of Education section of this Bulletin.)

B.A. or B.S. in Sociology with an Interest in Business The following courses are suggested for students seeking careers in sales, market research, and so forth. In addition to the B.A. or B.S. in sociology requirements, the following core courses are suggested:

Econ 1001, Principles of Microeconomics
BA 2400, Fundamentals of Financial Accounting
Sociology 4646, Demographic Techniques
Students may then choose to complete one of the following three sets of courses:

1) Marketing Management

3700, Basic Marketing
3740, Marketing Intelligence
3760, Industrial Marketing
2) Financial Management

3500, Financial Management
3501, Financial Policies
3520, Investments
3) Accounting

2410, Managerial Accounting
3401, Intermediate Accounting I
3411, Cost Accounting

## Requirements for the Minor

Students must apply for the minor in sociology. Candidates must complete at least 15 hours of departmental course work in sociology, of which at least 9 must be completed at UMSt. Louis' department of sociology and must be beyond those applied to the candidate's major. At least 6 hours must be at the 4000 level (no more than 3 hours of either Soc 4350, Special Study, or Soc 4385, Internship may be applied to this 4000 level requirement).

Candidates who anticipate that their background in sociology may play a substantial role in their career plans are strongly encouraged to take some or all of the core requirements. Candidates must have a cumulative grade point average of 2.0 or better in all courses pertaining to the minor.

Department courses taken on a satisfactory/unsatisfactory basis may not be applied to the minor.

## Department Awards

The department offers several annual awards to outstanding students on the basis of merit.
The Ray Collins Alumni Award is given annually by the Sociology Alumni Association to the top graduating senior. The awardee is selected by the faculty on the basis of GPA, and the award consists of first-year membership dues in the Sociology Alumni Association and a cash award.

Honors Program Student Association Awards are given annually to exceptional students. The awards include student affiliate memberships in the Honors Program Student Association of the American Sociological Association to aid the establishment of a network of colleagues who are at similar points in their career development.

The Alumni Agent Scholarship and the Sociology Alumni Scholarship are given to deserving sociology majors annually. The awardees are selected by the faculty on the basis of merit.

A series of undergraduate awards are given to outstanding students. The Freshman Sociology Award is given to the outstanding freshman student in lower-division sociology course work; the Outstanding Junior Sociology Major Award is given to the outstanding junior sociology major; the Outstanding Sociology Minor Award is presented to the graduating student with the most outstanding minor GPA record; and the Outstanding Sociological Statistics and Methods Award is given to the sociology major with the best overall record in Soc 3220 and 3230. This award carries a stipend for the student to serve as an undergraduate course assistant for Soc 3220, or 3230 .

## Department Honors

The sociology department will award department honors for those B.A. and B.S. degree candidates in sociology with an overall grade point average of 3.2 or better. They must also successfully complete an independent study through Soc 4350, Special Study.

## Graduate Studies

## 2+3 B.A. and M.A. in Sociology

The $2+3$ combined B.A./M.A. program in sociology provides an opportunity for students of recognized academic ability and educational maturity to fulfill integrated requirements of the undergraduate and master's degree programs from the beginning of their junior year. Because of its accelerated nature, the program requires the completion of some lowerdivision requirements of ( 12 hours) before entry into the three-year portion of the program. When all the requirements of the B.A. and M.A. programs have been completed, the students will be awarded both the baccalaureate and master's degrees. A carefully designed
program can permit a student to earn both degrees withiz as few as ten semesters.

The combined program requires a minimum of 137 bow's, of which 30 must be at the 4000 or 5000 levels. In qualifying for the B.A., students must meet all University and college requirements, including the requirements of the undergraduate major described previously. During the junior and senior years, students normally take a 4000 level research practicum course, Soc 5400 , Soc 5402 , and So: 5404. In qualifying for the M.A., students must meet all University and Graduate School requirements, includin; satisfactory completion of a minimum of 30 graduate credit hours. Up to 12 graduate credit hours may be applied simultaneously to both the B.A. and M.A. programs. Any 4000 level course applied to the M.A. requirements wil require additional work to qualify for graduated credit.

Students should apply to the Graduate Director of the Department of Sociology for admission to the $2+3$ combined degree program in sociology the semester they will complete 60 undergraduate degree credit hours, but no later than the accumulation of 90 credit hours. A cumulativ: grade point average of 3.0 or higher, and three letters of recommendation from faculty are required for consideration. Students will be admitted to the $2+3$ programs under provisional graduate status until they have completed 30 credit hours with a grade point average of 3.0 or higher. After completion of the provisional period, and with recommendation of the Graduate Director, students can be granted full admission into the program. Students must maintain a grade point average of 3.0 or higher throughout the combined program. Students who officially withdraw from the $2+3$ combined degree program will be awaried the B.A. degree when they have successfully completed all the requirements for the degree.

The following requirements must be completed prior to enrolling in the $2+3$ program:

1010, Introduction to Sociology and three additional sociology courses.

The following undergraduate courses are required for majors in the $2+3$ program:

3210, Sociological Theory
3220, Sociological Statistics (or an approved statistics course)
3230, Research Methods
Graduate Sociology Requirements for Students in the $2+3$ Program

The following graduate courses are required at the 4000 to 5000-level:

1. Sociology 5400, Proseminar in Sociology
2. Sociology 5402, Advanced Quantitative

## Techniques

3. Sociology 5404, Advanced Methodology
4. Five additional courses ( 15 hours) that have been approved by the Graduate Director

## Graduate Exit Requirements:

A student's program must include one of the following exit projects: a 6 -hour internship (Soc 5480, Individual Study) or a 6 -hour preparatory sequence and an approved paper (Soc 5490 , Supervised Research). Each candidate is given a final oral review conducted by a faculty committee and focused on the course work completed and the student's chosen exit project or thesis.

## M.A. in Sociology

The department offers a flexible program of studies leading to the Master of Arts degree in sociology. Course work combines intensive examination of the core areas of sociology with acquisition of the analytical skills of sociological investigation. A variety of career options are available to the master's-level graduate, including: program evaluation and research; field or casework related to community issues; administrative roles in social agencies and planning organizations; or doctoral studies in sociology or related fields.

The curriculum is designed to serve the needs of full-time students as well as working students who are able to engage only in part-time studies. This design allows pre-career and mid-career students to prepare for employment in education, service agencies, community organizations, government agencies, or businesses. The curriculum also invites students to take advantage of the university's urban setting through integration of selected work experiences with practicum courses and academic seminars under faculty guidance. The curriculum emphasizes theoretical, analytic, and substantive approaches to urban-related problem solving.

## Admission Requirements

Individuals with at least the equivalent of the department's B.A. or B.S. degree in sociology may be admitted to the Graduate School as candidates for the M.A. degree. Students with bachelor's degrees in fields other than sociology may be admitted to pursue graduate sociology studies under the condition that they make up core deficiencies prior to graduate work.

In addition to meeting the general admission requirements of the Graduate School, a student should ordinarily have:

- A baccalaureate degree with a minimum grade point average of 3.0 .
- At least 15 hours in the social sciences, of which 12 should be in upper-level courses.
- Three letters of recommendation from persons qualified to judge the candidate's potential for success in the program.
- A statement describing the applicant's interest in graduate study in sociology.

Students who do not meet these requirements may be provisionally admitted upon approval of the department and the dean of the Graduate School. Admission and financial aid decisions are made on the basis of past academic record, program performance, and career commitment. Students wishing to continue regular employment outside the university may enroll on a part-time basis. Requests for further information about the program should be sent to:

Director of Graduate Studies
Department of Sociology
University of Missouri-St. Louis
One University Blvd.
St. Louis, MO 63121-4400

## Degree Requirements

## Master of Arts in Sociology

Each student shall prepare an adviser-approved course of study during the first semester of enrollment. Candidates for the M.A. degree shall complete a minimum of 30 hours of approved study, at least 21 of which must be taken in courses offered by the department.

## Core Curriculum

5400, Proseminar in Sociology
5402, Advanced Quantitative Techniques
5404, Advanced Methodology
The sociology department participates in a joint quantitative techniques and methodology series of courses with the other social sciences which can be substituted for the above.

Concentration The department offers opportunities for intensive work in one of the several research areas of department faculty members, which allows the flexibility for comprehensive and coherent exposure to the methods and insights of the discipline. Matriculating students are encouraged to plan, with their advisers, a coherent program of studies consistent with their career interests.

Exit Requirements A student's program must include one of the following exit projects: a 6-hour internship; Soc 5480, Individual Study or a 6 -hour preparatory sequence and an approved paper Soc 5490, Supervised Research. Each candidate is given a final oral review conducted by a faculty committee and focused on the course work completed and the student's chosen exit project or thesis.

## Career Outlook

The following career information is adapted from the American Sociological Society Web site. For more information, see http://www.asanet.org/.

A B.A. or B.S. in sociology is excellent preparation for graduate work in sociology for those interested in an
academic or professional career as a professor, researcher, or applied sociologist.

The undergraduate degree provides a strong liberal arts preparation for entry level positions throughout the business, social service, and government worlds. Employers look for people with the skills that an undergraduate education in sociology provides. Since its subject matter is intrinsically fascinating, sociology offers valuable preparation for careers in journalism, politics, public relations, business, or public administration fields that involve investigative skills and working with diverse groups. Many students choose sociology because they see it as a broad liberal arts base for professions such as law, education, medicine, social work, and counseling. Sociology provides a rich fund of knowledge that directly pertains to each of these fields.

The M.A. offers students access to an even wider variety of careers. Sociologists become high school teachers or faculty in colleges and universities, advising students, conducting research, and publishing their work. Over 3000 colleges offer sociology courses. Sociologists enter the corporate, nonprofit, and government worlds as directors of research, policy analysts, consultants, human resource managers, and program managers. Practicing sociologists with advanced degrees may be called research analysts, survey researchers, gerontologists, statisticians, urban planners, community developers, criminologists, or demographers. Some M.A. sociologists obtain specialized training to become counselors, therapists or program directors in social service agencies.

Today, sociologists embark upon literally hundreds of career paths. Although teaching and conducting research remains the dominant activity among the thousands of professional sociologists today, other forms of employment are growing both in number and significance. In some sectors, sociologists work closely with economists, political scientists, anthropologists, Psychologists, social workers and others reflecting a growing appreciation of sociology's contributions to interdisciplinary analysis and action.

## Course Descriptions

Students who have earned 24 or more semester hours of credit at any accredited post-secondary institutions(s) before the start of the fall 2002 semester must meet the general education requirements stipulated in the UM-St Louis 20012002 Bulletin. The following courses fulfill the Social Sciences breadth of study requirements as described in that Bulletin:
$1010,1040,1999,2100,2102,2103,2160,2180,3200$, 3202, $3210,3214,3220,3224,3230,3231,3241,3245$, $3250,3262,3264,3268,3270,3278,3280,3286,3290 \mathrm{a}$, 3290b, 3290c, 4040, 4100, 4300, 4310, 4312, 4314, 4316, $4317,4320,4331,4336,4338,4340,4342,4344,4646$, $4350,4352,4354,4356,4360,4361,4370,4375,4378$, 4380, 4940

## 1010 Introduction to Sociology (3) [V, SS]

An introduction to sociological approaches to human behavior, including types of social organizations, patteris of social interaction, and social influences on individual conduct.

## 1040 Social Problems (3) [V, SS]

Conditions defined by society as social problems, as well as potential solutions, are examined from various sociological perspectives. Emphasis is given to problem issues prevalent in metropolitan settings. Analyses focus on victims and beneficiaries of both problem conditions and alternative solutions.

## 1999 The City (3) [MI, V, SS]

Same as Pol Sci 1990, and ID 1990. Consideration of economic factors, urban institutions, historical developinents in urbanization, problems of the inner city, suburbia and the metropolitan area, ethnic groups, stratification, and psychological implications of urban living. This course is for freshmen and sophomores. It is open to juniors and sen.ors with the consent of instructor.

## 2100 Women in Contemporary Society (3)

Prerequisite: Soc 1010 or ID 50 or consent of instructor. An introduction to the sociological analysis of the status of women in society, including their work, family, and political roles. Socialization, education, and the women's movernent will also be considered, as these affect the position and participation of women in a variety of social arenas.

## 2102 Introduction to Women's and Gender Studies (3)

 Same as WGS 2102, Social Work 2102, and Hist 2102 This core class is required for all Women's and Gender Stucies Certificate earners. This class introduces students to cultural, political, and historical issues that shape gender. Through a variety of disciplinary perspectives in the humanities, social sciences, and natural sciences, the course familiarizes students with diverse female and male experiences and gendered power relationships.
## 2103 Gender Roles in Society (3)

Same as WGS 2103. Prerequisite: Soc 1010 or WGS 1012 or consent of instructor. The study of social processes thriugh which gender roles are developed and acquired; the impact of gender roles on personal identity and social conduct; the relationship between gender roles and social inequality; and individual and social consequences of changing gender roles in contemporary society.

## 2160 Social Psychology (3)

Same as Psych 2160. Prerequisite: Soc 1010 or Psyh 1)03. Study of the interaction between individuals and their :ocial environment. Examination of basic principles, concepts, and methods.

2170 Aging in America: Concepts and Controversits (3) Same as ID 2170 and Ger 2170. This course examines the major theoretical and service issues connected to the study of
older adults and their families, using multidisciplinary perspectives. Students are provided with an introduction to the field of aging through an examination of current social issues and controversies. This course emphasizes student involvement through class discussion, and is appropriate for students in the arts and sciences, business, communication, education, and nursing.

## 2180 Alcohol, Drugs, and Society (3)

Same as CCJ 2180. Prerequisite: Soc 1010 or Psych 1003. This course examines the medical, legal, and social aspects of alcohol and drug use. Medical aspects considered include treatment approaches and the role of physicians in controlling such behavior. In the legal realm, past and present alcohol and drug laws are explored. Cultural and social influences on alcohol and drug use are discussed.

## 3200 Sociology of Deviant Behavior (3)

Prerequisite: Soc 1010 or consent of instructor. Theories of the nature, causes, and control of deviance as a social phenomenon. Application of theories to specific substantive areas, such as mental disorder, delinquency, drug abuse, suicide, unconventional sexuality, and physical disability.

## 3202 Urban Sociology (3)

Prerequisite: Soc 1010 or consent of instructor. Urbanization as a world phenomenon; urban social and ecological structures and changing life styles; the decision-making processes in urban problem-solving.

## 3210 Sociological Theory (3)

Prerequisite: Soc 1010 or consent of instructor. The nature of sociological theory. An investigation of theory from Comte through contermorary developments. Contributions made by theorists in related disciplines.

3214 Juvenile Delinquency and Youth Crimes (3)
Prerequisite: Three hours of 2000 level sociology. A theoretical and research-oriented approach to delinquency and youth crime, including types, trends, causation, correction, and prevention.

## 3220 Sociological Statistics (3)

Prerequisites: Soc 1010 and Math 1020 or 1030. Issues and techniques of statistical analyses relevant to quantitative sociological research, e.g., elementary probability, measurements of central tendency and dispersion, measures of relationships including linear regression and correlation, inferential statistics.

## 3224 Marriage and the Family (3)

Same as Nurs 3224 and WGS 3224. Prerequisite: Soc 1010 or consent of instructor. The study of patterns of close relationships, and how these relationships are influenced by larger social forces. Topics include: love, dating, mate selection, cohabitation, altemative lifestyles, working families, parenting, single mothers, families in crisis, domestic violence, and divorce. Universal and variable
aspects of family organization, family role systems, and changes in family social structure.

## 3230 Research Methods (3)

Prerequisites: Soc 1010 and satisfaction of mathematics proficiency requirement and Soc 3220 or consent of instructor. Research planning and interpretation, principles of research design, measurement, and sampling. Techniques for the collection, analysis, and presentation of data. The course also includes an introduction to the Statistical Package for the Social Sciences (SPSS) and lab exercises.

## 3241 Selected Topics in Macro-sociology (1-3)

Prerequisite: Soc 1010 or consent of instructor. Examination of a specific topic that focuses on large-scale social systems and the structural relationships among social organizations and institutions. May be taken more than once for credit provided the topic of the course is different each time.

## 3245 Sociology of South Africa (3) [CD]

Prerequisite: Soc 1010 or consent of instructor. An analysis of South African society as a sociocultural system, with attention to its demographic, ecological, and social structures; its distinctive social institutions and life styles; and the social dynamics of modernization, urbanization, and ethnicity. This course satisfies the Cultural Diversity requirement.

## 3250 Sociology of Victimization (3)

Same as WGS 3250. Prerequisites: Soc 1010. Examines the role of social factors in a wide range of kinds of victimization-crime, violence, natural disasters, accidents, disease, etc. The topic of social reactions to various kinds of victimization is also covered. Sociological theories of victimization are emphasized.

## 3262 Social Psychology of Urban Life (3)

Prerequisites: Soc 1010 or Psych 1003. Examines how people experience and give meaning to their lives as urban dwellers. Topics include: cognitive maps, crowding, sensory overload, lifestyle diversity, strangers, urban tolerance, social networks, segmentation of personal life, and quest for identity.

## 3264 The Sociology of Religion (3)

Prerequisite: Soc 1010 or consent of instructor. Religion as a universal social institution, its development, forms, and influence in the world, including Western and Eastern religions. Sociological analysis of the effects of religion upon the individual and societies. Religion, its roles in social change, and contemporary trends.

## 3268 The Sociology of Conflict (3)

Prerequisite: Soc 1010 or consent of instructor. The conditions under which social conflicts arise, develop, and are terminated (or in some cases resolved) are examined. The functions of different levels of conflict are studied to determine the potential effects and outcomes of planned intervention.

## 3270 Socialization (3)

Prerequisite: Soc 1010 or consent of instructor. Analysis of the structural and social psychological aspects of roles and the self as a product of social interaction.

## 3278 Sociology of Law (3)

Prerequisite: Soc 1010 or consent of instructor. A study of law and society with emphasis on the sociological analysis of specific problems of legal doctrines and legal institutions. The law is examined as an instrument of social control through study of the courts, the legal profession, the police, and various social institutions. Consideration is given to law as an instrument of social change.

## 3280 Society and Technology (3)

Prerequisite: Soc 1010 or consent of instructor. Technology in industrial and postindustrial societies. The social shaping of technological systems. The role of technology in social change.

## 3286 Society, Arts, and Popular Culture (3)

(Same as Ant 3286) Prerequisite: Soc 1010 or Anth 1011. The relationship of artists, writers, and musicians; their traditions and modes of artistic expression to variant social structures and institutions; and social pressures and rewards.

## 3290a, 3290b, 3290c Undergraduate Seminar in Sociological Issues (3)

Prerequisites: Soc 1010 and consent of instructor. Consideration of an issue or area of the instructor's choice not already covered by other undergraduate courses. May be taken up to three times for nine hours of credit, provided the subject matter is different each time the seminar is taken.

## 3298 Practicum in Field and Laboratory Research (1-3)

Prerequisites: Soc 3220 and Soc 3230, or consent of instructor. Intensive field or laboratory research to be taken subsequent to, or concurrent with, a specific substantive course. May be taken twice for credit.

3317 Social Psychology of Conflict and Negotiation (3) Same as Psych 3317. Prerequisite: nine (9) hours of Psychology or nine (9) hours of sociology, including Psych 2160 or Soc 2160 . The purpose of this course is to understand how social psychological phenomena affect the processes and outcomes of negotiation and other forms of social conflict. The course is designed to be relevant to the broad spectrum of conflict situations people face in their work and daily lives. A basic premise of this course is that while analytical skills are needed to discover solutions to social problems, negotiation skills are needed in order for these solutions to be accepted and implemented.

Note: Any $\mathbf{4 0 0 0}$ level course taken for major elective credit requires prior completion of two of the following: Soc 3210, Soc 3220, or Soc 3230.

4040 Survey Research Practicum (3)
Same as Econ 4140 and Pol Sci 4040. Prerequisites: Junior standing, Soc 3220, Soc 3230, and consent of instructor. The execution of a sample survey, including establishing study objectives, sampling, questionnaire construction, interviewing, coding, data analysis, and presentation of results. May be taken more than once for credit provided the course topic is different each time.

## 4100 Diversity and Social Justice (3)

Same as Soc Wk 4100. Prerequisites: Soc 1010 or equivalent. Analyzes the structure, dynamics, and consequences of social and economic injustice, and the impact on diverse groups in American society. Examines theoretical models and practice principles for work with diverse groups.

## 4300 Communities and Crime (3)

Same as CCJ 4300. Prerequisite: CCJ 1110, 1120, 1130, 2210, 2220, English 3100 or consent of instructor. Analysis of the sources, consequences, and control of crime within communities. Emphasis on social and ecological theories of crime and on population instability, family structure, and the concentration of poverty as causes of crime. Common ty crime prevention efforts are also addressed.

## 4310 Selected Topics in Sociological Theory (1-3)

Prerequisite: Soc 3210 . Focused examination of selected issues, the contributions of individual theorists, and methodological implications in the study of sociological theory. May be taken twice for credit.

## 4312 Sociology of Wealth and Poverty (3)

Prerequisites: Soc 1010 and junior standing or consent of instructor. Theory and research on social stratification and inequality in contemporary societies.

## 4314 Social Change (3)

Prerequisites: Soc 1010 and junior standing, or consent of instructor. Theories of social change applied to the analysis of small and large social systems, including the planning of change and projecting of alternative futures.

## 4316 Power, Ideology, and Social Movements (3)

Prerequisite: Soc 1010 and Junior Standing or consent of instructor. Effect of events and social processes on thought and action in the twentieth century. Social functions of ideologies as expressed in movements and formal and informal organizations seeking social change.

## 4320 Forms of Criminal Behavior (3)

Same as CCJ 4320. Prerequisite: CCJ 1110, 1120, 1:30, 2210, 2220, English 3100 or consent of instructor.
Examination of major types of criminal behavior including violent, property, public order, and organizational offenses. Emphasis on theories of, and responses to, these cringes.

4325 Gender, Crime and Justice (3)
Same as CCJ 4325. Prerequisites: CCJ 1110, 1120, 1130 , 2210,2220 , English 3100 or consent of instructor. Analysis of the role of gender in crime and in the justice system. Emphasis on gender differences in crime commission, criminal processing, and the employment of women in criminal justice agencies. Fulfills CCJ diversity requirement.

4330 Field Research in Crime and Deviance (2-4) Prerequisites: Soc 3214. Students will participate in individual or group research projects involving systematic data collection and sociological analysis conceming the causation or societal reaction to crime, delinquency, or related forms of deviance. One option available to students will be an opportunity to study organizations dealing with juvenile or adult offenders.

## 4331 Qualitative Methods in Social Research (3)

 Prerequisite: Soc 3220 and $\operatorname{Soc} 3230$, or their equivalent, or consent of instructor. This course is devoted to such qualitative methods as participant observation, intensive interview, content analysis, and oral history, among others. The place of these kinds of techniques in social research, as well as the issues raised by them, will be considered. Students will participate in individual or group research projects using one or more of the methods discussed.
## 4336 Organizations and Environments (3)

Prerequisites: Soc 1010 and junior standing or consent of instructor. Internal and external forces that influence the structures, adaptive flexibility, and actions of public and private organizations and agencies are examined. Specific foci include: organizational responses to environmental opportunities, constraints, and contingencies; sources of conflict and impediments to organizational goal attainment; and strategies for increasing organizational effectiveness, efficiency, and chances for survival.

## 4338 Sociology of Health (3)

Same as Nurs 4338. Prerequisites: Soc 1010 and junior standing. Exploration of social dimensions and issues related to health and illness, such as access to the health care delivery system; factors influencing prevention, utilization and compliance; changing relationships among health care providers and consumers; health care costs, trends, and crosscultural variations.

## 4340 Race, Crime, and Justice (3)

Same as CCJ 4340. Prerequisite: CC J 1110, 1120, 1130, 2210, 2220, English 3100 or consent of instructor. Analysis of the involvement of racial minorities in crime and the criminal justice system. Emphasis on group differences in offending, processing, victimization, and employment in criminal justice agencies.

4342 World Population and Ecology (3)
Prerequisites: Soc 1010 and junior standing or consent of instructor. Sociological theories and research relating people to their ecological environments. Topics include fertility and
population change in the non-Western world. Emphasis is directed to population policies in e.g., Africa and India and China.

## 4344 Problems of Urban Community (3)

Prerequisites: Soc 1010 and junior standing, or consent of instructor. The urban community as an area of social action and problem solving with emphasis on the sociological aspects of urban problems.

## 4350 Special Study (1-10)

Prerequisite: Consent of instructor. Independent study through readings, reports, and field work.

## 4354 Sociology of Business and Work Settings (3)

Prerequisites: Soc 1010 and junior standing, or consent of instructor. The sociology of work and occupations in America, Europe, and Asia; organization structures and worker participation; worker attitude, behaviors, and commitment; the socialization of the worker; determinants of worker behavior; social problems of work and business; and the impact of community on work place and business behavior.

## 4356 Sociology of Education (3)

Prerequisite: Soc 1010 and junior standing, or consent of instructor. Education as a social institution, its role as an agent of socialization, and its effect upon the processes of social change and social mobility. The relationship between the school and its community.

## 4360 Sociology of Minority Groups (3)

Same as WGS 4360. Prerequisites: Soc 1010 and junior standing or consent of instructor. The study of dominantsubordinate group relations. Religion, ethnicity, race, and gender as factors in the unequal distribution of power.

## 4361 Social Gerontology (3)

Same as Ger 4361. Prerequisites: Soc 1010 and junior standing, or consent of instructor. Topics include: sociological theories of aging, technological and social change and its effects on the environment of older people, and prejudice and discrimination against the elderly.

## 4365 Sociological Writing (3)

Prerequisites: Soc 1010, Eng 3100 and junior standing, or consent of instructor. This course offers directed practice in the interpretation and reporting of sociological research in a wide range of styles, including those appropriate for research reports, journal articles, policy papers, non-technical magazines, books and monographs, as well as oral reports to diverse consumers.

## 4370 Selected Topics in Techniques of Sociological Research (1-3)

Prerequisite: Soc 3220,3230 , or consent of instructor. The study of a specific research technique used in sociological analyses. May be taken more than once for credit provided the course topic is different each time.

## 4375 The Social Psychology of Disabilities (3)

Same as Psych 4375. Prerequisite: Soc 2160 or Psych 2160 or consent of instructor. A social Psychological and microsociological examination of attitudes and behaviors affecting persons with disabilities. Topics include stigma and empowerment, adaptive behaviors, stereotypes and prejudices, and images of disabilities in popular culture and mythology. The course will address the experience of disability and its social consequences for the lives of persons with disabilities.

## 4378 Selected Topics in Social Psychology (1-3)

Prerequisite: Psych 2160 or Soc 2160 , or consent of instructor. Focused examination of selected issues, concepts, and methods in the study of social interaction. May be taken twice for credit.

## 4380 Selected Topics in Social Policy (1-3)

Prerequisite: Soc 1010, Junior standing or consent of instructor. Examination of a specific sociological topic of current relevance in the community. May be taken more than once for credit provided the course topic is different each time.

## 4385 Internship in Sociology (1-6)

Prerequisite: Junior standing and consent of instructor. Students participate in supervised placements in a position related to the profession of sociology.

## 4646 Demographic Techniques (3)

Prerequisites: Soc 3220 and Soc 3230, or consent of instructor. Practicum experience with computation and analysis of major demographic measures of population size, growth, and shape; fertility; mortality; immigration; emigration; and morbidity. Special attention to comparisons of standard Western and non-Western demographic models, with emphasis on computer modeling.

## 4940 Leadership and Management in Nonprofit

 Organizations (3)Same as Soc Wk 4940, Pol Sci 4940, and PPA 4940.
Prerequisite: Junior standing. Addresses the role and scope of the independent sector in the United States, as well as the leadership and management of nonprofit organizations within that sector. Topics include the economic and political scope of the independent sector the role of volunteerism in a democratic society, and the role and scope of philanthropy. Topics in voluntary organization management and leadership include: the dynamics, functions and membership structure of NPOs, especially staff-board and other volunteer relations; governance and management of NPOs; resource mobilizations; and program development management and evaluation.

## 5400 Proseminar in Sociology (3)

Required of all entering graduate students in the fall semester of the first year of residency. An overview of the field of contemporary sociology, with ermphasis on the major theories, issues, research approaches, and ethical problems in
the field today, and an introduction to theory construction, measurement, and design strategies.

## 5402 Advanced Quantitative Techniques (3)

Prerequisite: Soc 3220 or consent of instructor. A study of advanced quantitative analysis of sociological data, focusing on problems of multivariate analysis, sampling theory and techniques, and the use of electronic data processing in approaching these problems.

## 5404 Advanced Methodology (3)

Prerequisite: Soc 3230 or consent of instructor. A study of methodological problems on an advanced level, focusing on contemporary issues in the processes of inquiry with particular emphasis on the applicability of different modes of research to various types of theoretical problems.
Consideration of ethical problems in social research.

## 5406 Research Practicum (3)

Prerequisites: Soc 5400 and consent of instructor. Involvement of students in an individual or group project culminating in a report, in order to provide firsthand experience in integration of theoretical concerns, methodological principles, and appropriate research techniques in an empirical study, the subject of which shall be determined in collaboration with the instructor.

## 5410 Comparative Social Structures (3)

Prerequisite: Soc 5400 or consent of instructor. Social institutions in selected societies are examined in terms of their similarities and differences. Typically, non-American and American social structures such as religion, education, politics, family, and economy are compared, along with population dynamics and change, myths, values, and norms. Societies are selected depending on specialty of faculty and interests of students. May be repeated for credit if the $t$ spic is different.

## 5415 Foundations of Criminological Theory (3)

Same as CCJ 5415. Prerequisites: Graduate standing and consent of instructor. Examination of the history of criminological thought incorporating the major works of such theorists as Bentham, Beccaria, Marx, Durkheim, Lombroso, Sutherland, and Merton.

## 5420 Theories of Conflict (3)

Prerequisite: Soc 5400 or consent of instructor. The co.flict perspective in sociology is contrasted with consensus raodels of society. Conflict theorizing is traced from the Classical social thought tradition in Western civilization to its modern Marxist and non-Marxist formulations in contemporary sociology. Ethical implications for social conflict intervention are considered.

## 5422 Family and Interpersonal Conflict Resolution (3)

 Prerequisite: Soc 5420 or consent of instructor. The soarces and functions of interpersonal conflict in family and neighborhood settings are analyzed. Mediation andconciliation strategies are developed in relation to primary and secondary structures, role systems, and social change.

## 5424 Conflict Management in Organizations (3)

Prerequisite: Soc 5420 or consent of instructor. Intrinsic sources of inter- and intraorganizational conflict and related methods of mediation are examined. Conflict management strategies and situational manifestations of conflict are analyzed within the context of antecedent conditions, such as domain dissensus, differential interests and goals, previously unresolved disputes, unbalanced power relations, structural barriers to communications, internal and external competition for resources, and environmental change.

5426 Community and Regional Conflict Intervention (3) Prerequisite: Soc 5420 or consent of instructor. Community and regional conflicts are examined, with emphasis on paradigms for analyzing power, policy, and social change, and on developing intervention skills through simulation exercises. Intervention roles and approaches, such as mediation, conciliation, arbitration, and advocacy are discussed.

## 5430 Policy Mediation Processes (3)

Prerequisite: Soc 5426 or consent of instructor. Sociological theories of conflict are applied to public issues and policymaking, with an emphasis on building analysis and practice skills. Processes of mediated problem solving are studied and applied to conflict between jurisdictions, between citizens and governments, and between public and private sectors.

## 5432 Survey Research Methods (3)

Same as Ed Rem 6712, Pol Sci 6406. Prerequisites: An introductory statistics course such as Soc 3220 or consent of instructor. A course on the principles and procedures for conducting survey research. Topics include: forming questions and scales, survey design, sampling methods, data preparation and analysis, and presentation of results.

## 5440 Seminar in Urban Sociology (3)

Prerequisites: Nine hours of undergraduate course work in sociology and consent of instructor.

5444 Social Policy and Community Planning (3)
Prerequisite: Consent of instructor. Analysis of the formulation of policy as a social process with concentration on political as well as technical-rational elements. Relation of social policy formation to planning at the community level and analysis of the elements and dynamics of community planning. Analysis of and exposure to planning agencies in the St. Louis metropolitan area.

## 5449 Issues in Retirement (3)

Same as Ger 5449. Prerequisite: Graduate standing. This course examines macro and micro issues of retirement in the United States--its processes, causes, and consequences--in relation to economic market conditions, demographic changes, and programs and policies that are targeted to
support the elderly (e.g., Social Security). It also examines issues relating to older women and retirement.

## 5450 Seminar in Social Psychology (3)

Prerequisites: Nine hours of undergraduate course work in sociology and consent of instructor.

## 5451 Negotiating Workplace Conflict (3)

Same as Mgt. 5612 and PPA 6680. Prerequisites: PPA/Mgt. 6600 , and Graduate Standing. Examines conflict and cooperation between individuals, groups, and organizations over control of work. A central theme is how this conflict is expressed, controlled, and resolved. Students participate in exercises to learn basics of two-party negotiations.

## 5460 Seminar in Deviant Behavior (3)

Prerequisites: Nine hours of undergraduate course work in sociology and consent of the instructor. Advanced theories of the nature, causes, and control of deviance as a social phenomenon.

## 5461 Law and Social Control (3)

Same as CCJ 6430. Prerequisites: Graduate standing and consent of instructor. Examination of the relationship between law and other social institutions, the values and interests that are expressed in law and shaped by legal structures and processes, and law as an instrument of public policy, social control, and social change.

## 5470 Seminar in Sociological Issues (1-3)

Prerequisites: Nine hours of undergraduate course work in sociology and consent of instructor. Consideration of an issue or area of the instructor's choice not already covered by one of the other 5000 level courses. May be taken up to three times for up to nine hours of credit, provided the subject matter is different each time the seminar is taken.

## 5475 Introduction to Evaluation Research Methods (3)

 Same as Psych 5475, PPA 6750, and CC J 5475. Prerequisite: At least one course in research design and statistics at the graduate level. A comparative study of research strategies with regard to data sources, data collection, and modes of analysis that are appropriate for program evaluation research. Attention is given to observational, survey, and quasi-experimental methodologies.
## 5476 Research Practicum in Evaluation Research Methods (3)

Prerequisites: Soc 5475 and consent of instructor. Instruction in, and supervision of, research design and data collection for evaluation of social-deviance action program research report. Concurrent with on-site participant observation.

## 5480 Individual Study (3)

Prerequisite: Consent of adviser and instructor. Designed to give the student the opportunity to pursue particular interests within the discipline and/or to study areas not currently
covered by formal courses. Guided by faculty with appropriate interests. May be taken only twice.

## 5490 Supervised Research (1-10)

Prerequisites: Graduate standing and consent of instructor. Individual supervision of research leading to the preparation of a thesis, research paper, or publishable article, in which the student demonstrates skills in the discipline of sociology.

5492 Advanced Sociological Theory (3)
Prerequisite: Soc 3210 or consent of instructor. Recent and current developments in sociological theory in light of its tradition and methodological issues. The state of modern theory with regard to specific conceptual, substantive, and methodological concerns.

## 5495 Sociological Reporting (3)

Prerequisites: Soc 5400, Soc 5402, and Soc 5404. As part of the M.A. degree exit requirement, the seminar offers directed practice in the interpretation and reporting of sociological data in a wide range of styles, including those appropriate for research reports, journal articles, policy papers, nontechnical magazines, books, and monographs, as well as oral reports to diverse consumers. Ethical dimensions of interpretation and dissemination are explored.

## 5498 Advanced Seminar in Gerontology (3)

Prerequisite: Graduate standing. This course will provide indepth analysis of specialized topics in Ger which are not covered in required courses. (Course may be repeated for a maximum of nine credits, assuming topics are different.)

## 6200 Family Policy (3)

Same as Pol Sci 6416 and SW 6200. Prerequisites: SW 5200 or equivalent or consent of instructor and graduate standing. Examines policy development, implementation and impact of social policies on children, youth, and families. International, national, and state policies that affect basic family needs will be the focus, including topics such as economic support, health care, child care and protection, and child and youth development. Intended and unintended consequences of existing policies on the family will be examined as well as future policy directions.

## 6442 Minority Aging (3)

Same as Ger 6442. Prerequisite: Soc 4361 or consent of instructor. The experience of aging for racial and ethnic minority elderly will be examined in the context of their families, communities, and society. Key questions concerning minority elderly frame the course, such as the relative importance of culture versus social structure, and the applicability of gerontological theory to the minority aging experience.

6445 Sociological Dimensions of Chronic Illness (3) Same as Ger 6445. Prerequisite: Soc 5400 or consent of instructor. The consequences of chronic illness for social roles, family and organizational dynamics, and the functioning of society are examined. Chronic illness is
presented as both a medical problem and a social phenomenon that is shaped by the changing age structure of society.

## 6446 Selected Topics in Health Care Policy (3)

 Same as PPA 6460 and Pol Sci 6446. Prerequisite: Cor sent of instructor. The study of specialized issues and methods relating to health care policy. May be repeated for credit, provided the subject matter is different.
## Minors in Interdisciplinary Studies

The College of Arts and Sciences offers a number of interdisciplinary programs leading to either Bachelor of Liberal Studies degree or a minor or a certificate in a designated area of study. There are also a number of courses which are designated as interdisciplinary and which may or may not be part of a particular interdisciplinary minor or certificate program.

These interdisciplinary courses and programs bring together the resources of two or more subject areas to focus on topics that benefit from being studied from the point of view of more than one discipline. In some cases, faculty from several departments teach as a team, giving students the opportunity to experience faculty dialogue in a cross disciplinary fashion.

## Bachelor of Liberal Studies (BLS)

The Bachelor of Liberal Studies is a degree program that enables students to combine structured academic emphases in ways more relevant to their interests than the standard academic major.

Students who participate in this program must declare their areas of study (two minors or minor and certificate) at the time they declare that BLS is their intended degree. The plan of study should be approved at the beginning of the program.

To obtain a Bachelor of Liberal Studies (BLS), a student must complete:

- UM-St. Louis General Education Requirements General Education (consult General Education section of course listings)
- Communication Skills 6 credit hours
- Managing Information 3 credit hours
- Valuing Skills
- Social and Behavioral Sciences
- Humanities
- Math/Science
- (for a total of 42 credit hours)

In addition, students must complete the State requirement (3) and the Cultural Diversity Requirement (3) if not met in General Education course selection

- The university requirement of proficiency in English Composition English 1100, Freshman Composition English 3100, Advanced Expository Writing
- The university requirement of proficiency in Mathematics (to be completed in first 24 hours at the University)
- A Liberal Studies Concentration (33-41 hours)
to consist of designated (identified) BLS Minors in participating departments or other units (minimum of 15 hours each)
or
A designated minor and a designated multidisciplinary certificate (minimum of 15 hours in each). No course may be used more than once. and
A capstone course (minimum of 3 hours) selected from one of the minors that make up the identified BLS score.

Note: Not all Departments have capstone courses so students must be careful to pair minors and certificates so that they have a capstone course.

## Also Required

- Minimum of 45 credit hours in Junior and Senior level course work ( 3000 and 4000 level)
- Electives 28-42
- A minirnum of 120 credit hours
- Overall GPA of 2.0 with a minimum grade of $C$ in all courses used in BLS combination areas
- Residency requirement, in addition to campus residency, unless otherwise specified, 9 graded hours in each minor and certificate at 2000 level or above and one capstone course

The College of Arts and Sciences (CAS), Fine Arts and Communication (CoFAC) and Business Administration (BA) have joined together to make available Liberal Studies combinations involving the following units:

Department of Anthropology, (CAS)
Department of Art History, (CoFAC)
Minor in Art History or Studio Art
Department of Biology, (CAS)
College of Business Administration, (BA)
Minor in Business Administration only
Department of Chemistry and Biochemistry, (CAS)
Department of Communication, (CoFAC)
Department of Criminology and Criminal Justice, (CAS)
Department of Economics, (CAS)
Department of English, (CAS)
Department of Foreign Languages and Literature, (CAS)
Department of History, (CAS)
Department of Mathematics and Computer Science, (CAS)
Department of Music, (COFAC)
Department of Philosophy, (CAS)
Department of Physics and Astronomy, (CAS)
Department of Political Science, (CAS)
Department of Psychology, (CAS)
Department of Sociology, (CAS)
Department of Theatre, Dance and Media
Studies, (COFAC)
Institute of Women's and Gender Studies, (CAS)

## Bachelor of Liberal Arts: Capstone and Other Restrictions

A. The School of Social work, as well as the Colleges of Education, Nursing, and the Joint Engineering Program are not participants in the BLS program.
B. The College of Business is participating but only the General Business Minor may be used. No capstone course will be available for the business minors. Students selecting the Business Minor as one of the components for the BLS must select the other minor from or a department that does offer a capstone.
C. The Studio Arts minors in the Department of Art and Art History will not have a capstone. Students selecting a Studio Art Minor will have to pair it with a minor that does have a capstone.
D. Undergraduate certificates and Interdisciplinary Minors may be paired with a minor to form a BLS core; however, since certificates and interdisciplinary minors will not have capstone courses, they must be paired with a minor that does have a capstone.
E. Only the Theatre minor can be used from the Department of Theatre, Dance and Media Studies. That Department will offer no capstone course.
F. The capstone will be in addition to the courses presented for the minor. A minimum grade of C must be earned in the capstone course.
G. Students who are planning to earn a Bachelor of Liberal Studies degree should declare the BLS as their major within the first 90 hours of the program. Declaration past this time may prevent timely graduation as all capstone courses are not available every semester.

The following departments have identified a Capstone:
Anthropology: Anthropology 4301, Ideas and Explanations in Anthropology
Art \& Art History: Art 3395, Sophomore/Junior Seminar: The Methods of Art History or one additional 4000 level topics course in Art History
Biology: Biology 4889, Senior Seminar
Chemistry/Biochemistry: Chemistry 3022, Introduction to Chemical Literature (1) and Chemistry 3905, Chemical Research (1) and Chemistry 4897, Seminar (1)
Communication: Communication 3330 , Research Methods I
Criminology \& Criminal Justice: Criminology 4390, Seminar in Criminology \& Criminal Justice
Economics: Economics 4100, Introduction to Econometrics (If this course is used to complete the minor, then, the students must take an additional 4000 level Economic course).
English: Additional 4000 level English Literature course (Student must identify themselves as using the additional

4000 level course as a Capstone so additional requirernents can be assigned).

## Foreign Languages and Literatures:

French 3211, Contemporary French Culture
German 3210, German Culture and Civilization
Spanish 3210, Hispanic Culture and Civilization: Spa:n or Spanish 3211, Hispanic Culture and Civilization: Spazish America
History: History 4004, Senior Seminar (5) credits
Mathematics/Computer Science:
Computer Science, 4000 Level Course in Computer Science, which was not counted as one counted as on $\geqslant$ of the electives towards the minor.
Mathematics, 4000 Level Course in Mathematics, which was not counted as one counted as one of the electives towards the minor.
Statistics, There will be no Capstone course in Statistics. The student will have to choose a capstone course frem the other area of concentration.
Music: Music 4000, Directed Studies (3) credits (Under the Music History and Literature, Music Theory and Composition, Music Pedagogy, or Music Practicum curricular destination)
Philosophy: Philosophy 4491, Senior Seminar Physics: Physics 4381, Directed Readings in Physics Political Science: Political Science 3950, Senior Seminar in Political Science
Psychology: An additional 4000 level Psychology course beyond Psychology courses present for the Minor
Sociology: An additional 4000 level course in Sociclogy

## Interdisciplinary Minors and Certificates

## Minor in American Studies

American Studies is an internationally recognized academic field which involves an interdisciplinary approach to the study of the culture(s) of the United States, its colonial antecedents, and its indigenous peoples.

Students interested in this minor should contact the coordinator of American Studies for advice and information.

Candidates must have a cumulative grade point average of 2.0 or better in the 18 credit hours required for the rinor. Three hours of the minor may be taken on a satisfactory/ unsatisfactory basis. Candidates wishing to take Auerican Studies courses from the Honors College (see belov') must be members of the Honors College or must have a $: 50$ cumulative grade point average.

## Requirements for the minor

Completion of the American Studies minor requires. at least 18 semester credit hours, including at least two courses ( 6 hours) from Section $A$ and at least two c jurses ( 6 hours) from Section B. The other 6 hours may be: chosen from Section A, B, and/or C. Please read the: special requirements below.

3
A. Core courses in American Studies (all courses are 3 credits except where otherwise indicated).
At least two of the following core courses are required to qualify for the minor. Of this minimal requirement, one course must be chosen from either American Studies or English and the other from either History or Political Science. Students may take up to two additional courses from this group, and these may be chosen from any department or discipline.

## Anthropology

2120, Native Peoples of North America
Art and Art History
1104, Indigenous Arts of North America
2270, American Art to 1876
2279, American Architecture
English
1170, American Literary Masterpieces
1700, African-American Literature
1710, Native American Literature
2710, American Literature I
2720, American Literature II

## History

1001, American Civilization (to the mid-nineteenth century)
1002, American Civilization (from the mid-nineteenth century)
1003, African-American History
1004, The History of Women in the United States

## Honors

1210, American Traditions: Humanities
1220, American Traditions: the Fine and Performing Arts
1230, American Traditions: Social Sciences
1310, Non-Western Traditions: Humanities
1320, Non-Western Traditions: the Fine and Performing Arts
1330, Non-Western Traditions: Social Sciences
Admission to these Honors Seminars requires consent of the dean of the Honors College. Note: that depending on instructor and content, Honors 1210 can fulfill the requirements from this group in literature/American Studies and Honors 1230 can fulfill the History/Political Science requirement. Honors 1310-1330 can qualify as additional Group A choices when their focus is on Native American traditions.

## Music

1002, Introduction to African American Music
1060 , Introduction to Jazz

## Philosophy

3307, American Philosophy
Political Science
1100, Introduction to American Politics

1990, The City
2300, State Politics
2350, Introduction to Urban Politics
2650, American Political Thought
2900, Studies in Political Science (when appropriate).

## Sociology

1990, The City
B. Optional courses in American Studies (all courses are 3 credits except where otherwise indicated). To complete the American Studies minor, students must choose at least two courses from this group, from any department or discipline, and may choose up to four courses in this group. Courses chosen from this group must be chosen from at least two departments.

## Anthropology

3250, American Folklore
3291, Current Issues in Anthropology (when appropriate).

## Art and Art History

3360, Photography and Society (same as ID 3360)
4475, Topics in American Art
4481, Topics in Contermporary Art (when appropriate)

## Communication

1050, Introduction to Mass Media
2243, Communications in American Politics
3352, Mass Media Criticism

## Economics

2800, History of American Economic Development (same as Hist 2800)

## Education

Ed Fnd 3251, Black Americans in Education
Ed Fnd 4330, History of American Education
Ed Fnd 4332, Progressivism and Modern Education

## English

3800, Topics in Women and Literature (when appropriate)
4610, Selected Major American Writers I
4620, Selected Major American Writers II
4640, American Fiction to World War I
4650, Modern American Fiction
4930, Studies in Women and Literature (when appropriate)
4950, Special Topics in Literature (when appropriate)

## History

2219, U.S. Labor History
2800, History of American Economic Development (Same as Econ 2800)
3000, Selected Topics in History (when appropriate)
3012, The Indian in American History
3021, U.S. Urban History
3031, History of Women in the United States
3042, U.S. Social Movements in the $20^{\text {th }}$ Century
3043, History of Crime and Justice

3051, African-American History: From Slavery to Civil Rights
3052, African-American History: From Civil Rights to Black Power
3053, African-American Women's History
4004, Senior Seminar ( 5 credits: when appropriate)
4013, United States History for the Secondary Classroom

## Honors College

When topics are appropriate, any of the seminars below can qualify as an "option" course for the American Studies minor. Admission to these courses requires the consent of the dean of the Honors College.
2010, Inquiries in the Humanities
2020, Inquiries in the Fine and Performing Arts
2030, Inquiries in the Social Sciences
2070, Inquiries in Education
3010, Advanced Seminar in the Humanities
3020, Advanced Seminar in the Fine and Performing Arts
3030, Advanced Seminar in the Social Sciences
3070, Advanced Seminar in Education
3510, Research Seminar: Humanities
3520, Research Seminar: Fine and Performing Arts
3530, Research Seminar: Social and Behavioral Sciences
3570, Research Seminar: Education

## Interdisciplinary

3360, Photography and Society (same as Art 3360)

## Philosophy

4410, Significant Figures in Philosophy (when appropriate)

Political Science
2280, Judicial Politics and Policy
3300, The American Presidency
3331, Congressional Politics
2320, African Americans and the Political System
3340, Politics and the Media
3450, Political Parties and Elections
2380, Women in U. S. Politics
3200, Constitutional Law
3210, Civil Liberties
3390, Studies in American Politics (when appropriate)

## Sociology

1040, Social Problems
2100, Women in Contemporary Society
3268, The Sociology of Conflict
4316, Power, Ideology and Social Movements
4360, Sociology of Minority Groups
4380, Selected Topics in Social Policy (when appropriate)
C. American Studies elective courses (courses are 3 credit hours unless otherwise indicated). Up to two courses from this group may be used for the American Studies minor. When two courses are chosen form this group, they must be chosen from different departments.

## Anthropology

2126, Archaeology of Historic St. Louis
2131, Archaeology of Missouri
2132, Archaeology of North America
2138, African-American Archaeology

## Art and Art History

2281, Art Since 1960

## Communication

3332, Intercultural Communications
3343, The Rhetoric of Protest
Criminology and Criminal Justice
2240, Policing
4340, Race, Crime and Justice

## English

4060, Adolescent Literature
4770, Modern Poetry
4760, Modern Drama
4740, Poetry since World War II

## History

3001, United States History: Colonial America to 1763
3002, United States History: Revolution and the New
Nation, 1763-1815
3003, United States History: Nationalism and
Sectionalism, 1815 to 1860
3004, United States History: 1860-1900
3005, United States History: 1900-1940
3006, United States History: 1940 to the Present
3031, History of Women in the United States
3041, Topics in American Constitutional History
3044, American Military History to 1900
3045, American Foreign and Military Affairs, 1900 Present

## Media Studies

2218, Public Policy in Telecommunication
3355, Media law and Regulation

## Political Science

2260, Law and the Individual
2290, Women and the Law
2420, Introduction to Public Policy
2820, United States Foreign Policy
3330, Introduction to Political Behavior
3370, Mock Constitutional Convention
3410, The Politics of Business Regulation
3460, The Politics of Poverty and Welfare

## Social Work

1200, Social Welfare as a Social Institution 3400, Social Issues and Social Policy Development

## Sociology

1040, Social Problems
2180, Alcohol, Drugs and Society

3202, Urban Sociology
4354, Sociology of Business and Work Settings
In addition, courses with variable topics such as Topics in..., Studies in..., and seminars may be taken when the topics are appropriate. When in any doubt, see the coordinator of American Studies; such courses must be approved for inclusion in your American Studies minor before the semester registration deadline.

## Minor in Black Studies

The minor in black studies is open to all undergraduate students at UM-St. Louis, whatever their major field. This minor is an interdisciplinary course of studies intended to provide a focus for new and existing courses in the area of black and African diaspora studies. A faculty member with expertise in black or diaspora studies is designated as coordinator. Students interested in pursuing the minor should consult the coordinator for advisement. For appropriate referral, please contact the advising office at the College of Arts and Sciences, 303 Lucas Hall.

Candidates must have a cumulative grade point average of 2.0 or better in the minor. Courses taken on a satisfactory/ unsatisfactory basis may not be applied to the minor. Courses applied to the minor may not be counted for a major.

Any courses relevant to black or African diaspora studies, offered by a humanities or social science department, may be taken when approved by the coordinator for the minor. Special topics courses, directed studies or readings may also be included for credit if relevant to the minor.

## Requirements

1. Students must take one of the following:

History 1063, The African Diaspora to 1800
History 1064, The African Diaspora Since 1800
2. A minimum of two courses from the following:

Anth 1005, Human Origins
Anth 2124, Cultures of Africa
Art 1105, Introduction to The Arts of Africa
English 1700, African-American Literature
History 1003, African American History
History 1061, African Civilization to 1800
History 1062, African Civilization Since 1800
Music 1002, Introduction to African-American Music
3. Students should select a minimum of three courses from the following list. One course must be a social science and one must be a humanities course.
Anth 3234, Cultural Continuity and Change in Subsaharan Africa
Anth 3235, Women in Subsaharan Africa: A
Contemporary Perspective
History 3050, Topics in African-American History
History 3053, African American Women's History

History 3301, West Africa to 1800
History 3302, West Africa Since 1800
History 3303, African Diaspora to 1800
History 3304, African Diaspora since 1800
Pol Sci 2320, African Americans and the Political System
Pol Sci 2580, African Politics
Psych 4392, Selected Topics in Psychology: African American Psychology (Note: Students should only take Psych 4392 when the topic is African American Psychology).
Sociology 3245, Sociology of South Africa
Sociology 4360, Sociology of Minority Groups
Comm 3332, Intercultural Communication

## Minor in Classical Studies

The minor in classical studies is an interdisciplinary course of studies intended to encourage undergraduates in various disciplines to come to a fuller awareness of the cultures of ancient Greece and Rome and of the classical tradition that underlies much of modern Western civilization. In addition to appealing to any student's curiosity about the early stages of society in the West, the minor provides an especially valuable supplement to those who are majoring in many liberal arts areas including history, literature, philosophy, foreign languages, and art.

Students pursuing the minor will acquire a foundation in either Greek or Latin. They may choose to use either sequence to fulfill the foreign language requirement in the College of Arts and Sciences.

## Requirements

Candidates for the minor must complete 19 credit hours of course work including:

Latin 1001
Latin 1002 or
Ancient Greek 1001
Ancient Greek 1002
and three courses from the following list and any other course approved by the coordinator:
Ancient Greek 1001, Intermediate Ancient Greek
Language and Culture
Art 2211, Art and Archeology of the Ancient World
Art 2212, Greek Art and Archeology
Art 2213, Roman Art and Archeology
Art 4411, Topics in Ancient Art and Archeology
English 1200, Myth
English 2200, Classical Literature in Translation
History 3081, Rome: The Republic and Empire
Latin 2101, Intermediate Latin Language and Culture
Phil 3301, Ancient Philosophy
Phil 4401, Plato
Phil 4402, Aristotle

## Minor in Legal Studies

The minor in legal studies is open to all undergraduate students at UM-St. Louis, whatever their major field. It offers a secondary field of concentration in one of the most
important areas of social life. Students may use the minor as a complement to their major, as an additional qualification for career opportunities, or as general education.

This interdisciplinary minor coordinates liberal arts courses related to law. A faculty member in Legal Studies will advise students and will work with their major advisers in planning appropriate courses.

## Candidates must take:

Interdisciplinary 1200, Foundations of Law: An Introduction to Legal Studies (crosslisted as Pol Sci 1200 and CCJ 1200), and five courses from the following list. At least three courses must be taken at the 3000 level and above. No more than two courses from a single discipline may be included in the minor.

CCJ 1075, Crime and Punishment
CCJ 1100, Introduction to Criminology and Criminal Justice
CCJ 1130, Criminal Justice Policy
CCJ 2226, Law and the Individual
CCJ 2227, Urban Law: Poverty and the Justice System
CCJ 3345, Rights of the Offender
Comm 3355, Media Law and Regulation
Econ 3650, Law and Economics
History 3041, Topics in American Constitutional History
History 3071, Medieval England
Phil 5533, Philosophy of Law
Phil 4487, Seminar in Philosophy of Law
Pol Sci 2260, Law and the Individual (cross listed as CCJ 2226)

Pol Sci 2280, Judicial Politics and Policy
Pol Sci 2290, Women and the Law
Pol Sci 3200, Constitutional Law
Pol Sci 3210, Civil Liberties
Pol Sci 3260, Judicial Decision Making
Pol Sci 3290, Studies in Public Law
Pol Sci 4850, International Law
Soc 2175, Women, Crime, and Society
Soc 3278, Sociology of Law

## Minor in Public Affairs Journalism

The minor in public affairs journalism provides students with an overview of media operations, including basic writing and reporting skills, as well as a specialty area of advanced study. Ordinarily the specialty or cognate area focuses on a particular field, such as consumer affairs, economics, or political science -- areas in which a journalist would specialize. Cognate areas are proposed by students seeking the minor and approved by a faculty committee.
A minimum grade point average of 2.0 is required in the minor. No more than 3 hours credit may be taken on a satisfactory/unsatisfactory basis. A total of 18 hours is required for the minor. At least 12 of the 18 required hours must be taken at UM-St. Louis.

## Requirements

## A. 9 hours in communication/English professiona training:

English 3140 or Media Studies 3214, News Writing
English 3180, Reporting or Media Studies 2212, Broadcast Writing and Reporting
English 4890, Independent Writing Project, or Media Studies 3394, 3396 or 3397, Internship

## B. 9 hours in public affairs at the $\mathbf{3 0 0 0}$ level or above

1. Students earning a writing certificate or majoring :n communication with a mass communication emphas:s must take 15 hours (at least 9 of these at the 3000 level or above) in economics, political science, or sociology.
2. Students majoring in economics, political science, or sociology must take 9 hours (in addition to the requi ed English/communication courses) at the 3000 level o: above in addition to English/communication courses chosen from those listed above and/or in the two cognate areas outside their major (i.e., economics, political science, or sociology).

A list of courses applicable to the minor is available from the coordinator.

## Minor in Urban Studies

A minor in urban studies includes 18 hours of course work. Candidates must have a cumulative grade point ave:age of 2.0 or better in the minor. Courses taken on a satisfectory/ unsatisfactory basis may not be applied to the mino:Special topics courses relevant to urban studies may be included in the minor when approved in advance by the coordinator of the urban studies minor.

## Requirements

Students must take:
Interdisciplinary 1990, The City
and five courses selected from the following list, a: least three courses at the $\mathbf{3 0 0 0}$ level or above. No more than two courses from a single discipline may be included in the minor.

Courses Applicable to the Minor
Anth 3242, The Culture of Cities
Anth 3250, American Folklore
Art 2279, American Architecture
Art 3365, The Artist and the City
CCJ 2230, Crime Prevention
CCJ 4300, Communities and Crime
Econ 3510, Public Finance: State and Local
Econ 3700, Urban and Regional Economics
Geography 2100, Urban Geography
Geography 2110, Location Theory
History 3000, Selected Topics in History (when urban or St. Louis history)

Pol Sci 2350, Introduction to Urban Politics
Pol Sci 3450, Urban Administration
Pol Sci 4470, Urban Planning and Politics
Psych 2256, Environmental Psychology
Psych 4235, Community Psychology
Soc 1040, Social Problems
Soc 3202, Urban Sociology
Soc 4344, Problems of Urban Community

## Course Descriptions

In addition to regular departmental offerings, the College of Arts and Sciences also offers several interdisciplinary courses, listed below. These courses bring together the resources of two or more disciplines to focus on topics that benefit from being studied from the point of view of more than one discipline. In many cases faculty from several departments teach an interdisciplinary course together, giving students the opportunity to experience faculty dialogue on issues in a cross-disciplinary fashion. Most interdisciplinary courses have no prerequisites. Freshman and sophomore students are especially encouraged to take these courses.

Students who have earned 24 or more semester hours of credit at any accredited post-secondary institutions(s) before the start of the fall 2002 semester must meet the general education requirements stipulated in the UM-St Louis 2001-2002 Bulletin. The following courses fulfill the Social Sciences breadth of study requirements as described in that Bulletin: 1001, 1200, 1220, 1450, 1990, $2102,2150++, 3690^{*}$. The following courses fulfill the Humanities breadth of study requirement: $1000,4465$.
*These courses may fulfill the Humanities or Social Sciences breadth of study requirements.
++ Depending on topic.

## 160 Monday Noon Cultural Seminar (2)

An interdisciplinary examination of topics in the Humanities. Students will attend the Monday Noon Cultural Series program of the Center for the Humanities each week and meet as a group to explore the nature and background of each presentation, e.g., fiction reading, musical event, presentation of scholarly research in the arts or culture, or social and historical analysis.

## 1000 Special Topics (3)

Topics may vary from semester to semester, however, they will all focus in the cultural heritage of Great Britain with material taken from art, theater, literature, and selected topics in philosophy.

## 1001 Special Topics (3)

Topics may vary from semester to semester, however, material will be selected which will focus in the social, economic, historical or political institution of Great Britain.

1075 Crime and Punishment (3)
Same as CC J 1075 and Soc 1075. An introduction to sociological and psychological explanations of crime and punishment. An examination of private and governmental responses to the threats of crime and delinquent behavior.

## 1200 Foundations of Law: An Introduction to Legal Studies (3)

Same as CCJ 1200 and Pol Sci 1200. As a broad liberalarts approach to the study of law, this course is designed to familiarize students with legal ideas, legal reasoning, and legal processes. It also provides comparative and historical perspectives on law that will help explain legal diversity and legal change. Finally, it offers opportunities to explore some of the persistent issues in law and legal theory: for example, issues about the sources of law, the responsibilities of the legal profession, or the relative merits of the adversary system.

## 1220 Special Topics in Gerontology (1-3)

Same as Ger 1220 . Selected topics dealing with various aspects of gerontology. The specific contents of this course will vary from semester to semester. The course may be repeated for credit with permission of the Gerontology director.

## 1450 Introduction to Labor Studies (3)

Same as Pol Sci 1450. This course covers many topics important to the role of unions in the American political system and American society from a labor perspective. Topics include the role of workers in current and future times, unions' institutional structure, collective bargaining strategies and obstacles for union organizing, recent union campaigns, labor's political role, and the relationship between labor and media.

## 1990 The City (3)

Same as Pol Sci 1990, and Soc 1999. Consideration of economic factors, urban institutions, historical developments in urbanization, problems of the inner city, suburbia and the metropolitan area, ethnic groups, stratification, and psychological implications of urban living. This course is primarily for freshmen and sophomores. It is open to juniors and seniors with the instructor's permission.

## 2102 Introduction to Women's Studies (3)

Same as Soc 2102 and Psy 2102. An introduction to the study of women's roles in a diverse and gendered culture and society. Through a variety of disciplinary perspectives in the humanities, social sciences, and natural sciences, it seeks to understand gender as a concept that affects both women and men. This course explores issues of power, identity, and relationship in women's lives.

## 2150 Special Topics in Women's and Gender Studies

 (3)An introduction to a particular topic area in women's studies (topics will be announced prior to registration),
drawing on the theories and methods of such disciplines as sociology, Psychology, political science, history, philosophy, art history, and others to examine particular aspects of women's experience in social and cultural life. Course may satisfy the distribution requirement for Humanities or Social Sciences depending on the topic.

## 2170 Aging in America: Concepts and Controversies

 (3)Same as Soc 2170, SW 2170, and Ger 2170. This course examines the major theoretical and service issues connected to the study of older adults and their families, using multidisciplinary perspectives. Students are provided with an introduction to the field of aging through an examination of current social issues and controversies. This course emphasizes student involvement through class discussion, and is appropriate for students in the arts and sciences, business, communication, education, and nursing.

## 3220 Science for the Middle School Teacher I (5)

 Prerequisites: Chem 1111, Bio 1811 and either Chem 1011 or Bio 1202. This course is intended to provide science content and pedagogical methods to students preparing to teach science at the middle school level. Science content in the first semester may include investigations of the properties of solids and solutions, chemical changes and conservation of matter, forces and simple machines, food webs, the environment and ecosystems, heat and radiation, waves and diffraction, static electricity and currents, but other topics from the middle school science curriculum could be substituted. Students will be expected to develop grade appropriate teaching materials, and complete individual and group investigations. Two hours of lecture, one hour of discussion, and two two-hour laboratory sessions per week.
## 3221 Science for the Middle School Teacher II (5)

Prerequisites: ID 3220. This course is intended to provide science content and pedagogical methods to students preparing to teach science at the middle school level. Science content is the second semester may include the atmosphere and climate, rocks and minerals, water resources, cells, and living systems, reproduction and genes, biodiversity and adaptation, water cycles, the solar system, and earth as a planet, but other topics from the middle school science curriculum could be substituted. Students will be expected to develop grade appropriate teaching materials and complete individual and group investigations. Two hours of lecture, one hour of discussion, and two two-hour laboratory sessions per week.

## 3352 Independent Studies in Women's and Gender Studies (1-3)

Prerequisite: Junior standing; two courses in Women's and Gender Studies, including 2102; and consent of the instructor and the Institute. Directed independent work in selected Women's and Gender Studies topics through
readings, research, reports and/or conferences. Course may satisfy the distribution requirement for the Humanities, Social Sciences or Math/Science depending on topic

3360 Photography and Society (3)
Same as Art 3360. A study of photography as a mears of information and expression, as an influence on culture, and as a reflection of concepts in politics, science, moral:ty, and art.

## 3690 The Marxist Heritage (3)

Same as Phil 3369, and Pol Sci 3690. Study of Man: and leading Marxists. Designed to evaluate their influence on recent political, economic, and social thought and institutions.

4465 Topics in Photographic Studies (3)
Same as Art 4465. Prerequisite: Permission of instructor. Advanced study of specific styles, periods, or issues within photographic history.

## 5350 Topics in Women's and Gender Studies (3)

 Prerequisite: Junior standing and one Women's and 'Jender Studies course. This course will focus on a particula: aspect of women's conditions (to be announced prior to registration) and will draw upon recent theoretical and methodological work in the field of women's and geader studies from a variety of disciplines. Course may satisfy the distribution requirement for Humanities or Social Sciences depending on the topic.
## 5351 Theories of Feminism (3)

Prerequisites: Junior standing and one Women's and Gender Studies course preferably ID 2102 or consert of instructor. An analysis of contemporary theories of feminism, including liberal, radical, socialist, and women-of-color perspectives, and an exploration of the underpinnings of feminist theory in major systems cf thought.

## 5353 Internship in Women's and Gender Studies (3)

 Prerequisite: 90 hours. 2.5 GPA, 12 WGS hrs. Internship would place the student in a profit or nonprofit setting for approximately ten hours a week in an internship str.ctured and supervised by the Institute; consent of Director required; may include biweekly seminar. Student must present appropriate course background for either opion, plus the above pre/co-requisites.6401 Inquiries in Women's and Gender Studies (3) Introduces graduate students to the field of women's studies, with particular focus on its vocabulary and evolution, its location within and relationship to the academy, and its predominant theoretical and methodological frameworks. Specific content will vary year to year. Strongly encouraged for graduate students in Women's and Gender Studies.

6450 Seminar in Women's and Gender Studies (3)
Critical examination of advanced topics in the humanities, social sciences, or natural sciences from women's and gender studies perspectives. May be taken more than once provided that the subject matter is different each time the seminar is taken.

6452 Special Readings in Women's Studies/Gender Studies (3)
Prerequisite: Admission to Graduate Certificate program and consent of instructor. Directed independent work on a selected Women's and Gender Studies topic through readings, research, reports, and/or conferences.

## Certificate Programs

The University College offers a wide variety of certificates, which provide our students the opportunity to develop expertise in subjects other than their major field. These programs usually combine course offerings from several departments so the subject is examined from a multidisciplinary approach. While most persons who earn certificates do so in the process of completing their undergraduate degree, a certificate may be completed by non-degree seeking students.

Students wishing to earn a graduate certificate must seek formal admission to the Graduate School.

To find the descriptions of the courses within a specific certificate program, refer to the individual department from which the courses are drawn. Following is a list of certificate programs offered by the University, with only the program requirements listed for those which are interdisciplinary.

## Graduate Certificate Programs:

Biotechnology, Business Administration, Forensic Economics, Gerontology, Human Resources Management, Institutional Research, International Studies, Logistics and Supply Chain Management, Managerial Economics, Marketing Management, Museum Studies, Non Profit Organization Management and Leadership, PsychologyClinical Respecialization, Trauma Studies, Tropical Biology and Conservation, Women's and Gender Studies, Writing, Gateway Writing Project

## Undergraduate Certificate Programs:

African Studies (African Studies or African Diaspora Studies), Archaeology, Biochemistry, Biotechnology, Conservation Biology, East Asian Studies, European Studies, Greek Studies, International Business, International Studies, Labor Studies, Latin American Studies, Non-Profit Arts Organization Management \& Leadership, Non Profit Organization Management and Leadership, Photographic Studies, Studies in Religions, Trauma Studies, Women and Gender Studies, Writing, Writing with Technical Emphasis

## Africana Studies Certificate

Students seeking the Africana studies certificate have two options: an emphasis in African studies and an emphasis in African diaspora studies.

## I. African Studies:

1) At least one course in two of the following four areas for a total of 9 hours:

## Area 1: Anthropology

2124, Cultures of Africa
Area 2: Art and Art History
2105, Introduction to The Arts of Africa

Area 3: History<br>1061, African Civilization to 1800<br>1062, African Civilization Since 1800<br>\section*{Area 4: Political Science}<br>2580, African Politics

2) One course in two of the following areas, a total of 6 hours:

## Area 1: Anthropology

3234, Cultural Continuity and Change in Sub-Saharan Africa
3235, Women in Sub-Saharan Africa: A Contemporery Perspective

Area 2: Art and Art History
4405, Topics in the Arts of Africa
Area 3: History
3301, West Africa to 1800
3302, West Africa Since 1800
Area 4: Sociology
3245, Sociology of South Africa
3) An independent study course ( 3 hours) in which : research paper will be written on some aspect of African Studies

## II. African Diaspora Studies

One course from each of the following areas, a total of 6 hours.

## Area 1: Africa

Anthropology
2124, Cultures of Africa
History
1061, African Civilization to 1800
1062, African Civilization Since 1800

## Area 2: Diaspora

Anthropology
1005, Human Origins
History
1003, African-American History
1063, The African Diaspora to 1800
1064, The African Diaspora Since 1800
3052, African-American History: From Civil Righs to Black Power

At least one course from each of the following artas, a total of 6 hours:

## Area 1: Africa

## Anthropology

3234, Cultural Continuity and Change in Sub Saharan Africa
3235, Women in Sub-Saharan Africa: A Contemporary
Perspective
Art
1105, Introduction to the Arts of Africa
History
3301, West Africa to 1800
3302, West Africa Since 1800

## Political Science

2580, African Politics
Sociology
3245, Sociology of South Africa

## Area 2: Diaspora

Communication
3332, Intercultural Communication

## English

1700, African-American Literature
History
3050, Topics in African-American History
3303, African Diaspora to 1800
3304, African Diaspora Since 1800
Music
1002, Introduction to African-American Music
Political Science
2320, African Americans and the Political System
*Psychology
4392, Selected Topics in Psychology: African American Psychology
Sociology
4360, Sociology of Minority Groups
*Note: Students should take Psychology 4392 only when the African American Psychology topic is offered.

## Biochemistry Certificate

(Refer to the Biology section of this Bulletin.)

## Biotechnology Certificates

(Refer to the Biology section of this Bulletin.)
Business Administration Certificate
(Refer to the Business Administration section of this Bulletin.)

## Conservation Biology Certificate

(Refer to the Biology section of this Bulletin.)

## East Asian Studies Certificate

1) First- and second-year Chinese, Japanese, Korean, or other appropriate Asian language ( 20 hours taken in four semesters).
2) History 1041 and History 1042, East Asian Civilization
3) One course in three of the following six areas, a total of nine hours:

Area 1: Anthropology
2110, Cultures of Asia
Area 2: Art and Art History
1109, The Arts of China
1110, The Arts of Japan
4408, Topics in Asian Art
Area 3: History
3101, Modern Japan: 1850 to Present
3102, Modern China: 1800 to Present
*4004, Senior Seminar
*Note: Students should take History 4004 only when the topic is appropriate to East Asia.

Area 4 Music
1080, Non-Western Music I
1090, Non-Western Music II
Area 5: Philosophy
1120, Asian Philosophy
Area 6: Political Science
2550, East Asian Politics
*3590, Studies in Comparative Politics
*3890, Studies in International Relations
*Note: Students should take Pol Sci 3590 or Pol Sci 3890 only when the specific topic is appropriate.

## European Studies Certificate

1) Four semesters of college work or the equivalent in a modern European foreign language.
2) History 1032, Topics in European Civilization: 1715 to the Present.
3) One course each from at least four of the following eight areas, a total of 12 hours. Students should consult advisers at the Center for International Studies to determine how these courses can best be arranged to meet their interests.

## Area 1: Art and Art History

2235, Italian and Northern European Renaissance Art
2245, Baroque Art and Architecture
4435, Topics in Renaissance Art
4445, Topics in Seventeenth- and Eighteenth-Century European Art
4455, Topics in Modern Art

## Area 2: Economics

3310, Comparative Economic Systems

## Area 3: English

2280, The Contemporary World in Literature
2320, English Literature II
4920, Continental Fiction
4410, Restoration and Eighteenth-Century Drama
4450, The Eighteenth-Century English Novel
4540, The Nineteenth-Century English Novel
4580, Literature of the Late Nineteenth and Early
Twentieth Centuries
4750, Modern British Fiction

## Area 4: History

1031, Topics in European Civilization: Emergence of Westem Europe to 1715
3085, The Age of the Renaissance
3086, The Age of Reformation
3092, Europe 1900-1950: War and Upheaval
3093, Europe, 1950 - Present: Peace and Prosperity
3094, France in the Modern Age
3095, Germany in the Modern Age

## Area 5: Foreign Languages and Literatures

## French

2110, Modern French Literature in Translation
2150, European Literature in Translation: Special Topics
3211, Contemporary French Culture
3281, French Literature II: Nineteenth and Twentieth
Centuries
4341, Seventeenth-Century French Theatre and Poetry
4342, Seventeenth-Century French Prose
4353, Eighteenth-Century French Literature
4354, Eighteenth-Century French Theatre and Novel
4362, Nineteenth-Century French Novel
4371, Twentieth-Century French Novel
4375, Modern French Theatre

## German

2110, Masterpieces of German Literature in Translation
2150, European Literature in Translation: Special Topics
3201, Masterpieces of German Literature
3202, The German Novelle and Drama
3210, German Culture and Civilization
4315, German Classicism and Romanticism
4320, German Realism and Naturalism
4345, Modern German Literature
4397, Survey of German Literature Part I
4398, Survey of German Literature Part II Spanish
2110, Spanish Literature in Translation
2150, European Literature in Translation: Special Topics
4310, Spanish Literature from 1898 to 1939
4315, Spanish Literature from 1939 to the Present
4320, Realism and Naturalism in the Nineteenth-Century Spanish Novel
4321, Poetry and Drama of the Nineteenth Century

4325, Poetry and Drama of the Golden Age
Area 6: Music
4220, Music of the Renaissance
4230, Music of the Baroque
4240, Music of the Classic Period
4250, Music of the Romantic Period

## Area 7: Philosophy

3303, Early Modern Philosophy
3304, Kant and Nineteenth-Century Philosophy
3305, Twentieth-Century Philosophy
4405, The Rationalists
4406, The British Empiricists

## Area 8: Political Science

2510, Comparative Politics of Europe
2560, Russia and the New Republics
3840, European International Relations
*4510, Comparative Public Policy and Administration
*3590, Studies in Comparative Politics
*3890, Studies in International Relations
*Note: Students should take Pol Sci 4510, 3590, or 3890 only when the topic is appropriately European.

## Forensic Economics Certificate

(Refer to the Economics section of this Bulletin.)

## Gerontology Certificate

(Refer to the Graduate School-Gerontology section of this Bulletin.)

## Greek Studies Certificate

Students seeking the Greek Studies Certificate must complete both a language studies component and a focus area component. Courses are 3 credit hours unless noted otherwise.
I. Greek Language. Students must complete at lea:st 9 credit hours from the following courses.

## Ancient Greek

1001, Ancient Greek 1 (5)
1002, Ancient Greek 2 (5)
2101, Intermediate Ancient Greek Language and Culture
2190, Greek and Latin in English Today
2151, Special Readings (1-3)
Modern Greek
1001, Modern Greek I (5)
1002, Modern Greek II (5)
2101, Intermediate Modern Greek Language and Culture
2150, Modern Greek Literature in Translation
2190, Special Readings (1-3)
II. Focus Area. Students must complete at least 9 credit hours in one of the following focus areas.

## Literature and Culture

## Anthropology

4350, Special Study*

## English

1200, Myth
2200, Classical Literature in Translation
History
1030, The Ancient World
2115, Greek History and Culture (same as Anthropology 2115)

Modern Greek
2150, Modern Greek Literature in Translation**
2190, Special Readings (1-3)**
Music History and Literature
4270, A History of Byzantine Music and Hymnography
Philosophy
3301, Ancient Philosophy
4401, Plato
4402, Aristotle

## Archaeology and Art History

## Anthropology

2190, Special Topics in Archaeology*
4309, Archaeological Field School (3-6)*
4350, Special Study (1-3)*
Art History
2211, Art and Archaeology of the Ancient World
2212, Greek Art and Archaeology
4411, Topics in Ancient Art and Archaeology*
3390, Special Study ( $1-10$ )*
4490, Special Study (1-10)*
Notes:
*Must be taken only when appropriate to Greek Studies.
**These courses will count for either the language requirement or the focus area requirement but not for both.

## Human Resource Management Certificate

(Refer to the Business Administration section of this Bulletin.)

## International Business Certificate

1) Students must complete a minimum of 12 hours in the Business Internship Program in London or in some other approved overseas study program.
2) One course from Area 1 and one from Area 2 a total of six hours.

## Area 1: Business Administration:

3580, International Finance
3680, International Management

3780, Intemational Marketing
Area 2: International Studies:
Anth 3238, Culture and Business in East Asia
Econ 3300, International Economic Analysis
Econ 3301, International Finance
Econ 3310, Comparative Economic Systems
Econ 3320, Economic Development
Pol Sci 3830, International Political Economy
Pol Sci 3890, Studies in International Relations
(International Relations of East Asia)
Sociology 3241, Selected Topics in Macro-sociology. (Work and Industry in Japan)
Sociology 4354, Sociology of Business and Work Settings
In lieu of a course from Area 2, students may substitute one course ( 3 hours) at the advanced level of a foreign language. Advanced level is defined as a course beyond the 13 hour introductory language sequence.
3) An independent study course is not required for this certificate option.

Note: Students participating in other approved overseas study programs such as Hogeschool Holland Business School, Ecole Superieure de Commerce de Saint Etienne, or Université Jean Moulin, may also qualify to apply 12 credit hours toward the International Business Certificate.

## Graduate Certificate in Institutional Research

The Post-Master's Certificate Program in Institutional Research (CPIR) is for academics who want training in Institutional Research in preparation for working in an IR Office at a postsecondary institution, a government agency, or a private education organization. The program consists of 18 hours and may be taken as part of a doctoral program. Of the 18 hours, 12 are in the required core ( 6 hours are in research methods and 6 hours in IR seminar), plus a 3-hour Higher Education (HIR ED) or an Educational Research (ED REM) elective and a 3-hour capstone. Students may transfer up to 6 hours of postMaster's work into the program with the approval of the advisor.

## Graduate Certificate in International Studies

 A Graduate Certificate in International Studies is a program of study featuring advanced, multidisciplinary course work designed for individuals, including teachers and other professionals, who wish to expand their knowledge and understanding of international and cross-cultural affairs. The Certificate is sponsored by the Center for International Studies, and the Departments of Economics, History, Foreign Languages and Literatures, and Political Science. A broad set of course offerings is available in these and other departments, with the flexibility for students to tailor the program to their particular interests and needs. The program has been developed as a vehicle for bringing together the resourcesof a distinguished faculty in international studies and for providing an opportunity for further graduate learning. Applicants to the Certificate program must meet the general requirements for admission to Graduate School as explained in the graduate study section of this Bulletin. The Certificate is awarded after completion of 18 hours, including a minimum of 12 hours drawn from a list of core courses and an additional six hours selected from a wide variety of offerings in eight different disciplines. No more than 12 hours may be from any one discipline. Students may simultaneously earn a graduate degree and count credits earned in their degree program toward the Certificate when appropriate.

## Requirements

Students must complete at least 12 hours chosen from the following list of core courses:

## Anthropology

5428, Peoples and Cultures of Southeast Asia
5440, Global Refugee Crisis
Business Administration
5280, International Business Operations
5480, International Accounting
6580, International Finance, Investment, and Commercial

## Relations

## Economics

6300, International Trade
6301, International Monetary Analysis

## History

6111, Readings in European History to 1715
6112, Readings in European History Since 1715
6113, Readings in East Asian History
6114, Readings in Latin American History
6115, Readings in African History
Political Science
6450, Proseminar in Comparative Politics
6451, Seminar in Comparative Politics
6480, Proseminar in International Relations
6481, Seminar in International Relations
6488, Studies in International Relations
Sociology
5410, Comparative Social Structures
Students may complete an additional six hours chosen from the following:

Business Administration

* 3580, International Finance

3680, International Management
3780, International Marketing

* Note: Students may not count both Bus. Admin. 6580
and 3580.
Communication
3332, Intercultural Communication
3354, Comparative Telecommunication Systems
3356, International Communication
Criminology and Criminal Justice
3305, Comparative Criminology and Criminal Justice


## Economics

4301, International Economic Analysis: Finance
4980, Special Readings
English
4920, Continental Fiction
History
3045, American Foreign and Military Affairs, 1900-Present
3092, Europe 1900-1950: War and Upheaval
3093, Europe, 1950-Present: Peace and Prosperity
3094, France in the Modern Age
3095, Germany in the Modern Age
3097, History of Spain
3101, Modern Japan: 1850 to Present
3102, Modern China: 1800 to Present
3202, History of Latin America: Since 1808
3302, West Africa: Since 1800
4001, Special Readings
Foreign Languages and Literatures
French 4362, Nineteenth-Century French Novel
French 4365, Modern French Poetry
French 4371, Twentieth-Century French Novel
French 4375, Modern French Theatre
German 4315, German Classicism and Romanticism
German 4320, German Realism and Naturalism
German 4345, Modern German Literature
German 4398, Survey of German Literature Part II
Spanish 4310, Spanish Literature from 1898 to 193)
Spanish 4315, Spanish Literature from 1939 to Present
Spanish 4320, Realism and Naturalism in the Nineteenth-Century Spanish Novel
Spanish 4321, Poetry and Drama of the Nineteenth.
Century
Spanish 4340, Spanish-American Literature of the Nineteenth Century
Spanish 4341, Modernismo
Spanish 4345, Spanish-American Literature of the Twentieth Century
Spanish 4351, Spanish-American Fiction in the Twentieth Century
Spanish 4360, Spanish-American Poetry from
Modernismo to the Present
Music
4250, Music of the Romantic Period
4260, Music of the Twentieth Century
Political Science
4510, Comparative Public Policy and Administration
3590, Studies in Comparative Politics
4850, International Law
3860, Studies in War and Peace
3890, Studies in International Relations
6485, Directed Readings and Research in Internatic nal Relations
Sociology
4342, World Population and Ecology

## Graduate Certificate in Logistics and Supply Chain Management

(Refer to the Business Administration section of this bulletin.)

## Labor Studies Certificate

The Labor Studies Certificate is designed for students who are interested in a focused specialty in labor studies. The 18 credit hour curriculum consists of six credit courses offered over a three-semester period.
Pol Sci 1450, Introduction to Labor Studies
Pol Sci 3220, Labor Law
Pol Sci 3430, Union Leadership and Administration
Pol Sci 3470, Collective Bargaining
Hist 2219, U.S. Labor History
Econ 3900, Selected Topic in Economics

Latin American Studies Certificate

1) Thirteen credit hours or the equivalent in Spanish.
2) Either History 1051, Latin American Civilization, or Spanish 3211, Hispanic Culture and Civilization: Spanish America.
3) A total of 12 hours from at least three of the following areas:

Area 1: Anthropology
2134, Archaeology of the Inca, Aztec, and Maya
Area 2: Art and Art History
1103, Pre-Columbian Art of Mexico and Central America

## Area 3: History

3201, History of Latin America: To 1808
3202, History of Latin America: Since 1808
Area 4: Political Science
2530, Political Systems of South America
2540, Political Systems of Mexico, Central America, and the Caribbean
*3590, Studies in Comparative Politics
*Note Students should take Pol Sci 3590 only when the topic is appropriate to Latin America.

## Area 5: Spanish

2110, Spanish-American Literature in Translation 3211, Hispanic Culture and Civilization: Spanish America 3281, Introduction to Hispanic Literature: Spanish America
4340, Spanish-American Literature of the Nineteenth Century
4341, Modernismo
4345, Spanish-American Literature of the Twentieth Century
4351, Spanish-American Fiction in the Twentieth Century 4360, Spanish-American Poetry from Modernismo to the present

## Managerial Economics Certificate

(Refer to the Economics section of this Bulletin.)

## Marketing Management Certificate

(Refer to the Business Administration section of this Bulletin.)

## Museum Studies Certificate

(Refer to the History section of this Bulletin.)

## Non-Profit Arts Organization Management \& Leadership

The University of Missouri-St. Louis offers an undergraduate certificate for students who wish to consider entering the field of nonprofit arts or cultural organization management, as well as current professional staff, board members, and other leaders of such organizations. The program applies to students interested in all types of nonprofit arts and cultural organizations, including performing and visual arts, cultural, historical, and educational institutions.

Students may not enroll in the Undergraduate Certificate Program prior to the completion of 18 credit hours in one field of the arts, including six credits of upper division courses ( $3000-4000$ level). The certificate may be earned in conjunction with an undergraduate degree in majors such as Art \& Art History, Communication, Music, and Theatre \& Dance, or as an independent, 18 semester-hour undergraduate certificate.

Required Courses ( 15 credit hours) Art 3387, Music 3388, Music 4920, or equivalent, Internship (3 credit hours) or equivalent professional field experience
Public Policy Administration,
Art 3393, Gallery Management (3 credit hours) PPA/PS/SW 4911, Staff Management Issues (1 credit hour)
PPA/PS/SW 4912, Legal Issues in Governing and Managing (1 credit hour)
PPA/PS/SW 4913, Managing Issues in Nonprofit
Organizations ( 1 credit hour)
PPA/PS/SW 4940, Leadership and Management of
Nonprofit Organizations ( 3 credit hours)
PPA/PS/SW 4960, American Philanthropy and
Nonprofit Resource Development ( 3 credit hours) OR
Music 3394, Practicum in Performing Arts Management: Music ( 3 credit hours),
Theatre \& Dance 3394, Practicum in Performing Arts
Management: Theatre \& Dance (3 credit hours)
Elective Courses ( 3 credit hours)
Students must satisfy all prerequisites prior to enrolling in these courses. Three hours of elective credit must be selected from the following list of courses:

Business Administration:
1590, Topics in Business Administration

2900, Legal Environment of Business
3451, Accounting for Governmental and Not-for-profit Entities
3600, Management and Organizational Behavior
3611, Advanced Management and Organizational Behavior
3621, Human Resource Management
3700, Basic Marketing

## Communication:

1030, Interpersonal Communication I
2228, Public Relations Writing (Same as English 3280)
2230, Small Group Communication
2231, Communication in Organization
2232, Effective Communication in the Organization: Tool for Leadership
2240, Persuasive Communication
3358, Communication in Public Relations

## English:

3120, Business Writing (for Business Administration majors only)
3130, Technical Writing
3280, Public Relations Writing (Same as Communication 2228)

## Psychology:

2222, Group Processes in Organizations
3317, Social Psychology of Conflict and Negotiation (Same as Sociology 3317)
3318, Industrial and Organizational Psychology (Same as
Business Administration 3623)
3320, Personnel Assessment

## Political Science:

2400, Public Administration

## Non-Profit Organization Management and Leadership Certificate <br> (Refer to the Graduate School-Public Policy Administration section of this Bulletin.)

## Non-Profit Organization Management and Leadership Certificate (Undergraduate)

The university offers an undergraduate certificate program for students who want to become professional staff, board members, or other leaders of nonprofit and voluntary organizations, as well as those who are currently in the field.
The certificate requires the completion of 18 semester hours. Nine of these hours must be the following core courses:

Political Science
3940, same as Soc or SW 4940 (3 hours)
Political Science and Social Work 4911, Management Issues in Nonprofit Organizations: Staff Management Issues

4912, Management Issues in Nonprofit Organizations::
Legal Issues in Governing and Managing Nonprofit Organizations
4913, Management Issues in Nonprofit Organization:: Financial Issues
4960, American Philanthropy and Nonprofit Resource Development

The remaining 9 hours of electives can be selected from the following courses:

## Business Administration

3600, Management and Organizational Behavior
3611, Advanced Management and Organizational Behavior
3621, Human Resource Management
3700, Basic Marketing

## Communication

2228, Public Relations Writing (Same as English 3280)
2230, Small Group Communication
2231, Communication in the Organization
2240, Persuasive Communication
3358, Communication in Public Relations

## English

3120, Business Writing
3130, Advanced Business and Technical Writing

## Political Science

3420, Public Personnel Management
3440, Public Budgeting

## Psychology

2222, Group Processes in Organization
3320, Personnel Assessment

## Social Work

3300, Intervention Strategies for Social Work with
Organizations and Communities

## Sociology

3268, The Sociology of Conflict
3280, Society, Arts and Technology
4312, Sociology of Wealth and Poverty
4314, Social Change
4336, Organizations and Environments

## Photographic Studies Certificate

(Refer to the Art and Art History Section of this Bulletin.)

## Psychology - Clinical Respecialization Certificate

(Refer to the Psychology section of this Bulletin.)

## Studies in Religions Certificate

A certificate in studies in religions requires the completion of 18 hours with a grade of $C$ or better.

Courses must be chosen from two or more departrients (interdisciplinary offerings excluded), and the pro gram
must include two or more courses which focus on different major religious traditions. (Courses which fulfill this requirement are marked with an asterisk [*] in the list below.)

In addition, students are encouraged to broaden their understanding of religions and religious experience by enrolling in several courses in which these subjects are studied in philosophical or cultural contexts.

Students must obtain the approval of the coordinator of studies in religions before completing 12 hours toward this certificate.

## Requirements

Students must take 18 hours chosen from the following list in accordance with the guidelines above:
Anthropology
2173, Archaeology and Cultures of the Biblical World
3244, Religion, Magic, and Science

## Art

*2214, Early Christian and Byzantine Art
2225, Medieval Art
English
*1130, Topics in Literature
*2230, Jewish Literature
*2240, Literature of the New Testament
*2250, Literature of the Old Testament
*4940, Special Topics in Jewish Literature
*4950, Special Topics in Literature
*Note: English 1130 and 4950 should only be taken when
Religious Literature is the topic.
History
*3082, History of the Church: The Middle Ages
Music
1030, Music in Religion
Philosophy
1120, Asian Philosophy
1185, Philosophy of Religion
3302, Medieval Philosophy
3385, Issues in Philosophy of Religion
4485, Topics in Philosophy of Religion

## Political Science

2610, Ancient and Medieval Political Thought
2650, American Political Thought
Sociology
3264, The Sociology of Religion

## Taxation Certificate

(Refer to the Business Administration section of this Bulletin.)

## Trauma Studies Certificate (Graduate)

(Refer to Psychology section of this Bulletin for Graduate Certificate, Undergraduate information follows.)

## Trauma Studies Certificate

The trauma studies certificate is designed for students who are interested in a focused specialty in trauma studies or victim services in addition to their own major. It is appropriate for students in the College of Arts and Sciences or any of the schools of the university. It is particularly appropriate for students wishing to pursue careers in psychology, social work, sociology, criminology, law, public health, or nursing.

## Requirements

A student may earn a trauma studies certificate by completing 18 hours with a GPA of 2.0 or better from at least three departments from the following courses:

Students must complete at least 12 hours from the following group:

CCJ
1120, Criminal Law
4300, Communities and Crime
4350, Victimology
Nursing
4770, Topics in Nursing (Women at Risk: Women and Safety)
Psychology
2232, Psychology of Victims
3295, Selected Projects in Field Placement: Helping
Victims of Crime (for three credits only toward certificate).
3390, Directed Studies, if trauma-related topic (for three credits only toward certificate). Please seek approval of the Coordinator of the Trauma Studies Certificate in advance
4380, The Psychology of Death Dying, and End-of-Life Concerns

## Social Work

3601, Abused and Neglected Children
3602, Child Welfare Practicum Seminar
4399, Child Sexual Abuse
Sociology
3250, Sociology of Victimization
3278, Sociology of Law
3375, Social Psychology of Disabilities
Only one of the following highly recommended courses may be counted toward the trauma studies certificate:
Psychology 2161, Helping Relationships
Social Work 3100, Introduction to Interventive Strategies for Social Work Practice

Students may count up to 6 hours from the following group toward the trauma studies certificate:

## CCJ

2230, Crime Prevention
2240, Policing
4340, Race, Crime, and Justice (same as Soc 4340)

## Political Science

2400, Public Administration
2420, Introduction to Public Policy
4940, Leadership and Management in Nonprofit
Organizations (same as SW 4940 and Soc 4940)
Psychology
2160, Social Psychology (same as Soc 2160)
2230, Psychology of Women
4235, Community Psychology
2245, Abnormal Psychology
Social Work
4940, Leadership and Management in Nonprofit Organizations (same as Pol Sci 4940 and Soc 4940)
4601, Women's Social Issues

## Sociology

2102, Women, Gender and Diversity
2160, Social Psychology (same as Psych 2160)
3214, Juvenile Delinquency and Youth Crimes
3268, The Sociology of Conflict
4940, Leadership and Management in Nonprofit Organizations (same as Pol Sci 4940 and SW 4940) 4340, Race, Crime, and Justice (same as CCJ 4340)

Special Topics courses relevant to trauma studies may be included in the certificate when approved in advance by the coordinator of the trauma studies certificate.

Tropical Biology and Conservation Certificate
(Refer to the Biology section of this Bulletin.)
Writing Certificates
(Refer to English section for Undergraduate Writing and Writing with Technical Emphasis; and the English and College of Education (Teaching and Learning) section for the Graduate Certificate in the Teaching of Writing.

## Institute for Women's and Gender Studies

## Core Faculty

Kathy Gentile, Associate Professor of English,* Director Ph.D., University of Oregon
Nanora Sweet, Associate Professor of English,* Ph.D., University of Michigan
Deborah Cohen, Assistant Professor of History*
Ph.D., University of Chicago
Terri Conley, Assistant Professor of Psychology*
Ph.D., University of California-Los Angeles
Farida Jalazai, Assistant Professor of Political Science*
Ph.D. University of Buffalo - Suny
Kathleen Nigro, Lecturer in Women's and Gender Studies
Ph.D., St. Louis University
"*Joint appointees" and "Affiliate Faculty"
Sally Barr Ebest, Professor of English
Ph.D., Indiana University
Barbara Harbach, Professor of Music
Ph.D., Eastman School of Music
Barbara Kachur, Professor of English
Ph.D., Ohio State University
Carol Peck, Professor of Optometry
Ph.D., University of California-Los Angeles
Margaret Sherraden, Professor of Social Work
Ph.D., Washington University
Jayne Stake, Professor of Psychology
Ph.D., Arizona State University
Anne Winkler, Professor of Economics
Ph.D., University of Illinois-Urbana
Jeanne Morgan Zarucchi, Professor of French and Art History
Ph.D., Harvard University
Ruth Bohan, Associate Professor of Art History
Ph.D., University of Maryland
Susan Brownell, Associate Professor of Anthropology
Ph.D., University of California, Santa Barbara
Sheilah Clarke-Ekong, Associate Professor of Anthropology
Ph.D., University of California-Los Angeles
Jody Miller, Associate Professor of Criminology and Criminal Justice
Ph.D., University of Southern California
Rodney Brunson, Assistant Professor in
Criminology and Criminal Justice
Ph.D., University of Illinois-Chicago
Matthew Davis, Assistant Professor in Educational
Leadership and Policy Studies
Ph.D., University of Texas
Virginia Navarro, Assistant Professor in Educational Psychology
Ph.D., Washington University
Laura Westhoff, Assistant Professor of History and Education
Ph.D., Washington University

Vivian Eveloff, Director of the Sue Shear Institute For Women in Public Life
Malaika Horne, Director of the Executive Leadership Institute
Ph.D., St. Louis University
Lori Curtis, Lecturer in Social Work
M.S.W., Washington University

Margaret Phillips, Lecturer in Foreign Languages
Ph.D., St. Louis University
Lynn Staley, Lecturer in English
Ph.D., St. Louis University
Petzall, Jill, Adjunct Lecturer in Film Studies
M.A., Washington University

## General Information

The Institute for Women's and Gender Studies has three central missions: to provide a comprehensive undergraduate and graduate gender studies curriculum, to support research on gender and women's issues, and to sponsor events and provide community outreach. Institute faculty engage in disciplinary and interdisciplinary scholarship to enhance our understanding of the ways in which gender, sex, and sexuality have structured human society and experience across time and cultures. Faculty and students draw upon the rich body of interdisciplinary feminist scholarship to investigate emerging theories and research on women, men, and gender. Our courses encourage a reassessment of female and male roles in society and facilitate career goals that focus on gender issues. WGS classes promote the exchange of knowledge among people of different genders, classes, ethnicities, sexualities and cultural conditions. WGS courses enable students to broaden their educational experiences and develop new insights into their own lives and aspirations.

The Women's and Gender Studies program offers undergraduate and graduate certificates in cooperation with most of the departments in the College of Arts and Sciences, as well as with departments in the College of Fine Arts and Communication. The opportunity to earn an 18 -hour certificate is available to all students pursuing a degree at UM-St. Louis and to individuals with a bachelor's or master's degree from any university. Women's and Gender Studies courses are open to all students, whether or not they are working toward a certificate.

## Undergraduate Certificate

## Requirements

## For Admission:

Undergraduate certificate candidates must meet the University's general education requirements. Applicants must have a cumulative G.P.A. of at least 2.5 and must maintain a minimum 2.5 G.P.A. in WGS courses. Candidates for undergraduate certificates are asked to register with IWGS after taking one or two courses.

Students will then be enrolled in the program and will be placed on our mailing list for class information and announcements of upcoming events.

## Certificate Requirements

Students must take at least 18 hours in Women's and Gender Studies courses.

9 hours must include 3 core courses:

1) WGS 2102 Introduction to Women's and Gender Studies
2) WGS 3033 Sexuality and Gender Theory or other 30005000 level course in feminist or gender theory
3) Capstone Experience: Students must complete a final research project or practicum. The Capstone requirement may be satisfied by WGS 4352 Independent Study in Women's and Gender Studies, WGS 4353 Internship in Women's and Gender Studies, or by a 4000 -level WGS course or other 4000 -level seminar where student completes a final research and writing project that focuses on women's and gender studies.

9 hours may be cross-listed courses with student's major department or WGS electives from various disciplines.

## Graduate Certificate

The graduate certificate in Women's and Gender Studies is designed for students who wish to receive postbaccalaureate training in gender studies.

## Requirements

For Admission:
Baccalaureate degree
2.75 G.P.A.

Official transcripts of all previous undergraduate/graduate work

Two letters of recommendation
If you are not currently enrolled at UM-St. Louis, you must apply through the Graduate School. This certificate is available to students with Bachelor's or Master's degrees and students enrolled in graduate degree programs. A student need not be enrolled in a degree program to earn the WGS graduate certificate.
Post B.A./B.S. students may enroll in the undergraduate or graduate certificate program.

## Certificate Requirements

At least 18 hours of Women's and Gender Studies courses at the 4000,5000 , and/or 6000 level

1) 3 hours must include a graduate feminist or gender theory course, which may be WGS 5033, Advanced Sexuality and Gender Theory, WGS 5040 Feminist Critical Theory, or other theory course.
2) 3 hours must include either a graduate internship or practicum, or final writing project, which may be an independent study WGS 6452 Special Readings in Women's and Gender Studies, or a substantial reseatch and writing project for a WGS graduate seminar, wt ich may be WGS 6450 Seminar in Women's and Gender Studies, or other cross-listed, 5000 or 6000 -level seminar
3) 12 hours must be at the 5000 level or above, while up to 6 hours of 4000 -level courses may be taken for gracuate credit, as long as student completes graduate level vork for the course.
4) No more than 6 hours may be taken as Directed or Independent Study credit.

Most WGS courses are cross-listed with other depa tments and count toward a department's degree requiremerts we well as toward the certificate.

## Course Descriptions

## 1004 The History of Women in the United Stater (3)

 (Same as History 1004)A survey of women's history from the colonial era to the present.

2102 Introduction to Women's and Gender Stucies (3) (Same as Social Work 2102, History 2102, and Soc iology 2102)

This core class is required for all Women's and Geader Studies Certificate earners. This class introduces stadents to cultural, political and historical issues that shape gender. Through a variety of disciplinary perspectives in the humanities, social sciences, and natural sciences, the course familiarizes students with diverse female ard male experiences and gendered power relationships.

## 2103 Gender Roles in Society (3)

Prerequisites: Soc 1010 or WGS 2102 or consent © $f$ instructor. (Same as Soc 2103) The study of social processes through which gender roles are developed and acquired; the impact of gender roles on personal icentity and social conduct; the relationship between gender roles and social inequality; and individual and social consequences of changing gender roles in contemporary society.

2140 Female Sexuality (3)
(Same as Psych 2140)
Prerequisites: Psych 1003, or Bio 1012, or its equivalent. This course will present a biological-psychological orientation toward the study of female sexuality. Topics include: sexual anatomy, hormonal influences on sexual behavior, psychosexual development, sexual attraction and relationships, sexual response and dysfunction, menstruation, pregnancy, menopause, reproductive health issues, and social issues in sexuality.

## 2150 Special Topics in Women's and Gender Studies*

 (3)An introduction to a particular topic area in women's and gender studies (topics will be announced prior to registration), drawing on the theories and methods of such disciplines as sociology, psychology, political science, history, philosophy, art history, and others to examine particular aspects of gender in social and cultural life. Course may satisfy the distribution requirement for humanities or social sciences depending on the topic.

## 2230 Psychology of Women (3)

(Same as Psych 2230)
Prerequisites: Psych 1003. Evaluation of psychological theories and research regarding physiological, cognitive, and personality sex differences, female problems in adjustment, and clinical intervention for women.

## 2232 Psychology of Victims (3)

(Same as Psych 2232)
Prerequisites: Psych 1003. A review of the effects of crime, violence, natural disasters, and other traumas on psychological functioning with attention to the relationship between gender and victimization. Prevention and therapy techniques will also be discussed.

## 2253 Philosophy and Feminism (3)

(Same as Phil 2253)
A critical examination of what various philosophers have said about issues of concern to women. Sample topics include oppression, racism, women's nature, femininity, marriage, motherhood, sexuality, pornography, and the ethics of care.

## 2410 Work, Families, and Public Policy (3) (Same as Econ 2410)

This course compares the economic behavior of women and men in both the labor market and the household. Topics include: the family as an economic (production) unit, gender differences in labor force participation, occupations and earnings; the effectiveness of human capital theory and labor market discrimination in explaining the male-female wage gap; remedies for reducing the wage gap, family structure and economic well-being, and alternative policies to alleviate poverty.

3031 History of Women in the United States (3)
(Same as Hist 3031)
Prerequisites: Junior standing or consent of the instructor. Development of women's economic, political, and social role in the United States with special emphasis on the nineteenth and twentieth centuries; women and work; women and the family; women and reform movements; women and education; feminist theorists and activists; images of women.

## 3032 History of Women in Comparative Cultures (3)

(Same as Hist 3032)
Prerequisites: Junior standing or consent of the instructor. An introduction to the historical development of women's status in a variety of cultures and periods within the areas of Africa, Europe, the Far East, Latin America, and the Middle East. The course analyzes women's political, economic, familial, and sexual roles and the economic, demographic, ideological, and political forces which promoted change and continuity in these roles.

## 3033 Sexuality and Gender Theory (3)

## (Same as Hist 3033)

Prerequisites: Junior Standing or consent of instructor. This course examines the ways in which contemporary sexuality and gender theory has challenged and changed the study of culture and history. The course introduces students to sexuality and gender theory in late twentieth and early twenty-first century contexts. It then explores dynamic links between theory and the formal structures of political economy as well as the informal structures of everyday life.

## 3034 History of Sexuality (3)

(Same as Hist 3034)
Prerequisites: Junior Standing or consent of instructor. This course locates sexuality at the center of history and examines its impact over time on politics, society, culture and economics. In particular, the course focuses on changing definitions of sexual deviance, the historical evolution of formal and informal regulations of sexual practices and the manner in which sex has been deployed in broader historical struggles involving gender, race, class, migration and state building.

## 3053 African-American Women's History (3)

 (Same as Hist 3053)Prerequisites: Junior standing or consent of instructor. This course introduces some of the themes of AfricanAmerican women's history. By examining the impact of region, gender, and class on African-American women's experiences across time, the course highlights black women's applied and theoretical contributions to feminist politics and activism as well as the black struggle for freedom and equality. Topics covered include: slavery and emancipation, institution and community building, the family and work, electoral politics and direct action protest, civil rights, and contemporary issues.

## 3224 Marriage and the Family (3)

(Same as Soc 3224)
Prerequisites: Soc 1010 or consent of instructor. The study of patterns of close relationships and how these relationships are influenced by larger social forces. Topics include: love, dating, mate selection, cohabitation, alternative lifestyles, working families, parenting, single mothers, families in crisis, domestic violence, and divorce. Universal and variable aspects of family organization, family role systems, and changes in family social structure.

## 3250 Sociology of Victimization (3)

(Same as Soc 3250)
Prerequisites: Soc 1010. Examines the role of social factors in a wide range of kinds of victimization-crime, violence, natural disasters, accidents, disease, etc. The topic of social reactions to various kinds of victimization is also covered. Sociological theories of victimization are emphasized.

## 3325 Violence Against Women (3)

(Same as CCJ 3325)
Prerequisites: Junior standing, CCJ 1110, 1120, 1130, 2210,2220 , and Eng 3100, or consent of instructor. This course examines the nature, extent, causes and consequences of various types of violence against women, including rape, sexual assault, stalking, and intimate partner violence. Criminal justice policy and practice regarding violence against women are also examined. Fulfills CCJ diversity requirement.

## 3345 Lesbian Psychology (3)

(Same as Psych 3345)
Prerequisites: Junior standing, 9 hours of psychology, or consent of instructor. Explores psychological, social, cultural, and historical aspects of lesbianism. Topics include development of lesbian identity historically and individually, causes of sexual orientation, coming out, relationships and friendship, sexuality, roles, prejudice and discrimination, race and class, legal and economic issues, politics and feminism, health, and community.

## 3350 Special Topics in Women's and Gender Studies

 (3) *Prerequisites: WGS 2102 or consent of instructor. Special Topics in Women's and Gender Studies. Topics vary by semester.

## 3352 Independent Studies in Women's and Gender Studies (1-3)

Prerequisite: Junior standing; two courses in Women's and Gender Studies, including 2102; and consent of the instructor and the Institute. Directed independent work in selected women's and gender studies topics through readings, research, reports and/or conferences. Course may satisfy the distribution requirement for the humanities, social sciences or math/science depending on topic.

## 3376 Women \& Visual Arts (3)

(Same as Art 3376)
Prerequisites: art 1100 or consent of instructor. Selecied topics concerning women as creators, users, and subject matter of art. Great women artists in the Western world will be studied, as well as women weavers, potters, and sculptors in non-western society.

## 3700 Diversity and Social Justice (3)

(Same as Soc Wk 3700)
Prerequisites: Soc 1010 or equivalent. Analyzes the structure, dynamics, and consequences of social and economic injustice, and the impact on diverse groups in American society. Examines theoretical models and practice principles for work with diverse groups.

4300 The Female Gaze: Women and the Media (3) Prerequisites: Junior standing or consent of instructo: This course challenges how women's issues and performances of femininity are represented in global media, particularly popular Western media which perpetuate cultural stereotypes of gender norms. Spe ific topics will vary.

## 4350 Special Topics in Women's and Gender Studies*

 (3)Prerequisites: WGS 2102 or consent of instructor. Special topics examined from a gender perspective in the fieids of anthropology, art history, criminology, economics, English, foreign language, history, philosophy, polit.cal science, psychology, social work, sociology, business, or others. Topics and departments vary by semester. Ccurse may be repeated by permission of IWGS Director.

## 4352 Independent Study in Women's and Gender Studies (1-3) <br> Prerequisites: WGS 2102 or consent of instructor.

 Independent, directed readings and research in a wo:nen's and gender related topic, to be determined in consulation with instructor.4353 Internship in Women's and Gender Studies (3) Prerequisite: 90 hours. $2.5 \mathrm{GPA}, 12$ WGS hrs. Inte nship would place the student in a profit or nonprofit setting for approximately ten hours a week in an internship str.ctured and supervised by the Institute; consent of Director required; may include biweekly seminar. Student rust present appropriate course background for either opion, plus the above pre/co-requisites.

4452 Feminism and Science (3)
(Same as Phil 4452)
Prerequisites: Six hours of philosophy, graduate standing, or consent of instructor. This course will explore major themes and issues in feminist science scholarship, a body of research that focuses on the relationship between science and gender. This course emphasizes feminist research in the philosophy and history of science, and in the biological sciences. Issues covered include the nature
of objectivity, evidence, and truth; the factors that contribute to the acceptance or rejection of research hypotheses and theories; the nature and consequences of science's cognitive authority; and the relationship between science and values.

## 4610 Domestic Violence: Theory, Problems, and Practice (3)

(Same as Soc Wk 4610)
Prerequisites: Soc Wk 3150. Focuses on theoretical and empirical understanding of domestic violence in U.S. society and social work practice with battered women and their families. This course addresses direct services, community organizing, and public policy changes to help end violence against women. Relationships between violence against women and other forms of oppression (e.g., racism, economic exploitation, heterosexism and social class) are explored.

## 4630 Women's Social Issues (3)

(Same as Soc Wk 4630)
Prerequisites: Soc Wk 3150 or equivalent. This course will help students become more sensitive to the social and welfare concerns of women. The topics include work, education, family responsibilities, violence against women, and special health and mental health service needs. Emphasis will be placed on understanding how social action can be used to bring about positive change.

## 4930 Studies in Gender and Literature (3)

(Same as Eng 4930)
Prerequisites: Students must satisfy English prerequisites for 4000 -level courses or obtain permission of instructor. The course examines the role of gender in literature, including the transformation of literary genres by women writers, writings by women during a particular historical period, and gender relations in literature. Specific topics vary from semester to semester. The course may be repeated for credit with departmental approval.

## 4931 English Women Writers, 1300-1750 (3)

(Same as Eng 4931)
Prerequisites: Students must satisfy English prerequisites for 4000 -level courses or obtain permission of instructor. Texts covered will range in scope from closet drama and romance to lyrics to personal, political, and religious writing by women such as Margery Kempe, Mary Sidney, and Amelia Lanyer who wrote during a period when reading and writing were not the female norm.

## 4932 Female Gothic (3)

(Same as Eng 4932)
Prerequisites: Students must satisfy English prerequisites for 4000 -level courses or obtain permission of instructor. The course examines the historical development of the female gothic, a genre which employs narrative strategies for expressing fears and desires associated with female experience. From the late $18^{\mathrm{d}}$ century to the present, we
will trace the persistence of the Gothic vision in fiction and film.

## 4933 Female Novel of Development (3)

(Same as Eng 4933)
Prerequisites: Students must satisfy English prerequisites for 4000 -level courses or obtain permission of instructor. The course covers the development of the female Bildungsroman from the late $18^{\text {th }}$ century to the present. We will consider how contemporary and current theories of female development help us read these novels within their particular cultural contexts.

## 4934 Austen and the Brontes (3)

(Same as Eng 4934)
Prerequisites: Students must satisfy English prerequisites for 4000 -level courses or obtain permission of instructor. This course covers the novels of the major $19^{\text {th }}$ century British writers Jane Austen and the three Bronte sisters, Anne, Emily, and Charlotte. The course will be devoted to Austen's romantic comedies and the historical/cultural contexts that inform the novels, as well as the darker romanticism of the Brontes, along with the biographical, cultural, philosophical, and religious contexts of their work.

## 4935 Women Heroes and Romantic Tales (3)

(Same as Eng 4935)
Prerequisites: Students must satisfy English prerequisites for 4000 -level courses or obtain permission of instructor. Women as epic and romantic heroes in British and transatlantic writing 1790s-1850s: reformers and rulers in novels by Mary Wollstonecraft and Mary Shelley; a runaway slave and an epic poet in works by Mary Prince and Elizabeth Barrett Browning; erotic and political adventures in Robinson, Dacre, Hemans; American icons "Pocahontas" and "Evangeline" in Sigourney and Longfellow.

## 4936 Tales of the Islamic East (3)

(Same as Eng 4936)
Prerequisites: Students must satisfy English prerequisites for 4000 -level courses or obtain permission of instructor. Adventure, gender, and power in British and post-colonial writing: Lady Montague on Turkey, Gibbon on Islam, Byron and Hemans on harems and heroes, Disraeli on the Jewish Caliph of Baghdad, T.E. Lawrence on Arabia, and el Saadawi and Rushdie on (post) modern gender and the Islamic East.

## 4937 Irish and Irish-American Women Writers (3) (Same as Eng 4937)

Prerequisites: Students must satisfy English prerequisites for 4000-level courses or obtain permission of instructor. This course traces the parallel arcs of feminism reflected in similarly-themed Irish and Irish-American women's novels from 1950 to present. Authors range from Edna O'Brien and Mary McCarthy, the first contemporary feminist novelists in Ireland and America, through Emma

Donoghue and Eileen Myles, whose lesbian protagonists bring feminist perspectives into the $21^{\text {st }}$ century.

## 4938 American Women Poets of the $20^{\text {th }} / 21^{\text {st }}$ Centuries

 (3)(Same as English 4938)
Prerequisites: Students must satisfy English prerequisites for 4000 -level courses or obtain permission of instructor. Introduction to American women poets since 1900: anarchists, Imagists, Harlem formalists, white lyricists, modernists (Ridge, H.D., Dunbar-Nelson, Millay, Stein); mid-century giants (Rukeyser, Brooks) and Confessionals (Sexton, Plath); feminists and multiculturalists (Rich, Lorde, Giovanni, Hogan), poets of witness and the play of language and the mind (Klepfisz, Olds, Mullen, Perillo).

## 5031 Advanced History of Women in the United States

 (3)(Same as Hist 5031)
Prerequisites: Graduate standing. Development of women's economic, political, and social roles in the United States with special emphasis on the nineteenth and twentieth centuries: women and work; women and the family; women and reform movements; women and education; feminist theorists and activists; images of women.

## 5032 Advanced History of Women in Comparative Cultures (3)

(Same as Hist 5032)
Prerequisites: Graduate standing. An introduction to the historical development of women's status in a variety of cultures and periods within the areas of Africa, Europe, the Far East, Latin America, and the Middle East. The course analyzes women's political, economic, familial, and sexual roles and the economic, demographic, ideological, and political forces which promoted change and continuity in these roles.

## 5033 Sexuality and Gender Theory (3)

(Same as Hist 5033)
Prerequisites: Graduate standing. This course examines the ways in which contemporary sexuality and gender theory have challenged and changed the study of culture and history. The course introduces students to sexuality and gender theory in late twentieth and early twenty-first century contexts. It then explores dynamic links between theory and the formal structures of political economy as well as the informal structures of everyday life.

## 5034 History of Sexuality (3)

## (Same as Hist 5034)

Prerequisites: Graduate standing. This course locates sexuality at the center of history and examines its impact over time on politics, society, culture and economics. In particular, the course focuses on changing definitions of sexual deviance, the historical evolution of formal and informal regulations of sexual practices and on the manner in which sex has been deployed in broader historical
struggles involving gender, race, class, migration and state building.

## 5040 Feminist Critical Theory (3)

(Same as Eng 5040)
Prerequisites: Graduate standing and consent of instructor. A consideration of feminist critical theory as a means of reassessing literary texts and our cultural heritage. After exploring the roots of feminist criticism, the seminar will examine Anglo-American and continental debates on theories of language, writing and representation. In providing an interdisciplinary context the course will consider studies in psychology, anthropology, history; and philosophy/theology which have influenced and enriched feminist approaches to literature.

## 5053 Advanced Studies in African-American History

 (3)(Same as Hist 5053)
Prerequisites: Graduate standing. This course introduces some of the themes of African-American women's history. By examining the impact of region, gender, and clas; on African-American women's experiences across time, the course highlights black women's applied and theore ical contributions to feminist politics and activism as we 1 as the black struggle for freedom and equality. Topics covered include: slavery and emancipation, institution and community building, the family and work, electoral politics and direct action protest, civil rights, and contemporary issues.

## 5350 Topics in Women's and Gender Studies (3)

Prerequisite: Graduate standing and at least one Women's and Gender Studies course. This course will focus on a particular aspect of gender (to be announced prior to) registration) and will draw upon recent theoretical and methodological work from a variety of disciplines.

## 5450 Special Topics in Women's and Gender Str dies

 (3)*Prerequisites: Graduate standing or consent of instractor. Special topics at the Graduate level examined from a gender perspective in the field of anthropology, art history, criminology, economics, English, foreign language. history, philosophy, political science, psychology, social work, sociology, business, or others. Topics and departments vary by semester.

## 5500 Foundations of Human Behavior in the So sial Environment (3)

(Same as Soc Wk 5500)
Prerequisites: Soc Wk 3150 or equivalent or admission to the MSW program. Focuses on theoretical and empirical understanding of human behavior in the social environment using a life-span perspective. Introdu.ces biological, behavioral, cognitive, and sociocultural theories of individuals, families, and small groups, and their implications for the professional social worker's
understanding of socioeconomic status, gender, disability, ethnicity, race, and sexual orientation.

5700 Diversity, Social Justice and Social Practice (3) (Same as Soc Wk 5700)
Prerequisites: Graduate standing. Analyzes the structure, dynamics, and consequences of social and economic injustice, and the impact on diverse groups in American society. Examines theoretical models and practice principles for work with diverse groups.

## 6353 Graduate Internship in Women's and Gender

 Studies (1-6)Prerequisites: Graduate standing and consent of Director. Provides an opportunity for the Graduate Women's and Gender Studies student to acquire "real world" experience working in a non-profit, political, economic, or social service organization with a gender focus.

6435 Gender, Crime and Criminal Justice (3)
(Same as CCJ 6435)
Prerequisites: Graduate standing. This course provides an analysis of theories of crime, crime processing and gender. Topics examined include the role of gender in criminal offending and victimization. The impact of gender on criminal/juvenile justice system processing and treatment will be addressed.

6450 Seminar in Women's and Gender Studies (3)*
Prerequisites: Graduate standing and consent of instructor. Critical examination of advanced topics in the humanities, social sciences, or natural sciences from women's and gender studies perspectives. May be taken more than once provided that the subject matter is different each time the seminar is taken.

6446 Sex Crime (3)
(Same as CCJ 6446)
Prerequisites: Graduate standing and consent of instructor. Examination of consensual and non-consensual sexual offending. Topics include historical development of laws regulating sexual conduct, controversies surrounding the application of these laws, and the nature and distribution of sexual offenses.

## 6452 Special Readings in Women's Studies/Gender Studies (3)

Prerequisite: Admission to Graduate Certificate program and consent of instructor. Directed independent work on a selected Women's and Gender Studies topic through readings, research, reports, and/or conferences.

* Each semester the Director of the Institute for Women's and Gender Studies identifies courses being offered by other departments and they are cross listed with Women's and Gender Studies courses under the special topic course title. Consult the course schedule each semester for a list of these courses.


## Pre-Professional Programs

Students at the University of Missouri-St. Louis may develop pre-professional study programs from the university's academic offerings in architecture, engineering, dentistry, journalism, law, medicine, optometry, or pharmacy. With early and careful advising, students may develop a two-year study program in preparation for transfer into a professional program in the junior year, or they which provide strong undergraduate preparation for may select a major field of study and related area courses graduate professional study.

Students should seek pre-professional faculty advisers in their interest area early in their academic careers to ensure development of sound, comprehensive study programs which fulfill the admission requirements of the professional program to which they wish to apply.

The following $g$ information on pre-professional study at UM-St. Louis is provided to give students minimal guidelines and assistance in planning a program.

## Pre-Architecture

The Department of Art and Art History sponsors the $3+4$ Program for the School of Architecture at Washington University. A student who is accepted to the School of Architecture, Washington University, at the end of the junior year may graduate with a Bachelor of Arts degree in art history from UM-St. Louis after the satisfactory completion of the first year of professional school upon meeting one or more of the following conditions:

1) The student has completed all general education requirements and all requirements for the art history major and lacks only the total hours (electives) necessary for a degree. (The courses at Washington University will fulfill all remaining courses.)
2) A student who has not completed required courses for the art history degree must remedy the deficiency with courses taken at the UM-St. Louis within three years of entering the professional school. At the time of graduation, the student must remain in good standing in the professional school or have successfully graduated from professional school.
3) A student who has not completed all the courses required for the art history major may, if the art and art history department at UM-St. Louis approves, substitute up to six hours of appropriate course work from the professional school.

The requirement that 24 of the last 30 hours of course work for a degree be taken at UM-St. Louis shall be waived where necessary for students graduating under this procedure. For more information on admission requirements, please contact the College of Arts and Sciences at (314) 516-5501, 303 Lucas Hall.

## Pre-Engineering

The Joint Undergraduate Engineering Program of the University of Missouri-St. Louis and Washington University was established in 1993. It allows UM-St. Louis to offer complete Bachelor of Science degree programs in mechanical, electrical and civil engineering.

All three programs are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

Students who enter the joint program take the preengineering half of their course work on the campus of UM-St. Louis. The remaining half of their degree programs, consisting of upper-level engineering cour ies and laboratories, is taken on the campus of Washington University and taught by Washington University engineering faculty members. The two campuses are separated by a driving time of about 15 minutes.

The UM-St. Louis pre-engineering program provides a solid base in mathematics, physics, chemistry, and introductory engineering subjects. Students completing the pre-engineering program will be well prepared for transferring to engineering schools throughout the U.ited States, including UM-Columbia, UM-Rolla, Washinyton University, and SIU-Edwardsville, in addition to continuing their education and earning their engineering degrees at UM-St. Louis.

## Admission Requirements

In addition to the general admission requirements, prospective undergraduate engineering and preengineering students may be required to take a mathematics placement test, given at UM-St. Louis, the semester before enrolling.

Although there is no required pattern of high-school units for admission to the undergraduate engineering or peengineering programs, students are urged to complee at least four units of mathematics, including units in al zebra (excluding general mathematics) and trigonometry.
Calculus, if available, is also strongly recommendecं.
The following indicates pre-engineering course work required for students planning to pursue a Bachelor of Science degree in engineering at UM-St. Louis through the joint program with Washington University.

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## Physics

2111, Physics: Mechanics and Heat
2112, Physics: Electricity, Magnetism, and Optics
Introductory Engineering
Engineering
2310, Statics
2320, Dynamics
Humanities, Social Sciences, and English Composition English
1100, Freshman Composition
Humanities Electives (three courses)
Social Sciences Electives (three courses)
Students planning to earn a bachelor of science degree in engineering at UM-St. Louis should choose humanities and social sciences electives to meet both the UM-St. Louis general education requirements and the humanities and social sciences requirements of the Joint Undergraduate Engineering Program. In particular: * A course in American history or government, or in Missouri history or government, must be included.

* The cultural diversity requirement must be fulfilled.
* A total of three humanities and three social science courses are required. At least one course must be at the junior level or higher, taken at a four-year institution. Please contact the UM-St. Louis Engineering Advisor at 314-516-6800 to be sure that the required humanities and social science courses are selected.

For further Information about undergraduate engineering and pre-engineering programs at UM-St. Louis, please contact the UM-St. Louis/Washington University Joint Undergraduate Engineering Program at 228 Benton Hall, (314) 516-6800.

## Pre-Journalism

Students wishing to pursue a journalism degree should review the entrance requirements of the schools they would like to attend for information on suggested prejournalism courses of study.

Students seeking a degree from the University of Missouri must complete their junior and senior years at the School of Journalism, University of Missouri-Columbia. For admission, students must present to the UMC School of Journalism 60 acceptable credit hours that include the required courses listed below.

## Required Courses

The following studies are required for admission to the School of Journalism:

English Composition: English 1100-Freshman Composition, 3 hours, grade of $B$ or higher. If a grade of C is received, the student must pass the Missouri College English Test (MCET) on the UMC campus. Advanced Placement (AP) English Composition credit or International Baccalaureate test credit will be accepted for
incoming freshmen admitted to UMC fall semester 2002 and after.

Math: Students must complete College Algebra with a grade C- range or higher, or have a minimum ACT math score of 26 or a minimum SAT score of 600 .

Foreign Languages: Four years of high school work in one foreign language or 12-13 hours of college work in one foreign language.

Biological, Mathematical, Physical Science: Math 1310 - Elementary Statistics (C- range grade) plus six hours from biological anthropology, biology, chemistry, astronomy, geology, physics, above college algebra level math or computer science.* One course must include a lab. Please note: College Algebra is the prerequisite course for statistics at UMC and UM-St. Louis.

* Computer Science 1250 - Introduction to Computing.

Social Science: Twelve hours are required to include American History or American Govemment/Introduction to Political Science; Microeconomics, three hours in a behavioral science (anthropology, but not Anthropology 1005, psychology or sociology); and three hours in economics, history, or political science. Please note: Prestrategic communications majors must complete both microeconomics and macroeconomics.

Humanistic Studies: Nine hours are required to include three hours in American or British literature, plus two courses from any of the following areas: history or appreciation of art or music, humanities, philosophy, religious studies, non-U.S. civilization or classical studies, history or appreciation of communication, film or theatre.

In addition, word processing skills are required (40 words per minute). A minimum TOEFL score of 600 is required for students whose native language is not English.

Nontransferable courses at the School of Journalism include: basic military science, basic physical education, word processing or computer applications, typing or practical arts/vocational technical education courses, photography, public relations, advertising, journalism or mass communication, orientation, professional skills, college preparatory, and no more than three hours maximum of applied music, dance, acting or studio art.

Students are required to take four journalism courses (minimum C-range grades) at UMC prior to admission to the school: J1010-Careers in Journalism, J1100Principle American Journalism, J2100 - News, and J2000 - Cross Culture Journalism. The English composition requirement must be satisfied prior to enrollment in J 2000 and J 2100 . Completion of 15 hours and a minimum 2.75

GPA are required for $\mathbf{J 1 1 0 0}$. A minimum 2.8 GPA is required for J2100 and J2000.

The School computes the grade point average for transfer students based on courses accepted toward admission until a Mizzou GPA is established. The School uses the Mizzou GPA for enrollment in the preliminary journalism courses and for acceptance to the sequences.

Admission is by emphasis area. Emphasis areas are Convergence Journalism, Magazine Journalism, Newspaper Journalism, Radio-TV Journalism, Strategic Communications and Photojournalism.

The School accepts credit through the College-Level Examination Program (CLEP - subject exams only), Advanced Placement Program (AP), and the International Baccalaureate (IB) program. Regulations apply.

Credit should be referred for review;
Please send official transcripts to:
Admissions, 230 Jesse Hall, Columbia, MO 65211.
For advisement and information, contact the Office of Undergraduate Student Affairs in the College of Arts and Sciences, 303 Lucas Hall, 314-516-5501.

## Pre-Law

Students planning to attend law school must pursue an undergraduate degree of their choice. There is no such thing as a pre-law major. Law schools encourage students to pursue a course of study that includes a broad liberal arts background. The pre-law advisor will assist students in choosing courses that will enhance their analytical and writing skills.

English language and literature courses are virtually indispensable. An awareness of the institutional processes of government obtained through study in political science is needed. Since law is inseparable from historical experience, an acquaintance with American history is important. Students should acquire a knowledge of macroand microeconomics. Statistics, accounting, and computer science are valuable in understanding special legal subjects and the practice of law. Other recommended courses include formal logic, general psychology, into sociology, ethics, theories of justice, and courses that promote cultural awareness.

The University of Missouri has law schools at Columbia and Kansas City. University of Missouri-St. Louis students may seek assistance in planning an undergraduate program, preparing for the LSAT, and applying to law school in the office of the pre-law adviser. Students should contact the pre-law adviser through the College of Arts and Sciences, 303 Lucas Hall, (314) 516-5501, early in their undergraduate studies.

## Pre-Health Sciences

Students wishing to enter medical, dental, optometry, or veterinary medicine schools should pursue B.A. or B.3. degrees with majors in the disciplines of their choice, but should take whatever additional courses may be neces sary as prerequisites for admission to the professional schcol. Since admission requirements vary, students are urged to consult the catalogs of the schools to which they interd to apply. Updated information may be found in:

## Medical School Admission Requirements (United States and Canada)**

Phone: 1-202-828-0416; Website: www.aamc.org American Dental Education Association Official Guide to Dental Schools
Phone: 1-202-289-7201; Website: www.adea.org/sturlentapplicant/default.htm
Schools and Colleges of Optometry Admission Requirements
Phone: 1-301-231-5944; Website: www.opted.org
Pharmacy School Admission Requirements
Phone: 1-703-739-2330; Website: www aacp.org
Veterinary Medical School Admission Requireme ats in the United States and Canada
Phone: 1-202-371-9195; Website: www.aavmc.org/
**A copy of the MSAR is also available at the reference desk of the Thomas Jefferson Library.

Suggested Courses (Pre-Med, Pre-Dental, Pre-Vet)
Many medical schools recommend the following undergraduate courses:

Biology: Biology 1811, Introductory Biology: From Molecules to Organisms; Biology 1821, Introductory Biology: Organisms and the Environment; Biology 2012, Genetics; and additional courses in molecular and/or cell biology.

Chemistry: Chemistry 1111, Introductory Chemistr: I; Chemistry 1121, Introductory Chemistry II; Chemistry 2612, Organic Chemistry I; 2622, Organic Chemistry II; Chemistry 2633, Organic Chemistry Lab; and additional courses in organic chemistry and quantitative analysis. (Biochemistry is recommended.)

Mathematics: Students should take courses at least through calculus, as appropriate for the major degres, Math 1800, Analytical Geometry \& Calculus I (biology, chemistry or physics majors), or Math 1100, Basic Calculus (biology majors). Consult with the Pre-Health Sciences advisor to determine the appropriate course(s).

Physics: 8 credit hours or as appropriate for the deg:ee chosen, Physics 1011 \& 1012-Basic Physics (biology majors), OR Physics 2111, Physics: Mechanics and Heat and Physics 2112 , Physics: Electricity, Magnetism c.nd Optics (chemistry or physics majors). Consult with the Pre-Health and Sciences advisor.

Successful completion of these recommended courses also helps students prepare for required standardized exams. Since students are not confirmed for admission to professional schools until the science requirements for admission are fulfilled, students should meet the science requirements before the end of the junior year. To complete these requirements in time, Chemistry 1111 and 1112, Introductory Chemistry I and II should be taken during the freshman year.

Students also should take the required national standardized examination before or during the junior year as is appropriate for the exam: The Medical College Admission Test (MCAT) for pre-med students; the Medical College Admission Test or Graduate Record Exam (GRE) for pre-vet students; the Dental Aptitude Test (DAT) for pre-dental students; the Optometry Admission Test (OAT) for pre-optometry students; and the Pharmacy College Admission Test (PCAT), (if required) for prepharmacy students. (Note: pre-vet students should consult with their intended veterinary colleges for appropriate test information.)

Each year the number of applicants to health profession schools exceeds the number of available places. Students, therefore, are encouraged to have alternative plans should they not gain entrance. Nursing, laboratory technology, and allied health may be considered as alternative fields.

For more information, testing dates, or pre-health science advising, contact the pre-health professions adviser through the College of Arts and Sciences, 303 Lucas Hall, (314) 516-5501.

## Pre-Optometry

The University of Missouri-St. Louis offers a four-year program of study leading to the doctor of optometry degree; this professional degree is administered by the College of Optometry. It is one of only 16 schools of optometry in the United States and the only one in the state of Missouri.

Because the University offers the doctor of optometry degree, it is an ideal institution for pre-optometry education. There are three distinct programs available to UM-St. Louis pre-optometry students:

The Department of Biology and the Department of Physics and Astronomy sponsor 3+4 Programs for the UM-St. Louis College of Optometry. In these programs, a student may be admitted to the College of Optometry after completing three years ( 90 semester hours) of study in their respective majors and successful completion of the Optometry Admission Test (OAT).
Note: Math 1800, Analytical Geometry and Calculus I must be taken in the first semester. The undergraduate degree is granted when the student satisfactorily completes the first year of the professional program. One or more of the following conditions must be met in order to qualify
for the undergraduate degree. 1) All general education requirements and all requirements for the biology or physics major, except electives, must be completed. 2) Any deficiency in required courses must be remedied with courses taken at UM-St. Louis within three years after entering the College of Optometry. 3) Up to 6 hours from the College of Optometry may be substituted for undergraduate degree in Biology with approval of the Department of Biology. For more information, contact the Department of Biology, (314) 516-6200. 4) 12 hours in Optometry are required to complete the B.S. in Physics degree. For more information, call the Department of Physics and Astronomy at (314) 516-5931.

The Pierre Laclede Honors College and the College of Optometry offer the Scholars Program; this program allows a student to complete both the undergraduate and doctor of optometry degrees in seven years. To qualify for this program, a student must be a senior in high school; scored a minimum composite of 27 on the ACT; and be accepted to the UM-St. Louis Pierre Laclede Honors College program. For more information about the Scholars Program, contact the Pierre Laclede Honors College, (314) 516-6870.

For more information on admission requirements for the College of Optometry, please refer to the Optometry section of this Bulletin.

## Pre-Pharmacy

In general, a pharmacy program may consist of 1-3 years of pre-professional study followed by 4-5 years in a professional program. Some institutions, however, offer the entire program at the pharmacy college or school. Since entrance requirements vary, students should consult the catalog and/or web site of the college or school to which they want to apply. Missouri has two pharmacy schools: St. Louis College of Pharmacy, and University of Missouri-Kansas City School of Pharmacy. Beginning Fall 2005, the metropolitan area also includes Southern Illinois University Edwardsville School of Pharmacy. Internet links for these and other pharmacy programs in the United States, Canada and abroad can be found at the web site for the American Association of Pharmacy Colleges, www.aacp.org.

Before taking any courses for pre-pharmacy, UM-St. Louis students should contact the College of Arts and Sciences, 303 Lucas Hall, for pre-pharmacy information. It is important that students take the correct courses for the pharmacy programs they are seeking. Generally, science admission requirements may include some or all of the courses listed below (and possibly other courses):

Bio 1811, Introductory Biology: From Molecules to Organisms
Bio 1821, Introductory Biology: Organisms and the Environment
Bio 1131, Human Physiology and Anatomy I

Bio 1141, Human Physiology and Anatomy II
Chem 1111, Introductory to Chemistry I
Chem 1121, Introductory to Chemistry II
Chem 2612, Organic Chemistry I
Chem 2622, Organic Chemistry II
Chem 2633, Organic chemistry Laboratory
Math 1800, Analytical Geometry and Calculus I
Physics 1011, Basic Physics
Physics 1012, Basic Physics
Usually, pre-pharmacy requirements also include courses in English composition, humanities, social and behavioral sciences. The specific pharmacy school or college determines these requirements. In addition, many pharmacy institutions require applicants to take the Pharmacy College Admission Test (PCAT). Detailed information about the PCAT is available online at www.pcatweb.info. For additional information about application deadlines and procedures, gpa requirements, and letters of recommendation, students should consult the catalogs and/or web sites for the programs they intend to apply.

Pre-Pharmacy advising and information is available through the Office of Undergraduate Student Affairs in the College of Arts and Sciences, 303 Lucas Hall, 314-5165501.

## College of Business Administration

## Faculty

Keith Womer, Professor*, Dean Ph.D. Pennsylvania State University
Thomas H. Eyssell, Professor*, Associate Dean and Director of Graduate Studies in Business Ph.D., Texas A \& M
David R. Ganz, Assistant Professor Emeritus;
Associate Dean Emeritus and Director of Undergraduate
Studies in Business
M.S. in C., Saint Louis University

John J. Anderson, C.P.A., C.M.A., Professor Emeritus, Associate Dean Emeritus
Ph.D., University of Wisconsin-Madison
Nasser Arshadi, Professor*, Vice Provost for Research
Ph.D., University of Nebraska
Howard B. Baltz, Professor Emeritus
Ph.D., Oklahoma State University
Allan Bird, Professor*, Director, International Business Institute
Ph.D., University of Oregon
James A. Breaugh, Professor*;
Coordinator of Management
Ph.D., Ohio State University
James F. Campbell, Professor*,
Ph.D., University of California, Berkeley
William P. Dommermuth, Professor Emeritus
Ph.D., Georgia State University
Douglas E. Durand, Professor Emeritus, Dean Emeritus
Ph.D., Washington University
Hung-Gay Fung, Professor *
Ph.D., Georgia State University
Michael M. Harris, Professor*
Ph.D., University of Illinois-Chicago
Marius A. Janson, Professor*
Ph.D., University of Minnesota
Kailash Joshi, Professor*
Ph.D., Indiana University
Mary Lacity, Professor*
Ph.D., University of Houston
Edward C. Lawrence, Professor*;
Coordinator of Finance
Ph.D., Pennsylvania State University
Joseph S. Martinich, Professor*
Ph.D., Northwestern University
Ray Mundy, Professor*; Director,
Center for Transportation Studies
Ph.D., Pennsylvania State University
Janet Y. Murray, E. Desmond Lee Professor*
Ph.D. University of Missouri-Columbia
Robert M. Nauss, Professor*; Coordinator of Logistics
and Operations Management
Ph.D., University of California, Los Angeles
David Ricks, Curator Professor Emertius
Ph.D., Indiana University

David Ronen, Professor*
Ph.D., Ohio State University
Rajiv Sabherwal, Curator Professor*
Ph.D., University of Pittsburgh
Vicki Sauter, Professor*
Ph.D., Northwestern University
L. Douglas Smith, Professor*; Director,

Center for Business and Industrial Studies
Ph.D., University of Minnesota
Robert S. Stich, Professor Emeritus
Ph.D., New York University
Fred J. Thumin, Professor Emeritus; Diplomate, Industrial and Organizational Psychology
Ph.D., Washington University
Deborah B. Balser, Associate Professor*
Ph.D., Cornell University
Donald H. Driemeier, Associate Professor Emeritus;
Dean Emeritus
D.B.A., Washington University

Michael T. Elliott, Associate Professor*
D.B.A., Mississippi State University

Timothy A. Farmer, C.P.A., Associate Professor*
Ph.D., Ohio State University
Greg Geisler, Associate Professor*
Ph.D., University of North Carolina at Chapel Hill
D'Anne G. Hancock, Associate Professor*
Ph.D., University of New Orleans
Julius H. Johnson, Jr., Associate Professor*
Ph.D., George Washington University
Charies R. Kuehl, Associate Professor Emeritus
Ph.D., University of Iowa
Donald R. Kummer, Associate Professor*
Ph.D., University of Oregon
Haim Mano, Associate Professor*;
Coordinator of Marketing
Ph.D., University of Chicago
Dinesh Mirchandani, Associate Professor*
Ph.D., University of Kentucky
Stephen R. Moehrle, C.P.A., Associate Professor*
Ph.D., Indiana University
Mary Beth Mohrman, Associate Professor*, Coordinator
of Accounting
Ph.D., Washington University
R. Frank Page, C.P.A., Associate Professor Emeritus

Ph.D., University of Illinois
Jennifer Reynolds-Moehrle, C.P.A., Associate
Professor*
Ph.D., Indiana University
Mahesh Shankarmahesh, Associate Professor*
Ph.D., Old Dominion University
Paul S. Speck, Associate Professor*
Ph.D., Texas Tech University
Ashok Subramanian, Associate Professor*;
Coordinator of Information Systems
Ph.D., University of Houston

Bindu Arya, Assistant Professor*
Ph.D., University of Texas at Dallas
Brigitte Bojkowszky, Visiting Assistant Professor* Ph.D., Vienna University
Frank Q. Fu, Assistant Professor*
Ph.D., University of Houseton
Gerald Yong Gao, Assistant Professor*
Ph.D., University of Hong Kong
Young-Won Her, Assistant Professor*
Ph.D., University of South Carolina at Columbia
James M. Krueger, C.P.A., Assistant Professor*;
Vice Chancellor for Managerial \& Technological Services
D.B.A., Indiana University

Natalia Mintchik, Assistant Professor*
Ph.D., University of North Texas, Denton
Erin K. Pellegrini, Assistant Professor*
Ph.D., University of Miami
Joseph Rottman, Assistant Professor*
Ph.D., Washington University
Pamela S. Stuerke, Assistant Professor*
Ph.D., Indiana University
Gaiyan Zhang, Assistant Professor*
Ph.D., University of Califormia, Irvine
Donald C. Sweeney II, Adjunct Professor;
Associate Director, Center for Transportation Studies
Ph.D., Washington University
David A. Bird, Instructor Emeritus
M.S., Washington University

Lindell P. Chew, Instructor
M.B.A., University of Missouri-Columbia

John Cox, Instructor Emeritus
M.A., University of Missouri-Columbia

Ottilia Voegtli, Instructor Emeritus
M.B.A., University of Missouri-St. Louis

Wayne W. Winter, Instructor; Assistant Coordinator
in Legal and Business Studies
L.L.M., Washington University

Robert J. Banis, Lecturer
Ph.D., North Carolina State University at Raleigh
Michael Brown, Lecturer
M.B.A., Walsh College of Accounting \& Business

Administration

## Joy Dakich, Lecturer

M.A., University of Missouri-St. Louis

Peggy A. Lambing, Lecturer
M.B.A., University of Missouri-St. Louis

William R. Link, C.P.A., Lecturer
M.B.A., University of Missouri-Columbia

Kenneth W. Locke, Lecturer
D.B.A., Indiana University-Bloomington

Gwen Moore, Lecturer
M.B.A., Washington University

Johnna Murray, Lecturer
MAcc., University of Missouri-St. Louis
Rhonda Tenkku, Lecturer
M.B.A., University of Missouri-St. Louis

James Tiburzi, Lecturer
J.D., University of Illinois-Urbana

Elizabeth W. Vining, Lecturer
M.B.A., University of Missouri-St. Louis
*member of Graduate Faculty

## History

The University of Missouri - St. Louis College of Business Administration was established in 1967, and was accredited by AACSB-International six years later, the shortest time on record for any school to receive accreditation of its business program. AACSBInternational is the only internationally recognized accrediting agency for business and accounting programs. In 2006, the College of Business Administration received reaccreditation of its business and accounting prograrns, both undergraduate and graduate.

## Vision

The UM-St. Louis College of Business Administraticn will become one of the top metropolitan public business schools in the country and be recognized as a leading student-centered provider of quality business education.

## Mission

The College of Business Administration is committer to:

- Providing students a high-quality business education at the undergraduate and graduate levels.
- Creating educational value by delivering innovative, cutting-edge curriculum, using both traditicnal and non traditional delivery methods.
- Conducting and disseminating basic and arplied research that advances our understanding of issues relevant to the effective administrat on of organizations.
- Serving the University, the St. Louis busiress and not-for-profit communities, the citizers of Missouri, and society at large.


## Values

Opportunity: We are committed to providing students an opportunity to excel in a rigorous academic business program.

Knowledge: We value the creation, application, anc communication of knowledge to advance business disciplines and improve management practices.

Access: We strive to ensure that our programs are accessible, consistent with the land-grant mission of the University of Missouri.

Integrity: We value high standards of professional and ethical conduct.

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Excellence: We strive for excellence in our own endeavors and expect it of those with whom we work.

Community: We value our ties with the business and not-for-profit communities, and work to create opportunities of mutual benefits.
Respect: We endeavor to treat all people with dignity and respect, and to maintain fairness in our interactions with all students, employees and the community.

Diversity: We seek to maintain a diverse and involved community of students, faculty, and staff.

Collegiality: We seek to provide a collegial climate that fosters positive relationships among students, faculty and staff.

## College of Business Administration Programs

## Undergraduate Degrees

Bachelor of Science in Accounting
Bachelor of Science in Business Administration
(with emphasis areas available in)
Finance
International Business
Logistics and Operations Management
Management
Marketing
Bachelor of Science in Information Systems
Undergraduate Minors
Accounting
Finance
General Business
Information Systems
International Business
Logistics and Operations Management
Management
Marketing

## Undergraduate Certificate

International Business Certificate (see International Studies)

Graduate Degrees
Master of Accounting
Master of Business Administration
Accounting
Finance
Information Systems
Logistics and Supply Chain Management
Management
Marketing
Operations Management
Master of Science in Information Systems

Ph.D. in Business Administration<br>Information Systems<br>Logistics and Supply Chain Management

## Graduate Certificates

Graduate Certificate Program in Business Administration Graduate Certificate in Human Resources Management Graduate Certificate in Logistics and Supply Chain Management
Graduate Certificate in Marketing Management

## Undergraduate Programs

Detailed information concerning all degree requirements can be found by visiting our web site, at http://www.umsl.edu/divisions/business/undergrad advisin g/.

Lower Division Requirements-all degrees-all students Each student must complete a 42 -hour block of general education coursework fulfilling six goals-three skill goals and three knowledge goals. The skill goals include two courses in communicating, one course in managing information and one course in valuing. The knowledge goals include three courses in the social sciences, three courses in the humanities, and four courses in the combined areas of mathematics and science. All courses must be selected from a list approved by the Faculty Senate of the campus. In many instances courses required by the College of Business Administration for each of its degree programs will satisfy a segment of the general education requirements. A list of courses which fulfill the humanities, social science, and math/science knowledge goals can be obtained in the Office of Undergraduate Academic Advising in the College of Business Administration, 487 Social Sciences and Business (SSB) building; or by visiting our web site.

## Lower Division Non-Business Course Requirements

Students pursuing any undergraduate business degree must complete the following non-business courses:
English 1100, Freshmen Composition (communicating skill goal)
One additional "communicating skills goal" course Mathematics 1030, College Algebra (math/science knowledge goal)
Mathematics 1100, Basic Calculus (math/science knowledge goal)
Mathematics 1105, Basic Probability and Statistics (math/science knowledge goal)
Economics 1001, Principles of Microeconomics (valuing skill goal and social science knowledge goal)
Economics 1002, Principles of Macroeconomics (social science knowledge goal)
A science lecture course (math/science knowledge goal)
A cultural diversity course
A course required by the State of Missouri
Three humanities courses (humanities knowledge goal)
Two social science courses (in addition to those above)

## Lower Division Business Course Requirements Business Administration (BA)

2400, Fundamentals of Financial Accounting 2410, Managerial Accounting
2800, Information Systems Concepts and Applications
2900, Legal Environment of Business

## Upper Division Requirements-all degrees-all students

## Upper Division Non-Business Requirement

English 3120, Business Writing, with a minimum grade of C-

Upper Division Non-Business or Business Requirement Two global awareness courses selected from an approved list maintained in the Office of Undergraduate Academic Advising in the College of Business Administration; also available on our web site.

## Upper Division Business Requirements

## Business Administration (BA)

3300, Business Statistics
3320, Introduction to Operations Management
3500, Financial Management
3600, Management and Organizational Behavior
3700, Basic Marketing
4219, Strategic Management
A minimum of 18 additional hours of upper division approved business electives

## Assessment-All degrees-all students

The Academic Profile Test is administered to all entering freshmen and to all graduating seniors.
Business Administration 4220, Business Assessment Testing, is administered to all graduating seniors. A "Satisfactory" grade is required for graduation.

General Degree Requirements-all degrees-all students Students must complete a minimum of 120 credit hours for any baccalaureate degree from the College of Business Administration
Students must complete a minimum of 60 non-business hours
Students must complete a minimum of 48 hours in business courses
Students must complete a minimum of 36 hours of upper division business courses
Students are limited to a maximum of 24 credit hours in any single business discipline beyond core courses
Students are limited to a maximum of 78 credit hours in business and economics combined
Students must attain a minimum campus grade point average of 2.0 . Grade modification may be used in calculating this grade point average

Students must attain a minimum business grade point average of 2.0. Grade modification may not be used in calculating this grade point average
Students seeking an emphasis area or major within the Bachelor of Science in Business Administration degree, Bachelor of Science in Accounting degree, and/or Bachelor of Science in Information Systems degree rust attain a minimum grade point average of 2.0 in the emphasis/major. Grade modification may not be use 1 in calculating this grade point average
A minimum grade of C - is required for each course in the business core (except BA 4219); for each course which serves as a prerequisite for another course; and for each course in an emphasis area and/or major
Of the maximum of 18 hours which may be taken on a satisfactory/unsatisfactory graded basis, only 9 hours can be in business, and those are restricted to electives-courses beyond the required business core courses Business course prerequisites are enforced by the College of Business Administration and include a minimum campus grade point average of 2.0 as a condition for taking any upper division business course
Emphasis Areas may be added for up to two years following degree completion Each additional degree from the College of Business Administration requires 15 unique hours taken at UM-St. Louis subsequent to completion of the prior business:: degree

## Transfer Issues

Students must complete a minimum of 60 hours from four year, baccalaureate degree granting colleges/universities A minimum of $50 \%$ of all business course work must be completed at UM-St. Louis
Students must complete a minimum of 21 graded hours in business courses
Individuals must complete their last 30 hours in residence at UM-St. Louis
A minimum of 56 graded hours at UM-St. Louis are required to qualify for consideration for Latin Honors Students seeking to use a lower division course to satisfy an upper division business requirement must validate the course being transferred. If successfully validated, he transfer course will waive the need to take the uppe: division equivalent course at UM-St. Louis, but the course transferred will be counted as lower division; it will not count toward the 36 upper division hours required in business
Completion of a 42-hour general education block, which is certified by the sending institution as fulfilling its general education requirement, will be viewed as fulfilling $\mathrm{JM}-\mathrm{St}$. Louis' general education. However, all lower division courses required as part of a degree program at UM-St. Louis must be completed.

Requirements Unique to Specific Degrees in the College of Business Administration

## Bachelor of Science in Accounting Degree

## Mission

To foster excellence in accountancy by:

1) Providing a rigorous educational experience as a framework for lifelong learning to individuals of diverse academic backgrounds
2) Creating, expanding and disseminating knowledge through scholarly activities
3) Serving the academic, professional and business communities

Lower or Upper Division Non Accounting Courses Required
One of:
Communication 1030, Interpersonal Communication I or
Communication 1040, Introduction to Public Speaking
or
Business Administration 3100, Contemporary Business
Communications
and one of:
Philosophy 1130, Approaches to Ethics
or
Philosophy 2254, Business Ethics

## Upper Division Accounting Courses Required

Business Administration (BA)
3401, Financial Accounting and Reporting I
3402, Financial Accounting and Reporting II
3411, Cost Accounting
3441, Income Taxes
and one of either
3421, Accounting Information Systems and Spreadsheet Applications
or
3810, Information Systems Analysis
See the Office of Undergraduate Academic Advising for alternatives to satisfy the State of Missouri's requirement of 150 hours for eligibility to take the Uniform Certified Public Accounting Examination.

## Bachelor of Science in Business Administration Degree

## General Business

For those undecided regarding a specific emphasis area, a general business degree option is available. Students must complete a minimum of 18 hours of upper division approved business electives (see comprehensive list of business courses in the course descriptions section of this publication)

## Emphasis in Finance

Finance is a multidisciplinary field that combines various concepts from management, economics and accounting with financial techniques to make sound business decisions and solve problems.
A minimum of 15 hours of upper division finance electives must be selected from the following:

## Business Administration (BA)

3501, Financial Policies
3502, Treasury Management
3503, Computer Applications in Finance
3520, Investments
3521, Financial Risk Management
3522, Security Analysis
3525, Practicum in Investments
3540, Financial Services Industry and Instruments
3541, Commercial Bank Management
3542, Principles of Real Estate
3560, Practice of Personal Financial Planning
3561, Principles of Insurance
3562, Life Insurance and Employee Benefits
3563, Retirement Planning and Employee Benefits
3564, Estate Planning and Trusts
3580, International Corporate Finance
3582, International Investment
3595, Business Administration Problems - Finance
3598, Business Administration Seminar - Finance
3599, Independent Study (approved)

## Track Certification

Students may combine selected courses from the list above, and other specified upper division business electives, to fulfill a designated track with dual objectives of acquiring in depth knowledge, and to prepare and be eligible for various professional certification examinations.
Detailed information is available in the Office of Undergraduate Academic Advising. The specific tracks available include:

## Corporate Finance

Financial Institutions and Services
Investment and Portfolio Management
Financial Planning
Insurance

## Emphasis in International Business

National markets are becoming increasingly integrated.
The study of international business focuses on understanding the forces behind this globalization of markets and production.
Twelve (12) hours are required of all individuals seeking an emphasis in International Business:

Two of the following courses:

## Business Administration (BA)

3580, International Finance
3682, Managing the Global Workforce

## 3780, International Marketing

Plus two additional approved international business course other than BA 3289, the international business practicum. (Lists of approved courses are available in the CoBA student advising office.) Proficiency in a foreign language of international commerce (determined by the College of Business Administration) must be demonstrated - 13 credit hours in one approved language or satisfactory performance on the UM-St. Louis foreign language placement test.

An international experience is encouraged for all parties in the program: such experience is required for those individuals seeking the International Business emphasis through the Pierre Laclede Honors College. (International students in the Honors College program are required to demonstrate a three- month, full-time work experience in the United States.)

## Emphasis in Logistics and Operations Management

 This discipline has as its objective to get the appropriate goods or services to the right place, at the right time, in the right quality and quantity-thereby making the greatest contribution to the organization.Students must complete a minimum of 12 credit hours selected from the following:

Business Administration (BA)
3395, Business Administration Problems-Logistics and Operations Management
3398, Business Administration Seminar-Logistics and Operations Management
3399, Independent Study (approved)
3843, Decision Support Systems
4312, Business Forecasting
4314, Multivariate Analysis
4321, Production and Operations Management
4322, Lean Production in Manufacturing and Service Operations
4324, Service Operations Management
4326, Quality Assurance in Business
4330, Business Logistics Systems
4350, Operations Research
4354, Operations Research II
4381, International Logistics \& Operations Mgmt
At most, one of the following courses may be counted toward the LOM emphasis area.

## Business Administration (BA)

3806, Managerial Applications of Object-Oriented Programming I (programming)
3842, Management of Telecommunications
3844, End-User Computing for Business Applications (programming)

## Emphasis in Management

The study of management focuses on the behavior of individuals and groups in an organizational setting.

Students must complete BA 3611, Advanced Management and Organizational Behavior, plus 3 courses selected from

Business Administration (BA)
3289, Practicum in International Business
3621, Human Resource Management
3622, Industrial and Labor Relations
3623, Industrial and Organizational Psychology (same as Psychology 3318)
3624, Employee Training and Development
3680, International Management
3682, Managing the Global Workforce
3684, The Japanese Management System
3685, Role of the Global Corporation
3695, Business Administration Problems-Managernent and Organizational Behavior
3698, Business Administration Seminar-Management and Organizational Behavior
3699, Independent Study (approved)
4614, Entrepreneurship/Small Business Managemert
4689, International Strategic Management

## Emphasis in Marketing

Marketing involves the activities needed to facilitatt an exchange. This includes selling products, services, or ideas to both individual consumers and business bur'ers.

Students must complete 5 upper division marketing courses to include the capstone course, BA 4700. Marketing Management.

## Bachelor of Science in Information Systems Degree

## Mission

The Information Systems (IS) area endeavors to prepare high-potential students of diverse backgrounds for successful careers in the IS profession. Careers in I's may include programming, systems analysis and design, database administration, end-user support, network administration, and management consulting. The goal is to provide students with the skills to deal with the challenges confronting IS through teaching, research, and service to the profession.
Students are required to complete a minimum of 7 courses beyond required business core courses

Programming -2 courses ( 6 hours)

## Business Administration (BA)

3806, Managerial Applications of Object- Orientec Programming I
3816, Managerial Applications of Object Oriented Programming II

Business Administration (BA)
3810, Information Systems Analysis
4850, Information Systems Design

Database-1 course (3 hours)
Business Administration (BA)
3845, Database Management Systems
Students must complete 2 courses (at least 13800 -level business Information Systems course) from the following list:
Business Administration (BA)
3805, Legacy Systems
3815, Object Oriented Applications in Business
3841, Enterprise Information Systems
3842, Management of Telecommunications
3843, Decision Support Systems
3844, Developing Business Applications in .NET
3846, e-Commerce
3847, Web Design
3848, Security and Information Systems
3421, Computer Applications in Accounting
3503, Computer Applications in Finance
3721, Marketing and the Internet
A pre-approved Computer Science Class
Seminars and Independent Studies are restricted to those offered by and approved by the Area faculty and approved by the Area Coordinator
3899, Business Administration Problems/Seminar
3898, Independent Study

## Minors in Business Administration

## General Requirements

All minors are 15 credit hours or 5 courses, including business core courses
Students must attain a 2.0 grade point average for all courses in the minor
Students must attain a minimum grade of C - in each course included in the minor
All courses in the minor must be on a graded basis A minimum of 9 credit hours of coursework included in the minor must be taken in residence at UM-St. Louis One must complete a baccalaureate degree at UM-St. Louis in order for a minor to be conferred A minor may be added for up to two years following completion of the baccalaureate degree

## Minor in General Business

This minor is available only to students seeking a baccalaureate degree outside the College of Business Administration

Five courses selected from
Business Administration (BA)
1800, Computers and Information Systems
2400, Fundamentals of Financial Accounting
2900, Legal Environment of Business
3320, Introduction to Operations Management

3500, Financial Management
3600, Management and Organizational Behavior 3700, Basic Marketing

## Minor in Accounting

Available to all students except those pursuing the Bachelor of Science in Accounting degree. Students must complete
Business Administration (BA)
2400, Fundamentals of Financial Accounting
2410, Managerial Accounting
plus any three upper division accounting electives

## Minor in Finance

Available to all students except those pursuing the Bachelor of Science in Business Administration degree.
Students must complete
Business Administration (BA)
3500, Financial Management
plus any four upper division finance electives

## Minor in Information Systems

Available to all students except those pursuing the Bachelor of Science in Information Systems degree. Students must complete

One Required Course:

## Business Administration (BA)

2800, Introduction to Information Systems
Four of the Following Courses:
At least three of the courses must be 3800-level IS courses.
Business Administration (BA)
3805, Legacy Systems
3806, Mgrl. Appl. Of Object Oriented Programming I
3810, Systems Analysis
3815, Object Oriented Applications in Business
3816, Managerial Applications of Object Oriented
Program II
3841, Enterprise Information Systems
3842, Management of Telecommunications
3843, Decision Support Systems
3844, Developing Business Applications in .NET
3845, Database Management Systems
3846, e-Commerce
3847, Web Design
3848, Security and Information Systems
4850, Information Systems Design
3421, Accounting Information Systems
3502, Computer Applications in Finance
3721, Marketing and the Internet
A pre-approved Computer Science Class
3895, Business Administration Problems-IS
3898, Business Administration Seminar-IS
3899, Independent Study in IS
(Seminars and Independent Studies are restricted to those offered by and approved by the Area faculty and approved by the Area Coordinator.)

## Minor in International Business

Available to all students except those pursuing the Bachelor of Science in Business Administration degree with an emphasis in International Business. Students must complete any 5 courses in International Business.

## Minor in Logistics and Operations Management

Available to all students except those pursuing the Bachelor of Science in Business Administration degree.
Students must complete:

## Business Administration (BA)

3320, Introduction to Operations Management plus any four upper division logistics/operations management electives, including no more than one programming course selected from:

## Business Administration (BA)

3806, Managerial Applications of Object-Oriented Programming I
3844, End-User Computing for Business Applications

## Minor in Management

Available to all students except those pursuing the Bachelor of Science in Business Administration degree. Students must complete:

## Business Administration (BA)

3600, Management and Organizational Behavior 3611, Advanced Management and Organizational Behavior
plus any 3 upper division management and organizational behavior electives

## Minor in Marketing

Available to all students except those pursuing the Bachelor of Science in Business Administration degree. Students must complete:
Business Administration (BA)
3700, Basic Marketing
plus any 4 additional upper division marketing electives

## Minor in Transportation Studies

Available to all students. (For those pursuing the BSBA degree, this will result in an emphasis in marketing if the marketing capstone course, BA 4700, Marketing Management, is taken in addition to the requirements listed below. Such individuals will have completed both BA 3320, Introduction to Operations Management, and BA 3700, Basic Marketing.)

Students must complete five courses to include:
Business Administration (BA)
3770, Introduction to Transportation
3771. Traffic and Transportation Management

Plus three additional courses selected from:
Business Administration (BA)
3090, Internship in Business Administration
3198, Business Administration Seminar: Domestic
Transportation
3198, Business Administration Seminar: Railroads in American Life
3198, Business Administration Seminar: Aviation in American Life
3198, Business Administration Seminar: Economics of Transportation
3199, Independent Study*
3320, Introduction to Operations Management
3700, Basic Marketing
*No more than one approved independent study course may count towards the minor.

## Graduate Studies

The College of Business Administration offers four graduate degrees: the Doctor of Philosophy in Busiress Administration (Ph.D.) the Master of Business Administration (MBA), the Master of Science in Information Systems (MS in IS), and the Master of Accounting (MAcc). All programs carry the prestigious accreditation of the AACSB.

## Admission Requirements

The admissions decision is based on a combination of factors. Consideration is given to a candidate's aced mic record, scores on the Graduate Management Admissions Test (GMAT), work and leadership experience, a personal narrative on the application form, and recommendations.

As in most AACSB-accredited graduate business programs, the UM-St. Louis College of Business generally requires Graduate Management Admissions Test (GMAT) scores. Information on the GMAT exam can be obtained from the Office of Graduate Business Studies, or on the Internet at www.mba.com. The examination tests one's ability to read, understand, and to reason logically with both verbal and quantitative material. The test is not a measure of achievement or business knowledge. Under certain conditions, the applicant may petition for waiver of the GMAT requirement, based on possession of an advanced degree and/or the ability to supply acceptable scores from an equivalent test.

## Doctor of Philosophy in Business Administration (PhD.)

The PhD. program is designed to prepare academic: scholars who will excel in the national and international marketplace. This is the only doctoral business program with an Information Systems emphasis offered at a public university in the state of Missouri. Courses are taught by full-time, nationally known scholars who have bee:
recognized as one of the most academically prolific IS faculties in America.

## Master of Business Administration Program (MBA)

 The MBA is available in three formats: the evening MBA program, the Internet-based Professional MBA program and the International MBA program. All are fully accredited by AACSB International - The Association to Advance Collegiate Schools of Business, the premier accrediting body in collegiate business education. The MBA programs are designed to prepare students for administrative and professional positions. They also provide an appropriate foundation for students contemplating doctoral work and eventual careers in college teaching and research. The programs are designed for students who have bachelor's degrees from accredited instinutions, including those with undergraduate backgrounds in the sciences, engineering, humanities, or arts. Graduate Business program information is available online at http://mba.umsl.edu.
## The Evening MBA Program

The MBA curriculum provides training in the fundamental areas of business administration. The core program is designed to generate a working knowledge of the concepts and interrelationships of four broad categories fundamental to management training:

- The external environment confronting business organizations and management's response to legal, economic, social, and political issues.
- The internal operation of various business organizations and management's role in channeling human behavior to satisfy both personal and organizational goals.
- Basic concepts, terminology, and interaction of the accounting, marketing, finance, information technology and operations management disciplines.
- Quantitative management decision-making models put to use in the context of current management information systems.

The total degree program is integrated by a course in strategy formulation and implementation in the student's last semester. There is no thesis requirement; however, students interested in undertaking an individual research project may earn elective credit by enrolling in a supervised independent study course.

## Degree Requirements

Depending on the student's previous background, programs will range from 39 to 54 hours. Coursework must be completed within a six-year period. At least 30 hours of coursework must be taken while enrolled as an MBA candidate at UM-St. Louis.

Candidates must take at least one course at either the core level or from the business breadth requirements list in each of the following six areas: accounting, finance,
management, marketing, information systems, and logistics and operations management. Also, no more than 15 credit hours may be taken in any one of the six areas. Students are also required to have completed the equivalent of ECON 4150, Quantitative Methods and Modeling in Economics, Business, and the Social Sciences, by the end of their first 15 hours in the program.

## Required Courses

The following courses or their equivalents are required of all degree candidates.

## General Requirements - 18 hours

ECON 4150, Quantitative Methods and Modeling in Economics, Business, and the Social Sciences
BA 5000, Economics for Managers
BA 5100, Managerial Communication
BA 6990, Strategy Formulation and Implementation
LOM 5300, Statistical Analysis for Management
Decisions
BA 5900, Law, Ethics, and Business

## Core Requirements - 18 hours

ACCT 5400, Financial and Managerial Accounting
FIN 6500, Financial Management
MGMT 5600, Organizational Behavior and
Administrative Processes
MKTG 5700, Contemporary Marketing Concepts
IS 5800, Management Information Systems
LOM 5320, Production and Operations Management
Business Breadth Requirements - 9 hours
A student must take a second-level course in three of the following areas:

Accounting: ACCT 5401, Financial Reporting and Analysis
Finance: FIN 6500, Any approved graduate level course beyond FIN 6500
Management: MGMT: Any approved graduate level course beyond MGMT 5600
Marketing: Any approved graduate level course beyond MKT 5700
Information Systems: Any approved graduate level course beyond IS 5800
Logistics and Operations Management: Any approved graduate level course beyond LOM 5320

## Electives

The student must take a minimum of nine hours of elective courses. A maximum of six hours of electives may be taken at the undergraduate level. Graduate students may be required to complete additional work in these courses. Nine elective hours may be taken outside the College of Business Administration if the student has approval in advance from a graduate adviser for the specific courses desired.

## Emphasis Areas

MBA students may obtain emphasis areas in Accounting, Finance, Information Systems, Logistics and Supply Chain Management, Management, Marketing or Operations Management. In addition to the requirements articulated above, the requirements for each emphasis area are shown below.

## Emphasis in Accounting

MBA students seeking an Emphasis in Accounting must complete a minimum of 12 hours of graduate -level Accounting electives beyond ACCT 5400 and including ACCT 5401. A maximum of 15 hours in any functional area will count toward degree requirements. (Ordinarily only courses that are not substantially the same as courses taken for credit in a student's undergraduate program would be acceptable.) The total number of elective courses required will depend on the number of hours waived. Students must complete at least 39 credit hours to earn the MBA.

## Emphasis in Finance

MBA students seeking an Emphasis in Finance must complete a minimum of 12 hours of Finance electives beyond FIN 6500. A maximum of 15 hours in any functional area will count toward the degree requirements. One Finance course may apply toward the Business Breadth requirement, and the remainder toward the Elective requirement. The total number of elective courses required will depend on the number of hours waived. Students must complete at least 39 credit hours to earn the MBA degree.

## Emphasis in Information Systems <br> Required Course <br> IS 5800, Management Information Systems

## Four Courses from the following:

IS 6805, Applications of Programming for Business
Solutions
IS 6835, IT-Enabled Business
IS 6836, Telecommunications; Design \& Mgmt
IS 6837, IS/TT Architecture
IS 6838, Business Processes: Design, Management, and Integration
IS 6840, Information Systems Analysis
IS 6845, Database Management Systems
IS 6846, Management of Global Sourcing
IS 6847, IS Financial and Project Management
IS 6848, Knowledge Management \& Business Intelligence
IS 6850, Information Systems Design
IS 6881, Management of Transnational IS
IS 6891, Seminar on Advanced IS topics
Guided Internship
A maximum of 1 course outside IS (Courses outside the College of Business must be approved by the IS Area Coordinator)

Emphasis in Logistics and Supply Chain Management MBA students seeking an Emphasis in Logistics \& Supply Chain Management must complete 9 hours from approved courses in addition to LOM 5300 and LOM 5320. UF to 3 hours may be transferred from another AACSB-accre;ited graduate program at the discretion of the Area Coordinator of the LOM Area. A maximum of 15 hours in any functional area will count toward the degree requirements. The total number of elective hours required will depend on the number of hours waived. Students must complete at least 39 credit hours to earn the MBA degree.

## Emphasis in Management

MBA students seeking an Emphasis in Management inay choose one of the tracks specified below. Regardless of the track chosen, one must complete a minimum of 12 hc urs of Management electives beyond MGMT 5600. A maximum of 15 hours in any functional area will count toward the degree requirements. The total number of elective courses required will depend on the number of hours waived. Students must take at least 39 credir hours to earn the MBA degree.

## General Management Track

Any 4 MGMT courses.

## Human Resource Management Track

MGMT 5621, Managing Human Resources +3 courses selected from MGMT $5622,5623,5624,5625$.

## Emphasis in Marketing

MBA students seeking an Emphasis in Marketing must complete a minimum of 12 hours of Marketing elect.ves beyond MKTG 5700, including MKTG 5701. A maximum of 15 hours in any functional area will count toward the degree requirements. The total number of elective ccurses required will depend on the number of hour waived. Students must complete at least 39 hours credit hours to earn the MBA degree.

## Emphasis in Operations Management

MBA students seeking an Emphasis in Operations Management must complete 9 hours from approved courses in addition to LOM 5300 and LOM 5320. Cp to 3 hours may be transferred from another AACSB accredited graduate program at the discretion of the Area Coordinator. A maximum of 15 hours in any functicnal area will count toward the degree requirements. The total number of elective hours required will depend on the number of hours waived. Students must complete at least 39 credit hours to earn the MBA degree.

A student cannot receive an emphasis in both Operctions Management and Logistics \& Supply Chain Manag mment for the same set of courses. An overlap of up to 3 credit hours out of the 9 hours required is allowed.

## Previous Education

Based on a formal review and evaluation by the Office of Graduate Studies in Business, students may be granted waivers of certain courses from the general and core requirements. Waivers depend on the applicability of prior coursework and the student's performance in these courses. Regardless of the number of courses waived, all students must take at least 39 hours to earn the degree.

## Professional MBA Program

A weekend-based Internet-enhanced version of the MBA program exists as an alternative to the traditional part-time evening program. This program is a 48 credit hour program for professionals with busy work or travel schedules. Students meet on campus monthly, with the remainder of the interaction between instructor and students taking place online. Students proceed through the program as part of a cohort group and complete the requirements for the degree in two years.

The first 30 hours of the Internet-based program consist of the same core courses required in the evening program (except for the mathematics and economics requirements, which are treated as prerequisites and must be satisfied prior to starting the program). The remaining 18 hours consist of the following courses:

ACCT 5401, Financial Reporting and Analysis FIN 6590, Seminar in Finance MGMT 5695, Seminar in Management MKTG 5795, Seminar in Marketing
IS 6891, Seminar in Management Information Systems LOM 6395, Seminar in Logistics and Operations Management

## International MBA Program

An International version of the MBA program also exists as an alternative to the evening MBA program. This program is a two-year, full-time program. Students take courses the first year outside the U.S. at a partner university and then take courses the second year on the University of Missouri - St. Louis campus.

## International MBA Program Degree Requirements

In addition to the requirements of the evening MBA program, the International MBA program requires an internship (outside the U.S. for Americans and in the U.S. for all others). The program also requires a proficiency in at least one major commercial language in addition to English as a prerequisite. (Coursework is generally in English). All participants in the International MBA program must meet the same General and Core Requirements as those in the evening MBA program.

Master of Science in Information Systems (MS in IS) The Master of Science in IS program is designed to provide the technical and managerial knowledge to operate successfully in careers associated with the design, development and management of computer-based
information, telecommunications, and Internet applications. The program accommodates students with undergraduate degrees specializing in IS, business, and computer science, as well as students with undergraduate degrees outside business. The program allows specialization in telecommunications, electronic commerce, or business systems development.

## MS in IS Program Degree Requirements

The program may require as few as 30 hours for students with undergraduate business degrees from AACSBaccredited institutions. Because of the need to attain general business core competencies as a foundation of the MS in IS requirements, students with no academic business background will be required to take additional hours as outlined below.

## General Requirements

All students must meet course requirements in quantitative reasoning, general business and IS. Students must complete a minimum of 30 credit hours beyond the general business core. Of the 30 hours beyond the general business core, at least 24 hours must cover topics beyond IS 5800 and IS 6805 . Students with a B.S.B.A. with an emphasis in IS or a B.S. in IS from an AACSB-accredited institution may, at the student's discretion, substitute two electives for IS 5800 and IS 6805 . Waivers may be granted for other courses with appropriate undergraduate course work.

## Quantitative Reasoning Requirement

Students are required to have completed by the end of their first semester in the program the equivalent of ECON 4150, Quantitative Methods in Modeling in Economics, Business and the Social Sciences with a grade of C or better. Students are also required to complete the equivalent of LOM 5300 Statistical Analysis for Management Decisions with a grade of C or better. These courses do not count towards the graduate degree, but waivers may be granted with appropriate undergraduate course work.

## General Business Core

Students must have a B.S. in IS, or a B.S.B.A. with an emphasis in MIS that requires a managerial communication course, and coursework equivalent to at least five of the following courses:

BA 5900, Law, Ethics, and Business
ACCT 5400, Financial and Managerial Accounting FIN 6500, Financial Management
MGMT 5600, Organizational Behavior and
Administrative Processes
MKTG 5700, Contemporary Marketing Concepts LOM 5320, Production and Operations Management BA 6990, Strategy Formulation and Implementation

Students who have not met this prerequisite must complete BA 5100 Managerial Communication and course work from at least five of the courses listed above.

## Program Requirements

A. Basic IS courses 15 credit hours

IS 5800, Management Information Systems
IS 6805, Applications of Business Programming
IS 6840, Information Systems Analysis
IS 6845, Database Management Systems
IS 6850, Information Systems Design
B. IS Electives 15 credit hours

Students choose 5 elective courses from the following:
IS 6808, Internet Programming (Java)
IS 6835, IT-Enabled Business
IS 6836, Telecommunications: Design \& Mgmt
IS 6837, IS/IT Architecture
IS 6838, Business Processes: Design, Management, and Integration
IS 6846, Management of Global Sourcing
IS 6847, IS Financial \& Project Management
IS 6848, Knowledge Management \& Business Intelligence
IS 6881, Management of Transnational IS
IS 6891, Seminar on Advanced IS Topics Guided internship
A maximum of 2 courses outside IS. Courses outside the College of Business must be approved by the IS Area Coordinator.

## Master of Accounting Program (MAcc)

The MAcc program prepares students to enter the accounting profession or to further existing accounting careers. It is designed to accommodate both students with undergraduate accounting majors and students with other undergraduate backgrounds. It may require as few as 30 credit hours for students with undergraduate accounting degrees.

Because of the need to attain general business and professional accounting core competencies as a foundation for the MAcc requirements, students with no academic business or accounting background will be required to take additional credit hours as outlined below.

## General Requirements

All students must meet course requirements in mathematics, general business, and accounting. Students must complete a minimum of 30 credit hours beyond the general business core and the professional accounting core. At least 15 credit hours in accounting must be completed, including at least 12 credit hours at the graduate level. At least 9 credit hours of the student's 30 credit hour program must be in graduate level non-accounting courses. Of the 30 credit hours beyond the general business and professional accounting core, 21 credit hours must be earned in courses at the graduate level.

## Mathematics Background Requirement

Students are required to have completed by the end 0 : their first semester in the program the equivalent of Econo:nics 4150, Quantitative Methods and Modeling in Econonics, Business, and the Social Sciences, with a grade of C or better. Graduate credit is not given for this course but it may be waived with appropriate undergraduate coursework.

## General Business Core

Students must have credit for the equivalent of one 3 hour course in each of the following subject areas: macroeconomics, microeconomics, financial accounting, managerial accounting, marketing, financial managernent, organizational behavior, and business strategy. Thest requirements may be met with graduate-level course work or may be waived with appropriate courses taken as an undergraduate.

## Professional Accounting Core

Students must have credit for the equivalent of each of the following three-credit-hour courses. Some of these c uurses may be taken concurrently with MAcc degree requirements (listed below) or may be waived with appropriate courses taken as an undergraduate.
BA 3401, Financial Accounting and Reporting I
BA 3402, Financial Accounting and Reporting II
BA 3421, Computer Applications in Accounting
BA 3411, Cost Accounting
ACCT 5411, Concepts in Management Accounting
ACCT 3441, Income Taxes
MAcc Degree Requirements (minimum: 30 credit ${ }^{\text {oours }}$ ) Accounting Courses (minimum: 15 credit hours, 12 redits at the graduate level)
BA 4401, Financial Accounting \& Reporting III* BA 4402, Financial Accounting \& Reporting IV* BA 4435, Auditing

Research course-At least one of the following cours is must be completed:
ACCT 5402, Professional Accounting Research
ACCT 5441, Tax Research
Seminar-At least one of the following courses must be completed:
ACCT 5403, Seminar in Financial Accounting The ry
ACCT 6441, Seminar in Taxation
ACCT 5435, Seminar in Auditing
Accounting Electives to meet 15 credit-hour and graduate level requirements

Non-Accounting Courses (minimum: 9 credit hours at the graduate level)
BA 5100, Managerial Communication*
BA 5900, Law, Ethics, and Business*
IS 5800, Management Information Systems*
LOM 5300, Statistical Analysis for Management
Decisions*

LOM 5320, Production and Operations Management*
Electives may be necessary to meet 9 -credit-hour graduate level non-accounting requirements or minimum 30 -credit-hour requirement (*May be waived with appropriate undergraduate courses).

## Ph.D. in Business Administration

## Admissions Requirements

Admission decisions are made on the basis of past academic record, intellectual ability, GMAT or GRE score, and career commitment. Applications are accepted from students who have baccalaureate or graduate degrees. Past graduate work may be credited toward degree requirements where appropriate. Applicants must submit: Official academic transcripts.
Official GMAT or GRE results in fields approved by the College of Business Administration.
Three letters of recommendation (at least two from individuals with earned doctorates).
A statement of objectives for the course of study.

## Graduate Assistantships

Stipends for research and teaching assistantships (nine month/20 hours per week) are awarded on a competitive basis. Out-of-state educational fees are waived for graduate assistants.

## Degree Requirements

The Ph.D. in the College of Business Administration requires a minimum of 69 course credit hours and a minimum of 6 dissertation credit hours beyond the baccalaureate degree. To ensure sufficient background for doctoral-level courses, students must demonstrate appropriate competence in quantitative reasoning, which is evidenced through completion of Econ 4105 and BA 5000 or their equivalent. Students must also demonstrate appropriate competence in managerial communication, which is evident through completion of BA 5100 or equivalent to be determined by the Ph.D. Coordinator.

## Course Requirements

The Ph.D. in Business Administration has a common set of requirements in three areas: Business \& Research Foundation (Section I), Supporting Field (Section II), and Other Requirements (Section IV). Requirements specific to the area of emphasis are in Section III.

[^1]MGMT 5600, Organizational Behavior
MKTG 5700, Contemporary Marketing Concepts LOM 5320, Production and Operations Management BA 7300, Statistical Modeling

The first eight courses $6800,5300,5900,5400,6500$, $5600,5700,5320$ will normally be waived if students had the courses as part of an UMSL MBA, MS in IS, or MAcc degree, or had equivalent graduate course work at an institution approved by the Graduate Business Programs Office and the Ph.D. Coordinator.

## II. Supporting Field Requirement: (9 credit hours)

 Students must take 9 credit hours of graduate level courses beyond foundation course work in a supporting field approved by the Ph.D. Coordinator. Supporting fields may include courses within or outside the College of Business Administration and are designed in consultation with the Ph.D. Coordinator.
## III. Emphasis Area Requirements:

Students must complete the requirements for one of the emphasis areas.

## Logistics \& Supply Chain Management (LSCM) Emphasis <br> (Will start Fall 2006 if approved by the Coordinating Board)

The Logistics \& Supply Chain Management emphasis requirement includes 33 credit hours.
Students are required to take the following eight courses:
MKT 5770, Supply Chain Management
LOM 6330, Business Logistics Systems
LOM 6331, Logistics and Supply Chain Operations Modeling
LOM 6332, Logistics and Supply Chain Strategic Modeling
LOM 6350, Management Science Methods
LOM 7381, International Supply Chain Management
LOM 7390, Research Seminar in LSCM
LOM 7393, Special Topics in LSCM
Students are required to take nine credit hours (three courses) (not included elsewhere) from the list of approved elective courses for the LSCM emphasis.

## IV. Other Requirements:

Upon completion of coursework, students are advanced to candidacy by successfully completing a comprehensive examination in their area of emphasis and a supporting field examination in their chosen area.
Students admitted to the program with a relevant Masters degree should pass the comprehensive examination and the supporting field examination within three years of admission to the Ph.D. program. Students admitted to the program with an undergraduate business degree should pass the comprehensive examination and the supporting
field examination within four years of admission to the Ph.D. program. Students admitted to the program with an undergraduate degree outside of business should pass the comprehensive examination and the supporting field examination within five years of admission to the Ph.D. program. In these cases, prior coursework will be evaluated for equivalency to Section I course requirements. Exceptions may be made, contingent on approval by the Ph.D. Coordinator.

Students will be evaluated anmually for satisfactory progress. Students deemed not to be making adequate progress are subject to the policies of the College of Business Administration regarding continuation of their assistantship. Students deemed not to be making adequate progress are subject to the policies of the Graduate School and the College of Business Administration regarding probation and dismissal from the program.

Students are required to take a minimum of 6 dissertation credit hours and to defend a dissertation proposal within one year of advancement to candidacy.

Students are required to present one paper at a regional, national, or international conference.

Students are required to submit one paper, approved by his/her dissertation advisor, to a refereed journal.

At least two semesters of supervised teaching in the College of Business Administration are required of all doctoral students.

Students are required to demonstrate competency in teaching during the first year in which they teach in the College of Business Administration. This requirement may be met by successfully completing one or more courses.

Students must satisfy all Graduate School requirements.
The degree is awarded upon successful completion and defense of the Ph.D. dissertation. The dissertation must be defended within three years of approval of a Ph.D. dissertation proposal.

## Graduate Certificate Programs in Business Studies

The College of Business Administration offers eight 18 -hour Graduate Certificates. To be admitted to a graduate certificate program, students must meet the same requirements as those needed for a graduate degree program in business (see Admission Requirements in the Graduate Studies in Business Administration section of this Bulletin).

Certificate programs allow qualified graduate students to pursue an intensive course of study in a specialized business topic without requiring completion of a full
graduate business degree program. Certificate prograns provide students with the opportunity to obtain the advanced knowledge available through a graduate course of study in relatively brief period.

In order to successfully complete a certificate progran, students must earn a 3.0 cumulative GPA in certificate classes. Unless otherwise specified, the coursework must be completed within six years. Students must also comply with all requirements related to matters such as prerequisites, academic probation, and other graduat: business program policies.

## Graduate Certificate Program in Business Administration

This is an 18 -hour program designed to accommodare individuals with an undergraduate/graduate degree in a non-business field seeking core business knowledge. The program emphasizes coursework designed to cover he major disciplines within the field of business. Upon completion, the student will have knowledge of com mon business theories, practices, and procedures.

To earn the certificate, students must complete six courses as prescribed below. All course prerequisites and all course waivers are applicable. Substitute courses nay be approved by the appropriate Area Coordinator and the Director of Graduate Studies in Business. In all cases, 18 hours are needed to complete the graduate certificate.

Program Requirements: ( 5 courses)<br>ACCT 5400, Financial and Managerial Accounting<br>MGMT 5600, Organizational Behavior and Administrative Processes<br>MKT 5700, Contemporary Marketing Concepts IS 5800, Management Information Systems

One of the following:
FIN 6500, Financial Management
LOM 5320, Production and Operations Management
Elective Course (1 course):
BA 5100, Managerial Communication
BA 5900, Law, Ethics and Business
*FIN 6500, Financial Management
*LOM 5230, Production and Operations Management
*Cannot be used as an elective if used as a prograrı requirement.

## Graduate Certificate in Human Resources Management

The Graduate Certificate in Human Resources Management is an 18 -hour course of study designed to focus on the multidimensional aspects of personnel operations within business organizations. The cou se of study emphasizes both formal and informal aspects of human resources management.

## Requirements

Students must complete the following six courses or appropriate substitutes if course waivers are appropriate: MGMT 5600, Organizational Behavior and
Administrative Processes
MGMT 5621, Managing Human Resources
MGMT 5623, Compensation and Benefits
MGMT 5222, Union-Management Relations and Collective Bargaining
MGMT 5225, Personnel Administration: Theory and Practice
LOM 5300, Statistical Analysis for Management Decisions

MGMT 5600, MGMT 5621 and LOM 5300 may be waived with equivalent undergraduate courses. If a student is able to waive any or all of these three courses, substitute courses (approved by both the Coordinator of the Management area and the Director of Graduate Studies in Business) will be provided. Substitute courses may include MGMT 5611, Advanced Organizational Behavior and Administrative Processes, or a course from outside the College of Business Administration. In all cases, 18 hours are needed to complete the Graduate Certificate in Human Resources Management.

## Graduate Certificate in Logistics and Supply Management

The Graduate Certificate in Logistics and Supply Chain Management is an 18 -hour program designed to provide a focused, intensive study of important issues within logistics and, more broadly, in supply chain management. Three required courses provide thorough background in operations, logistics and supply chain management. Three elective courses allow specialization in areas such as logistics and supply chain software, international logistics, operations research, e-commerce, and quality. Students must complete the following six courses or approved substitutes if course waivers are appropriate:

## Required Courses:

LOM 5320, Production and Operations Management LOM 6330, Business Logistics Systems
MKT 5770, Supply Chain Management
Nine additional hours (generally 3 courses) from:
LOM 5326, Quality Management
LOM 5312, Advanced Statistical Methods for Management Decisions
LOM 5354, Simulation for Managerial Decision Making
LOM 5322, Lean Production
LOM 5381, Intemational Logistics and Operations Management
LOM 6331, Logistics and Supply Chain Operational
Modeling
LOM 6332, Logistics and Supply Chain Strategic Modeling
LOM 6350, Management Science Methods
LOM 6354, Advanced Operations Research Topics

LOM 6360, Advanced Logistics \& Operations
Management Applications
IS 6835, Electronic Commerce
IS 6833, Decision Support System
BA 5333, Topics in Logistics and Supply Chain Management
BA 5301, Introduction to Geographic Information Systems
BA 5198, Seminar in Business Administration*
BA 5299, Individual Research*
*Subject to approval of the Area Coordinator of the LOM
Area.
Substitute courses must be approved by the Coordinator of the LOM Area and the Director of Graduate Studies in Business. In all cases, 18 hours are needed to complete the Graduate Certificate in Logistics and Supply Chain Management.

## Graduate Certificate in Marketing Management

The Graduate Certificate in Marketing Management is an 18-hour program designed to provide a focused intensive study of the marketing management activity within organizations. This program is designed to serve a broad group of marketing managers, including those with an interest in sales, brand management, promotion, and consumer behavior.

## Requirements

Students must complete the following six courses or appropriate substitutes if course waivers are appropriate:

MKTG 5700, Contemporary Marketing Concepts
MKTG 5710, Consumer Motivation and Behavior MKTG 5740, Marketing and Business Research

## Marketing Management:

MKTG 5701, Marketing Planning and Strategy
MKTG 5720, Marketing Communications
MKTG 5730, Product Planning and Pricing
All course prerequisites and all course waivers are applicable. The Marketing Area Coordinator and the Director of Graduate Studies in Business must approve substitute courses. In all cases, 18 hours (including at least 12 hours in Marketing) are needed to complete the certificate.

## Course Descriptions

Courses in this section are grouped as follows: all undergraduate courses are listed under Business Administration; graduate courses are listed under Accounting, Business Administration, Finance, Information Systems, Logistics and Operations Management, Management and Marketing

The College of Business Administration uses the University course numbering system.

A minimum grade of C - shall be required to meet the prerequisite requirement for any course. Prerequisites may be waived only by consent of both the instructor and the area coordinator. A minimum campus GPA of 2.0 is required for admittance to each upper division 3000 and 4000 level Business Administration course.

## Business Administration (BA)

## 1000 Topics in Business Administration (1-3)

Study of selected special problems in business and administration. May be repeated for credit with different topics. Cannot be included in BSBA program.

1590 Personal Finance for Nonbusiness Majors (3) For future professionals who want to learn more about personal finance and how to better manage their resources. The topics include purchasing/leasing cars, home acquisitions, investing in stocks and bonds, mutual funds, retirement planning and health and life insurance. Special emphasis will be on the nontechnical aspects of these issues. Cannot be used for credit in BSBA program.

1800 Computers and Information Systems (3) [MI] This course covers the basic concepts of networked computers including the basics of file management on local and remote computers, electronic mail, Internet browsers, and web page development. Students are also exposed to applications used in business for solving problems, communicating, and making informed decisions, including word processors, presentations software, and electronic spreadsheets. Students will also develop business applications using a popular programming language or database management tool. Credit cannot be granted for both CS 1010 and BA 1800.

## 1804 FORTRAN Programming (3)

Prerequisite: 1800. A study of the principles of programming digital computers using the FORTRAN language. Credit will not be granted for both 1804 and CS 1220.

## 2000 Topics in Business Administration (1-3)

Prerequisites: Vary with topic; contact the College of Business Administration. Study of selected special problems in business and administration. May be repeated for credit with different topics.

## 2400 Fundamentals of Financial Accounting (3)

 Prerequisites: MATH 1030 and completion of 27 credit hours MATH 1030 may be taken concurrently. This is a one-semester course in financial accounting theory and practice. The primary emphasis is on the corporate financial statements of income, financial position and cash flow-their content and interpretation; and the impact of financial transactions upon them.
## 2410 Managerial Accounting (3)

Prerequisites: MATH 1030 and BA 2400. This is an advanced course that goes beyond the scope of a secondsemester course in fundamentals of accounting. The development, interpretation, and use of relevant cost behavior, control, and traceability concepts for management planning, controlling, and decision making are emphasized. Topics include: an introduction to froduct costing, the contribution concept, direct costing, performance standards and variance analysis, responsibility accounting, segment profitability, alternative choice decisions, and capital budgeting.

## 2800 Information Systems Concepts and Applications

 (3)Prerequisites: BA 1800 or satisfactory performance on proficiency exam. This course covers concepts of information systems as they relate to business funct ons, including web page design and e-commerce, telecommunications, system analysis and design, etuics of information system design and use, information security, foundations of database systems and integrated bus:ness information systems. Students will also gain valuable strategies for career development, contact management, and networking.

## 2900 Legal Environment of Business (3)

Prerequisites: ECON 1001 and BA 2400. An introduction to the nature and meaning of law, sources of law, 1 fgal process and institutions. The legal environment of business is defined as: the attitude of the government towari business, the historical development of this attitude; current trends of public control in taxation, regulation of commerce, and competition; freedom of contract, antitrust legislation and its relationship to marketing, merge $s$, and acquisitions; and labor management relations.

## 3090 Internship in Business Administration (1-3)

Prerequisites: A minimum campus GPA of 2.0 ; on: must have completed and/or be currently enrolled in at lsast 6 credit hours of Business Administration electives and have consent of supervising instructor and Associate Dean. A Business College GPA of at least 2.5 is also required. Students are employed in the field of Business Administration where they apply the knowledge and skills learned in the classroom. Professional developmert and obtaining specialized work experience are the primary goals. A Business Administration faculty member will monitor the student's program with the student providing a formal writing report at the end of the project. BA 3090 may not be counted toward the minimum credit hcurs for any emphasis area.

3099 Independent Study in Business Administration (13)

Prerequisites: Minimum campus GPA of 2.0 and spproval by the supervising professor and the associate dean. Special individual study in business under the supervision of a full-time faculty member.

3100 Contemporary Business Communication (3)
Prerequisites: ENG 1100 or equivalent and a minimum campus GPA of 2.0 . (COMM 1040 recommended, but not required.) A forum wherein business writing and speaking skills are addressed. Communication unique to business organizations is critiqued. Emphasis is placed on writing and verbal communication skills necessary to succeed in the business environment.

3195 Business Administration Problems (1-10)
Prerequisite: To be determined each time the course is offered and to include a minimum 2.0 campus GPA. Study of selected special problems in business and administration. May be repeated for credit with different topics.

## 3198 Business Administration Seminar (1-10)

Prerequisite: To be determined each time the course is offered and to include a minimum 2.0 campus GPA. May be repeated for credit.

## 3200 Career Planning (1)

Prerequisite: A minimum of junior standing and a 2.0 campus GPA. The emphasis of this course will be to assist business students to develop an understanding of themselves as related to employment, to develop an understanding of the world of work, and to integrate these so that effective career decisions can be made.

## 3288 Independent Study in International Business

 (1-3)Prerequisites: Minimum campus GPA of 2.0 and approval by the supervising professor and the area coordinator of the specific discipline. Special individual study in international business under the supervision of an approved faculty member.

## 3289 Practicum in International Business (3)

 Prerequisites: At least one international business course, 2.0 campus GPA and completion of an approval form. Students will apply both their language skills and knowledge of international business by working for a three-month period in an organization located outside the student's country of origin. This course requires students to prepare a research report summarizing the global experience and how it relates to the international business program.
## 3300 Business Statistics (3)

Prerequisites: MATH 1100 and 1105 , BA 1800 and a 2.0 campus GPA. Construction and use of statistical models for business management. Students will learn techniques used for relational analysis and business forecasting and how to apply them in a business context. Tools include CHI-Square tests of statistical independence; analysis of variance; simple linear regression and correlation; multiple linear regression; and extrapolative techniques such as moving averages and exponential smoothing. Emphasis is placed on problem definition, construction of statistical
models, analysis of data, and interpretation of results. Computers are used for extensive analyses of case data.

## 3320 Introduction to Operations Management (3)

Prerequisites: A 2.0 campus GPA and either (ECON 1001, BA 2410, and BA 3300 or (MATH 2000) and STAT 1320. An examination of the concepts, processes, and institutions, which are fundamental to an understanding of manufacturing and service operations within organizations. Emphasis is on the management and organization of operations and upon the application of quantitative methods to the solution of strategic, tactical and operational problems.

## 3390 Internship in Logistics and Operations Management (1-3)

Prerequisites: A minimum campus GPA of 2.0 ; one must have completed and/or be currently enrolled in at least 6 credit hours of LOM electives and have consent of supervising instructor and Area Coordinator. A Business College GPA of at least 2.5 is also required. Students are employed in the field of Logistics and Operations. Management (LOM) where they apply the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience are the primary goals. An LOM faculty member will monitor the student's program with the student providing a formal written report at the end of the project. BA 3390 may not be counted towards the minimum credit hours for the LOM emphasis.

## 3399 Independent Study in Logistics \& Operations Management (1-3)

Prerequisites: Minimum campus GPA of 2.0 and approval by the supervising professor and the area coordinator. Special individual study in logistics and operations management under the supervision of a full-time logistics and operations management faculty member.

3401 Financial Accounting and Reporting I (3) Prerequisites: A minimum 2.0 campus GPA, MATH 1030, BA 2410 , and 57 credit hours. Review of the foundations of financial accounting theory and of the financial statement preparation process. Accounting theory and practice related to current assets (except for investments in securities). The course includes an emphasis on unstructured case problem solving skills, communication skills, and interpersonal skills.

## 3402 Financial Accounting and Reporting II (3)

Prerequisites: A minimum 2.0 campus GPA. In addition, MATH 1030 and BA 3401. Accounting theory and practice related to topics such as, investments in securities, operational assets, current and long-term liabilities, and leases. The course includes an emphasis on unstructured case problem solving skills, communication skills, and interpersonal skills.

## 3411 Cost Accounting (3)

Prerequisites: A minimum 2.0 campus GPA, MATH 1030, BA 3401, and 57 credit hours. The study of the basic principles of cost determination for, and control of, manufacturing and distribution activities. Topics include job-order costing, process costing, cost allocations, and the development and use of standard costs within a system of absorption costing.

## 3421 Accounting Information Systems (3)

Prerequisites: A minimum 2.0 campus GPA. In addition, MATH 1030 , BA 1800,2410 , and 3401 . Examines the fundamentals of accounting information systems, including hardware and software considerations, internal controls, and transaction processing cycles. Also focuses upon the development of efficient spreadsheets as applied to financial and managerial accounting concepts.

## 3441 Income Taxes (3)

Prerequisites: A minimum 2.0 campus GPA and 57 credit hours. Also MATH 1030, and either BA 3401 or BA 3560. Fundamentals of federal income taxation. Topics include taxable entities, income, deductions, tax accounting methods, tax basis, and property transactions at both the conceptual and operational levels.

## 3451 Accounting for Governmental and Not-for-Profit Entities (3)

Prerequisites: A minimum 2.0 campus GPA, MATH 1030, BA 3401, and 57 credit hours. Principles of fund accounting and financial reporting for governmental and not for profit entities. This course includes an emphasis on unstructured case problem solving skills, communication skills, and interpersonal skills.

## 3490 Internship in Accounting (1-3)

Prerequisites: A minimum campus GPA of 2.0 ; one must have completed and/or be currently enrolled in at least 6 credit hours of Accounting electives at the 3000 -level or above and have consent of supervising instructor and Area Coordinator. A Business college GPA of at least 2.5 is also required. Students are employed in the field of Accounting where they apply the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience are primary goals. An accounting faculty member will monitor the student's program with the student providing a formal written report at the end of the project.

## 3499 Independent Study in Accounting (1-3)

Prerequisites: Minimum campus GPA of 2.0 and approval by the supervising professor and the area coordinator. Special individual stady in accounting under the supervision of a full-time accounting faculty member.

## 3500 Financial Management (3)

Prerequisites: ECON 1002, MATH 1105, and BA 2400, and a 2.0 campus GPA. The study of a firm's need for funds; the institutions, instruments, and markets concerned
with raising funds; and the techniques of analysis used to determine how effectively these funds, once raised, are invested within the firm.

## 3501 Financial Policies (3)

Prerequisites: BA 3500 and a 2.0 campus GPA. The intensification and application of the concepts develcped in BA 3500. Special emphasis is given to the develorment of top management policies and their application tow ard complex problems of finance. Techniques for identifying and dealing with these problems before they become acute will be investigated. Cases will be integrated with appropriate outside reading.

## 3502 Treasury Management (3)

Prerequisites: BA 3500 and a 2.0 campus GPA. The focus of this course is on the role cash management plays in corporate finance. Topics include cash collection anc: payment systems, forecasting cash flows, electronic und transfers, check processing, international cash management and managing bank relationships. Students passing the course with a grade of A or B are permitted to take the qualifying exam to become a Certified Cash Manager (CCM) under a special arrangement with the Treasury Management Association. Along with other finance courses, this class prepares students for careers in th: treasury departments of major companies or with service providers like banks.

## 3503 Computer Applications in Finance (3)

Prerequisites: BA 1800,3500 , one 300 -level financ: course, and a 2.0 campus GPA. Financial problem solving and applications on the microcomputer. A project-oriented course with an emphasis on micro-sed finance proje:ts: present value/IRR analysis, duration, immunization, portfolio optimization, leasing, capital budgeting, financial forecasting, options, and futures.

## 3520 Investments (3)

Prerequisite: BA 3500 and a 2.0 campus GPA. Financial analysis of debt and equity instruments available on organized exchanges and in less tangible over-the-counter markets. Techniques of such analysis are presented $\mathbf{n}$ context with economic and management circumstanzes within the company, industry, and economy.

## 3521 Financial Risk Management (3)

Prerequisites: BA 3500 and a 2.0 campus GPA. A siudy of derivative securities (forward contracts, futures, sw:.ps and options) used in financial risk hedging. Emphasis w. 11 be placed on financial innovations and methods for tailoring a preferred risk/return trade-off. In addition, a project or a simulation will be utilized to emphasize the effects of risk management on portfolio development.

3522 Security Analysis (3)
Prerequisites: BA 3520 or 3501 ; a minimum campus GPA of 2.0 and consent of professor. The goal of the course is to provide practical experience for students wishing to
become stock analysts for national brokerage firms and the investment industry. Each student will have primary responsibility over one small, publicly traded St. Louis Company. The student is expected to become an expert on this company, its products, its financial condition and performance, competitors and the industry as a whole. This level of expertise is developed by visiting the company's facilities, interviewing executives, analyzing financial statements, and reading relevant research reports including current business periodicals. Each student is required to prepare a comprehensive written report on his or her assigned company.

## 3525 Practicum In Investments (1)

Prerequisite: BA 3500 and a 2.0 campus GPA. Students will apply their knowledge of stocks and bonds by managing a real dollar portfolio of securities. This course requires that students perform technical and fundamental analysis, prepare research reports, present proposals and participate in group investment decisions. The University's Student Investment Trust provides the money for students to invest. Course may be repeated for credit up to a maximum of 3 credit hours.

3540 Financial Services Industry and Instruments (3) Prerequisites: BA 3500 and a 2.0 campus GPA. The theory of financial services, instruments, and markets is discussed. In this framework, the valuation consequences of money and capital markets, corporate control, complex contracting, and regulatory environment are developed. Topics also include hedging, interest rate risk, deposit insurance, and financial instruments.

## 3541 Commercial Bank Management (3)

Prerequisites: ECON 1002, BA 3500, and a 2.0 campus GPA. Corporate finance and microeconomics are applied to matters of importance to commercial bankers. Among the subjects treated are bank-asset portfolio construction, lending policies, liabilities management, bank capital structure, short-run cash management, financial market rates and flows, and quantitative models for bank management. Commercial bank management is analyzed from an internal viewpoint in terms of what bank managers should look for in asset management and why; what market conditions they should be aware of; and what techniques they can use to meet changing economic and financial conditions.

## 3542 Principles of Real Estate (3)

Prerequisites: BA 3500 and a 2.0 campus GPA. As an introduction to the real estate industry, the course broadly explores all phases of acquisition, development and disposal of real property. Topics include legal requirements of contracts, property rights, valuation and appraisal techniques, marketing, brokerage operations and practices, mortgage financing, leasing and property management.

3560 Practice of Personal Financial Planning (3)
A minimum campus GPA of $2.0 ;$ BA 3500 or consent of instructor and Area Coordinator. Professional financial planning requires broad knowledge of investments, insurance, income taxation, retirement planning, and estate planning, as well as certification requirements and legal/ethical issues. This course introduces students to the field of financial planning, and provides an integrated overview of the topics listed above. Students interested in the Financial Planning track are encouraged to complete this course prior to taking other courses in the track.

## 3561 Principles of Insurance (3)

Prerequisites: BA 3500 and 2.0 campus GPA. This is a survey course intended to introduce students to the basic concepts of insurance. Topics include the nature of risks, types of insurance carriers and markets, insurance contracts and policies, property and casualty coverages, life and health insurance, and government regulations. The functions of underwriting, setting premiums, risk analysis, loss prevention, and financial administration of carriers are emphasized.

## 3562 Life Insurance (3)

Prerequisites: BA 3500 or equivalent and a minimum campus GPA of 2.0 . This course explores the life insurance business from the perspective of both the consumer and provider. Coverage will include an analysis of the various types of life insurance products, aspects of life insurance evaluation, reinsurance, underwriting, and uses of life insurance in financial planning. Also included is an examination of the tax, legal, and ethical requirements.

## 3563 Retirement Planning and Employee Benefits (3)

Prerequisites: A minimum campus GPA of 2.0; BA 3500 or consent of instructor and Area Coordinator. The course is designed to give students an understanding of the retirement planning process. Students will gain an appreciation of the usefulness (and shortcomings) of employee benefits and develop an ability to counsel others on important retirement and employee benefit decisions. Corporate pension and profit sharing plans, self-employed Keough plans, IRA's annuities, health insurance and social security will be discussed.

## 3564 Estate Planning and Trusts (3)

Prerequisite: A minimum campus GPA of 2.0; BA 3500 or consent of instructor and Area Coordinator. This course will focus on the responsibility of a financial planner in the formulation and implementation of an estate plan. Topics include wills, lifetime transfers, trusts, gifts, estate reduction techniques, tax implications in estate planning, business and inter-family transfers, dealing with incompetency, postmortem techniques, and the role of fiduciaries. Lectures, cases, and guest speakers will be used to stimulate analysis and discussion.

## 3580 International Finance (3)

Prerequisites: BA 3500 and a 2.0 campus GPA. A study of international financial markets, instruments, portfolio strategies and international financial management. Topics will include international risks, foreign diversification, foreign investment, foreign exchange determination and international working capital management issues. Derivatives are explored as instruments to hedge foreign exchange risk exposure, and special markets are evaluated in the international corporate/investments setting. Cases and/or outside readings may be used to emphasize interrelated issues.

## 3581 Business in China (3)

Prerequisites: A minimum campus GPA of 2.0 and junior standing. Introduces students to the practices of doing business in China. Students will be introduced to the Chinese economic and business environment. Issues related to trade and foreign direct investment in China will be discussed. The course adopts an innovative approach; utilizing lectures, case analysis, projects, and student presentations.

## 3582 International Investment (3)

Prerequisites: BA 3500 . This course explores the concepts of investing and hedging in international markets. Topics include equity and bond markets, global risk management, portfolio diversification, currency risk, asset pricing, and alternative portfolio strategies. Techniques for using derivatives are discussed in the context of hedging exchange rate risk. Reading foreign exchange quotes and understanding the functioning of global markets is central to the course. A prior course in investments is recommended but not required.

## 3590 Practicum in Finance (1-3)

Prerequisites: A minimum campus GPA of 2.0 ; one must have completed and/or be currently enrolled in at least 6 credit hours of finance electives and have consent of supervising instructor and Area Coordinator. A Business College GPA of at least 2.5 is also required. Students are employed in the field of finance where they apply the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience in a Track area are the primary goals. The student's program will be monitored by a finance faculty member with the student providing a formal written report at the end of the project. BA 3590 may not be counted toward the minimum 15 credit hours of finance electives for a finance emphasis.

## 3599 Independent Study in Finance (1-3)

Prerequisites: Minimum campus GPA of 2.0 and approval by the supervising professor and the area coordinator. Special individual study in finance under the supervision of a full-time finance faculty member.

3600 Management and Organizational Behavior (i)
Prerequisites: Junior standing and a 2.0 campus GPA This course involves the study of the behavior of individuals and groups in an organizational setting. Specific topis:s examined include: motivation, leadership, organizational design, and conflict resolution, as well as basic coverage of management principles. In covering these topics, both at classic and current perspectives :are provided.

## 3611 Advanced Management and Organizational Behavior (3)

Prerequisite: BA 3600 and a 2.0 campus GPA. Building upon 3600 , this course provides a more detailed examination of motivation, leadership, group proces:;, decision-making, job design, and organizational development. In addition to providing more detail in terms of content, this course provides the student with considerable practical experience through the use of class exercises, case studies, and small group discussions.

## 3612 Professional Skills Development (3)

Prerequisites: A minimum campus GPA of 2.0 and unior Standing. This course focuses on career managemeat. Topics include job search, interviews, resumes and cover letters, presentation skills, business etiquette, entry strategies, and career alternative.

## 3621 Human Resource Management (3)

Prerequisites: MATH 1105 BA 3600 and a 2.0 camrus GPA. In-depth examination of selected human rescurces management issues from a contemporary manager's. viewpoint. Topics examined include: employee se ection, performance appraisal, training and development, compensation, legal issues and labor relations.

## 3622 Industrial and Labor Relations (3)

Prerequisite: BA 3600 and a 2.0 campus GPA. Emphasis is on the dynamic relationship between management, employees, unions, and government as determinants in the efficient and effective use of human resources. Current issues and case materials are used to supplement text and lecture.

3623 Industrial and Organizational Psychology (3) [Same as PSYCH 3318] Prerequisites: PSYCH 2201 or MATH 1105, BA 3600. This course introduces the student to psychological research and theories pertaining to human behavior in the work setting. Topics covered include: selection, performance, appraisal, training, leaders ip, motivation, job satisfaction and organizational des gn.

3624 Employee Training and Development (3)
Prerequisite: A minimum 2.0 campus GPA. In addition, BA 3600 or permission of instructor. An intensive study of training in organizations, including needs analysis learning theory, management development, and
development of training objectives and programs. Projects and exercises are used to supplement the readings.

3680 International Management (3)
Prerequisites: A minimum 2.0 campus GPA. In addition, ECON 1002 and BA 3600 ; or consent of the instructor. A study of international business and management practices. Topics covered include an introduction to international management and the multinational enterprise, the cultural environment of international management, planning in an international setting, organizing for international operations, directing international operations, international staffing, preparing employees for international assignments, and the control process in an international context.

## 3682 Managing the Global Workforce (3)

 Prerequisites: A minimum 2.0 campus GPA. In addition, BA 3600 and at least one of the following: BA 3611 or BA 3621 or enrollment in Honors College or consent of instructor. A study of the international dimensions of organizational behavior and human resource management. The course provides an overview of the tools and skills that are necessary to understand and manage people in global organizations. Topics include motivation, leadership, communication, hiring, training, and compensation.3684 The Japanese Management System (3)
Prerequisites: BA 3600 and a 2.0 minimum campus GPA.
This course provides an introduction to various aspects of the contemporary Japanese business system. The emphasis is on interpretation of issues from a managerial perspective. Topics include an overview of Japan's economic growth, government policies, industrial and financial structure of Japanese business, labormanagement relations, internal management practices, international competitive strategies, managing U.S. subsidiaries in Japan, penetrating the Japanese market, Japanese investment in the U.S.A., and current issues in U.S. -Japan economic relations.

3685 Role of the Global Corporation (3)
Prerequisites: A minimum campus GPA of 2.0 and BA 3600 or permission of the instructor. The purpose of this course is to create awareness of controversial issues about international business. Students will gain a better understanding of resistance to and criticism of international business and will become better prepared for dealing with these issues and problems.

## 3689 International Business and Society (3)

Encompasses the readings, lectures, company and government agency visits, and cultural visits that comprise annual Country Study Tours, (e.g., Austria, Japan, Thailand, etc.). The program includes 45 contact hours or more of classroom lectures covering aspects of the chosen country's business and society, in-depth pre-departure cross-cultural orientation and training supplemented by
briefings on the country's economy and on U.S. market penetration by the Commercial Service, U.S. Embassy; a briefing by the in-country State of Missouri representative; briefings by host country agencies; company visits and factory tours; and tours of cultural sites. Student evaluation will be based on active participation and on a research paper based on readings, lectures, interviews and field observations.

## 3690 Internship in Management (1-3)

Prerequisites: A minimum campus GPA of 2.0 ; one must have completed and/or be currently enrolled in at least 6 credit hours of Management electives and have consent of supervising instructor and Area Coordinator. A Business College GPA of at least 2.5 is also required. Students are employed in the field of Management where they apply the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience are primary goals. A Management faculty member will monitor the student's program with the student providing a formal written report at the end of the project. BA

## 3699 Independent Study in Management (1-3)

Prerequisites: Minimum campus GPA of 2.0 and approval by the supervising professor and the area coordinator. Special individual study in management under the supervision of a full-time management faculty member.

## 3700 Basic Marketing (3)

Prerequisites: ECON 1001, junior standing, and a 2.0 campus GPA. An examination of the character and importance of the marketing process, its essential functions, and the institutions performing them. Attention is focused on the major policies (such as distribution, product, price, and promotion), which underlie the multifarious activities of marketing institutions and the managerial, economic, and societal implications of such policies.

## 3710 Consumer Behavior (3)

Prerequisites: BA 3700 and a minimum campus GPA of 2.0. A study of such consumer functions as decision making, attitude formation and change, cognition, perception, and learning. The marketing concepts of product positioning, segmentation, brand loyalty, shopping preference and diffusion of innovations are considered in context with the environmental, ethical, multicultural and social influences on an increasingly diverse American consumer.

## 3720 Management of Promotion (3)

Prerequisite: BA 3700 and a 2.0 campus GPA. A study of the design, organization, and implementation of the marketing communications mix. Various methods, such as advertising, personal selling, and publicity are analyzed as alternatives for use alone, or in combination, to stimulate demand, reseller support, and buyer preference. Particular topics considered include: media selection, sales
promotional, packaging, and selling strategy, and their relationships in the promotion process.

## 3721 Internet Marketing (3)

Prerequisites: BA 3700 and a minimum campus GPA of 2.0. This course will offer an opportunity to explore the impact of the Internet and information technology on the practice of marketing. The Internet and information technologies have revolutionized the way companies create and maintain exchange relationships between themselves and their customers. Companies, both big and small, are in the process of using the Internet to maximize the scope, effectiveness and efficiency of their existing marketing programs. This course is designed to impart students with an understanding of the range of issues involved in planning and implementing effective marketing and information communication strategies for commercial or not-for-profit organizations. The course's emphasis will not be on actual design of a web site per se, even though the merits and demerits of different layout types will be discussed. Some of the topics covered include, among others, strategic planning and its tactical implementation in electronic marketing, target market analysis and identification, the Internet's marketing capabilities and limitations, management of customer and supplier relations concerns about privacy and ethics, and understanding how the new technology has had an impact on the field of Marketing.

## 3740 Marketing Research (3)

Prerequisites: BA $1800,3700,3300$ and a 2.0 campus GPA. An investigation of the acquisition, presentation, and application of marketing information for management. Particular problems considered are defining information requirements, evaluating research findings, and utilizing information. Statistical methods, models, and/or cases are employed to illustrate approaches to marketing intelligence problems, such as sales forecasts, market delineation, buyer motives, store location, and performance of marketing functions.

## 3741 Quantitative Marketing Methods (3)

Prerequisites: BA $1800,3700,3300$ and a 2.0 campus GPA. Applications of stochastic, deterministic, and simulation techniques to decision areas, such as market potential, product diversification, physical distribution alternatives, retail location, media selection, and market exposure. Quantitative and computerized methods are used heavily to enhance decision making in marketing, especially the selection, allocation, budgeting, and forecasting of marketing resources.

## 3750 Sales Management (3)

Prerequisites: BA 3700 and BA 3600; (BA 3600) may be taken concurrently). Also a minimum campus GPA of 2.0. The aim of this course is to provide an understanding of how selling is critical to the success of marketing. The course will promote critical thinking skills as well as practical selling skills needed in a competitive
marketplace. Course topics include, among others, selling principles and techniques, understanding of the tasks and roles of the sales manager, the management of sales professionals within an organization, developing anc. applying effective persuasive communications, creating a vision, developing and implementing a sales-team strategy, structuring sales-force, designing and assigning territories, recruiting, training, motivation and evaluating salespreople, methods of compensation, and forecasting sales. The emphasis will be on ways the sales-force can be molded to build long-lasting relationships with customers through the systematic analysis and solution of customers' problems.

## 3760 Business-to-Business Marketing (3)

Prerequisites: Senior Standing, MATH 1105, BA 3700 and a 2.0 campus GPA. A study of the nature of the business-to-business(organizational) marketplace concentrating on those aspects that differentiate it from consumer ma-kets. The major focus of the course is marketing strategy, starting with analysis of the market wants and segments, concepts of pricing, the distribution arrangements, and buyer/seller relations. In this last area, consideratior will be given to service, personal selling, sales promotio1, and advertising, as found in the organizational marketplace. At all times emphasis is given to relating business-to-b 1 siness marketing strategy to basic concepts in underlying business disciplines. Lectures and case discussions are used heavily in the course.

## 3770 Introduction to Transportation (3)

Prerequisites: A minimum campus GPA of 2.0 ; alsc Junior standing or instructor consent. This course provides an overview of the transportation sector, including history, providers, users, and government regulation. The importance and significance of transportation, the operational aspects of transportation modes of rail, water, motor, air and pipeline; the demand and supply of transportation, and the managerial aspects of these modes of transport will be covered in the course.

## 3771 Traffic and Transportation Management (i)

Prerequisites: A minimum campus GPA of 2.0 and Junior standing or instructor's consent. This course focuses on the purchase of transportation and warehouse services ind/or the operation of transportation services as a firm ac ivity. This course is also designed to provide the student with an exposure to the managerial aspects of transportation management as a function of the firm's logistical strategy. In addition, it includes an introduction to the management of firms within the various transportation modes of rail, motor, air, water, and pipelines. This course is des: gned to provide the student with a basic understanding of the issues and work performed by traffic managers and the management of modern transportation firms.

## 3780 International Marketing (3)

Prerequisite: BA 3700 and a 2.0 campus GPA. Marketing management problems, techniques and strategies needed to apply the marketing concept to the world marketplace.

Understanding a country's cultural and environmental impact on the marketing plan is emphasized, as well as competing in markets of various cultures. Worldwide consumerism, economic and social development, the spread of multinational corporations, business ethics, and current economic and marketing issues are examined.

## 3790 Internship in Marketing (1-3)

Prerequisite: A minimum campus GPA of 2.0 ; one must have completed and/or be currently enrolled in at least 6 credit hours of Marketing electives and have consent of supervising marketing instructor and Area Coordinator. A Business college of GPA of at least 2.5 is also required. Students are employed in the field of Marketing where they apply for the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience are primary goals. A Marketing faculty member will monitor the student's program with the student providing a formal written report at the end of the project. BA 3790 may be counted toward the minimum credit hours of marketing electives required for a marketing emphasis.

## 3799 Independent Study in Marketing (1-3)

Prerequisites: Minimum campus GPA of 2.0 and approval by the supervising professor and the area coordinator. Special individual study in marketing under the supervision of a full-time marketing faculty member.

## 3806 Managerial Applications Of Object-Oriented

 Programming I (3)Prerequisites: (BA 1800 or CS 1220 or 1250 and a 2.0 campus GPA. The course provides a study of the UNIX operating system and the $\mathrm{C}++$ programming language as they pertain to managerial applications. In addition, the course will introduce the use of object-oriented programming methodologies.

## 3807 Legacy Systems (3)

Prerequisite: A minimum campus GPA of 2.0 and BA 3806. Structured COBOL programming techniques for business applications are presented. Included are report generation, control breaks, output editing, debugging tables, sort concepts, job control language, utilities, partitioned data sets, and updating files.

## 3810 Information Systems Analysis (3)

Prerequisites: A minimum campus GPA of 2.0 and (BA 3806 or permission of instructor). Aspects and methods for managing the computer and information resources of organizations. Topics include: project management aligning IS plans with corporate plans, MIS organizational structures, demonstrating the values of systems, facility management, purchase decisions, software acquisition, software metrics, security issues, and economic evaluation, as they relate to information resources. Special cases of systems, such as Enterprise Resource Planning (ERP) systems, Supply Chain systems, and BPO will be discussed.

3815 Object Oriented Applications in Business (3) Prerequisites: A minimum campus GPA of 2.0 and BA 3806. Object Oriented programming techniques for business applications are presented. The topics are implemented in a $\mathrm{C}++$ environment.

## 3816 Managerial Applications of Object-Oriented

 Programming II (3)Prerequisites: BA 3806 and a minimum campus GPA of 2.0. This course expands object-oriented skills taught in BA 3806. The emphasis in this course is on object-oriented development tools and development in a client-server environment. The data management tools will include the use of SQL to access server-based databases.

3841 Enterprise Information Systems (3)
Prerequisites: A minimum campus GPA of 2.0 and BA 2800. Aspects and methods for managing the computer and information resources of organizations. Topics include aligning IS plans with corporate plans, MIS organizational structures, demonstrating the value of MIS to senior management, facility management, purchase decisions, software acquisition, software metrics, project management, security issues, and economic evaluation, as they relate to information resources.

## 3842 Management of Telecommunications (3)

Prerequisite: BA 1800 and a 2.0 campus GPA. The technical and managerial aspects of telecommunications as they apply to the business environment are discussed. Issues include: communications components and services, local area network architecture, managerial implementations, organizational issues, and costbenefit analyses.

## 3843 Decision Support Systems (3)

Prerequisites: BA 3300 and a minimum campus GPA of 2.0. Applications of decision support systems and expert systems in a business environment are studied.
Relationships between decision support systems, expert systems, and database management systems are explored.

## 3844 Developing Business Applications in NET (3)

 Prerequisites: A minimum campus GPA of 2.0 and BA 3806. This course will enable students to design, implement, and debug object-oriented and data driven business applications in Visual Basic. NET. Students will learn application design choices, object-oriented design principles, event-driven programming, user interface programming using Windows Forms and user interface controls, data binding and database access using ADO.NET, exception handling, debugging and effective ways of working with Visual Studio.NET.
## 3845 Database Management Systems (3)

Prerequisites: A minimum campus GPA of 2.0 and (BA 3806 or permission of instructor). This course provides an introduction to the design and use of databases in meeting business information needs. Topics include database
planning, conceptual design, and data administration. The concepts are studied with projects involving the use of a current database management system.

## 3846 e-Commerce (3)

Prerequisites: A minimum campus GPA of 2.0 and BA 2800 . This course provides an understanding of strategies, managerial issues, and technologies pertaining to electronic commerce in organizations. Topics covered include: history, business models, the virtual value chain, electronic markets, impact on organizational strategy and industry structure, analysis of successful strategies, and other emerging issues (legal, ethical, regulatory) related to managing electronic commerce, and the technical infrastructure enabling electronic commerce.

## 3847 Web Design (3)

Prerequisites: A minimum campus GPA of 2.0 and BA 2800. This course focuses on web page planning, design, layout and construction. Topics covered include: setting up and maintaining a web site; understanding site structure, presentation, navigation and content management. HTMLXML, CSS, Dreamweaver, Fireworks, Flash, Photoshop, data access, scripting languages, and various other technologies and tools will be discussed.

## 3848 Security and Information Systems (3)

Prerequisites: A minimum campus GPA of 2.0 and BA 2800. This course addresses the challenge of assuring security in information systems - networked, embedded, and stand alone. Topics include: security policies, models, tools, and techniques for enforcement. The course also examines flawed security policies and the consequences of penetration and disruption of information systems

## 3890 Internship in Management Information System

 (1-3)Prerequisite: A minimum campus GPA of 2.0 ; one must have completed and/or be currently enrolled in at least 6 credit hours of management information systems electives at the 3000 -level or above and have consent of supervising markering instructor and Area Coordinator. A Business college of GPA of at least 2.5 is also required. Students are employed in the field of management information systems where they apply for the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience are primary goals. A management information systems faculty member will monitor the student's program with the student providing a formal written report at the end of the project. BA 3890 may not be counted toward the minimum credit hours of marketing electives required for a management information systems emphasis.

3899 Independent Study in Information Systems (1-3) Prerequisites: Minimum campus GPA of 2.0 and approval by the supervising professor and the area coordinator. Special individual study in information systems under the
supervision of a full-time information systems faculty member.

3900 Business Law: Contracts, Sales, Secured Transactions, Bankruptcy (3)<br>Prerequisites: BA 2400, ECON 1001, and a 2.0 campus GPA, or junior standing and a 2.0 campus GPA. Introduction to the laws of contracts, sales, secured transactions, bankruptcy, and other selected topics.

3901 Business Law: Negotiable Instruments, Business Organizations, Property (3)
Prerequisites: BA 2400, ECON 1001, and a 2.0 camrus GPA, or junior standing and a 2.0 campus GPA. Introduction to the laws of negotiable instruments, the principal-agent relationship, partnerships, corporatio:1s, property, and other selected topics.

## 3980 The Law of International Business Transactions

 (3)Prerequisites: A minimum campus GPA of 2.0; also
ECON 1002 and BA 2900 or consent of instructor. A. study of the role and function of International Law and national laws in the regulation of international business transactions. The impact of various legal regimes on import-export transactions, foreign investments, and operations of multinational enterprises will be incluced. The role of national government supranational governmental organizations, and non-governmental organizations in forming and administering the international legal environment will be studied.

## 3990 Internship in Business Law (1-3)

Prerequisite: A minimum campus GPA of 2.0; one raust have completed and/or be currently enrolled in at least 3 credit hours of Business Law electives and have corsent of supervising marketing instructor and Area Coordinator. A Business college of GPA of at least 2.5 is also required. Students are employed in the field of Business Law where they apply for the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience are primary goals. A Business Law faculty member will monitor the student's program with the student providing a formal written report a: the end of the project. BA 3990 may not be counted tov/ard the minimum credit hours of marketing electives required for a marketing emphasis.

3999 Independent Study in Legal Studies (1-3) Prerequisites: Minimum campus GPA of 2.0 and arproval by the supervising professor and the area coordinator. Special individual study in legal studies under the supervision of a full-time legal studies faculty member.

## 4219 Strategic Management (3)

Prerequisites: Senior standing and BA $3500,3700,3600$, a minimum campus GPA of 2.0 ; and concurrent emrollment in BA 4220. This is a capstone course drawing on the subject matter covered in prerequisite courses. Emphasis is
on the formulation and implementation of corporate, business and functional strategies designed to achieve organizational objectives. Topics include the role of top management, globalization of business and ethical perspectives. Case studies and research reports may be used extensively. (It is preferred that this course be taken during the student's final semester.)

## 4220 Business Assessment Testing (0)

Prerequisite: Concurrent enrollment in BA 4219. A onetime lab during which a major field exam in business is administered. Course graded on a
Satisfactory/Unsatisfactory basis. Satisfactory grade required for graduation.

## 4288 Internship in International Business (3-6)

 Prerequisites: ECON 1001 and 1002, BA 2400 and 2410 , an additional 12 hours in BA, concurrent enrollment in a UM overseas program; also a 2.0 minimum campus GPA. The internship will be a supervised field experience in a business/international organization at a foreign site. Students will work for 10 weeks on projects directed by host organization supervisors in consultation with an UMSt. Louis faculty member. Prior to the field experience students will receive training that includes familiarization with the language and practices of the country's business, the background of the host firm, and international information sources. The student will complete a written report of his/her project. Course may not be repeated for more than 6 hours credit.
## 4312 Business Forecasting (3)

Prerequisites: A minimum campus GPA of 2.0 and either BA 3220 or [Math 3000 and Statistics 1320]. Further study of statistical tools for forecasting in a decision-making context. Topics include explanatory models (multiple regression), classical time series decomposition, and extrapolative techniques (exponential smoothing and BoxJenkins procedures). In addition, methods for considering problems of intervention effects, seasonality, and collinearity will be discussed. Students will perform extensive analyses of time series data using computer packages.

## 4314 Multivariate Analysis (3)

Prerequisites: A minimum campus GPA of 2.0 and either BA 3320 or [Math 3000 and Stat 1320]. A study of statistical techniques applicable to multivariable relationships.

## 4321 Production and Operations Management (3)

 Prerequisites: A minimum campus GPA of 2.0 and BA 3320. Application of the tools and techniques of statistical decision theory and operations research to production and operating problems. Emphasis is on the use of mathematical modeling and simulation techniques to analyze complex and ill-structured problems in large-scale systems.
## 4322 Lean Production in Manufacturing and Service Operations (3) <br> Prerequisites: A minimum campus GPA of 2.0 and BA 3320. Study of Lean Production philosophy and techniques in manufacturing and service operations. Topics include process analysis and continuous improvement techniques, quick set-ups, total productive maintenance, kanban scheduling, cellular production, team organization of workers, supplier relations, quality management, and the environmental aspects of production.

4324 Service Operations Management (3)
Prerequisites: A minimum campus GPA of 2.0 and BA 3320. An examination of methods for designing and operating service delivery systems, such as in the health care, financial, transportation, hospitality, and governmental service industries. Topics include process and facility design, facility layout and location, queuing, demand forecasting and management, service quality, staffing, and personnel scheduling.

## 4326 Quality Assurance in Business (3)

Prerequisites: A minimum campus GPA of 2.0 and BA 3320. A study of statistical quality control concepts and procedures applicable to management systems, administrative activities, service industries, and nonprofit organizations. Some successful quality assurance programs will be examined.

## 4330 Business Logistics Systems (3)

Prerequisites: A minimum campus GPA of 2.0 and BA 3320. Analysis of business logistics systems, their design and operation. Topics include network design, facility location, transportation, vehicle routing, storage and handling, capacity planning, inventory management, and customer service.

## 4350 Management Science Methods (3)

Prerequisites: A minimum campus GPA of 2.0 and either BA 3320 or [Math 3000 and Stat 1320]. Applications of the theories and techniques of operations research to problems of business, government, and industry, with emphasis on the construction and utilization of quantitative decision models.

## 4354 Operations Research II (3)

Prerequisites: A minimum campus GPA of 2.0 and BA 4350. Topics of special interest including mathematical programming, stochastic decision-making, digital simulation, game theory, and other selected techniques. (Formerly Mathematical Programming).

## 4381 International Logistics and Operations Management (3)

Prerequisites: A minimum campus GPA of 2.0 and BA 3320. A study of business logistics and supply chain strategies involving shipments across national boundaries. Topics include the effects of international agreements and regional trading blocks on supply chain strategies; the
design of global logistics networks; managerial processes and systems for international production and distribution; and risk management for international logistics.

## 4401 Financial Accounting and Reporting III (3)

Prerequisites: A minimum 2.0 campus GPA. In addition, MATH 1030 and BA 3402. Accounting theory and practice related to topics such as income taxes, pensions, owner's equity, earnings per share, and the statement of cash flows. The course includes an emphasis on unstructured case problem solving skills, communication skills, and interpersonal skills.

## 4402 Financial Accounting and Reporting IV (3)

 Prerequisites: A minimum 2.0 campus GPA. In addition, MATH 1030 and BA 3402. Accounting theory and practice related to topics such as business combinations, consolidated financial statements, multinational operations, foreign exchange transactions, and governmental and nonprofit organizations. The course includes an emphasis on unstructured case problem solving skills, communication skills, and interpersonal skills.
## 4405 Professional Accounting Research (3)

Prerequisites: BA 4401 and a minimum campus GPA 2.0. Discussion of the research tools and methods available to resolve questions concerning accounting standards and practices. Critical analysis of topics of current interest and importance in accounting practice is the focal point of the course.

## 4435 Auditing (3)

Prerequisites: A minimum campus GPA of 2.0 . In addition, MATH 1105, BA 3402 , and BA 3421 or 3810 . An introduction to auditing practice. Includes the social role of auditing and the services offered by auditors in internal, governmental, and public accounting practice. Emphasis is on the financial auditing process, including professional ethics, audit risk assessment, study and evaluation of internal control, gathering and evaluating audit evidence, and audit reporting decisions.

## 4441 Advanced Federal Income Tax: Tax Research and

 Business Taxation (3)Prerequisite: A minimum campus GPA of 2.0 and BA 3441. Uses internet-based tax research service to conduct research that resolves tax law questions. Also focuses on federal income taxation of corporations, $S$ corporations, partnerships, LLCs and their owners.

## 4614 Entrepreneurship/Small Business Management

 (3)Prerequisites: BA 2900, 3500, 3700, 3600, and a 2.0 campus GPA. This integrative general management course is designed to communicate the academic principles of business management applicable to solving of problems of small- and medium-size businesses and assist in their development. This course will provide a background in the forms of business, the development of business plans and
systems integration, venture capital, accounting, procurement, promotion, financing, distribution and negotiations for initial organization, and operation and expansion of the firm.

## 4689 International Strategic Management (3)

Prerequisites: A minimum 2.0 campus GPA and BA $: 682$, 3780 and 3580 or consent of the instructor. A study of the international dimensions of strategic management. Provides an introduction to the key concepts and tool; necessary for international competitive analysis. Topics include the international dimensions of strategy formulation and implementation, diversification, straegic alliances, and divestment.

## 4700 Marketing Management (3)

Prerequisites: Math 1105, BA 3700, three other marketing elective courses, senior standing, and a 2.0 campus CPA. An intensive analysis of major marketing decisions facing the firm, such as level, mix, allocation, and strategy of marketing efforts. Specific decision areas investigated include market determination, pricing, physical distribution, product policy, promotion, channel management, and buyer behavior. Competitive, political, legal, and social factors that may affect such areas of decisions are discussed. Cases, models, and problem; are used heavily.

## 4850 Information Systems Design (3)

Prerequisites: A minimum campus GPA of 2.0; BA 3810 , 3816, and 3845. System design, implementation, and methods of systems installation and operation are presented. A system development project is requirec.

## Accounting Graduate

## 5400 Financial and Managerial Accounting (3)

This course provides an introduction to accounting, with emphasis on preparation of financial statements for external parties (financial accounting) and accumuletion of cost information to aid internal planning and contro: (managerial accounting). Topics covered include measurement of assets and liabilities, revenues and expenses, the accounting cycle, financial statements, cost terminology, cost behavior, product costing, and relevant costs for decision making. This course provides the necessary background for ACCT 5401 (Financial Reporting Analysis).

5401 Financial Reporting \& Analysis (3)
Prerequisites: ACCT 5400 or the equivalent. This c Jurse builds on the foundations covered in ACCT 5400 emphasizing in-depth analysis of published financis.l statements. The course begins with discussion of the role of financial accounting information in capital marksts and contracting, and continues with examination of a number of specific accounting issues. Students are encouraged to look behind the numbers to better understand the economics of the underlying transactions, and properly
interpret what the reported numbers mean about a firm's future prospects.

## 5402 Professional Accounting Research (3)

Prerequisite: BA 4401. Discussion of the research tools and methods available to resolve questions concerning accounting standards and practices. Critical analysis of topics of current interest and importance in accounting practice.

## 5403 Seminar in Financial Accounting (3)

Prerequisite: BA 4401. A study of current financial reporting issues. Analysis of current problems and approaches pertaining to the communication of corporate financial information to the U.S. and international investment communities.

5411 Concepts in Management Accounting (3) Prerequisites: MATH 1100 or ECON 4105 with a minimum grade of "C" and ACCT 5400. The development, interpretation, and uses of accounting reports and supplementary information for management planning, control, and decision-making. Emphasizes the application of relevant cost behavior, control, and traceability concepts in the preparation of internal accounting reports, with a secondary emphasis upon product costing techniques as appropriate to financial accounting needs. Topics include break-even analysis, operational budgeting, direct costing, absorption costing, standard costs and variance analysis, business segment analysis, responsibility accounting, distribution cost accounting, and gross profit analysis.

## 5412 Accounting Systems for Management Planning and Control (3)

Prerequisites: ACCT 5411 and LOM 5300, or permission of instructor. A study of advanced managerial accounting techniques useful in facilitating the planning and control process in modern organizations. Emphasis on the implementation and administration of these techniques, their integration with management information systems, and the organizational role of the corporate accountant.

## 5435 Seminar in Auditing (3)

Prerequisites: BA 4435 or permission of instructor. A study of advanced auditing and attestation issues, with an emphasis on operational auditing. Topics include professional ethics, risk analysis, internal control, fraud detection, analytical procedures, determining and assessing operational objectives, and reporting and implementing audit findings.

## 5436 Systems Auditing (3)

Prerequisites: ACCT 5400, IS 5800, or consent of instructor. Study of techniques involved in the control and audit of computer-based accounting information systems. Emphasis on the review of internal controls at operational and administrative levels and on computer-assisted audit techniques.

## 5441 Tax Research (3)

Prerequisite: BA 3441 or consent of instructor. A discussion of the research tools and methods available to resolve questions pertaining to the tax laws. Addresses techniques for locating, verifying, and evaluating authority. Students will be expected to complete a number of tax research and writing problems throughout the semester. A basic understanding of the federal income tax law is presumed.

## 5446 Advanced Topics in Taxation (3)

Prerequisites: BA 3441 and ACCT 5441, or consent of instructor. Addresses various topics selected by the instructor, such as property transactions, compensation plans, charitable contributions, the alternative minimum tax, and tax planning.

## 5455 Taxes and Managers' Decisions (3)

Provides a framework for understanding how taxes impact decisions of both business and individual taxpayers. The framework enables the student to become an effective evaluator of the tax planning strategies being implemented at both the firm and individual level. Students also learn how to quantify the effect taxes have on any transaction in order to maximize the after-tax return on assets or minimize the after-tax cost of financing. Unlike tax law knowledge, that becomes irrelevant when laws are repealed or changed, the analytical skills developed in this course will remain relevant.

## 5480 International Accounting (3)

Prerequisites: BA 3402. Accounting practices for multinational businesses. Discussion of comparative financial accounting practices, the development of international accounting standards, and managerial accounting practices related to multinational operations.

## 5491 Seminar in Advanced Theory and Contemporary Issues in Accountancy (3) <br> Prerequisite: ACCT 5403 and LOM 5300. Examines the theory underlying accounting practice. The course includes an in-depth analysis of contemporary developments in financial accounting with a succinct overview of accounting research paradigms.

## 6441 Seminar in Taxation (3)

Prerequisite: At least nine hours of Graduate level tax courses including ACCT 5441 or consent of the instructor. Addresses tax policy topics drawing on literature from accounting, economics, and public finance. Other topics of current interest will be selected by the instructor.

## Business Administration Graduate

## 5000 Economics for Managers (3)

The first portion of this course introduces microeconomic analysis of consumers, firms, and government. The concepts and tools of economic analysis are applied to the production and distribution functions of organizations. The
last portion is devoted to the macroeconomic influence of capital markets, the influence of interest rates, inflation, and the business cycle.

## 5001 Managerial Economic Analysis (3)

Prerequisites: BA 5000 or ECON 1001 and ECON 1002. Microeconomic analysis of consumers, firms, and government. The concepts and mathematical tools of economic analysis are applied to the production and distribution functions of organizations.

5002 Analysis of National Economic Environment (3) Prerequisites: BA 5000 or ECON 1001 and ECON 1002. The character and functioning of the national economic system; analyzing and forecasting fluctuations in national income and product, employment, and prices; the influence of monetary and fiscal policies. Emphasis is on the acquisition of knowledge concerning forces affecting all business firms.

## 5100 Managerial Communication (3)

An analysis of business writing and speaking, and the communication conventions common in organizations. Emphasis is placed on developing skills critical to career advancement and necessary for effective organizational functioning. A second goal is to prepare students for assignments in other business courses. This course must be taken within the first 12 credit hours of study, preferably in the student's first semester.

## 5198 Seminar in Business Administration (3)

An intensive study of a specific area of business administration of some specific business or economic phenomenon, or a specific problem or theory. Several different courses may be offered under this course number.

## 5280 International Business Operations (3)

Prerequisite: FIN 6580. Functional management within multinational corporations; case studies of operations abroad; and focus on managerial decision making.

## 5289 Internship in International Business (3)

Prerequisites: Consent of IMBA Director Students will apply both their language skills and knowledge of international business by working in an organization located outside the student's country of origin. This course requires students to submit regular evaluations and prepare a research report summarizing their global experience and how it relates to the international business program.

5290 Current Topics in Business Administration (1) Examination of a Business Administration topic of current interest. Instruction by regular graduate faculty, frequently supplemented by outside authorities (practicing managers, government officials, consultants, visiting faculty, etc.). Course may be taken three times for credit.

5299 Individual Research (1-10)
Prerequisite: Consent of instructor and graduate direstor. Special individual research topics under the guidanct: of a specific professor.

## 5450 Governmental Budgeting and Financial Control

 (3)Prerequisite: Completion of the MPPA Computer Proficiency Exam OR demonstrated proficiency with spreadsheets. (Same as Public Policy Administration 6180) A study of municipal and federal financial control ard budgeting procedures with emphasis on public polic $;$. The impact of financial control on top management decisions and the effect of budget strategies on the allocations of public funds.

## 5900 Law, Ethics, and Business (3)

Analysis of the relationship between law and busine is with emphasis on the ability of, and extent to which, governments regulate business activities. Topics covered include the employer-employee relationship, protection of consumers, antitrust regulation, and securities law. Also discussed are ethical issues confronting management of the modern business enterprises.

## 5905 Societal, Environmental, and Management Decisions (3)

Prerequisites: BA 5000. An examination of the exte nal relationships of a business enterprise with the broad and diverse interests of society. These are government and social forces that sometimes operate counter to the potential dictates of theoretical internal economic policies for an individual organization. The primary objective is to examine the increasingly complex set of interrelationships among business, government, other economic grouts, and "the public." A series of major current problems, chosen to raise some of the major issues involved in these interrelationships, and in particular to explore the development of public policy on such problems.

6990 Strategy Formulation and Implementation (3) Prerequisites: FIN 6500, MGT 5600, MKT 5700, LJM 5320 and special consent. Graduate program capstone course examining concepts and methods that integrate functional areas of business. The perspective is that of general management charged with directing the tot 1 enterprise. Interactions between the environment, organization, strategy, policies and the implementation of plans are explored. Special emphasis is given to globalization of business and ethical perspectives. This course should be taken during the semester prior to graduation. In no case may it be taken sooner than two semesters prior to graduation.

7001 Doctoral Research (1-12)
Prerequisites: Must have Ph.D. Program Director or Area Coordinator approval. Investigation of an advanced nature culminating in preparation for comprehensive
examinations and/or development of dissertation proposal. The course may be repeated.

## 7002 Dissertation Research (1-12)

Prerequisites: Must have Ph.D. Program Director or Area Coordinator approval. Investigation of an advanced nature culminating in the preparation of a doctoral dissertation. The course may be repeated.

7020 Seminar in Business Administration Teaching (1) Prerequisites: Admittance into the Ph.D. Program. This course explores the practice and pedagogy of teaching business administration.

## 7021 Qualitative Methods and Philosophical

 Foundations of Business Administration Research (3) Prerequisites: Admittance into the Ph.D. Program. This course investigates the ontology and epistemology of business administration research, particularly as they pertain to qualitative research methods, such as case studies, action research, and ethnomethodology.
## 7300 Statistical Modeling (3)

Prerequisites: LOM 5300; Admittance into the Ph.D. Program. Study of the multivariate analytical techniques and their application to the analysis of business systems. Topics include the construction and adaptation of statistical models and extrapolative techniques to accommodate factor interactions, nonlinearities, and periodic effects. Methodologies include multiple regression, ANOVA, the general linear model, MANOVA, structural equation modeling, and time series modeling.

## Finance Graduate

## 6500 Financial Management (3)

Prerequisites: ACCT 5400 or BA 2400, LOM 5300 or BA 3300 , and BA 5000 or ECON 1001 and ECON 1002. This course provides an in-depth analysis of corporate finance including asset pricing, risk and return, short- and longterm investment decisions, capital structure choices, dividend policy, derivatives, mergers and acquisitions, and a host of other current topics. The material is taught through lectures and problem solving.

## 6501 Advanced Financial Management (3)

Prerequisites: FIN 6500 and LOM 5300. Exposure to recent financial management theory through selected readings. Financial management problems are considered by the use of cases and simulation models. An original research project under the supervision of the instructor is required.

## 6520 Security Analysis (3)

Prerequisites: FIN 6500 and LOM 5300. An in-depth study of techniques used in evaluating various financial assets as investment opportunities. Financial assets studied include common stock, preferred stock, and fixed income securities. Other related topics such as sources of
investment information and current market trends are discussed.

## 6521 Introduction to Derivatives (3)

Prerequisite: FIN 6500. An in-depth study of advanced risk management techniques utilizing futures, forwards, options, swaps and synthetic securities. A broad study of speculative market characteristics will be reviewed in conjunction with a variety of financial innovations. Portfolio management theories combined with mathematical models will be utilized to demonstrate the effects of hedging techniques and portfolio insurance.

6540 Capital Markets and Financial Institutions (3) Prerequisite: FIN 6500 The theory of financial intermediation is discussed in the context of banks, savings and loans, public and private insurance companies, and investment banking. In this framework, the relationship with money and capital markets, markets for corporate control, complex financial contracting, and regulatory environment is developed.

## 6541 Commercial Bank Management (3)

Prerequisite: FIN 6500. This course explores the various bank management techniques required to manage a modern commercial bank in a rapidly changing environment. Topics include asset and liability management, capital adequacy, bank holding companies, profitability, and bank market structure and regulation.

## 6542 Real Estate (3)

Prerequisite: FIN 6500. This course provides a broad introduction to real estate with a focus on legal issues, market analysis, valuation, financing, leasing and investment decisions. Classes are conducted in a standard lecture format with discussion on current topics. No prior knowledge of the industry is required.

## 6580 International Finance, Investment, and Commercial Relations (3)

Prerequisite: FIN 6500. This course provides students with a working knowledge of the international environment relating to the financial and securities markets along with the impact on corporate operations. International risk and tools to control risk are studied in a practical environment that may include cases. Individual research may be required to reinforce the topics studied in the classroom. Class discussion of current issues and related readings are encouraged.

## 6581 Seminar in International Investments (3)

Prerequisite: Fin 6500. This course covers topics related to the determination of exchange rates, international parity relations and portfolio diversification. In addition, methods for using foreign exchange derivatives are explored in their use for hedging exchange rate risk. Learning to read foreign exchange quotes and understanding the functioning of global markets is an integral part of the course material. Each student is assigned a foreign country to study
throughout the semester with the completion if a comprehensive project report. A prior investments course is recommended but not required.

6590 Seminar in Finance (3)
Prerequisite: FIN 6500. This course incorporates a wide range of advanced topics in finance including, but not limited to, an evaluation of various financial assets as investment opportunities, trends in capital markets, derivatives and management of financial and non-financial firms.

## 6591 Finance Internship (1-3)

Prerequisite: Students must have completed and/or be enrolled in at least 6 credit hours of finance electives and have consent of supervising faculty member and Area Coordinator. Student work in the field of Finance where they apply the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience are the primary goals. The student's program will be monitored by a Finance faculty member with the student providing a formal report at the end of the project.

## Information Systems Graduate

## 5800 Management Information Systems (3)

(Same as PPA 6800). This course provides an overview of the established and contemporary issues related to information systems within organizations. Topics include the practices and tools associated with topics such as the management of IS-based investment projects, the design and implementation of IS, the alignment of IS strategy with organizational strategy, information security and privacy, and gaining a competitive advantage through IS.

## 6805 Applications of Programming for Business

 Solutions (3)Prerequisite: Econ 4105. This course provides a study of business-oriented programming. A programming language will be introduced and discussed in detail. Emphasis will be on program definition and the use of such programs in business-oriented applications.

## 6806 Managerial Applications of Object-Oriented Technologies (3)

Prerequisite: IS 6805. This course deals with businessoriented programming in an object-oriented environment. The emphasis will be on program definition, and tools and development in a client-server environment. The course will involve the study of an object-oriented language in addition to object-oriented methodologies for systems development.

6807 Business Programming and File Systems (3) Prerequisite: IS 6805. The course provides a study of business-oriented programming in a traditional centralized environment. The programming language COBOL will be introduced and studied in detail. Emphasis will be on
program definition and the use of file structures in business-oriented applications.

## 6808 Internet Programming for Business (3)

Prerequisite: IS 6805. Focus on web-based applications development for business. It will begin with the fundamentals of web-based computing, including we; client and server interaction, the MIME standard, ser ier and client data frame headers, the CGI standard, and error conditions as they pertain to business applications. In addition, JAVA will be introduced to build web-based GUI-interfaces and back-end servers. Finally, business applications issues such as firewalls, proxy servers and data encryption using secure servers will be included.

## 6825 Management Information Systems: Theory and Practice (3)

Prerequisite: IS 6800. The course presents and analyzes critically current MIS topics in the context of busine ss organizations. Issues may include: organizational at.d behavioral concerns, the fit between information systems and organizations, information systems developmen: and implementation, software evaluation and procurement, systems performance, and information systems planning and control.

6831 Internship in Advanced MIS Applications (3-6) Prerequisite: IS 6840 or permission of instructor. The internship will be a supervised field experience in a USbased business/organization or a US-based intemational business/organization. Students will be employed offcampus for a 10-16 week period on projects directed by host organization supervisors in consultation with a UMSt. Louis faculty member. The project requires stucents to apply MIS concepts to a real-world problem. The project does not duplicate, but builds upon material in the MIS curriculum. A professional written report will be required. The course may not be repeated for more than six hours credit.

## 6832 Information Systems Strategy (3)

Prerequisite: IS 6825. This course presents the management of computer-based information resources in the context of business organizations. Issues may iaclude: management strategies and policies for improving organizational productivity, measurement, evaluation and acquisition of management information services, otfice automation, end-user computing, computer use in international environments, social organizational perspectives and ethical implications. The course vill be taught using cases.

## 6833 Decision Support Systems (3)

Prerequisite: LOM 5300. Applications of decision support systems in a business environment are studied. Issues pertaining to maintenance of data, construction of nodels and provision of supporting technology are explored. Students will analyze, design and implement a managerial decision support system using current development tools.

## 6834 Fourth Generation Languages and End User

 Computing (3)Prerequisite: IS 6805. The course presents fourth generation languages and covers managerial issues of enduser computing. A specific fourth generation language will be introduced and programming applications will be assigned. In addition, the course will explore the problems of providing and managing micro-to-mainframe links, enduser software packages, and security/confidentiality issues.

## 6835 IT- Enabled Business (3)

Prerequisite: IS 5800 . TT-Enables Business focuses on business models, processes, and activities made possible by the internet. The course includes theoretic aspects of ecommerce: consumer relationship management, supply chain management, inventory management, business strategy, auctions, and portals. Issues associated with electronic commerce such as security, privacy, content selection and rating, intellectual property nights, authentication, encryption, acceptable use policies, and legal liabilities are explored. Particular attention is paid to IT-enabled entrepreneurship and business creation, and IT use in small to medium sized enterprises. Case studies drawn from actual business applications will be used to reinforce theory.

6836 Telecommunications: Design and Management (3) Prerequisite: IS 5800 (may be taken concurrently). The topic of telecommunications is addressed from both a technical and managerial viewpoint. In particular, the course will address issues such as communications components and services, local area network architecture, managerial implementations, organizational issues, and cost/benefit analyses.

## 6837 Information Systems Architecture (3)

Prerequisite: IS 6836. This course explores a wide range of topics necessary for understanding \& managing distributed computing technology. A wide range of infrastructure and "middleware" architectural components will be explored. Finally, the course will provide a framework for understanding the capabilities and shortcomings of various distributed computing architectures, technical standards and their implications for interoperability of components.

## 6838 Business Processes Design, Management \& Integration (3)

Prerequisites: IS 5800 . Major business processes are identified and analyzed. Issues related to characteristics, goals, benefits and costs of enterprise-wide design, and the role of information technology during the design process are discussed. Workflow automation, process modeling, analysis, automation, and redesign techniques are discussed, including the following: process inputs \& entrance criteria, process outputs and exit criteria, feedback mechanisms \& process correction, alternate theoretical frames for business process design, and impacts
on business process design from socio-cultural forces. Case studies are used to illustrate the concepts.

## 6840 Information Systems Analysis (3)

Prerequisite: IS 6805 . The theory and practice of structured analysis are presented. Topics may include: traditional vs. structured analysis methods, requirements analysis, user/analyst interaction, investigation of existing systems, human/ machine interfaces, CASE tools, and workbenches.

## 6845 Database Management Systems (3)

Prerequisite: IS 5800 . The course introduces the concepts of database management systems for business applications. Issues in database architecture, design, administration, and implementation are covered. Projects are assigned on a mainframe DBMS and a microcomputer-based DBMS to illustrate the concepts and applications.

6846 Management of Global Sourcing (3)
Prerequisite: IS 5800 . Largely fostered by the spread of the Internet, global software development standards, global software packages, and fewer trade restrictions, organizations now regularly source software development, software maintenance, systems upgrades, platform transitions, help desks, and other IS-related work globally. This course covers topics to help organizations manage global sourcing of IS work, including sourcing strategies, sourcing models (captive, joint venture, outsourcing), role of program management offices, supplier selection, engagement models, and special practices required to manage globally dispersed teams. Risk mitigation practices associated with cultural, legal, political, infrastructure, logistical, and human resource issues are also addressed.

## 6847 Financial and Project Management (3)

Prerequisite: IS 5800 . Effective project management ensures that a project is completed on time, within budget, and has high quality. The purpose of this class is to examine the task of project resource management with a focus on IT and services. It will cover conventional aspects of project management, such as the project evaluation, planning, roles, responsibilities, scheduling, and tracking. In addition, this class will examine risk management, change management, critical chain management, build vs. buy analysis, package vs custom solutions, vendor qualification and selection, and the roles of certification in the process. The class will also cover the management of programs or a portfolio of IT projects.

## 6848 Knowledge Management and Business

Intelligence (3)
Prerequisite: IS 5800 . Knowledge management (KM) is the process of creating, and drawing value from, an organization's intellectual assets. It deals with how to best leverage the organization's knowledge internally as well as externally. The emphasis on knowledge management within business organizations has risen dramatically in the last few years, to some extent as a result of the rapid
progress in information technology capabilities. The course covers the following topics: KM tools, technologies, and systems, including knowledge repositories, knowledge portals, and expert seeker systems, creating and sustaining a knowledge-sharing culture, managing and measuring intellectual capital, managing knowledge in networked organizations, including interorganizational alliances and supply chains, aligning knowledge with business strategy, risks of knowledge loss and knowledge leakage, business intelligence, and social aspects of knowledge management

## 6850 Information Systems Design (3)

Prerequisites: IS 6840 and IS 6845 . This course builds upon the analysis techniques presented in IS 6840 . It requires the student, usually working in a group, to design and implement a system in a real-world environment. Advanced design concepts are presented to support the students in their project work

## 6881 Management of Transnational Information Systems (3)

Prerequisites: IS 5800 (may be taken concurrently). The course presents concepts of managing global information technology. Issues covered include: global information technology, systems development, electronic data interchange, cross-border data flows, and national and international information structures. Further topics may include information technology enabled economic development, global outsourcing of information systems services, and social, organizational and ethical implications.

## 6890 Management Information Systems Thesis Research (1-6)

Credit to be awarded upon successful defense of thesis.
6891 Seminar in Management Information Systems (3)
Prerequisite: IS 5800. Topics of current interest in management information systems. Topics may include international information systems, electronic commerce, decision support systems, information systems strategy, telecommunications, and information systems management

## 6892 Seminar in Current Management Information System Topics (3)

Prerequisite: IS 5800 . Advanced topics of current interest in management information systems. Content to be determined each time the course is offered. May be repeated for credit.

## 7890 IS Research Seminar (3)

Prerequisites: IS 5800; Admittance into the Ph .D. Program. Analysis of the research problems, approaches, and findings of Management Information Systems Research. May be repeated for credit when the subject matter is different.

7891 Quantitative Research Methods in IS (3) Prerequisites: IS 5800; Admittance into the Ph.D. Program. Analysis of research design and validity of quantitative methods applied to the study of Managerient Information Systems, including laboratory experiments, sample surveys, and field experiments.

## 7892 Doctoral Seminar in Current Information Systems Topics (3)

Prerequisites: IS 5800; Admittance into the Ph. D. Program. Theoretical and empirical analysis of topics of long-term importance to the IS field such as systems analysis and design, systems development and implementation, and database management. A historical perspective of the technical and behavioral issues associated to IS artifacts is provided such that contemporary issues and trends can be appreciated.

## 7893 Special Topics in IS (3)

Prerequisites: Consent of instructor; Admittance into the Ph.D. Program. In-depth analysis of special topics in IS research. May be repeated for credit when the subject matter is different.

## 7894 Theoretical Foundations of Information Systems Research (3)

Prerequisites: IS 5800, Admittance to the Ph.D. Program. The theoretical foundations of information systems are largely built upon the theories from other disciplines. including the physical sciences, computer science, sociology, psychology, and mathematics. In this course, we survey a variety of theoretical foundations from ther disciplines by reading the original works, critical responses to these theories, and representative applications of these theories in the IS domain.

## Logistics and Operations Management Graduate

5300 Statistical Analysis for Management Decisions (3) Prerequisites: IS 5800 (may be taken concurrently) and ECON 4105 with a minimum grade of a C . The role of statistical evidence in the formation of inference and in the selection of strategies in solving business problems is developed. Probability and probability distributions are studied as a basis of statistical inference. An introduction to multivariate analysis is provided, which includes analysis of variance and regression methods.

## 5301 Introduction to Geographic Information Sy/stems

 (3)Prerequisites: LOM 5300 or equivalent, and conser tof instructor. Geographic information systems (GIS) are sophisticated computer-based systems for analysis, capture, presentation and maintenance of geographically referenced data. This course includes extensive use of GIS software and provides a foundation in using GIS fcr spatial analyses. A range of examples is used to emphasiz: use of GIS as a tool to support analysis and decision-making.

5312 Advanced Statistical Methods for Management
Decisions (3)
Prerequisite: LOM 5300 . The application of statistical methods to managerial problems, forecasting and business research. Topics include the blending of multiple regression and analysis of variance into a general linear model, logistic models, techniques for projecting seasonal time series, and forecasting techniques (ARIMA models) which deal with serially correlated data. Through class presentations, assigned exercises and a major project, students gain experience in constructing explanatory and predictive models for problems in marketing, finance, etc. Students use commercial software (e.g., the Statistical Analysis System) for analyzing data, constructing, models and producing reports.

## 5320 Production and Operations Management (3)

Prerequisite: LOM 5300. This course discusses issues related to the creation and delivery of goods and services. Topics include the design of production processes, the layout and location of facilities, forecasting, scheduling, inventory control, queuing, materials planning, and quality control. Analytical techniques such as linear programming are used in studying these problems.

## 5322 Lean Production (3)

Prerequisite: LOM 5320. Study of lean production philosophy and techniques in manufacturing and service operations. Topics include process analysis and continuous improvement, set-up reduction, total productive maintenance, kanban scheduling, cellular production, work teams, supplier relations, quality management, and the environmental aspects of production. Cases and a course project will be used to integrate and apply the course material.

## 5324 Service Operations Management(3)

Prerequisite: LOM 5320. An examination of methods for designing and operating service delivery systems, such as in the health care, financial transportation, hospitality, and governmental services industries. Topics include process and facility design, facility layout and location, queuing, demand forecasting and management, service quality, staffing, and personal scheduling.

## 5326 Quality Management (3)

Prerequisite: LOM 5300 or STAT 4200 or consent of instructor. (Same as MATH 5370). An applied course on total quality management. Quality improvement approaches are presented and the managerial implications and responsibilities in implementing these approached are discussed. Topical coverage includes the construction and interpretation of control charts, graphical methods, quality function deployment, robust experiments for product design and improvement, mistake-proofing (poke yoke), the Deming approach, Baldridge award criteria, quality cost audits, worker empowerment and reward systems. Cases involving both business processes and physical
processes are used to illustrate successful quality improvement efforts.

## 5333 Topics in Logistics and Supply Chain Management (3)

Prerequisite: Consent of instructor. This course covers topics in logistics and supply chain management. This may include subjects such as domestic and international transportation, transportation economics, supply chain strategy, logistics system design, procurement, reverse logistics, e-logistics, and information systems for logistics and supply chain management.

## 5334 Internship in Logistics and Supply Chain Management (1)

Prerequisite: Consent of instructor. Students receive practical experience in the area of logistics or supply chain management. The internship is supervised by a professional in the host organization in consultation with a faculty member.

## 5354 Simulation for Managerial Decision Making (3)

 Prerequisite: LOM 5320. Introduction to simulation as a managerial decision-making aid. Application of simulation to a number of management science-oriented problems. The course introduces and requires use of a simulation language.
## 5381 International Logistics and Operations Management (3)

Prerequisite: LOM 5320. A study of international logistics and operations management strategy, planning and operations. Topics may include multinational logistics and supply chain strategies, global network design and sourcing, international transportation, distribution and operations, import-export, risk management, etc.

## 6330 Business Logistics Systems (3)

Prerequisite: LOM 5320 (may be taken concurrently). Analysis of business logistics systems and their role in supply chain management. Covers both design and operation of logistics systems and their components. Topics may include network design, facility location, transportation, vehicle routing, inventory management, customer service, reverse logistics and logistics information systems.

## 6331 Logistics and Supply Chain Operational Modeling

 (3)Prerequisites: LOM 5320 and LOM 6330.
A study of the application of leading software packages to modeling problems and issues arising in the operational management of logistics and supply chains. This course covers the economic tradeoffs involved in such decisions, data requirements, operating parameters, and application of software packages to problems such as vehicle routing and scheduling, freight shipments consolidations, crossdocking, and other operational and tactical strategies. This
"hands on" course is designed to prepare students for higher-level supply chain analyses and consulting work.

## 6332 Logistics and Supply Chain Strategic Modeling

 (3)Prerequisites: LOM 5320 and LOM 6330.
A study of the application of leading software packages to modeling problems and issues arising in the planning and strategic management of logistics networks and supply chains. The course identifies and explores the economic and customer service tradeoffs involved in such networks. Issues such as location of facilities, assignment of production and distribution missions to facilities, identification of sourcing relationships amongst facilities, and identification of cost and customer service consequences of alternative supply chain designs are addressed by the application of commercial software packages to support decision making. This "hands on" course is designed to prepare students for high-level supply chain and analyses and consulting work.

## 6350 Management Science Methods (3)

Prerequisite: LOM 5320. This course provides a working knowledge of management science techniques. It emphasizes analytical approaches to solving business problems, construction of mathematical models, and manipulation of model variables for managerial decisionmaking. Topics include mathematical programming, including integer and network models, heuristics, and simulation models.

## 6354 Advanced Operations Research Topics (3)

 Prerequisite: Consent of instructor. Advanced topics from such areas as mathematical programming, stochastic processes, decision theory, or game theory are studied in depth.
## 6360 Advanced Logistics and Operations Management Applications (3)

Prerequisites: LOM 5320 and consent of instructor. Application of analytical techniques to business problems in logistics, operations and supply chain management. After a brief review of techniques and an examination of typical applications reported in the literature, the major portion of the term is spent in analyzing and solving an actual business problem. A team approach may be used, with groups of students responsible for finding and solving a problem. Primary emphasis is placed on the use of analytical techniques to solve management problems.

## 6395 Seminar in Logistics and Operations Management

 (3)Prerequisite: LOM 5320. Topics of current interest in logistics and operations management. Topics may include just-in-time and lean production, quality management, manufacturing and service systems, transportation and logistics, quantitative management tools, etc.

6840 Experimental and Survey Design and Analysis (3) Prerequisite: LOM 7310. This course covers the linear model and analysis of variance, including survey des gn, validity and reliability, design of experiments and applied regression methods. Topics may include analysis of covariance, multiple comparison procedures, cluster analysis and factorial experiment designs.

7350 Operations Research-Deterministic Models (3) Prerequisite: MATH 4450 or equivalent. (Same as MIATH 5350. A study of deterministic methods and models in operations research. This course provides an introduction to operations research and focuses on model building, solution and interpretation of results. Topics includs formulation, solution, duality and sensitivity analysis in linear programming, integer programming, network flow models, nonlinear optimization, and dynamic programming.

## 7352 Operations Research-Stochastic Models (3)

 Prerequisite: STAT 4200 or equivalent. (Same as VATH 5360). A study of stochastic methods and models in operations research. Provides an introduction to probabilistic models for decision making under uncertainty. Topics include stochastic processes, queuing theory and models, probabilistic inventory theory ard models, Markovian decision problems, simulation and reliability.7381 International Supply Chain Management (i) Prerequisites: LOM 5320; Admittance into the Ph.LI. Program. A comprehensive examination of internat onal logistics and supply chain management strategies, planning and operations from the firm's perspective. Topics may include multinational logistics and supply chain issues and management strategies, multination sourcing and network design, transportation issues in international supply chains, multinational distribution and operations, legal and financial issues in import and export, risk identification and management in international supply chains, and the relationship of supply chain management to other activities of international firms.

## 7390 Research Seminar in LSCM (3)

Prerequisites: LOM 6330; Admittance into the Ph.ID. Program. Analysis of research approaches, and findings in Logistics and Supply Chain Management. May be repeated for credit when the subject matter is different.

## 7393 Special Topics in LSCM (3)

Prerequisites: Consent of instructor; Admittance into the Ph.D. Program. In-depth analysis of special topics in Logistics and Supply Chain Management research May be repeated for credit when the subject matter is diffe:ent.

## Management Graduate

## 5600 Organizational Behavior and Administrative

 Processes (3)Same as PPA 6600. The theoretical and research contribution of the behavioral sciences to management and administration are examined and applied to selected organizational situations. Areas to be considered from the standpoint of both individual and organizational performance are communication, motivation, conflict, decision-making, goal setting, leadership, organizational design, climate, development, and control. Utilizing a systems perspective, the course attempts to develop in each student an ability to analyze and solve organizational problems.

## 5611 Advanced Organizational Behavior and Administrative Processes (3)

Prerequisite: MGT 5600. An in-depth examination of selected organizational and individual theories affecting behavior and operating performance. Organizational structure and design, formal and informal organization, decision making, communications, and motivation are analyzed for their organizational impact. The course seeks to develop further the ability to analyze and evaluate organizational processes and individual behavior.

## 5612 Negotiating Workplace Conflict (3)

Prerequisites: PPA/MGT 6600, and Graduate Standing (Same as Public Policy Administration \& Sociology 5451). Examines conflict and cooperation between individuals, groups, and organizations over the control of work. A central theme is how this conflict is expressed, controlled and resolved. Students will participate in exercises to learn the basics of two-party negotiations.

## 5613 Dynamics of Interpersonal Relations (3)

Prerequisite: MGT 5600 or academic background in general psychology. The self-concept, personality dynamics, and mechanisms of adjustment. Catalysts and barriers to effective communication. Examination of the functional relationship between ego-needs, perceptual distortion, and stereotypical thinking. Roleplaying, the resolution of role-conflict, and objective self-evaluation. The development of cooperation and trust as a prerequisite to effective human relations.

## 5614 Managing Organizational Change and Design (3)

 Prerequisite: BA 5600 (may be taken concurrently) This course examines the ways to manage organizational change to meet the rapid pace of change in the business environment. Cases and current research inform class discussions of different types of restructuring. Topics may include creating learning organizations, designing for innovation, managing growth and downsizing, and building sustainable organizations.
## 5621 Managing Human Resources (3)

Prerequisite: MGT 5600. In-depth examination of selected human resource management issues from a contemporary manager's viewpoint. Topics examined include: personnel planning; employee selection; performance appraisal, training, and development; compensation; legal issues; discipline; and labor relations. The course examines these topics as they relate primarily to operational activities in organizations.

## 5622 Union-Management Relations and Collective Bargaining (3)

Prerequisites: MGT 5600 and BA 5900. Primary concern is with the setting and the dynamics of contract negotiation and administration. Emphasis is on the development of insight and understanding of the forces affecting the decisions of the parties to a labor contract within the context of the social, political, and economic environment of the organization. A dynamic approach is taken to examine difficulties that arise in attempting to administer a collectively established relationship between employer and employee.

## 5623 Compensation and Benefits (3)

Prerequisites: MGT 5621 and LOM 5300. An in-depth study of compensation and benefit programs in organizations. Topics include job evaluation, incentive systems, performance appraisal, and employee benefits. Discussion of relevant laws, such as the Equal Pay Act, is also provided.

## 5624 Organizational Training (3)

Prerequisite: MGT 5600 or MGT 5621 or permission of department. An intensive study of training and developmental methods/issues in organizations. Topics include needs analysis, learning theory, training techniques, evaluation, and management development. Other topics include memory, training objectives, and training facilities. Projects and exercises are used to supplement reading and lecture.

## 5625 Selected Topics in Human Resource Management

Prerequisites: MGT 5621 and LOM 5300. This course provides an advanced treatment of selected human resource management topics. Primary focus is on topics such as job analysis, pre-employment screening devices, test validation, and civil rights laws. Other topics, such as performance appraisal, recruitment, promotions, and terminations may be covered. Various class projects may be assigned to supplement readings, lectures, and discussion.

## 5626 LeadershipThrough People Skills (3)

Prerequisite: MGT 5600 (or permission). This seminar will help students learn leadership strategies and develop skill sets that will allow them to: (1) Adapt to different people in appropriate and productive ways; (2) Gain commitment from others through the use of effective people skills; and
(3) Develop an awareness of their own current style of management and clearly see its impact on their staff and peers. Students will spend approximately 75 percent of their time "learning by doing" as they engage in and receive feedback on skills practices and role-plays. The seminar culminates with students planning and practicing a "real-life" interaction they will face on the job, thus creating a strong transfer of skills and learning from the seminar back to the workplace.

## 5689 International Business Strategies (3)

Prerequisites: BA 5000 and ACCT 5400. This course focuses on those managerial issues, which follow from the definition and implementation of corporate strategy for worldwide operations, as distinguished from purely domestic firms or those only marginally involved in international activities. It aims to develop an appreciation for the unique competitive, sociocultural and political environments in which international business takes place and the skills required to deal with these changes.

## 5695 Seminar in Management (3)

Prerequisite: MGT 5600. Topics of current interest in management. Possible topics include, human resource management, international management, and entrepreneurship.

## Marketing Graduate

## 5700 Contemporary Marketing Concepts (3)

Prerequisite: BA 5000 . Designed for students with no prior course work in the field of marketing. A wide spectrum of markering institutions and activities is covered. The impact of marketing on the total firm, the economy, and society in general is assessed. The course is intended to develop and organize the fundamental marketing concepts necessary to an analytical study of consumer behavior, the economic environment, and four managerial aspects of marketing. The acquisition and utilization of marketing research data for problem solving is stressed. Relation and integration of basic marketing knowledge to the successful development of sound marketing policy, planning, and strategy is developed.

## 5701 Marketing Planning and Strategy (3)

Prerequisite: MKTG 5700. Emphasizes the development of a total marketing program through an analytical study of the marketing-mix, the diagnosis of the business situation, along with the influence of exogenous variables and the development of an effective campus marketing strategy. Stresses importance of an integrated marketing plan and utilizes modern decision-making tools. Supplementary readings, journal articles, and current periodicals are used to place the theoretical framework of the course into the contemporary environment of the market place.

## 5710 Consumer Motivation and Behavior (3)

Prerequisite: MKTG 5700. An analysis of the sociopsychological foundations of consumer behavior including
personality differences, needs and wants, status symbols, social change and mobility, and fads and fashions.
Consumer spending and saving habits, product preferences, leisure-time patterns, shopping behavior and motivation research also are examined for their impa:t on advertising, selling, and marketing management.

## 5720 Marketing Communications (3)

Prerequisite: MKTG 5700. Deals with managerial decision making by placing particular emphasis on assimilatirg and integrating all forms of marketing communication in the development of promotional policies, plans, and procedures. Course approach is analytical rather thar. descriptive in investigating the areas of advertising, public relations, sales management, packaging, and other fcms of demand stimulation.

## 5730 Product Planning and Pricing (3)

Prerequisite: MKTG 5700. A study of product management focusing on new product development. The steps of the new product development process are covered in detail. Current issues in new product research are discussed. Projects are emphasized and involve the application of several of the key techniques to the student's own new product ideas. Selected pricing topics are allso covered, such as measuring consumer price sensitiv ty.

## 5740 Marketing and Business Research (3)

 Prerequisites: MKTG 5700 and LOM 5300. A broal approach to marketing research as a model for acquiring, retrieving, and analyzing decision-making informat on. Includes market measurement, evaluation of sales, and cost effectiveness, sales forecasting, and primary markeing research studies aimed at solving specific problems Emphasis is placed also on building a theoretical ard analytical framework to provide flexibility in the design of marketing experiments and in judging recent research innovations.
## 5760 Marketing Channel Strategy (3)

Prerequisites: MKTG 5700 and LOM 5320. A study of the marketing institutions involved in the distribution c f goods and services, industrial and consumer markets, as well as the establishment and integration of marketing channels. The planning and analysis of the macrodistribution and microdistribution systems which contribute to creaion of optimal time and place utility. Some attention is paid to quantitative applications to marketing situations in lluding simulation and logistics.

## 5761 Business to Business Marketing (3)

Prerequisite: Graduate standing or consent of instrictor. This course provides graduate students with an understanding of the role of business to business marketing as it pertains to business, government, and institutional customers. The course places a heavy emphasis or buyerseller interaction embodying business to business marketing. In addition to discussing the standard tieories and covering the subject domain of business mark ving, the
course focuses on the finer aspects of business to business marketing negotiations using exercises and readings. Student groups enact complex industrial buyer-seller negotiations striving to achieve their respective organizational goals.

## 5770 Supply Chain Management (3)

Prerequisite: Consent of Instructor. This course addresses supply chain management and its implications, with a focus on what firms can do to maintain competitiveness in the quickly changing business landscape. Topics may include, but are not limited to, value chain analyses, marketing business-to-business, supply chain analytics, procurement, production, logistics, and inventory management within supply chains.

## 5775 Domestic Transportation (3)

Prerequisite: Graduate standing or consent of instructor. Domestic Transportation is the study of North American transportation modes, their management and operating characteristics. This graduate course is part of the MidWest Transportation Consortium where UMSL, along with 5 other Universities, provides guest lecturers that comment on aspects of transportation. UMSL students concentrate on the business aspects of transportation.

## 5780 Seminar in International Marketing (3)

Prerequisite: BA 5700. An advanced seminar on topics in intemational or global marketing. Possible topics include the globalization of trade, export marketing, international market opportunity analysis, and negotiation for international marketers. Students who take one version of this course (e.g. globalization of trade) can take a second version of the course (e.g. negotiation for international marketers) with prior permission.

## 5795 Seminar in Marketing (3)

Prerequisite: MKTG 5700. This course addresses advanced problems in contemporary marketing. Topics may include, but are not limited to, marketing strategy, marketing communications and advertising, product management, consumer behavior, channels of distribution, international marketing, and marketing research.

## College of Education

## Accreditation

The University of Missouri-St. Louis, through the College of Education, is accredited by the National Council for Accreditation of Teacher Education for the preparation of early childhood, elementary, special education, physical education, secondary school teachers and school service personnel.

## Course Designations in the College of Education

The following abbreviations are used to indicate instructional areas in the course listings and descriptions in the College of Education.

Adult Education Courses (Adu Ed) Counselor Education Courses (Cns Ed)
Early Childhood Education Courses (Ech Ed)
Educational Administration Courses (Ed Adm)
Educational Foundations Courses (Ed Fnd)
Educational Psychology Courses (Ed Psy)
Educational Research and Evaluation Methods Courses (Ed

## Rem)

Educational Technology Courses (Ed Tec)
Elementary Education Courses (Ele Ed)
Middle Education Courses (Mid Ed)
Higher Education Courses (Hir Ed)
Physical Education Courses (Phy Ed)
School-Wide Education Courses (Educ)
Secondary Education Courses (Sec Ed)
Special Education Courses (Spc Ed)
Teacher Education Courses (Tch Ed)

## Teacher Education <br> Degrees and Areas of Concentration

The College of Education offers certification programs leading to the B.S. in education with specialization in any of the following: early childhood education, elementary education, special education, physical education, and secondary education. Courses are also available for those seeking certification for middle school language arts, mathematics, science and social studies. K-12 certification is available for music, art, foreign language and health. In cooperation with other schools and colleges of the university, the College of Education provides a program for students pursuing other degrees and also planning for a teaching career in secondary education.

## General Education Requirements

Students in the College of Education must meet university and departmental general education requirements specified for their degrees.

## Academic Residence

Students must be in residence for 30 of the last 30 seme ster hours of credit. Courses graded on a satisfactory/ unsatisfactory basis are not accepted within these last 3 ) semester credit hours. This residency requirement applies to students seeking a degree or teacher certification.

## Education Majors

Professional education courses must be completed witl a grade point average of 2.5 and no grade lower than a C (2.0). A C-grade is not acceptable.

## Admission to the College of Education

Any students who designate education degree program; as their intended degree paths will have Education as thei: assigned academic unit. Students admitted to the Collk ge of Education and also desiring teacher certification must also be admitted to the Teacher Education Program.

## Application and Admission to the Teacher Education Program

All students (pre- and post-degree) who wish to becore teachers must be admitted to the Teacher Education Program regardless of the college in which they are enrolled. The admission program requires student action at the folloving levels.

Applications to the Teacher Education Program are processed through the Teacher Certification and Advising Office (TC \& A). Eligibility is based upon fulfillment of the following requirements:

- Submission of qualifying scores on C-BASE in areas of English, writing, mathematics, science and social studies, as mandated by the Missouri Excellence in Education Act of 1985. Consult Teacher Certification \& Advising Office - College of Education, for test descriptions, cost, required scores, dates of administration, retest policies, etc. Acceptable C-BASE scores are required in addition to acceptable ACT or SAT scores. (C-BASE and ACT not applicable to students with a bachelor's degree. Graduates of the general studies program at UM-St. Louis, however, must take the C-BASE).
- Scores of either 20 on the ACT Composite (18, when taken prior to $11-1-89$ ) or 800 on the SAT (verbal plus math)*.
- Completion of 60 hours of college or university courses (at UM-St. Louis or another accredited school).
- A grade point average of 2.5 or higher.
- Completion of level one courses, or the equivalent, with a grade of C or better.
- Submission of a criminal record check and ciild abuse/neglect screening.


## General Information

## * Policy for Students Scoring Below ACT and SAT Qualifying Requirements

Students who do not achieve satisfactory scores of 20 on the ACT or 800 on the SAT may retake the test(s) until the requirement is met. Students with a documented disabling condition, preventing valid test administration of the ACT or SAT, may be evaluated for basic educational competencies through appropriate testing instruments and/or procedures. Students should contact campus Disability Access Services.

Students who do not meet the initial ACT or SAT qualifying scores may seek assistance in upgrading basic competencies through contact with one or more of the following University of Missouri-St. Louis services:
Center for Academic Development; Women's Center; Counseling Service; Veteran Affairs Office; Video Instructional Program; Horizons (Peer Counseling Center).

In addition, assistance may be available through correspondence courses, University of Missouri-Columbia. Copies of this policy are available in the Teacher Certification and Advising Office.

## Professional Internship Semester

Students in the early childhood, elementary, special education and secondary certification programs participate in a three credit hour Professional Internship, taken the semester prior to student teaching. The internship and student teaching application is the same and is according to the deadlines for Student Teaching. Internships involve education students one day per week in a school site setting throughout the semester. See the student teaching guidelines for application due dates.

## Application to the Student Teaching Program

The application for student teaching is a two-part process that begins two semesters prior to student teaching.

## Deadlines for the Formal Application

Fall Student Teaching First week of February of the previous year
Winter Student Teaching First week of September of the previous year
*Check 'My Gateway' and the student teaching bulletin board in Marillac Hall for exact dates.

Upon receipt, formal applications for both pre- and post degree students are checked to ensure they have met the following requirements:

- Full admission to the teacher education program for both pre- and post degree students.
- A cumulative grade point average of 2.5 or above by the semester before the one in which students plan to do their student teaching. The 2.5
cumulative grade point average must be maintained in order to graduate with a B.S. in education degree and/or be certified to teach in the state of Missouri.
- Grade point average of 2.5 in the teaching field (secondary education students only).
- A grade of C or better in all professional education courses so designated. Lists of these courses available in the TC \& A office and from advisers. A grade of C - is not acceptable.
- Completion of TB screening, police, and child abuse checks.
The student teaching experience in the early childhood, music, physical education, and special education certification programs has been strengthened by providing assignments in two different school settings. Students will be expected to do student teaching on a full-day basis for 14 -weeks an entire semester. The student teaching experience in elementary, middle school and secondary content areas completed at one site for a full semester. The student teaching experience must be completed in residence. Secondary student teaching in science education, mathematics education, and foreign language education is offered only during the winter semester.

Policies regarding withdrawal or removal from student teaching are found in the appropriate student teaching handbook. These are found in the 'online student teaching application' section of the College webpage.

For further information regarding certification, contact the Teaching Certification and Advising Office (TC \& A) at 155 Marillac Hall.

## Application for Degree and/or Certificate

## Bachelor of Science in Education (B.S.)

Candidates for the B.S.Ed. degree must complete degree and certificate application forms in the TC \& A Office when they apply for admission to internship/student teaching or during the semester before the one in which they expect to finish degree requirements. See information below on the on PRAXIS examination.

The College of Education requires a background check, current within one year, for every UMSL student in the teacher education program. Please note that students wishing to be certified will still be responsible for a more thorough, fingerprint background check as required by Missouri State Law before a certification will be issued. All background check information will be available to students upon their request.

## Bachelor of Educational Studies (B.E.S.)

Candidates should consult the TC \& A Office, 155 Marillac Hall for more information. This degree offers three areas of study: Early Childhood, Exercise Science and Professional Studies.

## Bachelor of Science in Community Education

Candidare should consult the TC \& A Office, 155 Marillac Hall for more information.

Students taking evening course offerings should complete degree application forms and certification application forms in the TC \& A Office.

## Bachelor of Arts

Students seeking the B.A. degree with teacher certification must complete a state certification form with the TC \& A. See note below on the on PRAXIS examination.

## Certification

In cooperation with the Missouri State Department of Elementary and Secondary Education, the College of Education is responsible for recommending all students for state teacher certification.

All individuals must pass the appropriate Praxis/National Teacher's Examination to meet graduation and/or certification requirements. This exam should be taken during the semester immediately prior to that of student teaching.

Students may earn certification in the fields of elementary education, early childhood education, middle school, music education, physical education special education (cross categorical), art education, as well as the secondary education areas of biology, chemistry, English, foreign languages (French, German, Spanish), mathematics, physics, social studies, and speech/theater. Graduate programs leading to certification are offered in counseling, reading, school administration (elementary and secondary principal, school superintendent), and special education.

## Graduate Level Certification Program

Applicants who already hold a Bachelor's degree in a teaching field can work toward secondary education certification by taking 18 credit hours of coursework and student teaching within a minimum of one calendar year. Coursework includes:

Tch Ed 5310: Designing Instruction, 3 credits (includes 14 clock hours of field experience)
Tch Ed 5311: Educational Foundations, 4 credits (includes 10 clock hours of field experience)
Ed Psy 6109: Learning and Development in Secondary School Settings, 4 credits (includes 8 clock hours of field experience)
*Tch Ed 5312: Differentiated Instruction, 4 credit hours (includes 12 clock hours of field experience)
Sec Ed 4989: Secondary Education Professional Internship, 3 credits (includes 84 clock hours of field experience) Sec Ed 4990: Student Teaching, 12 credits (full days in a school for one semester)

Students seeking certification via this program must meet with advisors in the College of Education Graduate Education Office, Teacher Certification and Advising Office
and secondary education faculty members in the content (teaching) area to plan specific programs and review requirements. Any hours in addition to the above necessary to meet state teacher certification requirements will be determined.
*This course, pending formal approval, could be substituted with an equivalent course. See the Graduate Office, secondary faculty or Teacher Certification and Advisirg Office for more information.

## Graduate Studies in Education

## Degrees and Areas of Emphasis

The College of Education offers Master of Education (M.Ed.), Educational specialist (Ed.S.), and doctoral di.grees at the graduate level. The M.Ed. degrees and the emphasis areas are:

- Adult and Higher Education
* Adult Education emphasis
* Higher Education emphasis
- Counseling
* Elementary School Counseling emphasis
* Secondary School Counseling emphasis
* Community Counseling emphasis
- Educational Administration
* Community Education emphasis
* Elementary Administration emphasis
* Secondary Administration emphasis
- Elementary Education
* Early Childhood Education emphasis
* General emphasis
* Reading emphasis
- Secondary Education
* Curriculum and Instruction emphasis
* General emphasis
* Reading emphasis
- Special Education
* General emphasis
* Early Childhood/Special Education emphasis

Courses are available for areas of specialization within the M.Ed. programs, including educational technology, physical education, educational psychology, and the various secondary school subject areas.

Ed.S. degree programs are available in school psychology and educational administration.
Programs leading to the Ed.D. degree are offered in four broad interdisciplinary emphasis areas: Educational Administration; Adult \& Higher Education; TeachingLearning Processes; and Counselor Education. Prograns leading to the Ph.D. degree are offered in the areas of Counseling, Educational Psychology, Teaching-Learning Processes, and Educational Leadership and Policy Studies.

## Master of Education Degree

## Admission and General Requirements

The College of Education follows Graduate School policies relating to admissions, academic standards, residency, transfer credit, time limitations, and thesis options (see Graduate Study in this Bulletin). In addition to meeting the general requirements of the Graduate School, applicants for school or community counseling must complete a separate application (see graduate studies in the Counseling division in this Bulletin). The minimum number of hours required for the M.Ed. degree is 32 or 33 except that the elementary, secondary, and community counseling emphases require 48 hours. The school has adopted a flexible policy on exit requirements, which are determined divisionally.

## Advisement and Program Planning

Upon acceptance, each student can contact the Office of Graduate Education for an appointment with the graduate advisor for a first semester course of study (314) 516-5483 or NAshford@umsl.edu). After acceptance, each student completes an adviser form, sent by the College of Education's Office of Graduate Education, 123 SCCB. A faculty adviser is then appointed who counsels the student in registration and program planning. A program for master's degree form must be submitted for approval during the first half of the student's program. This form includes all course work in the program and the exit requirement. Once approved, the degree program may be changed only by petition.

Students working toward teacher and/or school service personnel certification as graduate students should complete state certification forms in the Teacher Certification and Advising Office, 155 Marillac Hall, one year before those requirements will be completed.

## Educational Specialist Degree

The Ed.S. degree is intended to be a terminal degree for school personnel preparing for a specific role, either that of a school psychologist or that of a school building or district administrator. The programs require 60 hours of course work, post-baccalaureate. Both programs are designed to meet the respective Missouri certification requirements. The Ed.S. in School Psychology degree program requires three years of intensive, full-time training but students may be able to complete up to half of the curriculum as a part-time student. The Ed.S. in Educational Administration can be pursued on a part time or a full time basis.

## Admission and General Requirements

The College of Education follows Graduate School policies relating to admissions, academic standards, residency, transfer credit, time limitations, and exit requirements. Specific materials required for application vary by program, but generally applicants should submit an application to The Graduate School, transcripts of previous college work, GRE scores, and letters of recommendation.

## Advisement and Program Planning

For advising and program planning, school psychology students should contact the Division of Educational Psychology , Research and Evaluation, 402 Marillac Hall, 314-516-5783. Educational administration students should contact the Division of Educational Leadership and Policy Studies, 269 Marillac Hall, 314-516-5944.

## Doctor of Education Degree

The Ed.D. degree is designed primarily for the field practitioner and prepares professional leaders who are competent in identifying and solving complex problems in education. Four emphasis areas embrace general categories of professional activities: Educational Administration; Adult \& Higher Education; Teaching-Learning Processes; and Counselor Education.

Students seeking the Ed.D. degree are expected to meet the doctoral degree requirements and procedures adopted by the Graduate School. (See Doctoral Degree Requirements for details.)

## Admission and General Requirements

In addition to meeting the application and admissions requirements of the Graduate School, students must submit three letters of recommendation (two letters must be from individuals with an earned doctorate, preferably prior instructors), along with a professional resume. Because enrollment is competitive, admission standards are comparatively high. Successful candidates must exhibit significantly above-average academic records and GRE scores. In exceptional cases, other criteria may outweigh these customary indicators of probable academic success.

At least two years of teaching or other school service experiences are required for admission. Exceptions may be made by substituting a supervised internship during the first year of the program.

## Admission Application

In order to ensure time for review and decision, complete applications and accompanying materials must reach the office of admissions in a timely manner. In addition, applicants are urged to request transcripts and letters or recommendation two weeks before submitting their papers. Consideration of applications cannot be undertaken until all materials are available.

## Degree Requirements

1. Foundations, 12 hours from: philosophical, historical, psychological, sociological, anthropological, and comparative foundations of education, as well as curriculum, instruction and supervision.
2. Research Methods, 12-15 hours:

Students in the Educational Administration, Adult and Higher Education, and Teaching-Learning Processes options should complete the following or equivalent in order:

ED REM 6735: Statistical Analysis for Educational Research (pre-requisite)
ED REM 6750: Advanced Research Design in Education
Plus any two methods courses from the following:
ED REM 7771: Quantitative Research Methods I
ED REM 7772: Quantitative Research methods II
ED REM 7781: Qualitative Methods in Educational Research I
ED REM 7782: Qualitative Methods in Educational

## Research II

This sequence totals 12 hours of methods courses. Any remaining required hours could be completed with other ED REM courses numbered 6000 or higher or research courses in another curriculum.

Students in the Counselor Education option should complete the following sequence:

ED REM 6710: Educational Research Methods and Design
ED REM 7771: Quantitative Research Methods I
ED REM 7781: Qualitative Research Methods I
Plus any one method course from the following:
ED REM 7772: Quantitative Research Methods II
ED REM 7782: Qualitative Methods in Educational Research II
3. Common doctoral seminars, 6 hours

EDUC 7050, The Research Process I: Framing Research Questions within the Education Literature EDUC 7950, The Research Process II: Developing and Refining Education Research Proposals
4. Major Specialization, 21-39 hours:

## Educational Administration Option

Educational Administration (ED ADM) or other courses selected in consultation with the advisory committee, including internship (3-9 hours)

## Adult and Higher Education Option

Adult Education (ADU ED) or Higher Education (HIR ED) or other courses selected in consultation with the advisory committee, including internship (3-9 hours)

## Teaching-Learning Processes Option

Teacher Education (TCH ED) courses or courses in education in a teaching field, including courses on curriculum construction and the design and improvement of instruction, all selected in consultation with the advisory committee, including internship (3-9 hours)

## Counselor Education Option

Counseling Education (CNS ED) or other courses selected in consultation with the advisory committee, including internship (3-9 hours)
5. Minor Specialization, 12-18 hours

A secondary area of expertise identified in consultation with the advisory committee
6. Dissertation, 12 hours

Total: minimum 90 hours, post baccalaureate

## Doctor of Philosophy Degree

The Ph.D. degree in education, offered in cooperation with the School of Education at the University of MissouriKansas City and the College of Education at the University of Missouri-Columbia, is designed for educators who desire directed research experience promoting scholarly inqui y in education. Four emphases are available:

- Teaching-learning processes
- Educational leadership and policy studies
- Educational psychology
- Counseling


## Admission and General Requirements

In addition to meeting the application and admissions requirements of the Graduate School, students must submit:

- Three letters of recommendation (at least two from individuals with earned doctorates, preferably prior instructors).
- An original essay.
- A professional resume.
- Evidence of above-average academic records.
- GRE scores

A favorable vote of an admission interview committee, composed of faculty in the emphasis area, is required.
Admission is competitive.

## Admission Application

To ensure time for review and decision, complete applications and accompanying materials must reach the office of admission in a timely manner. In addition, applicants are urged to request transcripts and letters of recommendation at least two weeks before submitting their papers. Consideration of applications cannot be undertaken until all materials are available. Applicants to the Counseling emphasis are asked to apply by January $15^{\mathrm{th}}$.

## Degree Requirements

## 1. Foundations, 9-12 hours:

Philosophical, historical, psychological, sociological, anthropological, and comparative foundations of education, as well as curriculum, instruction, and supervision.

## 2. Research Methods $\mathbf{1 5 - 1 8}$ hours:

Students in the Teaching-Learning Processes, Educational Leadership and Policy Studies, and Educational Psychology emphasis areas should complete the following or equivalent in order:

ED REM 6735: Statistical Analysis for Educational
Research (Pre-requisite)
ED REM 6750: Advanced Research Design in Education
Plus any three methods courses from the following:
ED REM 7771: Quantitative Research Methods I
ED REM 7772: Quantitative Research Methods II
ED REM 7781: Qualitative Methods in Educational Research I
ED REM 7782: Qualitative Methods in Educational Research II
This sequence totals 15 hours of methods courses.
Remaining hours can be completed with other ED REM courses numbered 6000 or higher or research courses in another curriculum.

For Ph.D. students in the Counseling emphasis area, the recommended sequence is:

ED REM 6710: Educational Research Methods and Design
ED REM 7771: Quantitative Research Methods I
ED REM 7772: Quantitative Research Methods II
ED REM 7781: Qualitative Methods in Educational Research I
ED REM 7782: Qualitative methods Educational Research II

## 3. Foreign Language Proficiency or Other Research Tools, equivalent to 6 hours

4. Emphasis Area (Primary Discipline) courses, 21-27 hours, with at least 16 in residence, in one of the following areas:

## A. Teaching-Learning Processes

Minimum 15 hours in cognate area
Minimum 3 hours in curriculum or instruction
Minimum 3 hours in educational psychology
B. Educational Leadership and Policy Studies

Minimum 21 hours in educational leadership, either in K-12, higher education, work, adult, or community education settings, selected in consultation with the faculty advisor and advisory committee.

## C. Educational Psychology

Minimum of 21 hour in educational psychology. Program may include courses in research and evaluation methods, school psychology, developmental psychology, cognition and learning, character education, and socio-cultural theory. Courses in the primary discipline will be selected in
consultation with the faculty adviser and advisory committee.

## D. Counseling

Cns Ed 6030, Foundations for Multicultural Counseling
Cns Ed 6040, Group Procedures in Counseling
Cns Ed 6050, Individual Inventory
Cns Ed 6370, Community Counseling Practicum (or Cns Ed 6270, School Counseling Practicum)
Cns Ed 6380, Community Counseling Field Experience (6 hours) (or Cns Ed 6280, School Counseling Field Experience I and Cns Ed 6285 School Counseling Field Experience II
Cns Ed 6400, Career Information and Development
Cns Ed 6410, Advanced Career Development
Cns Ed 7000, Advanced Theories of Counseling and Family Therapy
Cns Ed 7010, Advanced Multicultural Counseling
Cns Ed 7020, Seminar in Counseling Research
Cns Ed 7030, Counselor Education and Supervision Cns Ed 7770, Doctoral Practicum (3 hours)

Additionally, all students should complete Cns Ed 7780, Doctoral Internship ( 6 hrs ) as a research internship; and a secondary discipline in Ed Psy consisting of at least Ed Psy 6310, Psychology of Learning Processes, Ed Psy 6113, Personality Development and Adjustment, and Ed Rem 6718, Psycho-Educational Assessment II

## 5. Related (Secondary Discipline) Courses, 12-15 hours,

 in education or another department.
## 6. Required Exit course, 3 hours

Education 7950, The Research Process II: Developing and Refining Education Research Proposals

## 7. Research Internship, 6-9 hours

## 8. Dissertation, 12 hours

Total: Minimum 90 hours, postbaccalaureate

## Support Services

The College of Education maintains a number of offices and centers to directly assist students, faculty, and people in the metropolitan area and to support its instructional, research, and service activities.

## Teacher Certification \& Advising Office-155 Marillac

This office supplies advisement services for undergraduate teacher education and certification students. It coordinates the clinical experiences of the College of Education and directs the student teaching program.

## Office of Graduate Education - 123 SCCB

Information about admission to, and requirements of, graduate programs in education may be obtained in this office. The office also assists students with advisement,
registration, graduation and related topics, and maintains student records.

## Teacher Education Resource Center-G01

The center is designed as an instructional media laboratory. The Instructional Technology Center located in Lucas Hall also has an office in the center.

## Human Services Unit -B23A ED LIB

The human services unit is a training facility for graduate students supervised by faculty in the Division of Counseling. Career counseling and assistance with vocational, adult, or adolescent developmental concerns are available to individuals in the community.

## Reading Clinic-B9 ED LIB

The reading clinic provides a laboratory setting for graduate level elementary and secondary teachers who are seeking certification as reading specialists. The clinic has been providing services to the surrounding community in diagnosing and treating severe reading problems in children and adults since 1966. The clinic also serves as a demonstration and materials center for preservice and inservice teacher education, as well as a clinical research facility for the faculty.

## University Child Development Center-130 SCB

The center provides university students with observation, participation, research, and similar educational and clinical opportunities; it also offers quality child care programs for children of student, faculty, staff, and community families.

## Technology and Learning Center- 100 Marillac

The center provides education students and faculty a model environment for managing new methods of teaching through the newest technologies; a place to research and develop technology-enhanced teaching methods to engage K-12 students; and programs that connect school classrooms to the workplace.

## Schoolwide Courses in Education (Educ)

1065 The University (3)
A College of Education interdisciplinary course on the principles, development, and organized structure of the university. Special emphasis will be placed on the role of the university in modern society and upon forces affecting the direction of the university and its potential for change. Methods include outside speakers, discussion groups, and laboratory research on UM-St. Louis.

## 2204 Special Topics in Education (1-3)

Prerequisites: Completion of 75 hours and consent of instructor. Examination of a special area or topic within the field of education. Topics to be considered will be announced prior to registration and may vary. For elective credit only. This course may be repeated for different topics. Not to exceed a total of six hours credit.

## 2290 Internship I (6)

Prerequisites: Senior standing and consent of instructor. Field experience in educational setting under university supervision. Includes planning, research, evaluation, and other professional activities in the student's area of concentration.

## 2291 Internship II (6)

Prerequisite: Completion of or concurrent enrollment in Educ 2290. Continuation of Educ 2290.

## 2297 Independent Study (1-3)

Prerequisites: Completion of 75 hours and consent of instructor. Independent study through readings, research, reports, and conferences designed to provide depth in areas of study previously introduced in education courses. For elective credit only. May be repeated. Not to exceed a total of three hours credit.

4301 Introduction to Microcomputers in Education (3) A course designed to introduce individuals to the microcomputer as an instructional medium. The course will emphasize (1) the history, role, and use of microcomputers in education; (2) learning the elements of programming for the microcomputer; and (3) beginning program construction and debugging operations.

## 5006 Graduate Workshop (1-10)

Prerequisite: Consent of instructor.

## 5993 Practicum in Individualized Instruction (3-6)

Prerequisites: Completion of the course(s) to which assigned for instruction and consent of instructor. Supervised instruction in individualized programs. Seminar accompanies instructional experience. May be repeated.

6308 Graduate Institute (1-10)
Prerequisite: Consent of instructor.

## 6408 Graduate Seminar (1-10)

Prerequisite: Consent of instructor. Intensive study of selected issues in education.

6475 Microcomputer Applications in Music Education (3) Same as Music 5750. Prerequisites: Graduate standing in music. An examination of the potential of microcomputers in the music education field. Experiences with available hardware and software suitable for applications that include inventory, budget, music library cataloging, digital music synthesis, and computer-assisted instruction at all levels.

## 6476 Microcomputer-Assisted Instruction Curriculum Development in Music (3)

Same as Music 5760. Prerequisites: Graduate standing in music. Design and development of Computer-Assisted Instruction (CAI) lessons in music. Commercial courseware and various CAI models will serve as the basis for creating original programs that can be used effectively to implement objectives of the music curriculum for a specific school or school district. The design, refinement, and production of a major CAI program for use in an elementary, secondary, or postsecondary setting is required.

## 6477 Advanced Microcomputer Application in Music (3)

Same as Music 5770. Prerequisite: Graduate standing in music. The study of complex microcomputer applications including music synthesis, MIDI, music-oriented graphics, voice and pitch recognition, administrative applications, and computer-assisted instruction.

6491 Staff Development and Professional Growth (1-10) Designed in conjunction with an individual school district or educational agency and related to problems of education confronting that specific district or agency.

## 6998 Thesis Research (1-10)

Prerequisite: Consent of instructor
7050 The Research Process I: Framing Research Questions within the Education Literature (3) Same as Ed Adm 7050. Prerequisite: Admission to the Ed.D. or Ph.D. in Education Programs. An overview of the essential elements of research proposals and familiarization with the techniques and tools used to identify important research questions within the education literature. Emphasis is placed on exploring the research literature and both framing and justifying research questions within that literature.

## 7415 Emphasis Area Seminar(s) (3)

Prerequisite: Admission to the doctoral program. All doctoral students are required to take at least two emphasis area seminars consistent with their programs. Students may take additional emphasis area seminars. Obtain a list of emphasis area seminars from the office of graduate studies in education.

## 7495 Doctoral Research Tools (1-6)

Prerequisites: Ed Rem 6710. Structured individual or small group instructional or supervised investigative experience in and with a specific research skill and/or procedure that will be needed in the production of a doctoral dissertation. May not substitute for any existing graduate courses that cover same research tool skills.

## 7880 Research Internship I (3)

Prerequisite: Nine hours of research methods or statistics and consent of instructor. Supervised experience in the conduct of research studies or scholarly inquiry.

7881 Research Internship II (3)
Prerequisite: Educ 7880 and consent of instructor.
Supervised experience in the conduct of research studies or scholarly inquiry.

## 7882 Research Internship III (3)

Prerequisite: Educ 7881 and consent of instructor.
Supervised experience in the conduct of research studies or scholarly inquiry.

## 7950 The Research Process II: Developing and Refining Education Research Proposals (3)

Prerequisites: Completion of 6 hours of ED REM courses numbered 7771 or higher. An in depth examination of the essential elements of a research proposal. Particular emphasis is placed on examining the validity and reliability or the trustworthiness of the design of the proposed research. Tools for identifying research strengths and weaknesses are applied to proposals. Presentation of a written proposal and oral defense of that proposal are required.

7999 Dissertation Research (1-12)
Prerequisite: Admission to the doctoral program. Credit awarded only upon successful defense of the dissertation.

## Division of Counseling and Family Therapy

## Faculty

Mark Pope, Professor*, Chair
Ed.D., University of San Francisco
R. Rocco Cottone, Professor

Ph.D., Saint Louis University
Patricia A. Jakubowski, Professor Emerita*
Ed.D., University of Illinois
Therese S. Cristiani, Associate Professor*
Ed.D., Indiana University
Susan Kashubeck-West, Associate Professor*, Ph.D., Ohio State University
W. Glenn White, Associate Professor Emeritus*

Ph.D., University of Missouri-Columbia
S. Kent Butler, Assistant Professor*

Ph.D., University of Connecticut
Angela D. Coker, Assistant Professor*
Ph.D., Union Institute and University
Matthew E. Lemberger, Assistant Professor*
Ph.D., University of South Carolina
*members of graduate faculty

## General Information

The Division of Counseling and Family Therapy is housed on the fourth floor of Marillac Hall. Information about offerings and related matters may be obtained in the Division office, 469 Marillac Hall. The Division of Counseling and Family Therapy offers course work leading to three degrees: the Ph.D. in Education with an Emphasis in Counseling; the Ed.D. in Counselor Education and Supervision; an M.Ed. in Counseling with an emphasis in community counseling; elementary school counseling; and secondary school counseling. Information on the doctoral degrees is presented in this Bulletin in the general College of Education listing.

The following Division of Counseling and Family Therapy areas have been accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) at the Master's level:

- Community Counseling
- Community Counseling with a Specialization in Career Counseling
- School Counseling

CACREP, a specialized accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation, grants accredited status to graduate-level programs in the professional counseling field.

Students wishing to receive Missouri certification in elementary school counseling, or secondary school counseling, must complete all required courses for the M.Ed. in School Counseling in addition to holding teaching certificates valid in Missouri or taking the equivalent course
work. (Consult your advisor if you have questions on these matters.) The M.Ed. in Community Counseling is appropriate for students planning to practice counseling in non school settings, and graduates may pursue the Missouri state license as a professional counselor (in order to practice independently).

The M.Ed. degree programs have an exit requirement of a comprehensive examination. Students may sit for the exam after completing 36 units of the degree program. There is a service charge for taking the exam. The exam will be given at least twice a year. All degree students should consult with their advisers about this requirement.

## Graduate Studies

## Admission

In addition to meeting the general admission requirements of the Graduate School, applicants to the M.Ed., must complete the divisional application in addition to the application to Graduate School, have three completed references on file, must have an undergraduate GPA of 3.0 , and must take Cns. Ed 6000, Personal and Professional Development in Counseling, in their first semester. Admissions will be conducted twice a year. The deadlines for application are June 1 for the fall semester and October $15^{\text {th }}$ for the spring semester. M.Ed. students, are accepted on a provisional basis pending their completion of application materials, Cns Ed 6000 , and a review by the Counseling Faculty Review Board.

Since it is the objective of the counseling faculty to identify students with low potential for competent practice as early as possible and to initiate the necessary procedures for dealing with such students, the faculty of the counseling program reserves the right to review students at any stage of their coursework. Any grade less than a B in any core counseling course Cns Ed 6000, Personal and Professional Development in Counseling; Cns Ed 6010, Theories of Counseling; Cns Ed 6370, Community Counseling Practium or Cns Ed 6270 School Counseling Practicum; Cns Ed 6380 Community Counseling Field Experience or Cns Ed 6280 School Counseling Field Experience I or Cns Ed 6285, School Counseling Field Experience II will automatically trigger a review process. The Counseling Review Board process, however initiated may result in the termination of the student's degree program or other required or recommended remedies to address deficiencies judged by the Counseling Review Board as related to the skills that are essential to the development of competent and ethical practices as a professional counselor.

Students admitted to the M.Ed. degree programs in counseling as "restricted graduate students" (see the "graduate study" rules in this Bulletin) must attain a 3.0 GPA for the first 12 hours of graduate course work at UM-St. Louis with no grade less than a B. Restricted students must include the following courses in the first 12 hours of coursework: Cns Ed 6000, Personal and Professional

Development in Counseling; Cns Ed 6010, Theories of Counseling; Cns Ed 6370 Community Counseling Practicum or Cns Ed 6270 School Counseling Practicum; a student earning any grade less than a $B$ in any of these courses, but still maintaining a 3.0 GPA , will be allowed to repeat the course one time and must earn a grade of $B$ or better to be admitted.

## Master of Education: Emphasis in Elementary School Counseling

The courses listed below meet the course work requirements for the M.Ed. degree, state certification, and licensing as a professional counselor:

## Counselor Education (Cns Ed)

6000, Personal and Professional Development in Counseling 6010, Theories of Counseling
6020, Ethical and Professional Issues in Individual and Relationship Counseling
6030, Foundations for Multicultural Counseling
6040, Group Procedures in Counseling
6050, Individual Inventory
6200, Foundations of School Guidance
6400, Career Information and Development
6270, School Counseling Practicum
6280, School Counseling Field Experience I
6285, School Counseling Field Experience II
One elective course
Psychological Foundations and Human Development (Ed Psy)
6210, Lifespan: Individual \& Family Development
6532, Psycho-Educational Differences in Childhood
Educational Research and Evaluation Methods (Ed Rem)
6709, Educational and Psychological Measurement
6710, Educational Research Methods and Design
Individuals seeking certification as a professional school counselor in the State of Missouri who are non-teacher certificated must take the following courses in addition to their counseling degree: Ed Psych 6111, Spc Ed 6412, Spc Ed 6320, and Elem Ed 6410 or Sec Ed 6415. Students seeking K-12 certification must take both Elem. Ed. 6410 and Sec Ed 6415.

## Master of Education: Emphasis in Secondary School Counseling

The courses listed below meet the course work requirements for the M.Ed. degree, state certification, and licensing as a professional counselor:

## Counselor Education (Cns Ed)

6000, Personal and Professional Development in Counseling
6010, Theories of Counseling
6020, Ethical and Professional Issues in
Individual and Relationship Counseling

6030, Foundations for Multicultural Counseling
6040, Group Procedures in Counseling
6050, Individual Inventor
6200, Foundations of School Guidance
6270, School Counseling Practicum
6280, School Counseling Field Experience I
6285, School Counseling Field Experience II
6400, Career Information and Development

## Psychological Foundations and Human Development (Ed Psy) <br> 6210, Lifespan: Individual \& Family Development <br> 6532, Psychoeducational Differences in Childhood

Educational Research and Evaluation Methods (Ed Rem)
6709, Educational and Psychological Measurement
6710, Educational Research Methods and Design
Electives to total 48 hours.
Individuals seeking certification as a professional schcol counselor in the State of Missouri who are non-teache: certificated must take the following courses in additio: to their counseling degree: Ed Psych 6111, Spc Ed 6412. Spc Ed 6320, and Elem Ed 6410 or Sec Ed 6415. Student; seeking K-12 certification must take both Elem. Ed. 6410 and Sec Ed 6415.

## Master of Education: Emphasis in Community Counseling

The community counseling emphasis allows flexibility for developing programs appropriate to particular nonschzol settings. Students must have their adviser's approval eefore taking other than required courses.

## Core Curriculum (Cas Ed)

The courses listed below meet the course work requirements for the M. Ed. degree and the license to practice as a professional counselor:
6000, Personal and Professional Development in Counseling
6010, Theories of Counseling
6020, Ethical and Professional Issues in Individual ard Relationship Counseling
6030, Foundations for Multicultural Counseling
6040, Group Procedures in Counseling
6050, Individual Inventory
6300, Foundation of Community Counseling
6370, Community Counseling Practicum
6380, Community Counseling Field Experience (6)
6400, Career Information and Development

## Psychological Foundations and Human Development (Ed

 Psy)The following course is required:
6113, Psychopathology and Diagnosis
Educational Research and Evaluation Methods (Lid Rem)
The following course is required:
6710, Educational Research Methods and Design

Area of Specialization (9 hours)
Course work in the area of specialization is to be selected in consultation with the adviser and may include career counseling, mental health counseling, rehabilitation counseling, child and adolescent counseling, couples and 'family counseling, and others.

## Career Outlook

## Elementary and Secondary School Counselors

 The demand for school counselors throughout the state is quite high. There is a shortage of school counseling personnel at all levels. Additionally, many teachers who do not intend to leave the classroom pursue this program to be better able to meet the needs of their students. Some graduates of the program have left the field of education and have obtained positions such as those cited under Community Counseling.Note: It should be noted that in Missouri, persons who engage in "professional counseling" in many of these settings are required by law to be licensed as professional counselors.

## Community Counselors

Graduates have been employed in a wide variety of settings: as counselors in community colleges, universities, employment agencies, vocational rehabilitation agencies, probation and parole work, juvenile detention, alcoholism and drug abuse clinics, career planning and placement centers, community mental health agencies, family and children services, and various federally funded public service projects. Additionally, graduates are employed in career development, and business and industry positions, especially in training and personnel areas. Others have moved into roles calling for research and evaluation skills.

## Course Descriptions

Prerequisites may be waived by consent of the department. For information about certification and licensure, an adviser should be consulted. Course descriptions in this section are Counseling (Cns Ed) courses.

## Counseling (Cns Ed)

## 1400 Making a Career Choice (1)

Introduces students to career development theories (Holland, Super, Bolles, etc.) and the career decision-making process. Students receive an overview of career development theory and learn how these theories pertain to the formulation of career plans. Self-assessment and decision-making techniques learned in this class can be revisited throughout the life span. The seminar format allows for small group discussion of career-related issues and personal application of career development principles.

## 3000 Introduction to the Counseling Profession (3)

Prerequisite: Junior or senior level standing. This survey course will provide undergraduates and noncounselors with a broad overview of the counseling profession. Topics include
a history of the profession, foundations of counseling, ethical, and legal considerations and the role of the counselor in various settings.

## 3210 Counseling Gifted Students (3)

Prerequisites: Spe Ed 3313, Ed Psych 3312, or equivalent. This course emphasizes the social and emotional development of gifted and talented individuals. Subject areas will include current research, factors affecting the development of the gifted, and resources and strategies utilized in counseling these students and their parents.

3220 Counseling Individuals with Special Needs (3) Prerequisite: Spc Ed 3313, or equivalent. A course emphasizing counseling skills for individuals who plan to work with the handicapped. Emphasis is placed on using counseling strategies with school-age handicapped children.

## 3710 Counseling the Chemically Dependent (3)

This course is an introduction to the problems resulting from the abuse of alcohol and other chemicals, with an emphasis on the impact of chemical dependence on the individual, the family, the employer, and the community. The special problems resulting from chemical dependence as it affects various populations, e.g., women, individuals with disabilities, and the elderly, will be analyzed and linked to appropriate counseling strategies.

## 3720 Youth and Chemical Dependence (3)

 Prerequisite: Junior standing. This course provides information about adolescent and preadolescent chemical dependency and its relationship to numerous other developmental and societal factors that place the adolescent "at risk" for the development of substance abuse problems. Skills in the identification, intervention, and referral of chemically-dependent adolescents are emphasized, along with preventive measures and family and school issues.
## 6000 Personal and Professional Development in Counseling (3)

Prerequisite: Provisional acceptance to the Counseling Program or consent of instructor. This course provides an in-depth view of the professional counseling field. Attention is focused on the development of the helping relationship, including a review of research on factors which influence helping processes and rapport building, a development of skills used in the counseling process, and increased awareness of how students' values, beliefs, and behaviors are related to counselor effectiveness.

## 6010 Theories of Counseling (3)

Prerequisite: Cns Ed 6000. This course will explore the philosophical foundations of counseling theory. The major constructs of contemporary counseling approaches will be discussed, and the practical applications of these theories will be analyzed.

## 6020 Ethical and Professional Issues in Individual and Relationship Counseling (3)

Prerequisite: Cns Ed 6000 . Ethical, legal, and professional issues related to counseling are addressed. Ethical dilemmas in the provision of counseling services to individuals, couples, families, and groups are defined. Specific ethical codes of professional organizations are examined.

6030 Foundations for Multicultural Counseling (3) Prerequisite: Cns Ed 6000 with a grade of $B$ or better and Cns Ed 6010. . This course will focus on: (1) reviewing knowledge and research in the area of multicultural counseling, (2) developing and/or enhancing skills useful in counseling with individuals from minority populations, and (3) developing levels of personal awareness about stereotypes, and learning how feelings and attitudes about these may impact counseling with individuals from minority populations.

## 6040 Group Procedures in Counseling (3)

Prerequisites: Cns Ed 6000 with a grade of B or better and Cns Ed 6010 and Cns Ed 6270 or 6370 . This course examines the process dynamics of groups including group development, leadership, norms and therapeutic factors. Group counseling theories and approaches used for other group work including skills, personal growth, support, vocational, and developmental guidance groups are included. Knowledge and skills of how to facilitate therapeutic groups are included. Students will be required to be participant-observers or facilitators of a group outside of class time.

## 6050 Individual Inventory (3)

Prerequisites: Ed Rem 6709. Uses of educational and psychological appraisal techniques in counseling. Develops counselors' abilities in assisting clients toward self-awareness through the use of test and nontest data. Ethical practices in the use of tests and the maintenance of personnel records are stressed.

## 6200 Foundations of School Guidance (3)

Prerequisites: Cns Ed 6000 with a grade of $B$ or better. The purpose of this course is to give students a foundation for understanding the history, philosophy, and development of school guidance programs. The role functions of the school counselor within a developmental, comprehensive program are examined, along with communication skills necessary for consultation with students, parents, school support staff, and resource people in the community nonacademic needs.

## 6270 School Counseling Practicum (3)

Prerequisite: Cns Ed 6000 and 6010 (both courses with a grade of $B$ or better) or consent of the instructor. Supervised practice in counseling with children and adolescents and the opportunity for students to learn to facilitate personal change and problem solutions using a defined systematic framework, theoretical orientation, or research base.

6280 School Counseling Field Experience 1 (3) Prerequisite: Cns Ed 6270 with a grade of $B$ or better and consent of instructor. A 300 -hour closely supervised field experience under the direction of a graduate faculty me mber. Designed to move the student to an appropriate level of competence and evidence of growth in the professional school counselor role. Students will receive 1.5 hours of group and 1 hour of individual supervision weekly by field experience site supervisor.

## 6285 School Counseling Field Experience II (3)

Prerequisites: Cns Ed 6280 with a grade of $B$ or better and consent of instructor. A 300 -hour closely supervised feld experience under the direction of a graduate faculty me mber. The course will build on and extend the School Counseling Field Experience I. The student will acquire counseling competencies and ethical practice in keeping with the Missouri state guidelines for school counselors. Students will receive 1.5 hours of group and 1 hour of individual supervision weekly by field experience site supervisor

6300 Foundation of Community Counseling (3) Prerequisites: Cns Ed 6000 with a grade of $B$ or better and Cns Ed 6010. A study of counseling profession appli:able to a variety of human service settings. Introduction to the basic philosophical, historical, and psychological foundations of community and agency counseling. Designed to acquaint the student with the foundations and roles of the counselor in various community and agency settings.

## 6370 Community Counseling Practicum (1-6)

Prerequisite: Cns Ed 6000 and 6010 and consent of instructor. One hundred clock hours of supervised prictice in counseling to provide the opportunity for students to pragmatically integrate and process materials, theorie:, techniques, and methodologies as they are applied in the counseling profession.

6380 Community Counseling Field Experience (1-i) Prerequisite: Cns Ed 6370 and consent of instructor. 4 100hour field experience for each semester-credit-hour o: enrollment. Students will be closely supervised unde: the direction of a graduate faculty member. Students mu:t demonstrate counseling competencies and skillful ethical practice. Students will receive 1.5 hours of group supervision weekly by a graduate faculty member and 1 hour of individual supervision weekly by field experience site supervisor during terms of enrollment.

6400 Career Information and Development (3)
Prerequisites: Cns Ed 6000 with a grade of $B$ or better and graduate standing. Emphasis is on the nature of the changing labor market and the impact on personal, social, economic, career and educational aspects of individuals and society. Use of occupational and educational information sys:ems and resources to assist with career decisions are examinet. The needs of culturally diverse populations are discussed Use of career and labor market information and programs st.ch as computer technology to access up-to-date career and labor
market information is explored. Techniques and methods of career counseling are discussed. Various theories of career development and career choice will be examined.

6404 Seminars (1-10)
Prerequisite: Graduate Standing

## 6410 Advanced Career Development (3)

Prerequisites: Cns Ed 6400 or consent of instructor. Emphasis is on current theories of career development, career choice, and techniques and methods of career counseling. Issues concerning education and training, work, leisure, the family, life roles, and culturally diverse populations are studied. The role of career theory in planning, development, and delivery of a career development program is explored.

## 6420 Career Assessment in Counseling and

 Rehabilitation (3)Prerequisites: Cns Ed 6050 and 6400 or consent of instructor. This course provides an in-depth and specialized look at the educational and psychological assessment techniques used in career counseling, especially the assessment of career interests, work values, work environment, work skills, work samples, career development stages, career maturity, career decision making, and career beliefs. Issues of using computers in the delivery of career development services will be discussed.

## 6497 Problems (1-10)

6500 Introduction to Systems Theory for Marriage and Family Counseling (3)
Prerequisite: Cns Ed 6010. This course is an introduction to general systems theory and application to marriage and family counseling. Students learn the theoretical basis for intervention and counseling strategies in the context of an ecology of human development. Developmental issues at individual, sibling, marital, family, and community levels and the ways in which various social systems interact with and mutually influence one another are presented.

## 6510 Couple Counseling and Enrichment (3)

Prerequisite: Cns Ed 6500 or consent of instructor. This course focuses on the theory and technique of marital or couples counseling and enrichment. Models and methods for prevention and treatment of relationship dysfunction are explored. Relationship developmental issues are addressed. Students are challenged to develop the critical skills necessary to be effective marriage counselors and marital life educators.

## 6520 Family Counseling (3)

Prerequisites: Cns Ed 6500 and Cns Ed 6260 or 6370 , or consent of instructor. This course offers an in-depth analysis of strategic, structural, experiential, communications, behavioral, and psychodynamic approaches to systems change and family counseling. The range of techniques and applied practices evolving from each orientation are explored
as are normal and dysfunctional family processes. Various counseling modalities, such as individual, concurrent, collaborative, conjoint, group, intergenerational, and networking are also considered.

## 6530 Assessment and Case Management in Couple and

 Family Counseling (3)Prerequisites: Cns Ed 6500,6510 , or 6520 . Techniques measures for assessing couple, marriage and family functioning are reviewed. The case management process is outlined, including stages of case development. Ethical issues related to case recording keeping are reviewed

## 6540 Preventive Interventions with Couples and Families

 (3)Prerequisite: Cns Ed 6500, 6510, or 6520. Interventions for preventing the development of mental health problems in a couple or family context are surveyed. Premarital counseling, couple and marriage enrichment training, family life education, and relationship enhancement training will be reviewed. Outreach approaches will also be presented.

## 6550 Trends, Family Counseling (3)

Prerequisites: Cns Ed 6500, 6520. The evolution of family types and structures in American cultures will be reviewed. Cultural influence on diverse system structures will be surveyed. Problems that impede family functioning and development, such as socioeconomic disadvantage, discrimination, addiction, unemployment, family blending, and abuse will be addressed, with special emphasis on the effects on family development and intervention strategies. Research data on normative and non-normative family functioning will be presented.

## 6600 Theories and Techniques of Counseling Children and Adolescents (3)

Prerequisite: Cns Ed 6000,6010 (with a grade of $B$ or better in both courses) or consent of the instructor. Focus is on counseling theories and their applicability to the developmental special concerns of children and adolescents including child-at-risk issues such as: abuse, suicide, divorce, and death and dying. Individual, group, and family intervention techniques and consultation skills will be emphasized, as well as legal and ethical considerations for counselors. Strategies presented can be utilized in a variety of settings. Multicultural considerations are also addressed.

## 6610 Counseling Parents of Exceptional Children (3)

 The development of counseling skills to enable human service professionals to interact productively with families who have handicapped children.
## 6700 Introduction to Addictive Behaviors and Addiction Counseling (3)

Prerequisites: Cns Ed 6010 consent of instructor. Exploration of the theoretical foundations of contemporary approaches to such addictive behaviors as alcohol and drug abuse, smoking, compulsive gambling, and sexual addiction. The nature, etiology, prevention, and treatment of addictions
are discussed and analyzed from a variety of theoretical perspectives. The applications of these specific theoretical models to various treatment settings are examined. Multicultural considerations are also addressed.

## 6782 Advanced Strategies in Addictions Counseling (3)

 Prerequisite: Cns Ed 6700, or consent of instructor. Study of advanced, empirically supported counseling approaches and techniques for the treatment of addictive behaviors. An emphasis is placed on screening and assessment procedures and on matching interventions to individual client and community needs.
## 6784 Counseling the Dual Diagnosed Substance Abuser

 (3)Prerequisites: Cns Ed 6700 and Cns Ed 6010. This course introduces the student to the special needs, concerns, and problems encountered when counseling clients who are both mentally ill and chemically dependent. Subject areas include an overview of counseling methodologies, diagnosis, and psycho-pharmacology.

## 6800 Rehabilitation Counseling (3)

Prerequisite: Cns Ed 6000; 6010; 6270; or 6370. This course addresses: a) the history of vocational rehabilitation; b) specialty issues in rehabilitation counseling; c) medical aspects of disability; d) the rehabilitation process; e) theories of rehabilitation; f) the assessment process of individuals with disabilities; $g$ ) the job placement and work adjustment process of individuals with disabilities; $h$ ) ethical issues in rehabilitation counseling.

## 6810 Integrating Religion and Spirituality in

 Counseling (3)This course is for counselors and students wishing to develop the methods to integrate religion and spirituality in counseling and learn about counseling strategies for persons of various religious backgrounds, the link between health and religion, and ethics involved in the assessment and integration of religion and spirituality in practice.

## 7000 Advanced Theories and Foundations of Counseling Psychology (3)

Prerequisites: Doctoral standing or instructor consent. A seminar on the discipline of counseling psychology, including its history, development, and current status. An important focus will be contemporary and emergent theories in the field.

## 7010 Advanced Multicultural Counseling (3)

Prerequisite: Cns Ed 6030 and doctoral standing or consent of instructor. This advanced course addresses theories and research in multicultural counseling

## 7020 Seminar in Counseling Research (3)

Prerequisite: Ed Rem 6710, doctoral standing or consent of instructor. The purpose of this course is to review and analyze current counseling research literature. Ethical issues will be addressed.

7030 Counselor Education and Supervision (3) An introduction to clinical supervision in counseling. Theories, models, and research in supervision will be presented. Students will supervise master's level students in practicum and internship courses in counseling.

7040 Counseling Women Toward Empowerment (3) Prerequisite: Cns Ed 6000, 6010 and Cns Ed 6270 or 6370 or consent of instructor. An introduction to Women's is sues in counseling. Relational theory, healthy female development, and an overview of clinical issues most common to females will be presented.

## 7050 Advanced Assessment in Counseling (3)

Prerequisite: Cns Ed 6050 and doctoral standing or consent of the instructor. This course develops advanced skills in the assessment process which includes the administration, scoring, and interpretation of psychological tests and environmental inventories, clinical interviewing, observation, and the gathering of historical and collabcrative information; and the integration of this information int) patterns to predict human functioning.

## 7070 Advanced Clinical Issues in Counseling (3)

Prerequisite: Doctoral standing or consent of instructor. This course will address advanced clinical issues with serio asly disturbed clients.

7600 Advocacy, Consulting, and Community Interrention in Counseling Psychology (3)
Prerequisites: Doctoral standing or instructor consent. This course provides students with knowledge and experience in the application of psychological theories and methods to community concerns and problems.

## 7770 Doctoral Practicum (3)

Prerequisites: Doctoral standing. 100 hours of on-campus doctoral-level supervised counseling practice. Studens will counsel clients and will be introduced to teaching and supervising beginning counseling trainees in a clinica. context. As a prerequisite to the doctoral internship, sudents will be expected to demonstrate competence in skills required of counselor educators and clinical superviscrs. Students will receive 1.5 hours of group and 1 hour 0 : individual supervision by a graduate faculty member.

## 7780 Doctoral Internship (1-6)

Prerequisites: Cns Ed 7770; Ed Rem 7804 and Ed Rem 7781. A 100 -hour field experience for each semester-credit hour of enrollment under the direction of a graduate faculty riember. Students provide counseling services to clients at field sites, teach and supervise beginning counseling trainees, and conduct clinical research projects. Students are supervised by a graduate faculty member in two hours per week of group supervision, and they receive one hour per week of individual supervision by the field site supervisor.

## 7802 Theory and Practice of Clinical Hypnosis in Counseling (3)

Prerequisite: Cns Ed 6270 or 6370 or consent of instructor. Clinical hypnosis is conceptualized and approached as a system of skilled communication. Historical perspectives, major models (Traditional, Standardized, and Utilization [Ericksonian), myths, and misconceptions will be explored. Students will develop skills in direct and indirect trance induction procedures, and case conceptualization with individuals and multiple participants. Legal and ethical considerations will be presented.

7806 Practicum in Group Counseling (3)
Prerequisite: Cns Ed 7804 and doctoral standing or consent of instructor. Students will lead or co-lead a supervised counseling group in the community.

## Division of Educational Leadership and Policy Studies

## Faculty

E. Paulette Isaac-Savage, Associate Professor*,

Chairperson
Ed.D., University of Georgia
Lynn Beckwith, Jr., E. Desmond Lee Professor in Urban Education
Ed.D., St. Louis University
Judith A. Cochran, E. Desmond Lee Professor in Tutorial Education*
Ph.D., Arizona State University
Kent Farnsworth, Mary Ann Lee Endowed Professor of Community College Leadership Community College
Professor President in Residence*
Ph.D., University of Iowa
Lowe S. (Sandy) MacLean, Vice Chancellor Emeritus*
Ed.D., Indiana University-Bloomington
Lloyd I. Richardson Jr., Professor*
Ph.D., George Peabody College
Charles D. Schmitz, Professor*, Dean
Ph.D., University of Missouri-Columbia
Joy E. Whitener, Dean Emeritus, Professor Emeritus*
Ed.D., Washington University
Patricia Boyer, Associate Professor*
Ph.D., University of Missouri-Columbia
Kathleen Sullivan Brown, Associate Professor
Ph.D., Washington University
Charles J. Fazzaro, Associate Professor*
Ed.D., West Virginia University
John A. Henschke, Associate Professor*
Continuing Education Specialist, University Outreach and
Extension-East Central Region
Ed.D., Boston University
Carol A. Murphy, Associate Professor*
Ed.D., Texas A\&M University
Thomas R. Schnell, Associate Professor*
Ph.D., Southern Illinois University, Carbondale
Shawn Woodhouse, Associate Professor*
Ph.D., University of Missouri-Columbia
Mary Cooper, Assistant Professor of Adult Education* Ph.D., University of Minnesota
Wendell L. Smith, Assistant Professor* Special Assistant to the Chancellor and Dean Emeritus
Ph.D., Ohio State University
Matthew D. Davis, Assistant Professor*
Ph.D., University of Texas, Austin
James E. Murray, Assistant Professor*
Ph.D., University of Missouri-St. Louis
Connie Koch, Affiliate Professor*
Ed.D., Southern Illinois University, Edwardsville
Ken Owen, Affiliate Associate Professor*
Ed.D., Saint Louis University
Margaret R. Dolan, Affiliate Assistant Professor*
Ph.D., St. Louis University
John Ingram Jr., Affiliate Assistant Professor
Ph.D., University of Wisconsin-Madison
*members of Graduate Faculty

## General Information

The Division of Educational Leadership and Policy Studies (ELAPS) faculty is housed on the second floor of Marillac Hall. Questions about the division and its offerings me.y be directed to the division office, 269 Marillac Hall (314)5165944.

## Graduate Studies

The ELAPS Division offers graduate programs in:

- K-12 Administration: including Missouri State School Administrator Certifications
- Higher Education: including Community College
- Adult and Community Education


## K-12 School Administration:

Includes academic degree programs at the master's (M.Ed.), specialist (Ed.S.), and doctoral (Ed.D. and Ph.D.) levels. These programs are consistent with the academic requirements for Missouri Sate certification for elementary, middle, and secondary school administration as well $\varepsilon .5$ school superintendent and special education administration. The programs are accredited by the National Council for Accreditation of Teacher Education (NCATE) and th: Missouri Department of Elementary and Secondary Education (DESE).

The Programs in K-12 school administration are not merely a list of courses. The M.Ed. and Ed.S. degree programs are organized into a continuous two-phase academic/practice experience. In the first phase the students earn the M.Ed. degree and meet the academic requirements for the in itial Missouri State elementary and secondary school administrator's certificates. The second phase leads $\%$ o the Ed.S., concentrating more on the relationship of acacemics to practical schooling experiences and solution to schorl-based problems. With proper selection of courses in the Ect.S. phase, students can meet the academic requirements for the Missouri school superintendent's certificate.

Education Specialist (Ed.S.) in Education Administration The Education Specialist Degree (Ed.S.) in Education Administration is a logical extension of the UM-St. 1.ouis M.Ed. in Education Administration and is designed to prepare administrators to serve in school settings from Kindergarten to grade twelve. The Ed.S. in Education Administration requires at least sixty ( 60 ) graduate credit hours of a planned program and may include no more than thirty (30) credit hours of an approved NCATE accredited master's degree. The Ed.S. is a terminal academic cegree
within the College of Education (COE); therefore, one-half ( 15 credit hours) must be completed within the COE after being admitted to the program. As constituted, the minimum course requirements for the Ed.S. in Education
Administration collaterally meets the academic standards for both Elementary and Secondary advanced school administrator certification in Missouri. To be recommended for the Missouri School Superintendent certificate requires an additional six (6) credit hours.

## Admission Standards

To be admitted to the Ed.S. in Education Administration program students must meet the following criteria:

1. Be admitted without qualification to the UM-St. Louis Graduate School;
2. Have scores on the Verbal, Quantitative, and Analytical Writing sections of the Graduate Record Examination that is at least the mean for the applicant's major field, gender, and ethnicity,
3. Have a graduate grade point average of at least 3.25 on a scale of 4.00 .
4. Have on file at least four (4) recommendations including the following: one (1) from an educator presently occupying a position equal or similar to that which the applicant aspires upon completing the Ed.S., two (2) from university professors with direct knowledge of the applicant's graduate degree work, and one (1) from someone other than a member of the applicant's family who can comment on the applicant's character.
5. Students already possessing a master's degree from an NCATE accredited institution may transfer those credit hour into the Ed.S. degree program; however, at least thirty (30) credit hours must be completed after acceptance into the program; and
6. Pass an oral interview conducted by the ELAPS K12 faculty.

## Degree Program

There are three (3) phases to this degree program. Phase 1.00 must be completed by students not possessing a UM-St. Louis M.Ed. in Education Administration and those wanting to transfer appropriate grade courses from other NCATE institutions. Phase 2.00 applies to those students meeting all of the requirements in Phase 1.00 . There are two (2) sections to Phase 2.00-Section 2.10 Technical Aspects of Education Administration and Section 2.20 Human Aspects of Education Administration. Courses in these two sections may be taken simultaneously. There are two (2) sections to Phase 3.00- Section 3.10 Writing Exit Requirements and Section 3.20 Examination Exit Requirements. Both sections must be completed no sooner than one (1) semester before completing all degree requirements.

Phase 1.00<br>1.00 Elementary and Secondary School Education Emphases<br>\subsection*{1.10 Contexts Core}<br>Ed Adm 6201, Knowledge Contexts of Education Administration and Policy (3)<br>Ed Adm 6202, Social Contexts of Education (3)<br>Ed Adm 6203, Political Contexts of Education (3)<br>Ed Adm 6204, Economic Contexts of Education (3)<br>Ed Adm 6205, Legal Contexts of Education (3)<br>Required Semester Hours Section 1.10 15<br>1.20 Research/Change Core (6-9 semester hours)<br>*Ed Rem 6707, Classroom Measurement and Evaluation (3)<br>**Ed Adm 6301, Education Administration and Policy Research (3)<br>Ed Adm 6503, Organizational Change in Education (3)<br>Required Semester Hours Section 1.20<br>1.30 School Specialization Core<br>1.31 Elementary School Administration<br>Ed Adm 6302, Elementary School Administration (3) Ed Adm 6401, School Staff Development and Supervision (3)<br>Ele Ed 6411, Curricular Issues in Elementary Schools *** Ed Adm 6900, Internship (3)<br>Required Semester Hours Section 1.31 12<br>or<br>1.32 Secondary School Administration<br>Ed Adm 6304, Secondary School Administration (3)<br>Ed Adm 6401, School Staff Development and Supervision (3)<br>Sec Ed 6415, Secondary School Curriculum<br>*** Ed Adm 6900, Internship (3)<br>Required Semester Hours Section 1.32<br>TOTAL Phase I................................................ 33-36<br>* Required if student had no equivalent course at the undergraduate level<br>** Must be taken during the first semester of Phase 2.00 courses<br>*** This course must be taken within the last (10) ten semester hours of completion of Phase 1.00

Phase 2.00
Section 2.10
Technical Aspects of Education Administration (12 Semester hours required)

At least 12 graduate semester hours are required from the following list of recommended courses. Other courses must be approved by the student's advisor and ELAPS division chairperson.

Ed Adm 6303, Middle School Administration (3)
Ed Adm 6305, School District Administration (3)
Ed Adm 6501, Principles of Public School Finance in Missouri (3)
Ed Adm 6502, School Buildings and Sites (3)
Ed Adm 6601, Administration of Adult and Community Education (3)
Ed Adm 6603, Financing of Community Education (3)
Hir Ed 6473, Curriculum in Higher Education (3)
Hir Ed 6476, Organization and Administration of Higher Education (3)
Ele Ed 6411, Curricular Issues in the Elementary School (3)
Ele Ed 4316, Middle Level Curriculum and Instruction (3)
Sec Ed 6415, Secondary School Curriculum (3)
Sec Ed 6420, Improvement of Secondary School Teaching (3)

Sec Ed 4315, The Middle Level School (3)
Ed Adm 6306, Special Education Administration (3)
Ed Tec 5340, Selection and Utilization of Educational Media
(3)

Ed Tec 6433, Educational Technology Systems Management (3)

Ed Tec 6449, Using Technology in Administrative Processes (3)

Ed Rem 6708, Education and Psychological Measurement
Ed Rem 6709, Individual Assessment of Cognitive Abilities (3)

## Section 2.20

Human Aspects of Education Administration
( 12 semester hours required)
At least 12 graduate semester hours are required from the following list of recommended courses. Other courses must be approved by the student's advisor and ELAPS division chairperson.

Ed Adm 6402, School Personnel Administration (3)
Ed Adm 6403, Problems in School Public Relations (3)
Ed Adm 6404, Collective Negotiations in Education Organizations (3)
Ed Adm 6602, Programming in Adult and Community Education (3)
Hir Ed 6474, The College Student (3)
Hir Ed 6477, History and Philosophy of American Higher
Education (3)
Ed Fnd 6421, Philosophy of Education (3)
Ed Fnd 6422, Analysis of Education Issues (3)
Ed Fnd 6435, History of Western Education (3)
Ele Ed 4317, The Middle Level Child (3)
Ed Psy 6225, Psychology of Adolescence (3)
Cns Ed 6200, Foundations of School Guidance (3)
Pol Sci 6462, Political Theory and Public Policy (3)
Pol Sci 6470, Proseminar in Urban Politics (3)
Cns Ed 6200, Foundations of School Guidance (3)
Ed Adm 6900, Internship (School District Level) (3)
Ed Adm 6900, Internship (Special Education Setting) (3)
TOTAL Education Specialist Degree in Education Administration ..... 60

Phase 3.00
Writing and Examination Exit Requirements

## Section 3.10-Writing Requirements

At least four (4) months before the completion of all curse work for the degree, each student must present to the ELAPS Division K-12 Regular faculty Ed.S. Writing Committee a scholarly paper on a topic approved by the student's academic advisor. The paper submitted may be original in that it has been written especially for this requirement or it may be a more comprehensive version of a paper wrinen for a class taken after being admitted to the Ed.S. programı. The paper must conform to the writing standards found in he booklet ELAPS K-12 Writing Requirements-Form and
Style. The topic and substance of the paper will be central to the oral comprehensive examination (see below).

## Section 3.20-Examination Requirements

There is both a written and oral portion to this examiration requirement.

## Written:

At least three (3) months before completion of all course work for the degree, each student must complete a written examination of no less than three (3) hours on two (2 topics agreed upon by the student's academic advisor and the student. The examinations will be read and evaluatec on scholarly substance of content and quality of writing is either PASS or FAIL by at least two (2) Regular members of the ELAPS K-12 faculty. Students receiving a FAIL gra le may retake the examination no more than twice. Students failing the examination a third time will be dropped from the program.

## Oral:

Within two (2) weeks after receiving a PASS grade on the written portion of this examination, each student must stand to a one (1) hour oral examination by at least three (3) members of the ELAPS K-12 administration faculty 'at least one must be Regular.) The examination must include the student's scholarly paper and may include any other aspect of the student's program deemed important to the examiners. The grade for the oral portion will be either PASS or FAIL. Students receiving a FAIL grade may retake the oral portion of the examination no more than twice. Students fail ng the oral examination a third time will be dropped from the program.

## Master of Education (M.Ed.) and Initial Missouri School Administration Certification:

The program of study for the M.Ed. in Education Administration is thirty-three (33) graduate credit hcurs. All courses in the program are required and must be taken in a particular sequence. The program meets the academc
requirements for either the Missouri elementary or secondary school administrator certificate.

## Degree Requirements

### 1.00 Contexts Core ( 15 semester hours)

Ed Adm 6201, Knowledge Contexts of Education Administration and Policy
Ed Adm 6202, Social Contexts of Education
Ed Adm 6203, Political Contexts of Education
Ed Adm 6204, Economic Contexts of Education
Ed Adm 6205, Legal Contexts of Education

### 1.20 Research/Change Core (6-9 semester hours)

*Ed Rem 6707, Classroom Measurement and Evaluation
**Ed Adm 6301, Education Administration Policy Research
Ed Adm 6503, Organizational Change in Education
1.30 School Specialization Core ( 12 semester hours)
1.31 Elementary School Administration

Ed Adm 6302, Elementary School Administration
Ed Adm 6401, School Staff Development and Supervision
Ele Ed 6411, Curricular Issues in Elementary Schools *** Ed Adm 6900, Internship

### 1.32 Secondary School Administration

Ed Adm 6304, Secondary School Administration
Ed Adm 6401, School Staff Development and Supervision
Sec Ed 6415, Secondary School Curriculum
***Ed Adm 6900, Internship

* Required if student had no equivalent course at the undergraduate level.
** Exit course--must be taken during last semester of M.Ed. program.
*** Must be taken within the last 10 semester hours before completion of M.Ed. program.
Master of Education: Educational Administration with Emphasis in Community Education
This is a 32-credit hour program for students interested in community education.


## Degree Requirements

| 2.10 | Ed Fnd 6421, Philosophy of Education |
| :--- | :--- |
|  | Ed Fnd 6435, History of Western Education |
|  | or |
|  | Ed Fnd 4330, History of American Education |
|  | Ed Fnd 6422, Social Contexts of Education |
|  | Ed Adm 6203, Political Contexts of Education |
|  | Total Required Sem. Hrs. Section $2.10=12$ |

Ed Rem 5730, Educational Statistics
Total Required Sem. Hrs. Section 2.20=6

## Community Education

Ed Rem 6601, Administration of Community and Adult Education
Ed Adm 6602, Programming in Community and Adult Education
Ed Adm 6900, Internship: Community Education Total Required Sem. Hrs. Section $2.30=9$

## School Specialization**

2.41 Elementary School Administration Ed Adm 6302, Elementary School Administration Ele Ed 6411, Curricular Issues in the Elementary School
Total Required Sem. Hrs. Section $2.41=6$

### 2.42

## Secondary School Administration

Ed Adm 6304, Secondary School Administration Sec Ed 6415, The Secondary School Curriculum Total Required Sem. Hrs. Section $2.42=6$

## TOTAL Master of Education-Community Educ $=\mathbf{3 3}$

*Exit Requirement--Taken within the last 9 semester hours of the M.Ed. program.
**Students take either section 2.41 or section 2.42 , not both sections.

## Master of Education in Adult \& Higher Education

The M.Ed. in Adult \& Higher Education is intended for 1) faculty and other educators who want to improve their adult teaching skills; 2) persons who occupy and seek to advance into administrative or management positions in a variety of educational settings; and 3 ) others who work with adults in a variety of agencies. The degree program includes courses in foundations, curriculum and teaching (including distance learning), organization and administration, research, and electives so that students can create an emphasis area to fit their career goals. To help address student interests, special topic seminars are offered from time to time. An internship in the student's emphasis area is a required exit experience. Students elect either the adult education or higher education emphasis area.

## Admission Requirements:

This degree program follows the policies of The College of Education and the Graduate School relating to admissions, academic standards, residency, transfer credit, time limitations, and thesis options (see Graduate Study in the Bulletin). The minimum number of hours required for the M.Ed. degree is 32 credit hours.

## Education Requirements

Foundation Courses (12 hours required)
A course focusing on the learner
Adu Ed 6410, The Adult Learner (3) or Hir Ed 6474, The College Student (3)
A course in historical foundations
Adu Ed 6411, History of Adult Education (3) or
Hir Ed 6477, History and Philosophy (3)
A course on the improvement of instruction
Adu Ed 6413, Improvement of Instruction in Adult
Education (3) or
Hir Ed 6473, Curriculum in Higher Education (3) or
Ed Psy 7647, Teaching for Learning in the University (3)
One of the following:
Adu Ed 6412, Philosophical Foundations of Adult Education (3)*

Adu Ed 6414, Curriculum Theory \& Development in Adult Education (3)*
Hir Ed 6476, Organization and Administration (3)
*Required for Adult Education
Adult and Higher Education Electives (12 hours minimum)
Adu Ed 4311, Teaching Basic Reading Skills to Adults (3)
Adu Ed 6430, Comparative Education: Adult \& International (3)
Adu Ed 6411, History of Adult Education (3)
Adu Ed 6416, Survey of Adult Distance Education (3)
Adu Ed 6417, Multicultural Issues in Adult Education (3)
Adu Ed 6418, Assessment in the Adult Classroom (3)
Adu Ed 6230, Adult Learning and Development (3)
Adu Ed 6420, Survey of Human Resource Development \&
Adult Ed (3)
Adu Ed 6425, Principles of Business Education (3)
Adu Ed 6426, Coordination of Cooperative Vocational Programs (3)
Adu Ed 6427, Improvement of Instruction in Teaching Business Subjects (3)
Adu Ed 6432, Teaching in the Community College (3)
Adu Ed 6435, Problems in Teaching College Biology (3)
Adu Ed 6997, Problems in Adult Education Research (3)
Adu Ed 6404, Seminar (3)
Hir Ed 5401, Current Issues in Higher Education (3)
Hir Ed 5402, Student Affairs Administration (3)
Hir Ed 6404, Seminar (3)
Hir Ed 6405, Economic s and Finance (3)
Hir Ed 6406, Govemance of Higher Education (3)
Hir Ed 6420, Legal Aspects of Higher Education (3)
Hir Ed 6421, Legal Aspects of Postsecondary Teaching (3)
Hir Ed 6422, Policy Analysis of Higher Education (3)
Hir Ed 6430, The Community College (3)
Educ 6308, Foundations of Adult Basic Education (3)
Ed Adm 6461, Administration of Adult and Community Education (3)
Ed Adm 6462, Programming in Adult and Community Education (3)
Ed Psy 6111, Psychology of Education (3)

Ed Tec 5340, Selection and Utilization of Educational Multimedia (3)
Ed Tec 6415, Teaching and Learning with Technology: Authoring Tools (3)
Ed Tec 6416, Teaching and Learning with Technology: Data Rep. Tools
Ed Tec 6436, Computer-Mediated Communication in Education (3)
Ed Tec 6437, Distance Learning via Networks and Telecommunications (3)
Ed Tec 6452, Educational Multimedia Design (3)
Ed Tec 6454, Instructional Video Production (3)
Research Course(s) (3-6 hours required)
Ed Rem 6710, Research Methods* (3)
Ed Rem 6707, Classroom Measurement and Evaluation (3)
Ed Rem 6709, Educational \& Psychological Measurerient
(3)
*Required for Higher Education
Exit Requirement (3 hours required)
One of the following taken during the 9 semester hour: of the program

Hir Ed 6490, Internship or Thesis in Higher Education (3) Adu Ed 6990, Internship in Adult Education (3)

## Adult Basic Education Certification

*Adu Ed 4311, Teaching Basic Reading Skills to Adults
*Ele Ed 6455, Problems of Teaching Arithmetic in th
Elementary School or Ele Ed 4346, Advanced Methois in Elementary School Mathematics
*Eight semester hours from these six courses, and 3 hours of adult education electives, in addition to Spc Ed 3313, Psychology and Education of Exceptional Individuals, are required for five-year certification from the Missouri Department of Elementary and Secondary Education.

## Adult Basic Education (ABE) Certification

1) Requirements for two-year teacher's certificate in $\triangle \mathrm{ABE}$ :
a. A holder of a bachelor's degree from a four-year college or university.
b. Annual attendance at Department of Elementary and Secondary Education (DESE) approved adult basic eifucation teacher certification workshops.
(The two-year ABE certificate may be renewed twice: Requirements for a five-year certificate must be completed by the end of the sixth year.)
2) Requirements for a five-year teacher's certificate $: n A B E$ :
a. Hold a bachelor's degree from a four-year college or university.
b. Earn eight semester hours in DESE-approved adu't education classes, institute or workshops.
(The five-year ABE certificate may be renewed an unlimited number of times by repeating the requirements durirg the previous five years.)
following Science Core Courses and the courses listed under Physics Endorsement:

Science core courses:
Philosophy 3380, Philosophy of Science
Biology
1811, Introductory Biology I
1821, Introductory Biology II
1111, Introductory Chemistry I
1112, Introductory Chemistry II
Geology 1001, General Geology
Atmospheric Science 1001, Elementary Meteorology
Biology 1202, Environmental Biology or another environmental science

## Physics

1011, Physics: Mechanics and Heat
1012, Physics: Electricity, Magnetism, and Optics

## Physics Endorsement

## Physics

3200, Survey of Theoretical Physics
3221, Mechanics
3223, Electricity and Magnetism
3231, Introduction to Modern Physics
4310, Modern Electronics
4311, Advanced Physics Laboratory I
4802, or Sec. Ed 3240, Curriculum and Methods of Teaching Physical Science
4837, Chemistry/Physics Teaching Intern Seminar

## Graduate Studies

The M.Ed. program in secondary education has general program, curriculum and instruction, or reading options. All consist of an initial required core of courses; an opportunity to develop an area of specialization; an opportunity for study in the teaching field; and a capstone or exit course. Areas of specialization are suggested below. A minimum of 33 hours is required for the general program, curriculum and instruction, and adult education and reading options.

## Master of Education: Secondary Education

The M.Ed. general program is appropriate for secondary teachers and department chairpersons. Programs must be planned with the academic adviser and meet the approval of the advisor, College, and Graduate School.

## 1) Required Core (9 hours)

Students are required to complete the following courses within the first 15 hours of study.
Tch Ed 6010, Examining History, Community, and Social Justice in Education (3 hours)
Tch Ed 6020, Teacher Action, Advocacy \& Leadership (3 hours)
Tch Ed/Ed Psy 6030, Instruction, learning \& Assessment (3 hours)

Ed Rem/Tch Ed 6040, Teacher Research (3 hours)
3) Teaching Field Concentration (12-18 hours) A curriculum course (required): Sec Ed 6415. The Secondary School Curriculum. Students should select at least 9 hours in their teaching field (mathematics; chemistry; biology; physics; social studies; English; physical education; speech and theatre; educational technology or other) or in secondary education, as identified in consultation with the faculty adviscr.
4) Specialization Areas (Optional: 6 hours) Students may follow one of the core competenc, courses with two additional courses to develop in area of specialization, such as:

Educational Technology Option: Tch Ed/EdPsy 6030
followed by Ed Tec 5340, Selection and Utilization of Educational Multimedia and Ed Tec 6452, Educational Multimedia Design

Educational Psychology Option, Tch Ed/Ed Psy 6030 followed by either Ed Psy 6210, Life-Span: Ind vidual and Family Development or Ed Psy/Ed Tec 6448, Technology Supported Inquiry Learning (3 hou:s each) and one of the following Ed Psy courses: 6210, Life-Span: Individual \& Family Development; 5215, Psychology of Early Childhood Development; 6220, Psychology of the Elementary School Child; or 6225, The Psychology of Adolescence ( 3 hours each) Teaching of Writing Option, Tch Ed/Ed Psy 6030 followed by Tch Ed 5850, Topics in the Teaching of Writing and Tch Ed 6890, Seminar in Professicnal Writing for Teachers; or Tch Ed 6880, Gateway Writing Project (6).

Other specialization areas are available and information is available in the Graduate Education and Teaching \& Learning Division offices.

## 5) Capstone Course (3 hours)

Students must enroll in the capstone course during their last semester.
Tch Ed/Ed Rem 6910, Teacher Research Caps tone (3 hours)

## Master of Education: Secondary Education with Emphasis in Curriculum and Instruction

The M.Ed. with an emphasis in curriculum and instruction is designed for graduate students who wish to further their competencies as teacher or curr culum specialist or instructional leaders.

1) Required Core requirements ( 9 hours) Students are required to complete the following courses within the first 15 hours of study.
Tch Ed 6010, Examining History, Community, and Social Justice in Education (3 hours)

Note: This would provide certification for (1) ABE teachers who are teaching less than half time and/or without a contract and/or not in a public school or an accredited private school and (2) ABE teachers with bachelor's degrees who have experience teaching adults, but do not have regular teacher certification. Information is available for professional certificates for full-time ABE teachers.

## Graduate Certificate in Institutional Research

The Post-Master's Certificate in Institutional Research (CPIR) is for academics who want training in Institutional Research in preparation for working in an IR Office at a postsecondary institution, a government agency, or a private education organization. The program consists of 18 hours and may be taken as part of a doctoral program. Of the 18 hours, 12 are in the required core ( 6 hours are in research methods and 6 hours in IR seminars), plus a 3-hour Higher Education (Hir Ed) or an Educational Research (Ed Rem) elective and a 3-hour capstone. Students may transfer up to 5 hours of post-Master's work into the program with the approval of the advisor.

## Course Descriptions

## Adult Education (Adu Ed)

4311 Teaching Basic Reading Skills to Adults (3)
A study of the reading process and of the characteristics of adult learners with a focus on instructional techniques and materials useful in upgrading the performance of adults with deficient reading skills.

## 4410 The Non-Traditional Adult Learner (3)

An introduction to the non-traditional adult learner. At the completion of the course the students will be able to identify the characteristics of non-traditional adult learners and various theories of how they learn, as well as the implications of these characteristics and theories on adults.

## 6230 Adult Learning and Development (3)

Prerequisites: Ed Psy 6210 or Ed Psy 6111 , or Adu Ed 6410. Same as Ed Psy 6230. Study of how life stage theories and theories of learning pertain to adult learner. Research bases of these theories explored in relationship to instructional practice with adult learners.

6404 Seminar in Adult Education Research (1-10) Prerequisites: Adu Ed 6410 or consent of instructor. A review of current research on various topics in the field of adult education. An in-depth study of these research topics will be conducted. Application to the field of adult education will be considered. Special focus will be placed on assessing and improving competency in educational, corporate and community settings.

## 6410 The Adult Learner (3)

This course is designed for those who help adults learn in a variety of settings. A study will be made of the characteristics of Adult Learners and various theories of how
they learn, as well as the implications of these characteristics and theories for adult education research, programming, curriculum, planning, and instructional practice.

## 6411 History of Adult Education (3)

Prerequisites: Adu Ed 6410. A study of the historical foundation of adult education in America will include the major theorists and their contributions and the continuing education of the adult in a progressive social context.

6412 Philosophical Foundations of Adult Education (3) Prerequisites: Adu Ed 6410 or consent of instructor. A comprehensive, systematic philosophical foundation for adult education. Exploration of philosophical underpinnings of various approaches to education of adults--role of learner, teacher, and objectives within each philosophy.

6413 Improvement of Instruction in Adult Education (3) Prerequisites: Adu Ed 6410 or consent of instructor. A study of selected methods and instructional techniques appropriate for the teaching of adults. An examination of current research will be made as it relates to the problems of instructing adults.

## 6414 Curriculum Theory and Development in Adult Education (3)

Prerequisites: Adu Ed 6410 or consent of instructor. A study of curriculum theory and its application to adult education. Particular emphasis will be placed on the development of model curricula for various programs in adult education.

## 6416 Survey of Adult Distance Education (3)

Prerequisites: Adu Ed 6410 . Survey of distance education covers concept, theories, history, present practice, delivery systems, major issues and directions of distance learning. Emphasis on research and practice in U.S.; however, course will explore topics and issues in distance education from international perspective, identifying similarities and differences among countries.

## 6417 Multicultural Issues in Adult Education (3)

 Prerequisites: Adu Ed 6410. Discussion of cultural diversity from an adult education perspective. Topics include cultural self-awareness, challenges/issues in intercultural educational settings, theoretical perspectives of multicultural education, and practitioner concerns and strategies for implementing multiculturalism in adult education settings.
## 6418 Assessment in the Adult Classroom (3)

Prerequisites: Adu Ed (6) 6410 \& Ed Rem 6707 or consent of instructor. This course addresses assessing how effectively adult educators are facilitating adult learning. Emphasis will be on knowledge and skills, learner characteristics, and learner reactions to instruction effectiveness in the adult classroom. Special attention will focus this assessment in the adult classroom within educational, corporate, community, and non-formal settings.

6420 Survey of Human Resource Development and Adult (3)

Prerequisites: Graduate standing and permission of instructor. Overview of fields of human resource development and adult education. Examines societal contexts within which training of adults and organization development occur. Explores systems theory that frames a discussion of adult education, training, and organization development. Represents unique characteristics of each field as well as ways in which two fields come together, along with general concepts: definitions, philosophies, goals, sponsoring agencies, professional roles, processes, participants, and resources.

## 6424 Intervention Determination in Adult Learning and Human Resource Development (3)

Prerequisites: Adu Ed 6410. A variety of strategies will be studied with a view to examining systemic problems in workforce and adult learning situations. The determination of interventions for program planning and development is the major focus. As key outcomes for this course, learners will be able to design and develop plans and distinguished among workplace, community and educational needs that can be met with educational interventions and those that require other, and more appropriate, non-training solutions. While specifically focused on HRD applications, the content of this course will apply to any educational setting for adults.

## 6425 Principles of Business Education (3)

Prerequisites: Business education certification and consent of instructor. Designed for the business education teacher, this course examines in depth the principles, practices, and problems of business education programs. It emphasizes research into historical and philosophical implications, the influence of contemporary attitudes on business education, evaluation of current programs, and development of innovative approaches. It may be applied toward Missouri Vocational Business Education certification.

## 6426 Coordination of Cooperative Vocational Programs

 (3)This course deals with student selection procedures.
Coordinating vocational instruction and planned employment experiences; research techniques for collecting and analyzing data for process and product evaluation; procedures for implementing new ideas and innovations in cooperative vocational education programs. The course is designed for vocational teachers and for teachers who wish to qualify as coordinators of cooperative vocational programs. This course may be applied toward Missouri Vocational Certification.

## 6427 Improvement of Instruction in Teaching Business Subjects (3)

Prerequisites: Business education certification or consent of instructor. Designed for business education teachers, this course examines current trends in planning, organizing, developing, and evaluating instructional materials relevant to business education classes. Emphasis is placed on research techniques and strategies for selecting and utilizing
appropriate curriculum materials, resources, and media to match learning needs. This course may be applied tow ard Missouri Vocational Certification.

## 6432 Teaching in the Community College (3)

This course is designed for students considering a teaching career in the community college. The main emphasis of the course will be to expose students to the unique features of the community college with respect to the special goals $o$ : the institution, variety of degree and nondegree programs. and diversity of community college students. A second objective will be to offer a brief review of teaching techniques that will be useful in the community college classroom.

## 6435 Problems in Teaching College Biology (3)

 Same as Biology 5985. Prerequisites: Teaching experience, 30 semester hours in biology, and consent of the instructor. Basic philosophies underlying undergraduate biology Education at the college level will be presented and examined with concern for establishment of an individual philosophy in the prospective college teacher. Teachirg techniques suitable for college-level instruction will b z considered, practiced, and evaluated. Advantages and limitations of various methods of instruction will be considered with respect to current research findings.
## 6494 Directed Readings in Adult Learning (1.0-6.0)

Prerequisites: Graduate Standing, Adu Ed 6410 and consent of instructor. Self-directed learning, as a key concept in Adult Education, is encouraged as a means of understunding the adult experience, both personally and professionally, and is a recognized core competency in the field of Adult Education. This course consists of supervised, independent study into the current research, literature, and issues in the area of Adult Learning. Learners are given the opportunity to meet with other learners and the instructor on a regular basis to share resources, ideas, and to gain feedback.

## 6497 Problems in Adult Education (1-10)

Prerequisites: Adu Ed 6410 or consent of instructor. Independent study on topics in adult education.

## 6990 Internship (1-10)

Prerequisites: Adu Ed 6410 or consent of instructor. Closely supervised experience in a field setting under the direction of a graduate faculty member. An appropriate level of competence and evidence of growth in the professionc:l role must be demonstrated by the intern. The internship will include planning, research, evaluation, and related professional activities.

## Educational Administration (Ed Adm)

Prerequisites may be waived by consent of the departrnent.

## 6201 Knowledge Contexts of Education Administration and Policy (3)

Prerequisites: Admission to masters, doctoral, and or certification programs in Education Administration or consent of instructor. This course is a survey of the various
views of knowledge that have influenced the nature of the organizational structures and policies of American educational institutions. The course is framed both by the purposes of American education and the scientific management movement of the first quarter of the $20^{\text {th }}$ Century.

## 6202 Social Contexts of Education (3)

Prerequisites: Ed Adm 6201, concurrent with Ed Adm 6201, or consent of instructor. This course is a critical examination of different perspectives on the social structures within which education policies are constituted and their concomitant practices implemented.

## 6203 Political Contexts of Education (3)

Prerequisites: Ed Adm 6201, concurrent with Ed Adm 6201, or consent of instructor. This course is a critical examination of those aspects of local, state, and federal politics which significantly influence the political contexts within which education policies are constituted and their concomitant practices implemented.

## 6204 Economic Contexts of Education (3)

Prerequisites: Ed Adm 6201, concurrent with Ed Adm 6201, or consent of instructor. This course is a critical examination of those aspects of local, state, and national economic structures which influence the nature of education policies and their concomitant practices.

## 6205 Legal Contexts of Education (3)

Prerequisites: Ed Adm 6201, concurrent with Ed Adm 6201 or consent of instructor. This course is a critical examination of both (1) local, state, and federal laws and (2) Western notions of justice within which education policies are constituted and their concomitant practices implemented.

## 6301 Education Administration Policy Research (3)

Prerequisites: Completion of at least twenty-four (24) credit hours towards the M.Ed. in Education Administration or consent of instructor. A study of issues and trends in basic, applied, and action research in educational policy making.

## 6302 Elementary School Administration (3)

Prerequisite: Completion of at least (15) credit hours of the M.Ed. in Education Administration or consent of instructor. This course is a comprehensive, systematic study of the elementary school principalship. Emphasis is placed on relating theories of learning, teaching, and organization to effective administration of elementary schools.

6303 Middle School Administration (3)
Prerequisites: Completion of at least (15) credit hours of the M.Ed. in Education Administration or consent of instructor. This course is a comprehensive, systematic study of the middle school principalship. Emphasis is placed on relating theories of learning, teaching, and organization to effective administration of middle schools.

6304 Secondary School Administration (3)
Prerequisites: Completion of at least (15) credit hours of the M.Ed. in Education Administration or consent of instructor. This course is a comprehensive, systematic study of the secondary school principalship. Emphasis is placed on relating theories of learning, teaching, and organization to effective administration of secondary schools.

6305 School District Administration (3)
Prerequisite: Enrolled in Advanced Certification Program and/or consent of instructor. Course focuses on current research about school district administration; also deals with major central office issues including: board/ superintendent relations, central office organization, the function and authority of assistant superintendents and program directors, and the administrative team approach to school district administration.

6306 Special Education Administration (3) Prerequisites: Completion of graduate degree in Special Education, Education Administration or consent of instructor. A study of organizational issues in special education and implications for practices and procedures. Specific attention will be given to special education delivery systems, compliance standards, funding sources, and regulatory standards.

## 6315 Middle School Educational Philosophy (3)

Prerequisites: Graduate standing. An in-depth examination of the educational philosophy and historical basis of middle level schools, and the relationship between philosophy and middle school organizational practices. Includes a review of the research, organizational structures and current trends and practices.

## 6317 Supervision and the Middle School Child (3)

Prerequisites: Graduate standing. The unique developmental characteristics and needs of early adolescents are explored through a variety of supervisory activities involving middle level students, teachers, administrators. The implications of economic and ethnic diversity for middle level schools will also be addressed.

## 6401 School Staff Development and Supervision (3)

Prerequisite: Ed Adm 6201, concurrent with Ed Adm 6201, or consent of instructor. This course provides an examination of the conceptual bases and practical applications of staff development and supervision in educational settings. It explores relevant conceptual models presented as heuristic devices to consider a variety of administrative techniques to assess needs, plan, deliver, and evaluate staff development and supervision programs in schooling.

## 6402 School Personnel Administration (3)

Prerequisite: Advanced graduate standing and/or consent of instructor. This course is a comprehensive, systematic study of problems in planning, recruitment, selection, induction, and retention relative to school personnel.

6403 Problems in School Public Relations (3)
Prerequisites: Advanced graduate standing and/or consent of instructor. This course is an examination of a range of both traditional and critical perspectives relevant to home-schoolcommunity relations.

## 6404 Collective Negotiations in Educational Organizations (3)

Prerequisites: Advanced graduate standing and/or consent of instructor. This course focuses on the concepts, issues, and processes involved with collective negotiations (bargaining) in American educational organizations. The major issues addressed in the course include recognition procedures, bargaining unit determination, the scope of negotiations, the proposal and counterproposal, compromise, impasse procedures, and master contract management.

## 6405 Extracurricular Activities (3)

Prerequisites: Graduate standing and/or consent of instructor. Activities related to the extracurricular program of secondary schools will be studied in depth. Analyses of appropriate activities will include the nature and purposes of these activities.

## 6406 Leadership in Educational Administration (3)

Prerequisites: Advanced graduate standing and/or consent of instructor. This course is designed to acquaint the administrator with the factors of groups and interpersonal relationships directly affecting job performance. The consequences of various types of group relationships upon the institution will be studied in detail. The administrator will study various rationales for and methods of improving interpersonal relationships within the institution.

6407 School Staff Development \& Supervision for Special Education Administration (3)
Prerequisites: Completion of graduate degree in Special Education, Education Administration or consent of instructor. This course provides an examination of the conceptual bases and practical application of staff development and supervision for special education settings for staffs serving special education students. It explores relevant conceptual models presented as heuristic devices to consider a variety of administrative techniques to assess needs, plan, deliver, and evaluate staff development and supervision programs serving students with special education needs.

6449 Using Technology in Administration Processes (3) Prerequisites: A course in measurement, statistics or evaluation, or consent of instructor. (Same as Ed Tec 6449). This course will explore how the use of data analysis with technology can be applied in the administration of schools or other work settings. Administrators will explore software tools and their implications for making decisions. A case study will be completed on the implementation of a technology in a school or other appropriate setting.

## 6497 Problems (1-10)

6501 Principles of Public School Finance in Missouri (3) Advanced graduate standing and/or consent of instructor. Course is designed to analyze and study critical areas of public school finance at the local and state levels, highlighting the role of such factors as legislative procedures, principles of local and state support, budgeting and accounting procedures, assessment of property, e:c.

## 6502 School Buildings and Sites (3)

Prerequisites: Advanced graduate standing and/or cor sent of instructor. This course deals with methods and procetures for (1) projecting the future building and facility needs of a public school district, (2) supervising actual planning and construction of educational facilities, (3) optimizing the use of current facilities, and (4) maintenance of buildings grounds, and equipment.

## 6503 Organizational Change in Education (3)

Prerequisite: Advanced graduate standing and/or consent of instructor. This course deals with (1) developing strategies for assessing educational needs, (2) methods of assessing the school's organizational health, (3) the designing of educational change strategies involving theory-based models, (4) using systems-analysis techniques to implement educational change, and (5) methods of involving students and staff in incorporating meaningful organizational change strategies in educational institutions.

## 6504 Organizational Change in Special Education

 Administration (3)Prerequisites: Advanced graduate standing and/or corsent of instructor. This course deals with developing strategies for assessing special educational needs, methods of distrist wide self-assessment of inclusive practices, the designing of educational change strategies involving theory based nodels, using collaborative-problem solving techniques to implement educational change, and methods of involving students and staff in incorporating meaningful organizational change strategies in special education.

## 6601 Administration of Adult and Community Education

 (3)Prerequisites: Graduate standing and/or consent of instructor. A course designed to familiarize the student with the structure, purpose, and processes of community education with particular emphasis being placed on the administrative theories and functions of adult education.

## 6602 Programming in Community and Adult Education

 (3)Prerequisite: Ed Adm 6601 and/or consent of instructor. Study and analysis of basic situations in which community and adult educational programming take place. Within this framework, application will be made of a fundamenta series of steps essential to sound educational programming.

6603 Financing of Community Education (3)
Prerequisites: Graduate standing and/or consent of instructor. The student will develop the necessary skills needed to construct an operational budget for the administration of community education programs. Emphasis will be placed on developing a support base from federal, state, and local funding resources. The student will be exposed to proposal writing and funding procedures.

6800 Education Policy Studies Seminar (1-6)
Prerequisites: Admission to doctoral program and consent of instructor. Intensive directed study of selected education policy issues.

## 6900 Internship (1-10)

Prerequisite: Consent of instructor. Closely supervised experience in a field setting under the direction of a graduate faculty member. An appropriate level of competence and evidence of growth in the professional role must be demonstrated by the intern. The internship will include planning, research, evaluation, and related professional activities.

## 7050 The Research Process I: Framing Research Questions Within the Education Literature (3)

Same as Educ 7050. Prerequisites: Admission to the Ed.D. or Ph.D. in Education Programs. An overview of the essential elements of research proposals and familiarization with the techniques and tools used to identify important research questions within the education literature. Emphasis is placed on exploring the research literature and both framing and justifying research questions within that literature.

## 7150 Educational Inquiry (3)

Prerequisites: Ed Adm 7050. This course is required for doctoral students in the Educational Administration program.
The course supports the development of the student's individual research topic and explores options for methodological approaches to education policy and administration issues.

## 7250 The Change Process in Schools and School Districts

 (3)Prerequisites: Ed Adm 7050 and Ed Adm 7150. Advanced study of the literature pertaining to the theories of action and strategies for leading and sustaining change in schools and school districts. Emphasis is on the framing of research questions through the perspective of the literature on the change process in the schools.

## 7800 Education Administration Doctoral Seminar (1-6)

 Prerequisites: Admission to doctoral program and consent of instructor. Intensive directed study of selected issues related to the administration of educational institutions.
## Higher Education (Hir Ed)

## 5401 Current Issues in Higher Education (3)

Prerequisites: Graduate admission. Familiarizes student with nature and characteristics of American higher educationstructure of higher education, roles played by various constituencies, and current issues.

## 5402 Student Affairs Administration (3)

Prerequisites: Graduate admission. Survey course in student personnel administration with emphasis on understanding college student and on learning ways to meet his/her academic and nonacademic needs.

## 6404 The Seminar (1-10)

Prerequisites: Graduate standing.

## 6405 Financial Issues in Higher Education (3)

Prerequisites: Graduate standing. Provides an overview of the state/federal funding mechanisms for higher education in the U.S. Addresses practices in budgeting at various types of postsecondary institutions.

## 6406 Governance of Higher Education (3)

Prerequisites: Graduate admission. Concentrates on study of unique system of governance in higher education, including faculty, institutional, system, and state governing mechanisms.

6420 Legal Aspects of Higher Education (3)
Prerequisites: Graduate admission. Examines legal rights and responsibilities of faculty, students, staff, and administrators. Includes fair employment, due process, affirmative action, and liability.

6421 Legal Aspects of Postsecondary Teaching (3) Prerequisites: Graduate admission. Examines legal issues of interest to faculty. Areas include faculty (contracts, grievances/appeals/affirmative action, free speech, tenure) and student (disability, sexual harassment, academic integrity, free speech, classroom incivility, student behavioral standards, grades) issues.

## 6422 Policy Analysis of Higher Education (3)

Prerequisite: Graduate admission. Introduces students to the analysis of higher education public policy. Includes state and local policy analysis and examination of legislative history of major federal higher education laws.

## 6430 The Community College (3)

Prerequisites: Graduate admission. Develops an understanding of the two-year college--its past, present, and future. Examines history, operations, funding, internal constituents, curricular mission, societal role, and current issues.

## 6431 Community College Leadership (3)

Prerequisites: Graduate admission. Introduces students to leadership theory and practice and the literature of leadership
development. Applies theory and practice to the unique role of the leader in community colleges, including the community college presidency. Particular emphasis is given to the diverse roles expected of the successful leader in today's community college.

6432 Current Issues in Community College Education (3) Prerequisites: Graduate admission. A review and analysis of current issues affecting community college students, instruction, administration, policy and community relations. Hir Ed 6430, The Community College, is recommended before taking this course for those not currently working in community college settings.

## 6435 The International Community College (3)

Prerequisites: Hir Ed 6430. Exploration of the development of systems of post secondary education throughout the world that mirror all or parts of the mission of the community college system in the United States. The course takes a comparative approach to examining the history, philosophy, structure, curriculum and student characteristics of these international systems, using the American system as a point of reference.

## 6440 Issues in Institutional Research I (3)

Prerequisites: Graduate standing. Provides a history and overview of institutional research in postsecondary education. Other areas of interest include student issues, student outcomes, higher education funding, productivity funding, and legal issues.

## 6441 Issues in Institutional Research II (3)

This course provides the study of key issues in institutional research, including faculty workload and salary, program assessment, fact books, peer institutions, national databases, and strategic planning.

## 6473 Curriculum in Higher Education (3)

Prerequisites: Graduate standing and/or consent of instructor. The development, implementation, and assessment of curriculum in higher education as well as historical and philosophical perspectives; major figures and emerging trends are included.

## 6474 The College Student (3)

Prerequisites: Graduate standing and/or consent of instructor. A comprehensive overview of the theories and research related to college and university student development. Particular attention is given to student demographics, patterns of growth and development, and attitudinal changes.

## 6476 Organization and Administration of Higher

Education (3)
Prerequisites: Graduate standing and/or consent of instructor. This course includes the study of the missions, governance, and organizational structures of American higher education institutions. Within this context, particular attention is given to administrative roles, responsibilities, and issues of leadership.

## 6477 History and Philosophy of American Higher Education (3)

Prerequisites: Graduate standing and/or consent of insiructor. This course is a systematic study of the historical and philosophical contexts that have conditioned the evolution of American higher education. Particular attention is giv $n n$ to significant events, trends, and movements within American higher education.

6497 Problems (1-10)
Prerequisites: Graduate standing and/or consent of the instructor.

## 6900 Internship (1-10)

Prerequisites: Graduate standing and/or consent of the instructor. Closely supervised experience in a field under the direction of a graduate faculty member. An appropriae level of competence and evidence of growth in the professional role must be demonstrated by the intern. The internsh $p$ will include planning, research, evaluation, and related professional activities.

6930 International Community College Internship (3)
Prerequisites: Hir Ed 6430 and consent of instructor. Supervised experience in an international community zollege setting under the direction of a graduate faculty member will include planning, research, evaluation, and related professional activities. Participants will be expected to both provide administrative or instructional assistance to the host college, and complete research related to the setting and experience.

7800 Higher Education Doctoral Seminar (1-6)
Prerequisites: Doctoral standing and/or consent of instructor. Intensive directed study of selected issues related to the administration of higher education institutions.

# Division of Educational Psychology, Research and 

 Evaluation
## Faculty

Matthew W. Keefer, Associate Professor and Chair* Ph.D., University of Toronto
Wolfgang Althof, Theresa Fischer Endowed Professor of Citizenship Education, Dr. Phil., University of Fribourg and Dr. Phil. Habil, Carl-Von-Ossietzky
Marvin W. Berkowitz, Sanford N. McDonnell Professor of Character Education*
Ph.D., Wayne State University
Thomas E. Jordan, Curator's Professor* of Child
Development, Professor Emeritus
Ed.D., Indiana University
William L. Franzen, Professor *, Dean Emeritus
Ph.D., University of Wisconsin
Michael W. Bahr, Associate Professor*
Ph.D., Indiana University
Victor A. Battistich, Associate Professor*
Ph.D., Michigan State University
Brenda Bredemeier, Associate Professor* Ph.D., Temple University
Margaret W. Cohen, Associate Professor*
Associate Provost Academic Affairs, Director, Center
Teaching and Learning
Ph.D., Washington University
Elisha A. Chambers, Assistant Professor*
Ph.D. Southern Illinois University, Carbondale
Cody S. Ding, Assistant Professor*
Ph.D., University of Minnesota
Donald A. Gouwens, Assistant Professor* Psy.D., Central Michigan University
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Ed.D., Harvard University

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## General Information

Faculty in the Division of Educational Psychology, Research, and are housed on the fourth floor of Marillac Hall. Information about course offerings may be obtained in the division office, 402 Marillac Hall.

At the undergraduate level, the division coordinates educational psychology and measurement courses required in the various B.S. in education degree programs.

At the graduate level, the division offers courses in educational psychology and in educational research and evaluation methods required in the various M.Ed. degree programs and in the doctoral programs. Students choosing to pursue a Ph.D. in education may elect an emphasis in
educational psychology. The Missouri certificate in school psychology is coordinated through this division.

## Educational Specialist in School Psychology

The Educational Specialist in School Psychology (Ed.S.) degree program at the University of Missouri-St. Louis provides training in data-based problem solving with particular attention to interventions and educational outcomes within a cognitive-behavioral theoretical perspective. The program promotes a unique set of professional values through its emphasis on:

- Data-based decision making
- Educational and psychological treatment Outcomes
- Multicultural diversity
- Program development and evaluation
- Facilitation of organization change

The Ed.S. is a terminal degree program designed to prepare future school psychologists to work in school settings. Graduates of the program are immediately eligible for School Psychologist Certification from the Missouri Department of Elementary and Secondary Education and are qualified to apply for the National Certified School Psychologist credential from the National Association of School Psychologists.

The Ed. S. in School Psychology degree program consists of 60 hours of graduate coursework that prepares school psychologists for professional roles as data-based problem solvers. In addition to courses in psychological and educational foundations, assessment, and direct interventions, a primary emphasis within the program is upon prevention and early intervention of academic, behavioral, and social-emotional problems through consultation, interdisciplinary collaboration, and systemslevel interventions. Throughout the program, including 500 -hours of supervised practicum and a year-long 1,400 hour internship in the schools, students work closely with the school psychology faculty and field-based supervisors to develop practical skills.

Admission requirements include a 3.0 undergraduate GPA, current GRE scores (combined verbal and quantitative score of 1000 recommended), two letters of recommendation, a personal statement describing professional goals (not to exceed five double-spaced typed pages), and a personal interview with members of the school psychology faculty. Prerequisite coursework in developmental psychology and statistics is required for admission. Conditional acceptance into the program may be granted pending completion of prerequisites and/or satisfactory progress in the program (i.e., 3.0 graduate GPA) for students who lack prerequisites or do not quite meet the admission requirements. All required application materials will be considered equally when making

College of Education Division of Educational Psychology, Research and Evaluation

admission decisions. Applications are reviewed annually with a March 1 deadline.

The Ed.S. in School Psychology degree program involves three years of intensive, full-time training; however, students may be able to complete up to half of the curriculum on a part-time basis provided they satisfy the university residency requirement. Credit may be granted for graduate coursework completed prior to entering the program, but a minimum of 30 graduate credit hours must be completed at the University of Missouri-St. Louis. Students who plan to enroll in the Ed.S. in School Psychology degree program as a part-time student are advised to meet with their adviser and develop a professional education plan at the start of their program. Please note the internship year involves a full-time placement with a school district during an academic school year and cannot be completed part-time.

Educational Specialist in School Psychology (Ed.S.) Curriculum:

Fall I
Ed Psy 6530, Foundations of School Psychology
Ed Psy 6210, Life Span Development
Ed Rem 6750, Advanced Research Design in Education
Ed Rem 6716, Psychoeducational Assessment and
Intervention I
Spring I
Ed Psy 6550, Professional Issues in School Psychology
Ed Psy 6310, Psychology of Learning Processes
Ed Rem 7771, Quantitative Research Methods I
Ed Rem 6718, Psychoeducational Assessment II
Summer I
Cns Ed 6010, Theories of Counseling
Ed Psy 6532, Psychoeducational Differences
Fall II
Ed Psy 6545, Consultation in Schools and Related Settings
Ed Psy 6536, Biological Bases of Behavior
Ed Psy 6540, Psychoeducational Interventions
Ed Psy 6590, School Psychology Practicum I

## Spring II

Ed Psy 6542, Psychotherapeutic Interventions in School Psychology
Cns Ed 6030, Foundations for Multicultural Counseling
Ed Rem 6730, Educational Program Evaluation
Ed Psy 6591, School Psychology Practicum II
Fall III
Ed Psy 6991, School Psychology Internship
(Praxis II School Psychology Examination and Case Study)

## Graduate Certificate in School Psychology

The Graduate Certificate in School Psychology is a 3)hour certificate program designed specifically for students who already possess graduate degrees and wish to werk toward certification as a School Psychologist in Miss suri. The program consists of a coordinated curriculum of school psychology specialty courses that provide partial completion of the 60 graduate hours required for certification as a School Psychologist in Missouri. Pe ease note that the Graduate Certificate in School Psychology is a university certificate and not state certification; it can be completed en route to state certification, but additional coursework is required (e.g., internship). Applicants should submit official undergraduate and graduate transcripts, current GRE scores, two letters of recommendation, and a personal statement describiny professional goals (not to exceed five double-spaced typed pages). The final step of the admission process involves a personal interview with a school psychology faculty member to explore career aspirations, review graduate transcripts, and develop a professional education plan tailored to the individual needs of the student. Graduate coursework completed within six years will be considered for credit toward the certificate and/or certification on an individual basis, but a minimum of 12 -hours of graduate coursework must be completed at the University of Missouri-St. Louis to satisfy the university residency requirement. Again, please note that state certification as a School Psychologist typically involves additional coursework beyond the requirements for the Graduate Certificate in School Psychology as outlined below.

## Courses:

## Foundations (9 hours)

Ed Psy 6530, Foundations of School Psychology
Ed Psy 6532, Psycho-Educational Difference in Chiidren
Ed Psy 6550, Professional Issues in School Psychology
Psycho-Educational Assessment (6 hours)
Ed Rem 6716, Psycho-Educational Assessment I
Ed Rem 6718, Psycho-Educational Assessment II
Interventions ( 9 hours)
Spe Ed 6444, Education of Learners with Learning Disabilities
Ed Psy 6540, Psycho-Educational Interventions in Childhood
Ed Psy 6545, Consultation in Schools and Related Settings
Supervised Experience ( 6 hours)
Ed Psy 6590, School Psychology Practicum

## Division of Educational Psychology,

## Research And Evaluation

## Graduate Certificate in Program Evaluation and

 Assessment in EducationThe Graduate Certificate in Program Evaluation and Assessment in Education provides specialized study in the theory and practice of program evaluation and assessment. The program will build on the content area knowledge base of the individual's bachelors or masters degree. The focus of the Program Evaluation and Assessment in Education certificate will be on the skills delineated in the standards and guidelines of the American Evaluation Association and the Joint committee on Standards in Educational Evaluation. The certificate will consist of 30 hours of core courses and internship experiences. Graduate credits earned in equivalent courses in Education or related Social Science disciplines may meet some of these requirements. Ed Rem 6710 Educational Research Methods and Design or its equivalent is prerequisite to all the courses in the Research Methods and Statistics focus area.

## Courses:

Program Evaluation ( 12 credit hours)
Ed Rem 6730, Educational Program Evaluation (3)
Ed Rem 6732, Advanced Theory and Practice in
Educational Program Evaluation (3)
Ed Rem 6990, Internship (6)
Testing and Measurement ( 9 credit hours)
Ed Rem 6707, Classroom Measurement and Evaluation
(3)

Ed Rem 6709, Educational and Psychological Testing (3)
Ed Rem 7711, Advanced Test Theory in Education (3)
Research Methods and Statistics (9 credit hours)
Ed Rem 6712, Survey Research Methods in Education (3)
Ed Rem 7771, Quantitative Research Methods I (3)
Ed Rem 7781, Qualitative Methods in Educational
Research I (3)

## Course Descriptions

Courses in this section are grouped as follows:
Educational Psychology (Ed Psy) and Educational
Research and Evaluation Methods (Ed Rem)

## Educational Psychology (Ed Psy)

2212 Introduction to Learners and Learning (3)
Prerequisite: Psych 1003. Same as Tch Ed 2212
Foundational study of the development of infants, children and adolescents focusing on the role of appropriate educational environments in fostering positive physical, cognitive, social, and moral outcomes. Reading relevant research will be combined with experiences in the field and technology-based assignments to investigate both biological and sociocultural forces that shape the development process. A minimum of 10 field experience hours required.

3312 The Psychology of Teaching and Learning (3) Prerequisites: Tch Ed 2210, Tch Ed 2211, Tch Ed 2212 or equivalents and admission to Teacher Education program. Same as Tch Ed 3312 . Application of the principles of psychology to an understanding of the dynamics of teaching behavior and learning behavior. Involves both theoretical and practical approaches to analysis of the leaming environment of the school. Required of all who are preparing to teach. Includes a field experience.

## 3525 Education and the Psychology of Human Sexuality (3)

Same as Nursing 4725. The course is designed to provide educators and other human services personnel with knowledge and understanding of various personal and social dimensions of human sexuality.

6030 Instruction, Learning and Assessment (3) Prerequisites: Admission into Graduate School. Same as Tch Ed 6030. Uses learning as the basis for the design of classroom instruction. By applying learning theories, teachers can improve their own unit development, lessons plans, assessment strategies, and the use of technology for effective teaching. Deals with the impact of cognitive educational research on the subject content and what is known about how people learn. Teachers will learn to critically evaluate and improve their own educational practices, design principled and appropriate assessments based on their instructional goals, and to assess their own professional development.

## 6109 Learning \& Development in Secondary School Settings (4)

Prerequisites: Graduate standing and admission to the secondary teacher education program. Investigation of teaching and learning theories and research on the developmental needs of pre-adolescent and adolescent students. Issues of cognition, moral and social development, motivation, and assessment will be analyzed and debated. Emphasis will be on theoretical and practical approaches to constructing and analyzing a learning system. Includes field experiences.

## 6111 Psychology of Education (3)

Current psychological theories and research that guide inquiry and decision making in education. Topics surveyed include behavior, development, learning, instruction.

## 6113 Psychopathology and Diagnosis (3)

Prerequisites: Graduate standing. Covers etiology, assessment and diagnosis of mental disorders using contemporary diagnostic systems. Course materials and assignment address the dynamics of adjustment and treatment implications for counselors, school psychologists, and others in the helping professions.

## 6115 Personality and Social Development (3)

Prerequisites: Graduate admission. A foundational course integrating major theoretical perspectives on personality
and social development. Emphasis is on the dynamic interplay of social influences on personality development and personality influences on social processes. Particular consideration is given to the impact of social contexts, including the school, on development.

## 6210 Life-Span: Individual and Family Development

 (3)Prerequisites: Graduate standing. Critical analysis of theories of human development including readings from empirical research and cross-cultural comparisons focusing on strategies to enhance developmental outcomes through relationship and environmental opportunity.

## 6215 Psychology of Early Childhood Development (3)

Prerequisite: Ed Psy 6111 or consent of instructor. A survey of the theories, concepts, and research which inform the field of early childhood development to help caregivers and teachers understand the cognitive, social, and emotional changes that take place from birth through the primary years of schooling.

## 6217 Foundations of Citizenship Education (3)

 Prerequisites: Graduate standing. Introduction to citizenship education providing a range of knowledge of civic participation, concepts of democracy, the democratic purposes of education, and the developmental of civic identity and political thinking, attitudes, and engagement. Comparison of historical and contemporary approaches to democratic citizenship
## 6218 Coaching Sports for Character (3)

Prerequisites: Graduate Standing. Interdisciplinary examination of relevant theory, research and pedagogical practices related to character development through sports. Drawing from both academic and professional.

6220 Psychology of the Elementary School Child (3) Prerequisite: Ed Psy 6111 or consent of instructor. Current research on the psychological changes which occur during the school age years of childhood. Includes attention to how development proceeds and to the processes that may alter its progress.

## 6225 The Psychology of Adolescence (3)

Prerequisite: Ed Psy 6111 or consent of instructor. Current research on the psychological changes which occur during adolescence. Attention is paid to the family, school, peer groups, and contemporary settings that practitioners must understand to help young people meet the psychosocial challenges of adolescence.

## 6230 Adult Learning and Development (3)

Prerequisites: Ed Psy 6210 or Ed Psy 6111, or Adu Ed 6410. (Same as Adu Ed 6230). Study of how life stage theories and theories of learning pertain to adult leamers. Research bases of these theories will be explored in relationship to instructional practice with adult learners.

6310 Psychology of Learning Processes (3)
Prerequisite: Ed Psy 6111. Advanced study of learning of instructional practice and instructional theories. The historical and theoretical bases are examined

## 6404 Seminar (1-10)

6417 Current Perspectives on Citizenship Education (3) Prerequisites: Ed Psy 6217. Seminar extends students' understanding of theory and research in citizenship education by applying it to practical programs in the US and abroad. Analysis of assumptions underlying methods of citizenship education and its goals. Exploration o: research on methods that promote, facilitate, or inhibit civic participation and citizenship competence.

## 6440 Moral Development and Education (3)

Prerequisites: Ed Psy 6210 or Ed Psy 6220 or Ed Psy 6225 or consent of the instructor. An introduction and overview of moral psychology and its implications for creatin, 3 learning environments. Questions of human moraiity are by nature cross-disciplinary, and readings and discuisions will involve questions of epistemology, human natuee, conceptions of "the good life," evidence for the malleability of human development, and research regarding the foundation, nature, and complexity of moral development.

## 6444 Cognition and Technology (3)

Prerequisites: Ed Psy 6111 or consent of instructor. Same as Ed Tec 6444. Examines cognitive theories and computer-based tools for learning. Students will ga:n a critical understanding of the relationship between the design of technological tools, the use of those tools : $n$ educational settings, and their implications for learning.

## 6445 Character Education and Development (3)

 Prerequisites: Ed Psy 6111 and Ed Psy 6220 or Ed Fsy 6225. Critical survey of theories of character development and models for character education in childhood anc. adolescence. Includes empirical and conceptual study of the nature of moral character, how it develops, and how it can be fostered in schools.6448 Technology-Supported Inquiry Learning (3) Prerequisites: Ed Tec 5340 \& Ed Psy 6310 , or const:nt of instructor. Same as Ed Tec 6448. Educational technology such as networked computers and software can play a supportive role in inquiry-based learning. Students will explore the theoretical background, design issues, and pragmatic realities of technology-supported inquiry learning environments. Such learning environments are best understood as systems involving social, cultura, material and psychological aspects. Consideration will be given to the important properties of settings, activities and technologies, as well as to the role of instructors.

6450 Advanced Methods in Character Education (3)
Prerequisite: Ed Psy 6445. Advanced exploration of methods for promoting character development in schools: class meetings, democratic processes, cross-age learning and character curriculum development. Methods will be critically examined for their empirical and theoretical justifications.

## 6497 Problems (1-10)

6530 Foundations of School Psychology (3)
Prerequisites: Graduate standing. Examines the professional roles, responsibilities, and functions of psychologists in schools. Focuses on educational foundations of school psychology including the history of the profession, organization and operation of schools, and emergent technologies.

## 6532 Psychoeducational Differences (3)

Prerequisite: Graduate standing. Examination of classification systems used with children and adolescents in the diagnosis and treatment of educational and physical disabilities, mental disorders, and other developmental challenges.

6534 Behavioral Analysis of Human Learning (3)
Prerequisite: Graduate standing. A course in the principles of human learning and the technology of behavior modification, from the perspective of the teaching and counseling professions. Emphasis is placed on its application to school learning and behavior problems and to social behavioral patterns in a variety of appropriate counseling settings.

## 6536 Biological Bases of Behavior (3)

Prerequisite: Graduate standing. Examination of biological factors affecting human behavior. Includes an overview of neuroscience, developmental psychophysiology, and basic psychopharmacology. Implications for psychological and educational interventions are considered.

## 6540 Psychoeducational Interventions (3)

Prerequisites: Ed Rem 6716 and Ed Psy 6532 or consent of instructor. Examines academic and instructional interventions, both preventive and remedial, that are delivered in schools and related settings with children and adolescents. Emphasizes linking assessment and intervention via use of direct and indirect service delivery.

## 6542 Psychotherapeutic Interventions in School Psychology (3)

Prerequisites: Ed Psy 6532 and Ed Rem 6718 or consent of instructor. Instruction and practice developing and implementing intervention plans for common social, emotional, and behavior problems found in schools and related settings. Special emphasis on prevention and early intervention within a systems perspective.

6545 Consultation in Schools and Related Settings (3) Prerequisite: Ed Psy 6530 or Cns Ed 6000 or consent of instructor. An examination of theoretical principles, research, and legal and ethical issues as applied to consultation practices in schools and related settings.

6550 Professional Issues in School Psychology (3) Prerequisites: Ed Psy 6530. Advanced examination of professional issues facing school psychologists including legal and ethical considerations, standards of practice, models of service delivery, and emergent technologies.

## 6590 School Psychology Practicum 1 (3)

Prerequisites: Grade of B or better in Ed Rem 6718 and Ed Psy 6532, and consent of instructor. Introductory supervised experience in psychoeducational assessment, and interventions for academic and behavior problems in schools and related settings. Settings and responsibilities determined in consultation with program faculty and site supervisor.

## 6591 School Psychology Practicum II (3)

Prerequisites: Grade of B or better in Ed Psy 6590 and consent of instructor. Advanced supervised experience in consultation, problem solving, psychoeducational assessment and interventions for academic and behavior problems in schools and related settings. Settings and responsibilities determined in consultation with program faculty and site supervisor.

## 6990 Internship (1-10)

Prerequisite: Consent of instructor. Closely supervised experience in a field setting under the direction of a graduate faculty member. An appropriate level of competence and evidence of growth in the professional role must be demonstrated by the intern. The internship will include planning, research, evaluation, and related professional activities.

## 6991 School Psychology Internship (3)

Prerequisites: Grade of B or better in Ed Psy 6591 and consent of instructor. Full-time field-based placement in an approved school or educational setting supervised by an appropriately credential school psychologist. Course may be repeated for credit.

## 7640 Changing Perspectives in Educational Psychology

 (3)Prerequisites: Ed Psy 6111 and doctoral standing or consent of instructor. The advanced exploration of foundational issues in educational psychology. Topics include theoretical perspectives of modes analysis used in the investigation of psychological theories and concepts in education.

7642 Sociocultural Perspectives in Education (3) Prerequisites: Doctoral standing or consent of instructor. Investigation of sociocultural theory with a focus on
educational applications. Topics include the social formation of mind, language as cultural tool, methodological issues in social science research, and dialogic inquiry as pedagogy.

## 7644 Motivation Theory in Education (3)

Prerequisites: Ed Psy 6111 and doctoral standing or consent of instructor. Focuses on the social and cognitive aspects of contemporary theories of motivation and examines supporting research. Participants will apply theory to settings of teaching and learning, training, and counseling relevant to their interests.

7647 Teaching for Learning in the Univ. (3) Prerequisites: Graduate standing and consent of the instructor. An examination of current research in learning, motivation, and assessment as it pertains to teaching and learning in post-secondary settings. Designed to guide graduate students to promote active and meaningful learning in college classrooms to develop college students' critical thinking skills. Graduate students across the disciplines may enroll.

## Educational Research and Evaluation Methods (Ed Rem)

## 3720 Classroom Testing and Measurement (3)

Basic measurement principles for the classroom teacher: test planning; construction and use of selection, supply, and performance type test items; item analysis for test improvement; methods of summarizing test scores; derived scores for interpretation of performance; development and use of norms in evaluation.

## 3721 Interpretation of Educational Tests and Measurements (3)

Prerequisite: Meet the university standard for proficiency in basic mathematical skills. A study of the principles of test theory with emphasis on standardized aptitude, behavioral, and achievement tests; the interpretation of individual and group performance; and application within classroom settings. Required of all majors in special education.

## 5730 Educational Statistics (3)

Prerequisite: Meet the university standard for proficiency in basic mathematical skills. Statistical methods for advanced undergraduate and beginning graduate students: descriprive statistics, probability and sampling, and introduction to hypothesis testing and inferential statistics.

## 6040 Teacher Research (3)

Prerequisites: Tch Ed 6010 and Tch Ed 6020. Same as Tch Ed 6040. This course provides the knowledge, skills, and practice for experienced practitioners to engage reflectively in a process of systematic study of their own practice with educational systems and situated contexts. Educators will learn both analytic and practical tools to
document multiple factors that can impact student learning and become more sophisticated consumers of researc 1 in order to engage in student advocacy and influence policy decision-making.

## 6404 Seminar (1-10)

Prerequisite: Consent of instructor. Educational research and evaluation methods seminar addressing special issues and topics not normally included in the regular statistics, research methods, evaluation, and measurement couries.

## 6497 Problems (1-10)

Prerequisites: At least one previous Ed Rem course and consent of course supervisor. Individual study on topics pertaining to educational measurement, evaluation, statistics, and research design.

6705 Evaluation of Data Analysis Programs (3) Prerequisite: Graduate admission and an introductory statistics course or consent of instructor. Principles and procedures for assessing the quality and effectivenes: of data analysis computer programs and packages in educational research. Review and evaluation of various computer programs and packages used in educationa research.

6707 Classroom Measurement and Evaluation (3) Prerequisites: Graduate admission or consent of instructor. An introductory graduate course to classroom testing and evaluation. Topic areas include comparison of criterionand norm-, validity and associated descriptive statisucs; derived referenced theory and technique; classical te:st theory, reliability and transformed scores; preparation of instructional objectives for use in developing the classroom test; performance evaluations, and portfol.o rubrics.

6709 Educational and Psychological Measurement (3) Prerequisite: Graduate admission or consent of instnctor. An introductory graduate course in testing and measurement theory: reliability, validity, and associz ted descriptive statistics; correlation and simple regression; derived and transformed scores; interpretation of test scores; measurement of aptitude, vocational interests, and personal-social adjustment.

6710 Educational Research Methods and Design (3) Prerequisite: An introductory statistics course or Ed Rem 6707 , or 6709 , or consent of instructor. An introductory course in educational research methodology: comparison of various types of qualitative and quantitative educstional research, threats to internal/external validity, sampling methods, data analysis, and components of research reports.

6712 Survey Research Methods in Education (3) Prerequisite: An introductory statistics course and Ei Rem 6710 or consent of instructor. Same as Political Science

6406 and Soc 5432. A course on the principles and procedures for conducting survey research. Topics include forming questions and scales, survey design, sampling methods, data preparation and analysis, and presentation of results.

## 6714 Action Research in Education (3)

Prerequisite: Ed Rem 6710 or consent of instructor. A course that engages the participants in systematic qualitative inquiry into their own practice: framing appropriate questions; gathering and interpreting data; analyzing culture, subjectivity and multiple perspectives; and reporting the results ("telling the story"). Readings will address the methods, politics, and ethics of action research. Enrollment requires access to a field setting.

## 6716 Psychoeducational Assessment and Intervention I

 (3)Prerequisite: Graduate standing. Instruction in the administration, scoring, interpretation, and reporting of results of individual and group tests of psychomotor ability, academic achievement, and oral language skills. Special attention given to linking assessment to intervention.

## 6718 Psychoeducational Assessment and Intervention

 II (3)Prerequisites: Grade of B or better in Ed Rem 6716 or Cns Ed 6050, and consent of instructor. An advanced assessment course in the administration and use of individual tests of cognitive abilities, diagnostic interviewing, adaptive behavior, and social-emotional behavior assessment with an emphasis on writing integrated reports with meaningful recommendations linking assessment to intervention.

6720 Nonparametric Statistics in Education (3) Prerequisite: Ed Rem 6710 or consent of instructor. An advanced educational research methods course in alternative analysis procedures to classical parametric statistics. Nonparametric methods are surveyed and their data requirements compared to their parametric counterparts. Educational research problems appropriate to or adaptable to these methods are studied.

## 6730 Educational Program Evaluation (3)

Prerequisites: Admission to doctoral education and Ed Rem 6710 or consent of instructor. A course on the principles and procedures for assessing the quality and effectiveness of programs, projects, and materials related to planned interventions and system changes in educational settings.

## 6732 Advanced Theory and Practice in Educational Program Evaluation (3)

Prerequisites: Ed Rem 6730 or consent of the instructor. Extension of the principles, attributes, and practices of program evaluation to contemporary problems and
settings. Study will include the comparison of examples of the program evaluation process. Focus will be on adherence to the Program Evaluation Standards endorsed by leading professional research and evaluation associations.

## 6735 Statistical Analysis for Education Research (3)

 Prerequisites: Graduate standing.Provides students with a fundamental and intermediate understanding of quantitative methods and their relationship to social science research in education. This course is designed to provide statistical background to students who will pursue advanced degrees in education. Students will conduct lab data analysis based on the topics covered in the class and learn how to generate specific research questions and conduct basic statistical analyses

6750 Advanced Research Design in Education (3) Prerequisites: Ed Rem 6735 or consent of instructor. This course is designed to provide students with a thorough background in the fundamental principles of research design in education, and the knowledge and skills necessary to design and carry out studies appropriate to a wide variety of research problems. It focuses on tailoring the research design and methodology to most effectively address the problem or issue of concem, including qualitative, quantitative, and mixed-method designs. This is an experiential course designed around active discussion by students each week, and requires each student to develop a detailed research proposal for conducting a study to examine an appropriate educational research problem.

## 6910 Teacher Research Capstone (3)

Prerequisites: Completion of Tch Ed/Ed Rem 6040 and all but the last 6 hrs of M.Ed. program. Same as Tch Ed 6910. This course applies the research knowledge, skills, and practice of experienced practitioners to a final research project that results from reflectively evaluating their own practice within educational systems and situated contexts. Educators will use both analytic and practical tools to research multiple factors that impact their own students learning. The final project will be presented to the faculty and students in the College of Education and displayed in a public forum as a capstone project for the M.Ed.

## 6990 Internship (1-10)

Prerequisite: Consent of instructor. Closely supervised experience in a field setting under the direction of a graduate faculty member. An appropriate level of competence and evidence of growth in the professional role must be demonstrated by the intern. The internship will include planning, research, evaluation, and related professional activities.

7711 Advanced Test Theory in Education (3)
Prerequisite: Admission to doctoral education and Ed Rem 6707, or Ed Rem 6709, or consent of instructor. An
advanced course in measurement theory and practice: issues of reliability, validity, and item analysis for both criterion and norm referenced tests; introduction to factor analysis in the development and analysis of test structure and validity; introduction to item response theory for the improvement of educational testing and research.

## 7771 Quantitative Research Methods I (3)

Prerequisites: Admission to doctoral education and Ed Rem 6710 or consent of instructor. An advanced educational research methods course: hypothesis testing using factorial analysis of variance; analysis of covariance; and the general linear model.

7772 Quantitative Research Methods II (3)
Prerequisite: Ed Rem 7771 or consent of instructor. An advanced educational research methods course; multivariate analysis of variance; canonical correlation, discriminant function analysis, factor analysis; cluster analysis, advanced topics in multiple linear regression; and associated research design issues.

## 7773 Quantitative Research Methods III (3)

Prerequisite: Ed Rem 7772. An advanced educational research methods course using multiple linear regression models, path analysis, and structural equation modeling. Focus is on the theory, issues, and application of these advanced data analysis techniques.

7781 Qualitative Methods in Educational Research I (3) Prerequisites: Admission to doctoral education and Ed Rem 6710 or consent of instructor. An introductory qualitative research methods course in education to develop skill in forming research questions, writing field notes, and collecting, organizing, and analyzing a variety of data. Philosophical and ethical issues in qualitative research are presented.

## 7782 Qualitative Methods in Educational Research II

 (3)Prerequisite: Ed Rem 7781 or consent of instructor. An advanced qualitative educational research methods course to address the issues of sampling strategies, observational and interview techniques, and data analysis. Requires access to a field setting to conduct a qualitative research study.

## Division of Teaching and Learning

## Facuity

Gayle Wilkinson, Chair, Associate Professor*
Ed.D., University of Illinois
Philip Ferguson, E. Desmond Lee Professor
in Education of Children with Disabilities
Ph.D., Syracuse University
Carl Hoagland, Emerson Electric Company Professor in
Technology and Learning
Ed.D., University of Massachusetts
William C. Kyle, E. Desmond Lee Family Professor of Science Education*
Ph.D., University of Iowa
Louis Lankford, Des Lee Foundation Endowed Professor in Art Education*
Ph.D., Florida State University
Robert Nordman, E. Desmond Lee and Family Fund Endowed Professor
M.M. Saint Louis Conservatory of Music

Wendy Saul, Dr. Allen B. and Mrs. Helen S. Shopmaker
Endowed Professor for Education in collaboration with
Springboard to Learning
Ph.D., University Wisconsin-Madison
James Shymansky, E. Desmond Lee Family Professor of Science Education
Ph.D., Florida State University
Patricia Simmons, E. Desmond Lee Professor in Life-Long
Learning for the Sciences
Ph.D., University of Iowa
Richard W. Burnett, Professor Emeritus*
Ed.D., Indiana University
Richard J. Friedlander, Professor*
Ph.D., University of California-Los Angeles
Charles Granger, Professor*
Ph.D., University of lowa
Kathleen M. Haywood, Associate Dean for Graduate Education, Professor*
Ph.D., University of Illinois-Urbana-Champaign
Wallace Z. Ramsey, Professor Emeritus*
Ed.D., University of Missouri-Columbia
Helene J. Sherman, Associate Dean, Professor*
Ed.D., University of Missouri-St. Louis
Blanche M. Touhill, Professor*; Chancellor Emerita
Ph.D., Saint Louis University
Paul D. Travers, Professor Emeritus*
Ed.D., George Peabody College
Doris A. Trojcak, Professor Emerita*
Ed.D., Indiana University
Harold E. Turner, Professor Emeritus*
Ed.D., George Peabody College
Douglas Turpin, Professor Emeritus in Music Education Ed.D., Washington University
Judith Walker de Felix, Professor*, Associate Provost
Academic Affairs; Dean of Graduate School
Ph.D., University of Florida
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Fred Willman, Professor*
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Jane Zeni, Professor*
Ed.D., University of Missouri-St. Louis
Susan Catapano, Associate Professor*
Ed.D., Nova.Southeastern University
Bruce A. Clark, Associate Professor Emeritus*
Ph.D., University of Illinois
Kevin Fernlund, Associate Professor
Ph.D., University of New Mexico
Harold Harris, Associate Professor*
Ph.D., Michigan State University
Thomas J. Loughrey, Associate Professor*
Ph.D., University of Iowa
Virginia L. Navarro, Associate Professor*
Ph.D., Washington University
Joseph L. Polman, Associate Professor*
Ph.D., Northwestern University
Rebecca Rogers, Associate Professor*
Ph.D., University of Albany-SUNY
Charles G. Smith, Associate Professor; Athletic
Director Emeritus, M.S., Washington University
Gwendolyn Turner, Associate Professor*
Ed.D. University of Arkansas
Cathy Vatterott, Associate Professor*
Ph.D., Saint Louis University
George J. Yard, Associate Professor Emeritus*
Ph.D., Saint Louis University
Karen Cumming, Assistant Professor
Ed.D., University of Illinois at Urbana-Champaign
Martille Elias, Assistant Professor
Ph.D., University of Missouri-Columbia
Gooyeon, Kim, Assistant Professor
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Jacquelyn A. Lewis-Harris, Assistant Professor*
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Lori Newcomer, Assistant Professor
Ph.D., University of Missouri-Columbia
Kim Song, Assistant Professor
Ed.D. Southern Illinois University-Edwardsville
Laura Westhoff, Assistant Professor
Ph.D., Washington University
Sheridan Wigginton, Assistant Professor
University of Missouri-Columbia
Lynn Navin, Lecturer: Director, University Child
Development center
M.Ed., Michigan State University

Debra Childs, Lecturer
M.Ed., Michigan State University

Diane Scollay, Lecturer; Director,
Gateway Writing Project
M.Ed., MA English, University of Missouri-St. Louis

Carol Weber, Lecturer
M.Ed., University of Missouri-St. Louis

* members of Graduate Faculty


## General Information

The faculty of the Division of Teaching and Learning has their offices on the $2^{\text {nd }}$ and $3^{\text {rd }}$ floors in Marillac Hall and in the Mark Twain Building. Information about course offerings and related matters on all programs except physical education may be obtained in 369 Marillac Hall. The physical education offices are located in 234 Mark Twain Building.

The division coordinates programs leading to a B.S. in education degree in:

## Early Childhood Education <br> Elementary Education <br> Physical Education <br> Secondary Education <br> Special Education

And the B.E.S. degree in:
Early Childhood Education
Exercise Science Education Professional Education

Programs leading to the M.Ed. in elementary education, secondary education, and special education also are coordinated in the Division of Teaching and Learning.

The early childhood undergraduate program is designed for students wishing to teach and direct programs for children from pre-kindergarten through grade three. Students electing this program will work directly with young children as a part of their professional courses.

The graduate program is designed to develop master-level educators through a common core of essential knowledge and experiences drawn from current research and practice in the field of early childhood education. Through this program, candidates are able to further their competencies as educators, directors, program planners, and curriculum developers in various early childhood settings. Students can complete additional course work to receive certification.

The elementary education program prepares students to teach in grades one through six. Students may also tailor a program leading to a middle school/junior high teaching certificate. A special feature of these programs is the many opportunities to work with children in schools as part of the professional course work.

The graduate program strives to develop and refine the concept of the "teacher as researcher" or the "teacher as reflective decision maker or problem solver." It is based on the premise that as professionals, teachers must understand both the products and findings of research and the underlying processes that influence their professional practice.

Students may choose a program leading to the M.Ed. In education, generalized or specialized elementary education or elementary education with Missouri certification in reading.

The physical education program coordinates wcrk in physical education, which leads to a B.S. in education degree with certification to teach either PK-9 or K-12.

The elementary education and secondary education graduate programs provide courses for graduate students who choose physical education as their teaching field.

The secondary education program prepares stucients for teaching these subjects in secondary schools (grade 9-12): biology, chemistry, English, French, German, history, mathematics, music, physics, psychology, social studies, speech and Spanish. A special feature of these programs is the close interdisciplinary cooperation between the College of Education and other university departments.

Students may also choose to pursue the bachelor s degree in the College of Arts and Sciences plus certification, or the B.S. in education degree, which includes Missouri certification.

At the graduate level, the division provides a prcgram leading to an M.Ed in secondary education with emphasis in: general secondary education; curriculum and instruction; secondary education with emphasis in reading; and secondary education and certification.

The special education program prepares students to teach learners with developmental disabilities, emotional/behavioral disorders, learning disabilities, or in early childhood special education settings. Students also receive certification as regular elementary school teachers upon completion of the curriculum. Missouri certification standards req sire a student teaching experience in each area of spec:al education.

At the graduate level, requisite course work for Missouri certification in special education is available, as is the M.Ed. Degree.

## Minor in Literacy

A Minor in Literacy can be earned by successfully completing 18 hours of the following:

Tch Ed 3315, Literacy Learning and Instruction Tch Ed 4391, Teaching Reading in Secondary School Content Areas
Ech Ed 3332, Literacy Learning and Instruction for the Young Child
Ele Ed 4989, Elementary Education Professiona 1 Internship
Ele Ed 3330, Literacy, Literature and the Learner Ele Ed 3336, Communication Arts Learning and Instruction
Ele Ed 3389, Classroom Based Assessment to Ciuide Literacy Instruction

Ele Ed 4387, Promoting the Language and Literacy
Development of Children Living in Poverty

## Minor in Mathematics Education K-5

A Minor in Mathematics Education can be earned by successfully completing 18 hours in the mathematics education field. The following mathematics education courses may be applied to Mathematics Education Minor.

Ele Ed 4246, Teaching Mathematics in the Elementary School
Ele Ed 4342, Teaching Remedial Mathematics
Ele Ed 4346, Advanced Methods in Elementary School Mathematics
Mid Ed 4246, Teaching Mathematics in the Middle School Ech Ed 4346, The Acquisition of Mathematical Concepts Ed Tec 5301, Introduction to Computers and the Internet in Education

Mathematics courses (except 1030, $1150 \& 2510$ ) with consent of advisor.

Note The State Board of education developed standards for renewable professional certificates, based on specific requirements for training and experience. Details regarding these standards are available in the office of undergraduate studies in education.

## Bachelor of Educational Studies

## Admission Requirements

To be admitted to the Bachelor of Educational Studies Program an applicant must:

- Be regularly admitted to the College of Education.
- Have a UM and overall cumulative grade point average of 2.5 on a 4.0 scale.
- Have a 20 on the ACT or 800 on the SAT
- Have a 235 on each subtest of the CBASE.
- Complete English 1100 with a C or better.
- Complete Mathematics 1030 with a C or better
- Have at least 45 hours of college credit.
- Complete an application for the Bachelor of Educational Studies and secure appropriate signatures.
The B.E.S. is professional degree designed for individuals who wish to study education as a scholarly discipline but who do not wish to prepare for the professional practice for education in the K-12 schools of this state or nation. Three emphasis areas are available: early childhood education; exercise science; and professional education studies.


## General Education Requirements

Students entering college first time Fall, 2002 should refer to the Introductory section of this bulletin for their General Education Requirements.

Communicative Skills (2 requirements)

- All students must complete a freshman English composition course with a grade of C - or better.
- All students must complete English 3100, Advanced Expository Writing, or its equivalent, with a grade of C - or better.
Mathematical Skills
- A grade of C- or better in a college-credit mathematics course having at least intermediate algebra as a prerequisite, or
- A satisfactory score on the university's Mathematics Proficiency Test.
Breadth of Study (minimum 42 hours in the following three areas with at least three courses in each area)
- Humanities
- Natural sciences and mathematics
- Social sciences

Other Requirements

- American History or Government (course taken at the University of Missouri or at other colleges or universities in Missouri)


## Degree Requirements

Cultural Diversity Requirement (3 hours)

- Ed Psy 3312/Tch Ed 3312, The Psychology of Teaching and Learning ( 3 hours)
- Communication 1040, Introduction to Public Speaking ( 3 hours)
- 6 hours in Psychology or Educational Psychology numbered $\mathbf{3 0 0 0}$ or higher
- Ed 2290, Internship (6 hours)
- Ed 2291, Internship (6 hours)

At least one of the following:

- Phy Ed 3282, Physical Growth and Motor Development ( 3 hours)
- Ed Psy/Tch Ed 2212, (3 hours), Introduction to Learners and Learning (3 hours), or equivalent
- Psy 2272, Adult Development and Aging (3 hours; same as Gerontology 2272)


## Emphasis in Early Childhood

One of the following two:

- Tch Ed 2211, Introduction to American Schools ( 3 hours or equivalent)
- Phy Ed 3282, Physical Growth and Motor Development (3 hours)
All of the following:
- Tch Ed 3313, Introduction to Leamers with Disabilities and Inclusive Education. (3 hours) or equivalent.
- Ech Ed 3303, Curriculum and Practice Laboratory: Infant/Toddler (1 hour)
- Ech Ed 3304, Curriculum and Practice Laboratory: Preschool (1 hour)
- Ech Ed 3312, Introduction to Early Childhood Education (3 hours)
- Ech Ed 3313, Curriculum and Practice: Infant/Toddler (2 hours)
- Ech Ed 3314, Curriculum and Practice: Preschool (2 hours)
- Ech Ed 4317, Assessing Individual Needs for Early Childhood Instruction (3 hours)
- Ech Ed 4331, Language Acquisition and Development in Early Childhood (3 hours)
- Ech Ed 3332, Literacy (3 hours)
- Ech Ed 4346, The Acquisition of Mathematical Concepts (3 hours)
Total: 27 hours
Second Concentration: Electives to total 12 hours to be chosen from Ech Ed, Ele Ed, Spc Ed, EdTec, Ed Rem, or an area chosen in consultation with the adviser.


## Emphasis in Exercise Science

All of the following:

- Bio 1131, Human Physiology and Anatomy I (4 hours)
- Bio 1141, Human Physiology and Anatomy II (4 hours)
- Phy Ed 3204, Special Topics in Physical Education (1-3 hours)
- Phy Ed 3283, Kinesiology (3 hours)
- Phy Ed 3284, Physiology of Human Exercise (3 hours)
- Phy Ed 3285, Sports Medicine (3 hours)
- Phy Ed 3287, Seminar in Exercise Science (3 hours) At least 6 credits from the following:
- Phy Ed 3261, Physical Activity for the Exceptional Learner (2 hours)
- Phy Ed 3275, Psychological Aspects of Physical Education
- Phy Ed 5330, Prescribing Physical Activity (3 hours)
- Phy Ed 5931, Adult Exercise Leadership (3 hours)
- Phy Ed 5380, Nutrition for Human Performance (3 hours) Total 27-29 hours
Second concentration: Electives to total 12 hours to be chosen from Bio, Chem, Phys, Psy, Geron, or an area chosen in consultation with the adviser.


## Emphasis in Professional Education Studies

27 hours in one of the following, numbered 3000 or above: Ele Ed, Spe Ed, Sec Ed.

Second Concentration: Electives to total 12 hours to be chosen from an area not selected above or Ech Ed, Phy Ed, Tch Ed, Cns Ed, Ed Psy, Ed Rem or Ed Tec.

Candidates for the Bachelor of Educational Studies degree must achieve a cumulative grade point average of at least. 2.750 , complete 24 of the last 30 hours in residence at UM-St. Louis, and be recommended by the faculty of the College of Education.

## Early Childhood Education (Ech Ed)

## Undergraduate Studies

Bachelor of Science in Education: Early Chilchood This program is designed for students wishing to teach and direct programs for children from birth through grade three.

## General Education Requirements:

Students entering college first time Fall, 2002 should refer to the Introductory section of this Bulletin :or their General Education Requirements.

English and Communication (9 hours)
English 1100, Composition
English 3100 or 3120 , Advanced Expository W iting Communication: 3 hours
Mathematics ( 3 hours)
Math 1150, Structure of Mathematical Systems I
Biological Science: includes lab (5 hours)
General Biology 1012/1013
Physical Science: includes lab (4 hours)

## Humanities ( 8 hours)

Three courses from two of the following fields: 3 rt , music, philosophy, and literature.
Social Science ( 15 hours)
Psych 1003, General Psychology
Pol Sci 1100, Introduction to American Politics. or equivalent and one of the following history courses:
Hist 1001, American Civilization
Hist 1002, American Civilization
and the following courses:
Pol Sci 1850, Global Ecology
Soc 1010, Introduction to Sociology, or any
anthropology course.

## Degree Requirements

Students are required to take the general education requirements as indicated for early childhood education above.

Level I: Exploring Education as a Profession
Tch Ed 2210, Introduction to Teaching
Tch Ed 2211, Introduction to American School;
Tch Ed 2212, Introduction to Learners and Learning

## Level II: Analyzing the Nature and Process of Education

Tch Ed 3310, Introduction to Instructional Metiods
Tch Ed 3312, Psychology of Teaching and Leaning
Tch Ed 3313, Introduction to Learners with Disability and Inclusive Education
Tch Ed 3315, Literacy Learning and Instruction
Phy Ed 3430, Elements of Health Education
Phy Ed 3282, Physical Growth and Motor Development

Level III: Synthesizing Theory and Practice in Educat Ele Ed 3330, Children's Literature and Reading
Ele Ed 3336, Teaching Language Arts and Rea ding, N-9
plus these Early Childhood Education (Ech Ed) courses:
Note: Ech Ed 3290 and Ech Ed 3291 must be taken during the same semester.

3303, Curriculum and Practice Laboratory: Infant/Toddler
3304, Curriculum and Practice Laboratory: Preschool
3312, Introduction to Early Childhood Education
3313, Curriculum and Practice: Infant/Toddler
3314, Curriculum and Practice: Preschool
3332, Early Literacy
4317, Assessing Individual Needs for Early Childhood
4346, The Acquisition of Mathematical Concepts
4320, Classroom Management
4989, Early Childhood Primary Internship
4990, Student Teaching in Early Childhood Education I ( 6 hrs ) 4991, Student Teaching in Early Childhood Education II ( 6 hrs )

Attention education majors: Professional education courses must be completed with a grade point average of 2.50 and no grade lower than a C- (2.0).

## Total: A minimum of $\mathbf{1 2 0}$ hours

## Graduate Studies

## Master of Education: Elementary Education, Early Childhood Education Emphasis

The M.Ed. program with an emphasis in early childhood education is designed to enable candidates to further their competencies as teachers or program administrators in public and private early childhood program. The program also prepares them for positions in community agencies that support families courses are as follows. Students must and young children. The minimum required and recommended complete the Required Core Competencies and Capstone Course as above.

## Career Outlook

The field of early childhood education has experienced a marked increase in the demand for highly qualified and professional prepared educators. As research continues to focus on the crucial early years of development, the need for trained professionals in early care and education will continue to rise. Early childhood graduates at all degree levels are attractive candidates for employment in a variety of educational positions. The downward extension of ages of schooling opens employment opportunities in the public and private sector. Future expansions of opportunities in schools are tied to population growth, increased specialization of services, and reduction in ratios between professional staff and children served. Additional career opportunities exist for early childhood educators in specialized childcare, private family care, instruction and training, corporations, self-owned businesses, and family-focused public and private agencies. Qualified early childhood educators can and do make a powerful difference in the lives of families and children.

Elementary Education (Ele Ed)

## Undergraduate Studies

## Bachelor of Science in Education: <br> Elementary Education

The elementary education program prepares students to teach in grades one through six.

## General Education Requirements:

English and Communication (9 hours)
English 1100, Freshman Composition
English 3100, Advanced Expository Writing
*Communication 1040, Introduction to Public
Speaking
Mathematics (6 hours)
Math 1150, Structure of Mathematical Systems I
Math 2510, Structure of Mathematical Systems II
Biological Science: includes lab ( 5 hours)
*General Biology 1012/1013
Physical Science: includes lab (4 hours)
Humanities (8 hours)
Three courses from two of the following fields: art, music, philosophy, and literature.
Social Science ( 18 hours)
Psych 1003, General Psychology
Pol Sci 1100, Introduction to American Politics, or equivalent
And one of the following history courses:
Hist 1001, American Civilization
Hist 1002, American Civilization
Pol Sci 1850, Global Ecology
Soc 1010, Introduction to Sociology, or any anthropology course.
Econ 3052, Microeconomics for the School Curriculum

## Program Requirements

## Level I: Exploring Education as a Profession

Tch Ed 2210, Introduction to Teaching
Tch Ed 2211, Introduction to American Schools
Tch Ed 2212, Introduction to Learners and Learning

## Level II: Analyzing the Nature and Process of Education

Tch Ed 3310, Introduction to Instructional Methods
Tch Ed 3312, Psychology of Teaching and Learning
Tch Ed 3313, Introduction to Leamers with Disabilities and Inclusive Education
Tch Ed 3315, Literacy Learning and Instruction
Level III: Synthesizing Theory and Practice in Education
Ele Ed 3330, Children's Literature and Reading Ele Ed 3336, Teaching Language Arts and Reading N-9

Ele Ed 4246, Teaching Mathematics in the Elementary School Ele Ed 4320, Classroom Management
Ele Ed 4253, Teaching Social Studies in the Elementary School
Ele Ed 4341, Teaching of Science in the Elementary School
Ele Ed 4989, Elementary Education Professional Internship
Ele Ed 4990 and 4991, Elementary School Student Teaching
Attention education majors: Professional education courses must be completed with a grade point average of 2.5 and no grade lower than a C-

Total: minimum of 120 hours.

## Middle School/Junior High (5-9)

General education requirements are the same as for elementary education.

## Related Area Requirements

Phy Ed 3430, Elements of Health Education
Phy Ed 3465, Physical Education Activities for the Elementary School
Ele Ed 2177, Elementary School Music
Ele Ed 2179, Art Activities for Elementary School

## Program Requirements

Tch Ed 2211, Introduction American Schools
Ed Psy 3312, Psychology of Teaching and Learning
Tch Ed 2213, Instruction to Learners with Disabilities and Inclusive Education and these

Elementary Education (Ele Ed) courses:
Ele Ed 4246, Teaching Mathematics in the Elementary School
Ele Ed 4253, Teaching of Social Studies in the Elementary School
Ele Ed 4990, Elementary School Student Teaching I
Ele Ed 4991, Elementary School Student Teaching II
Ele Ed 3330, Children's Literature and Reading
Ele Ed 3336, Teaching Language Arts and Reading, N-9
Ele Ed 4341, Teaching of Science in the Elementary
School
Ele Ed 3389, The Analysis and Correction of Reading
Problems in the Classroom
*Note: Ele Ed 4990 and Ele Ed 4991 must be taken during the same semester.
Postdegree certification students may take
Ed Fnd 4330, History of American Education, or Ed Find 6421, Philosophy of Education, in lieu of Tch Ed 2211.

Changes in teacher certification requirements in this area are upcoming. To obtain the latest information on requirement changes or to find out whether the new requirements will apply to you, contact the office of undergraduate teacher education, 155 Marillac Hall.

## Bachelor of Science in Education: Elementary

 Education (Middle School Certification)This area of specialization in elementary education prepares students to teach in grades 5-9.

## General Education Requirements

General education requirements are the same as or elementary education.

## Related Area Requirement

Phy Ed 3430, Teaching Health in the Elementar ${ }_{r}$ School

## Program Requirements

Level I: Exploring Education as a Profession
Tch Ed 2210, Introduction to Teaching
Tch Ed 2211, Introduction to American Schools
Tch Ed 2212, Introduction to Learners and Learaing

## Level II: Analyzing the Nature and Process of ${ }^{*}$ Education

Tch Ed 3310, Introduction to Instructional Methods
Tch Ed 3312, The Psychology of Teaching and Learning
Tch Ed 3313, Introduction to Learners with
Disabilities and Inclusive Education
Mid Ed 4315, The Middle Level School
Mid Ed 4316, Middle Level Curriculum and Instruction
Tch Ed 4391, Teaching Reading in the Secondary School Content Area

Level III: Synthesizing Theory and Practice in Education
Ele Ed 3389, Classroom Based Assessment to Ciuide Literacy Instruction
Sec Ed 4880, Writing for Teachers
Mid Ed 4317, The Middle level Child
Mid Ed 4989, Middle Level Internship
Mid Ed 4317\& Mid Ed 4989 should be taken concurrently.

## Special Methods

Along with education courses in Level III, students must take the appropriate special methods course congruent with the certification area(s) listed below: Ele Ed 3336, Teaching Language Arts and Reading, N-9
Mid Ed 4253, Teaching of Social Studies in the Middle School
Mid Ed 4246, Teaching Mathematics in the Miidle School
Ele Ed 4341, Teaching of Science in the Eleme tary School
Ele Ed 4990, Student Teaching

## Area of Concentration for State Certification

Middle School certification 5-9 requires a minimum of 21 hours for certification in the specific content of language arts, social studies, math, or science. Contact the office of undergraduate teacher education, 155 Marillac Hall, for specific content area courses.

Attention education majors: Professional education courses must be completed with a grade point average of 2.5 and no grade lower than a C - is acceptable.

Minimum of 120 hours.

## Graduate Studies

## Master of Education: Elementary Education

## General Curricular Program or Specialization in Selected Curricular Areas

The M.Ed. program in elementary education has a general program option, an emphasis in reading option, and an early childhood education option. All options consist of an initial required core of courses; a concentration area; an optional specialization area; a teacher research course; and a capstone or exit course. Areas of specialization are suggested below. A minimum of 33 hours is required for the degree; additional hours may be necessary for reading specialist certification.

## 1) Required Core ( 9 hours)

Students are required to complete the following courses within the first 15 hours of study.
Tch Ed 6010, Examining History, Community, and Social Justice in Education (3 hours)
Tch Ed 6020, Teacher Action, Advocacy \& Leadership (3 hours)
Tch Ed/Ed Psy 6030, Instruction, Learning \& Assessment (3 hours)

## 2) Required Research Course (3 hours) Ed Rem/Tch Ed 6040, Teacher Research (3 hours)

3) Elementary Education Concentration (12-18 hours) A curriculum course (required): Ele Ed 6410, Current Research in the Elementary School Curriculum Students should select at least 9 additional hours in one or more of the following areas: children's literature, early childhood, language arts, mathematics education, reading, science education, social studies education, special education, physical education, educational technology, curriculum development, improvement of instruction, or another area as identified in consultation with the faculty advisor.

## 4) Specialization Areas (Optional; 6 hours)

Students may follow one of the core competency courses with two additional courses to develop an area of specialization, such as: Educational Psychology Option: Ed Psy/Tch Ed 6030 followed by either Ed Psy 6210 Life-Span: Individual and Family Development or Ed Psy/Ed Tec 6448 Technology Supported Inquiry Learning ( 3 hours each) and one of the
following Ed Psy courses: 6210, Life-Span: Individual \& Family Development: 6215, Psychology of Early Childhood Development; 6220, Psychology of the Elementary School Child; or 6225 , The Psychology of Adolescence ( 3 hours each) Educational Technology Option: Tch Ed/Ed Psy 6030 followed by Ed Tec 5340 Selection and Utilization of Educational Multimedia and Ed Tec 6452 Educational Multimedia Design. Other specialization areas are available and information is available in the Graduate Education and Teaching \& Learning Division office.

## 5) Capstone Course ( 3 hours)

Students must enroll in the capstone course during their last semester.
Tch Ed/Ed Rem 6910, Teacher Research Capstone (3 hours)

## Emphasis in Reading

The M.Ed. program with emphasis in reading (literacy) is designed to enable candidates to further their competencies as teachers of reading, writing, and the other communication arts. The program also prepares them for positions as literacy coaches, reading specialists, curriculum specialist in communication arts and reading areas, consultants in areas of communication arts, and/or for further graduate study. The following program enables the student to earn a M.Ed. with an emphasis in Reading while fulfilling the Department of Elementary and Secondary Education's requirements for special reading certification in Missouri. Students must complete the first two levels of the Required Core, an educational psychology course, an approved educational research course, 18 hours of literacy courses, and an action research capstone course. The minimum required and recommended courses are as follows:

## Required Core (9 hours)

Tch Ed 6010, Examining History, Community, and Social Justice in Education (3 hours)
Tch Ed 6020, Teacher Action, Advocacy \& Leadership (3 hours)
Tch Ed/Ed Psy 6030, Instruction, Learning \& Assessment (3 hours) or a graduate level course in child psychology or adolescent psychology may be substituted if needed for certification.

## Required Research Course - Evaluation of

 Abilities and Achievement (3 hours)Ed Rem 6707, 6709, or 6716 Choose one course (3 hours) Dependent on student needs and interests.

## Reading Concentration (18 hours): <br> Required Courses

Ele Ed 6487, Literacy Acquisition \& Learning in a Diverse Society

Ele Ed 6684, Instructional Strategies for Teaching Reading
Ele Ed 6686, Analysis and Correction of Reading Disabilities
Ele Ed 6493, Reading Specialist Practicum I
Ele Ed 6494, Reading Specialist Practicum II
And at least one course from the literacy-related elective list or from the certification-related elective list below (min. 3 hrs ):

Capstone Course ( 3 hours)
Ele Ed 6482, Problems and Research in Teaching Elementary School Reading

## Literacy Related Electives

Ele Ed 6630, Communication Arts Instruction
Ele Ed 6436, Children's Literature I: Survey \& Analysis Eng 6880/Tch Ed 6880, Gateway Writing Project ( 6 hrs ) Tch Ed 4391, Teaching Reading in Secondary School Content Areas*
Ele Ed 6688, Literacy Assessment to Guide Instruction
Tch Ed 5312, Differentiated Instruction
To be recommended for Missouri Department of Elementary and Secondary Education special reading certification, teachers must have a valid Missouri teacher's certificate and two years of classroom teaching experience, and they must have had the following at either the undergraduate or graduate level: two additional courses in reading; language acquisition or development; classroom management techniques; counseling techniques (to include exceptional children and their families: child AND adolescent psychology; and testing, evaluation, and achievement. These certification requirements might be in addition to the courses listed in the program of study above. See your graduate advisor for information about these courses. M. Ed. Students needing any of the above can elect to take these courses at the graduate level where available and apply them to their concentration area.

## Certification Related Electives

Ed Psy 6220, Psychology of the Elementary School Child
Ed Psy 6225, The Psychology of Adolescence
Cns Ed 3320, Counseling Individuals with Special Needs Spc Ed 4315, Speech and Language Problems Exceptional Children
Ech Ed 4331, Language acquisition and Development in Early Childhood
Spe Ed 6320, Advanced Studies in Classroom Management
Ed Rem 6707, Classroom Measurement \& Evaluation
Ed Rem 6709, Educational and Psychological Testing
*Only one 4000 level course can be applied to the M.Ed.

## Certification Options

A combined M.Ed. and certification option exists. Options include elementary education (1-8), early childhood education (PK-3), and middle school/junior high (4-9). Students should consult certification advisers. Graduate credit will not be given for courses at the 1000 to 3000 levels and only one 4000 level course can be applied to an M.Ed. degree.

Elementary Education-Emphasis in Early
Childhood Education Concentration (12 hours) Required:
Ech Ed 6412, Foundations of Early Childhood Education (3)
Ech Ed 6413, The Educational Role of Play (3)
Ech Ed 6415, Organization and Development of Early Childhood Programs (3)
Ed Psy 6215, Psychology of Early Childhood
Development (3)

## Elective hours (6 hours)

Total: 33 hours

## Career Outlook

Undergraduate and graduate degrees in elements.ry education are most directly applicable to teaching at the level appropriate to the program emphasis. Increasing specialization of teaching assignments and downward extensions of ages of schooling conti nue to open employment opportunities. As in the past, elementary education graduates at all degree levels also continue to be attractive candidates for employment in many positions, which require (cr are well suited to) training in social and behavioral sciences. Positions in constant contact with and service to the general public such as sales, service, public relations, and general business are most common examples. Future expansions of opportunities in schools are tied to population growth, increas ed specialization of services, and reduction in ratio:; between professional staff and children served. Many currently employed teachers will retire within the next $5-10$ years; consequently, a shortage of teachers is anticipated.

## Physical Education (Phy Ed)

## Undergraduate Studies

## Bachelor of Science in Education: Physical Education

This program prepares students to teach physical education. Individuals can be certified for grades PK to 9 only or for grades PK to 12 .

## Communication Skills (9 hours)

English 1100, Freshman Composition
English 3100, Advanced Expository Writing or equivalent
Communication, 1030 or 1040

## General Education Requirements (42 hours required):

Students entering college first time, Fall 2002 should refer to the Introductory section of this Bulletin for their General Education Requirements.

## Communcation, 1030 or 1040

General Education Requirements ( 42 hours
required):
Students entering college first time, Fall 2002 should
refer to the Introductory section of this Bulletin for
their General Education Requirements.

Humanities (8 hours)
Three courses from two curricular designations in the humanities (Symbol H).

## Social Science (9 hours)

One course in American history
One course in American government
Psych 1003, General Psychology
Natural Science (8 hours)
One course in a physical or earth science
One course in a biological science.
At least one of these courses must have a laboratory
component.
Mathematics ( 3 hours)
One college-level mathematics course
Note: All of the courses above must be a minimum of two semester hours.
Electives 11-14 hours

## PK-9 Emphasis

## Level I: Exploring Education as a Profession

The following physical education (Phy Ed) courses and professional education courses are required ( 16 hrs ) and must be completed before advancement to Level II:
Phy Ed 3280, Human Anatomy and Physiology (5 hrs) Phy Ed 3277, Historical/Philosophical Foundations of Physical Education and Sport ( 2 hrs )
Tch Ed 2210, Introduction to Teaching (3 hrs)
Tch Ed 2211, Introduction to Schools ( 3 hrs )
Tch Ed 2212, Introduction to Learners (3 hrs)

## Level II: Analyzing the Nature and Process of Education

The following physical education (Phy Ed) courses and professional education courses are required ( 27 hrs ) before enrollment in any Level III courses:
Phy Ed 3267, Performance Analysis in Physical Education (3 hrs)
Phy Ed 3275, Psychological Aspects of Physical Education (3 hrs)
Phy Ed 3282, Physical Growth and Motor Development (3 hrs)
Phy Ed 3283, Kinesiology ( 3 hrs )
Phy Ed 3284, Physiology of Human Exercise (3 hrs)
Phy Ed 3285, Sports Medicine (3 hrs)
Tch Ed 3312, Psychology of Teaching and Learning ( 3 hrs )
Tch Ed 3313, Introduction to Learners with Disabilities and Inclusive Education ( 3 hrs )
Tch Ed 3386, Teaching Reading in Secondary School Content Areas ( 3 hrs )

The following physical education courses are required ( 9 hrs ) and can be taken concurrently with Level III courses:
Phy Ed 3434, Teaching of Wellness and Health Related Fitness (4 hrs)

Phy Ed 3261, Physical Activity for the Exceptional Learner ( 2 hrs )
Phy Ed 3468, The Curriculum and Methods of Teaching Physical Education ( 3 hrs )

## Level III: Synthesizing Theory and Practice in Education

The following physical education (Phy Ed) courses are required ( 26 hrs ):

Phy Ed 3422, Teaching of Skills: Grade PK-4 (4 hrs)
Phy Ed 3423, Teaching of Skills: Grades 5-9 (4 hrs)
Phy Ed 3425, Teaching of Skills: Movement, Dance and Rhythms ( 3 hrs )
Phy Ed 4989, Physical Education Professional Internship (3 hrs)
Phy Ed 4990, Student Teaching in Physical Education PK-5 ( 6 hrs )
Phy Ed 4991, Student Teaching in Physical Education 5-9 ( 6 hrs )

Total: 126 hours
Attention education majors: Professional education courses must be completed with a grade point average of 2.5 and no grade lower than a C -

## Grades PK through 12 Emphasis

Level I: Exploring Education as a Profession The following physical education (Phy Ed) courses and professional education courses are required (16 hrs ) and must be completed before advancement to Level II:

Phy Ed 3280, Human Anatomy and Physiology (5 hrs)
Phy Ed 3277, Historical/Philosophical Foundations of Physical Education and Sport (2 hrs)
Tch Ed 2210, Introduction to Teaching (3 hrs)
Tch Ed 2211, Introduction to Schools (3 hrs)
Tch Ed 2212, Introduction to Learners (3 hrs)

## Level II: Analyzing the Nature and Process of Education

The following physical education (Phy Ed) courses and
professional education courses are required ( 29 hrs )
before enrollment in any Level III courses:
Phy Ed 3267, Performance Analysis in Physical Education ( 3 hrs )
Phy Ed 3275, Psychological Aspects of Physical Education (3 hrs)
Phy Ed 3276, Sociological Foundations of Physical Education and Sport (2 hrs)
Phy Ed 3282, Physical Growth and Motor

Development (3 hrs)
Phy Ed 3283, Kinesiology ( 3 hrs )
Phy Ed 3284, Physiology of Human Exercise ( 3 hrs )
Phy Ed 3285, Sports Medicine ( 3 hrs )
Tch Ed 3312, Psychology of Teaching and Learning ( 3 hrs )
Tch Ed 3313, Introduction to Learners with
Disabilities and Inclusive Education ( 3 hrs )
Tch Ed 3386, Teaching Reading in Secondary School
Content Areas ( 3 hrs )
The following physical education courses are required ( 9 hrs ) and can be taken concurrently with Level III courses
Phy Ed 3434, Teaching of Wellness and Health Related Fitness ( 4 hrs )
Phy Ed 3261, Physical Activity for the Exceptional Leamer ( 2 hrs )
Phy Ed 3468, The Curriculum and Methods of Teaching Physical Education (3 hrs)

## Level III: Synthesizing Theory and Practice in Education

The following physical education (Phy Ed) courses are Required ( 30 hrs ):
Phy Ed 3422, Teaching of Skills: Grades PK-4 (4 hrs)
Phy Ed 3423, Teaching of Skills: Grades 5-9
(4 hrs)
Phy Ed 3424, Teaching of Skills Grades 9-12
(4 hrs)
Phy Ed 3425, Teaching of Skills: Movement, Dance and Rhythms ( 3 hrs )
Phy Ed 4989, Physical Education Professional
Internship (3 hrs)
Two of the following three:
Phy Ed 4990, Student Teaching in Physical
Education PK-5 ( 6 hrs )
Phy Ed 4991, Student Teaching in Physical Education 5-9 (6 hrs)
Phy Ed 4992, Student Teaching in Physical Education 9-12 ( 6 hrs )

Minimum: $\mathbf{1 3 2}$ hours
Attention education majors: Professional education courses must be completed with a grade point average of 2.5 and no grade lower than a C -

## Athletic Coaching Minor

An athletic coaching minor is available (minimum of 20 hours).
The following courses are required:
Phy Ed 3283, Kinesiology
Phy Ed 3424, Teaching of Skills: Grades 9-12
Phy Ed 5312, Management of Sports Programs
Phy Ed 5330, Prescribing Physical Activity

All courses apply to, but do not complete, teaching certification in Missouri.

## Health Certification

For those with a valid teaching certificate in physical, courses are available to obtain an additional endorsement in health education.

## Master of Education: Elementary or Secondary Education with Physical Education as Teaching Field

A significant number of graduate students choos: physical education as the teaching field within one of the master of education degree options. Most are currently employed as teachers of health and/or physical education. Certification requirements in Missouri mandate the completion of a master's digree to professionalize the certificate. Therefore, a full complement of graduate courses relating to teaching in physical education is available to meet this nesd. For many who need to pursue teacher certification in physical education while pursuing the master's degree, most course work needed to meet state certificat on requirements can be taken in the master's progra.n. For those employed outside education, an emphasis in exercise science is also available, providing a foundation of course work designed to prepare a person in this area. Specific information is available regarding each of these degree programs. Please consult with your graduate adviser to discuss the specific options and requirements.

## Career Outlook

The employment outlook for physical educators in the schools continues to be positive, especially in the elementary and middle school levels. Recent placement years have yielded full employment opportunities to UM-St. Louis graduates. Rising school enrollments and the expected retirement of a significant portion of currently employed teachers signal optimistic outlooks for the next few years. In addition to elementary, middle school, and high school physical education teaching, more limite 1 opportunities exist in athletic training, dance, re ;earch, sports management, and exercise leadership fields serving persons of all age categories.

## Secondary Education (Sec Ed)

## Undergraduate Studies

## Bachelor of Science in Education: Secondary Education

Two secondary education programs prepare stulents to teach in grades 9 through 12: Bachelor of Science in Secondary Education through the College of Education (B.S.Ed.) OR Bachelor of Arts in a
department of the College of Arts and Sciences (B.A.) with certification in Secondary Education.

## General Education Requirements

Students entering college first time, Fall 2002 should refer to the Introductory section of this bulletin for their General Education Requirements.
B.S.Ed. degree candidates must complete the following general education courses required by the College of Education and the Missouri Department of Elementary and Secondary Education.

## Humanities

Three courses required from two of the following fields: music (excluding applied music), art, foreign language, Western and non-Western cultures, philosophy, literature, classical studies, and theater and drama.

## Communication Skills

At least two courses in English composition and one in oral communications.

## Social Studies

One course in each-American history and American government, and one additional course selected from the following areas: geography, sociology, economics, anthropology, and psychology.

## Natural Science

One course in a physical or earth science; one course in a biological science. At least one of these courses must have a laboratory component.

## Mathematics

One college-level mathematics course.
Note All of the courses above must be a minimum of 2 semester hours.

## Program Requirements

B.S.Ed. and B.A. certification candidates must complete the following courses:

## Level I: Exploring Education as a Profession

Tch Ed 2210, Introduction to Teaching
Tch Ed 2211, Introduction to Schools
Tch Ed 2212, Introduction to Learners

## Level II: Analyzing the Nature and Process of Education

Tch Ed 3310, Introduction to Instructional Methods
Tch Ed 3312, Psychology of Teaching and Learning
Tch Ed 3313, Introduction to Leamers with
Disabilities and Inclusive Education
Tch Ed 4391, Teaching Reading in Secondary School Content Areas

## Level III: Synthesizing Theory and Practice in Education

Sec Ed 4xxx, Curriculum and Methods of Teaching (specific subject area)
Sec Ed 4989, Secondary Education Professional Internship
Sec Ed 4990, Secondary School Student Teaching
Note: Sec Ed 4989 Secondary Education Professional Internship and Sec Ed 4xxx, Curriculum and Methods of Teaching (specific subject area) must be taken in the same semester and in the semester immediately preceding Sec Ed 4990, Secondary School Student Teaching

## Attention education majors:

Professional education courses must be completed with a grade point average of 2.5 and no grade lower than a C - or better are required in all courses in the teaching field.

Emphasis Areas: B.S.Ed. candidates must complete 30 to 50 hours of specific subject requirements in one of the following fields: English, foreign language (French, German, or Spanish), mathematics, music, unified science (biology, chemistry, or physics endorsement), or social studies. For specific subject requirements see the appropriate department listing in the Arts and Science section of this bulletin: Social Studies requirements are listed below:

Note: Music education students take the following courses Sec Ed 3293, Student Teaching in Music Education K-6, and Sec Ed 3294, Student Teaching in Music Education 7-12. These two courses must be taken during the same semester.

Social Studies certification students must complete a major or an equivalent in hours in one of the following disciplines: anthropology, economics, geography, history, political science, psychology, or sociology. They must meet these minimum social science requirements: American history, 12 hours including History/Sec Ed 4013; European or world history, 9 hours including History/Sec Ed 4014; United States and/or state government, 6 hours including Political Science 3090/Sec Ed 3209; behavioral science, 6 hours; economics, 3 hours; geography, 3 hours; and 2 hours of elective social studies credit. For emphasis area advising, see the History Department.

## B.S. degree in Secondary Education with an Emphasis in Science-Physics

All candidates must enroll in a program that includes levels I, II, and III course work in the College of Education. In addition, students must complete the
following Science Core Courses and the courses listed under Physics Endorsement:

Science core courses:
Philosophy 3380, Philosophy of Science
Biology
1811, Introductory Biology I
1821, Introductory Biology II
1111, Introductory Chemistry I
1112, Introductory Chemistry II
Geology 1001, General Geology
Atmospheric Science 1001, Elementary Meteorology
Biology 1202, Environmental Biology or another
environmental science

## Physics

1011, Physics: Mechanics and Heat
1012, Physics: Electricity, Magnetism, and Optics

## Physics Endorsement

Physics
3200, Survey of Theoretical Physics
3221, Mechanics
3223, Electricity and Magnetism
3231, Introduction to Modern Physics
4310, Modern Electronics
4311, Advanced Physics Laboratory I
4802, or Sec. Ed 3240, Curriculum and Methods of Teaching Physical Science
4837, Chemistry/Physics Teaching Intern Seminar

## Graduate Studies

The M.Ed. program in secondary education has general program, curriculum and instruction, or reading options. All consist of an initial required core of courses; an opportunity to develop an area of specialization; an opportunity for study in the teaching field; and a capstone or exit course. Areas of specialization are suggested below. A minimum of 33 hours is required for the general program, curriculum and instruction, and adult education and reading options.

## Master of Education: Secondary Education

The M.Ed. general program is appropriate for secondary teachers and department chairpersons. Programs must be planned with the academic adviser and meet the approval of the advisor, College, and Graduate School.

## 1) Required Core ( 9 hours)

Students are required to complete the following courses within the first 15 hours of study.
Tch Ed 6010, Examining History, Community, and Social Justice in Education (3 hours)
Tch Ed 6020, Teacher Action, Advocacy \& Leadership (3 hours)
Tch Ed/Ed Psy 6030, Instruction, learning \& Assessment (3 hours)

Ed Rem/Tch Ed 6040, Teacher Research (3 hours)
3) Teaching Field Concentration (12-18 hours)

A curriculum course (required): Sec Ed 6415, The Secondary School Curriculum. Students should select at least 9 hours in their teaching field (mathemat:cs; chemistry; biology; physics; social studies; English; physical education; speech and theatre; educarional technology or other) or in secondary education, as identified in consultation with the faculty adviso:-
4) Specialization Areas (Optional: 6 hours)

Students may follow one of the core competency courses with two additional courses to develop ai area of specialization, such as:

Educational Technology Option: Tch Ed/EdPsy 5030 followed by Ed Tec 5340, Selection and Utilizar on of Educational Multimedia and Ed Tec 6452, Educational Multimedia Design

Educational Psychology Option, Tch Ed/Ed Psy 6030 followed by either Ed Psy 6210, Life-Span: Individual and Family Development or Ed Psy/Ed Tec 6448, Technology Supported Inquiry Learning ( 3 hour; each) and one of the following Ed Psy courses: 6210, Life-Span: Individual \& Family Development; 6215, Psychology of Early Childhood Development; 6220, Psychology of the Elementary School Child; or 6225, The Psychology of Adolescence ( 3 hours each) Teaching of Writing Option, Tch Ed/Ed Psy 6030 followed by Tch Ed 5850, Topics in the Teaching of Writing and Tch Ed 6890, Seminar in Professiorial Writing for Teachers; or Tch Ed 6880, Gateway Writing Project (6).

Other specialization areas are available and information is available in the Graduate Education and Teaching \& Learning Division offices.

## 5) Capstone Course ( 3 hours)

Students must enroll in the capstone course during their last semester.
Tch Ed/Ed Rem 6910, Teacher Research Capst mne (3 hours)

## Master of Education: Secondary Education with Emphasis in Curriculum and Instruction

The M.Ed. with an emphasis in curriculum and instruction is designed for graduate students who wish to further their competencies as teacher or curriculum specialist or instructional leaders.

[^2]Tch Ed 6020, Teacher Action, Advocacy \& Leadership (3 hours)
Tch Ed/Ed Psy 6030, Instruction, Learning \& Assessment (3 hours)
2) Required Research Course (3 hours)

Ed Rem/Tch Ed 6040, Teacher Research (3 hours)
3) Curriculum and Instruction Core (9 hours)

Sec Ed 6415, The Secondary School Curriculum
Sec Ed 6420, The Improvement of Secondary School Teaching
Sec Ed 6416, Curriculum Construction for Secondary Schools
4) Specialization Areas (Optional: 6 hours)

Same as above
5) Electives (3-9 hours)

Students can elect hours in their teaching field or other areas of secondary education. The following are suggested:
Ed Fnd 6421, Philosophy of Education
Ed Fnd 6422, Analysis of Educational Issues
Ed Fnd, 6435, History of Western Education
6) Capstone Course (3 hours)

Students must enroll in the capstone course during their last semester.
Tch Ed/Ed Rem 6910, Teacher Research Capstone (3 hours)
Master of Education: Secondary Education with Emphasis in Middle Level Education
The M.Ed. with an emphasis in middle level education is designed for graduate students who would like to further their competencies as a middle level educator.

1) Required Core Requirements ( 9 hours)

Students are required to complete the following courses within the first 15 hours of study.
Tch Ed 6010, Examining History, Community and Social Justice in Education (3 hours)
Tch Ed 6020, Teacher Action, Advocacy \& Leadership (3 hours)
Tch Ed/Ed Psy 6030, Instruction, Learning \& Assessment (3 hours)
2) Required Research Course ( 3 hours)

Ed Rem/Tch Ed 6040, Teacher Research (3 hours)
3) Middle Level Education Core ( 12 hours)

Students should select a curriculum course and at least 9 hours from the following:
Ed Adm 6303, Middle School Administration
Ed Adm 6315, Middle School Educational Philosophy
Ed Adm 6317, Supervision and the Middle School Child
Ed Psy 6225, The Psychology of Adolescence
Mid Ed 5220, Science for the Middle School Teacher (5 hours)
4) Specialization Areas (Optional: 6 hours)

Same as above
5) Electives (3-6 hours)
6) Capstone Course (3 hours)

Students must enroll in the capstone course during their last semester.
6910, Tch Ed/Ed Rem, Teacher Research Capstone (3 hours)

## Master of Education: Secondary Education with Emphasis in Reading

The M.Ed. program with emphasis in reading (literacy) is designed to enable candidates to further their competencies as teachers of reading, writing and other communication arts. The program also prepares them for positions as literacy coaches, reading specialists, curriculum specialist in communication arts and reading areas, consultants in areas of communication arts, and/or for further graduate study.
The following program enables the student to earn a M.Ed. with an emphasis in Reading while fulfilling the Department of Elementary and Secondary Education's requirements for special reading certification in Missouri. A course in reading in the content area is required for secondary certification. If this has not been taken as an undergraduate, it must be selected as an elective in the program for a Masters in Secondary Education with a Reading Emphasis. The minimum required and recommended courses are as follows:

1) Required core ( 9 hours)

Tch Ed 6010, Examining History, Community, and Social Justice in Education (3 hours)
Tch Ed 6020, Teacher Action, Advocacy \& Leadership (3 hours)
Tch Ed/Ed Psy 6030, Instruction, Learning \& Assessment ( 3 hours) or a graduate level course in child psychology and/or adolescent psychology may be substituted if needed for certification.
2) Required Research Course - Evaluation of Abilities and Achievement ( 3 hours)
Ed Rem 6707, 6709, or 6716, Choose one course (3 hours)
3) Reading Concentration ( 18 hours): Required Courses
Sec Ed 6487, Literacy Acquisition \& Learning in a Diverse Society
Sec Ed 6684, Instructional Strategies for Teaching Reading
Sec Ed 6686, Analysis and Correction of Reading Disabilities
Sec Ed 6493, Reading Specialist Practicum I
Sec Ed 6494, Reading Specialist Practicum II
And at least one course from the literacy-related elective list or from the certification-related elective list below ( min .3 hrs ):
4) Capstone Course (3 hours)

Sec Ed 6482, Problems and Research in Teaching Secondary School Reading

Literacy Related Electives Include:
Ele Ed 6630, Communication Arts Instruction
Ele Ed 6436, Children's Literature I: Survey \& Analysis Eng 6880/Tch Ed 6880, Gateway Writing Project
Tch Ed 4391, Teaching Reading in Secondary School Content Areas*
Ele Ed 6688, Literacy Assessment to Guide Instruction One course needed to complete certification (See note below)

To be recommended for Missouri Department of Elementary and Secondary Education special reading certification, teachers must have a valid Missouri teacher's certificate and two years of classroom teaching experience, and they must have had the following at either the undergraduate or graduate level: two additional courses in reading; language acquisition or development; classroom management techniques; counseling techniques (to include exceptional children and their families: child AND adolescent psychology; and testing, evaluation, and achievement. These certification requirements might be in addition to the courses listed in the program of study above. See your graduate advisor for information about these courses. M.Ed. Students needing any of the above can elect to take these courses at the graduate level where available and apply them to their concentration area.

Certification Related Electives Include
Ed Psy 6220, Psychology of the Elementary School Child
Ed Psy 6225, The Psychology of Adolescence
Cns Ed 3320, Counseling Individuals with Special Needs
Spe Ed 4315, Speech and Language Problems Exceptional Children
Ech Ed 4331, Language Acquisition and Development in Early Childhood
Spc Ed 6320, Advanced Studies in Classroom Management
Ed Rem 6707, Classroom Measurement \& Evaluation
Ed Rem 6709, Educational and Psychological Testing
Note: * Only one 4000 level course can be applied to the M.Ed.

## Master of Education: Secondary Education and Certification

Those holding a baccalaureate degree or major in the teaching field who would like to pursue initial teacher preparation and a Master's degree, can take the following program. The exact number of hours depends upon hours needed by the student to meet certification requirements in the chosen teaching field.

## 1) Required Teacher Certification Courses at the Graduate Level ( 17 hours)

Tch Ed 5311, Foundations in Education (4)
Ed Psy 6109, Learning and Development in Educational Environments
Tch Ed 5310, Instructional Design (3)

Tch Ed 5313, Introduction to Learners with Disabilities and Inclusive Education (3)
Tch Ed 4391, Teaching Reading in Secondary School Content Areas*
2) Required Teacher Certification Courses at the Undergraduate Level (19-21 hours)
These courses are not applicable to the Master's degree
Sec Ed 4xxx, Curriculum and Methods of Teaching ---(3)
Sec Ed 4989, Secondary Education Professional
Internship (3)
Sec Ed 4990, Secondary School Student Teachirg (12)

Sec Ed 4xxx, Student teaching Seminar (1-3)
3) Teaching Field courses (6 hours minimum)

Selected in consultation with advisor. Should be taken at the graduate level when possible. Only graduate credit can be applied to the Master's degree
4) Master of Education Required Core Courses (9 hours)
Students should complete initial teacher certificztion courses before enrolling in the following:
Tch Ed 6010, Examining History, Community and Social Justice in Education (3 hours)
Tch Ed 6020, Teacher Action, Advocacy \& Leadership
Tch Ed/Ed Psy 6030, Instruction, Learning \& Assessment (3 hours)
5) Required Research Course ( 3 hours) Ed Rem/Tch Ed 6040, Teacher Research (3 hours)
6) Capstone Course ( 3 hours)

Students must enroll in the capstone course during their last semester.

Tch Ed/Ed Rem 6910, Teacher Research Capstone (3 hours)

- Check with your advisor regarding limits on the number of 4000 level courses that can be applied to the Master's degree.

Total minimum 33 graduate hours

## Graduate Certificate in the Teaching of Writing,

 Gateway Writing ProjectJointly housed in the Division of Teaching and Learning and the Department of English, this Graduate Certificate prepares teachers at all levels (K12 , college, adult) to improve their students' performance in writing. The program also emplasizes using writing as a means to promote learning in all content areas. All courses provide opportunities for teachers to write, revise, share feedback, and retlect on their own writing development. Based on ths

National Writing Project's core belief that teachers of writing must themselves be writers, the Graduate Certificate in the Teaching of Writing brings together sound pedagogy, composition theory, and writing practice.

The Certificate is an 18 -hour program through the Gateway Writing Project (GWP); it may also be coordinated with other graduate programs. Certificate courses may be applicable to the M.A. in English with ermphasis in composition or to various M.Ed. programs. The GWP Certificate is especially appropriate for post-master's candidates who wish to pursue a specialization in teaching writing. The Graduate Certificate in the Teaching of Writing requires a 12 semester-hour core of courses developed by the Gateway Writing Project: The GWP invitational institute ( 6 hrs ), a designated "topics" course (3 hrs.), and an exit course ( 3 hrs .). The Certificate requires a minimum of 12 semester hours at the 5000 or 6000 [400] level or above. Electives ( 6 semester hours) may be chosen from approved offerings in English or Education.

## Admission:

Applicants must be admitted to Graduate School and be selected by the faculty admissions committee for the Gateway Writing Project's Certificate in the Teaching of Writing. The committee will review candidates on the basis of an interview, an application essay, and supporting documentation. Criteria include experience teaching writing at any level and academic record, especially in writing and the teaching of writing.

## Prerequisites:

Eng/SecEd 4880, "Writing for Teachers" or an equivalent course in teaching writing.
Coursework or competency in basic computer application.
Required Core Courses ( 12 semester hours)
Eng 4850(TchEd 5850), Topics in the Teaching of Writing (designated topics, 3 sem . hrs.)
Eng 6880/TchEd 6880, Gateway Writing Project ( 6 sem. hrs.) TchEd 6890, Seminar in Professional Writing for Teachers (exit course, 3 sem. hrs)

## Electives (6 semester hours)

Electives may be chosen from other Gateway Writing Project offerings or from courses offered by the appropriate academic department with advisor's approval. These electives must include at least one more 5000-6000 level course.

Suggested electives applicable to an MA in English with writing emphasis:<br>Eng 5840, Theories of Writing<br>Eng 5860, Writing/Reading Theory<br>Eng 5860, Composition Research<br>Eng 5890, Teaching College Writing<br>Eng 5800, Modern Linguistics

Suggested electives applicable to an M.Ed. in
Elementary or Secondary Education
El Ed 6387, Literacy Acquisition and Learning for Urban
Students
Sec Ed 6430, Problems in Teaching English in

Sec. School
El Ed 6432, Problems \& Research in Language Arts
EI Ed 6482, Problems \& Research in Elementary Reading Ed Rem 6714, Action Research in Education Courses in adult and higher education may also be appropriate. For complete information, see The Gateway
Writing Project's Graduate Certificate in Teaching Writing,
available from the English Department, from the
Division of Teaching and Learning, and from the
GWP Director via Continuing Education \& Outreach.
Special Education (Spc Ed)

## Undergraduate Studies

## Bachelor of Science in Education: Special Education

General education requirements (46 hours required):
Students entering college first time, Fall 2002 should refer to the Introductory section of this bulletin for their General Education Requirements.

English and Communication (9 hours)
English 1100, Composition
Communication 1030 or Communication 1040
English 3100
Mathematics ( 3 hours) 1150, Structure of
Mathematical Systems I
Science (8-9 hours)
Biology (Laboratory)
Physical Science (Laboratory)
Humanities (8 hours)
Music 3770, Introduction to Music for the Elementary
School Teacher (Recommended) plus two courses
from art, music, philosophy, or literature
Social Science ( 18 hours)
Psych 1003, General Psychology
History 1001, American Civilization, or
History 1002, American Civilization
Pol Sei 1100, Introduction to American Politics
Econ 3052, Microeconomics for the School
Curriculum
Sociology 1010, Introduction to Sociology, or
Any Anthropology course
Geography 1001 or 1002
Related Area Requirements (6 hours)
Phy Ed 3430, Elements of Health Education
Phy Ed 3261, Physical Activity of the Exceptional Learner

Program Requirements (24 hours)
Level I: Exploring Education as a Profession
Tch Ed 2210, Introduction to Teaching
Tch Ed 2211, Introduction to Schools

Tch Ed 2212, Introduction to Learners

## Level II: Analyzing the Nature and Process of Education

Tch Ed 3310, Introduction to Instructional Methods
Tch Ed 3312, Psychology of Teaching and Learning
Tch Ed 3313, Introduction to Leamers with Disabilities and Inclusive Education
Tch Ed 3315, Literacy Learning and Instruction
Cns Ed 3220, Counseling Individuals with Special Needs
Spe Ed 4315, Speech and Language Problems Exceptional Children
Spe Ed 4342, Transitions Issues and Planning
Spe Ed 3345, Education Programs for Students with Disabilities

## Level III: Synthesizing Theory and Practice in Education

Ele Ed 3330, Children's Literature and Reading
Ele Ed 3336, Teaching Language Arts and Reading, N-9
Ele Ed 4342, Addressing Teaching and Learning Needs in Mathematics
Must take one of the following three courses during the same semester as Elementary Professional Internship (El Ed 3289).
Ele Ed 4246, Teaching Mathematics in the Elementary School
Ele Ed 4341, Teaching Science in the Elementary School
Ele Ed 4253, Teaching Social Studies in the Elementary School
El Ed 4989, Elementary Education Professional Internship

Must take the following 6 credit hour course during the same semester as Special Education Professional
Internship (Spc Ed 4989)
Spe Ed 3349, Learning and Social Supports for Students with Disabilities
Spe Ed 4989, Special Education Professional
Internship
Note: Ele Ed 4989 must be taken prior to
Spe Ed 4989, Student Teaching
Ele Ed 4990, Student Teaching in Elementary Education
Ele Ed 4991, Student Teaching in Special Education
Note: Ele Ed 4990 and Spe Ed 4991 must be taken during the same semester.

Attention education majors: Professional education courses must be completed with a grade point average of 2.5 and no grade lower than a C-.

Total: Minimum of 120 hours

## Graduate Studies

Master of Education: Special Education
The M.Ed. program in special education consists of an initial required core of courses; an opportunity to develop an area of depth; an opportunity to specis.lize in special education; and a capstone or exit course. Areas of specialization are suggested below. A minimum of 33 hours is required. Graduate studeats should understand that completion of the M.Ed. program in special education does not assure teaching certification. Students seeking the degree and certification should consult with their advisers.

## 1) Required Core (9 hours)

Students are required to complete the following courses within the first 15 hours of study.
Tch Ed 6010, Examining History, Community, and Social Justice in Education (3 hours)
Tch Ed 6020, Teacher Action, Advocacy \& Leadership ( 3 hours)
Tch Ed/Ed Psy 6030, Instruction, Learning \& Assessment (3 hours)

## 2) Required Research Course ( 3 hours) Ed Rem/Tch Ed 6040, Teacher Research (3 hours)

## 3) Special Education Concentration ( $9-15$ hours)

Students should select either Sequence A or Sequence B below:

## A. Early Childhood Sequence ( 9 hours):

Spe Ed 6462, Introduction to Early Childhood Sjecial Education
Spe Ed 6463, Curriculum, Methods, and Materiz:ls for Early Childhood - Special Education
Spe Ed 6410, Families and Schools in Inclusive Communities
B. Cross-Categorical K-12 Sequence ( 9 hours': Spc Ed 6440, Disability, Schooling and Culture Spe Ed 6441, Curriculum \& Teaching for Diver se Learners and Students with Disabilities Spe Ed 6410, Families and Schools in Inclusive Communities

## Special Education Concentration Electives (3.9 hours):

Other electives may be chosen from the courses listed below and from other courses with approval of tie adviser and division chairperson. Students not choosing a Specialization Area (\#4, below) should take 9 hours of Special Education electives.

Spe Ed 6452, Social, Emotional, and Environmental Supports for Learners with Disabilities Spe Ed 6411, Law, Policy and Bureaucracy in Education and Disability Studies
4) Specialization Areas (Optional; 6 hours)

Students may follow one of the core competency courses with two additional courses to develop an area of specialization, such as:

Educational Technology Option: Tch Ed/Ed Psy 6030, followed by Ed Tec 5340, Selection and Utilization of Educational Multimedia and Ed Tec 6452, Educational Multimedia Design.
Educational Psychology Option: Tch Ed/Ed Psy 6030, followed by either Ed Psy 6210, Life-Span: Individual and Family Development or Ed Psy/Ed Tec 6448, Technology Supported Inquiry Learning ( 3 hours each)and one of the following Ed Psy courses: 6210, Life-Span: Individual \& Family Development: 6215, Psychology of Early Childhood Development; 6220, Psychology of the Elementary School Child; or 6225, The Psychology of Adolescence (3 hours each) Other specialization areas are available and information is available in the Graduate Education and Teaching \& Learning Division offices.

## 5) Capstone Course (3 hours)

Students must enroll in the capstone course during their last semester.
Tch Ed/Ed Rem 6910, Teacher Research Capstone (3 hours)
Total hours: minimum 33 credit hours

## Career Outlook

The employment outlook for special education teachers continues to be favorable, especially in certain positions. In addition to special classroom teaching, graduates of the area have been employed as resource-room teachers, clinical diagnostic personnel, itinerant teachers, educational resource teachers, consultants, educational therapists, and sheltered workshop evaluators, and in various supervisory and administrative positions in agencies and schools. In combination with counseling, educational psychology, physical education, or other areas, careers can be planned in such occupations as vocational evaluator, counselor for special-needs individuals, and special physical educators.

## Course Descriptions

Courses in this section are grouped as follows: Early Childhood Education (Ech Ed), Educational Foundations
(Ed Fnd), Educational Technology (Ed Tec), Elementary Education (Ele Ed), Middle Education (Mid Ed), Physical Education (Phy Ed), Secondary Education (Sec Ed), and Special Education (Spc Ed), and Teacher Education (Tch Ed).

Prerequisites may be waived by consent of the department.

## Early Childhood Education (Ech Ed)

## 3303 Curriculum and Practice Laboratory: Infant/Toddler

 (1)Classroom experience in infant or toddler classrooms under direction of university personnel. Must be taken concurrently with Ech Ed 3313, Curriculum and Practice: Infant/Toddler.

## 3304 Curriculum and Practice Laboratory:

## Preschool (1)

Classroom experience in preschool classrooms under direction of university personnel. Must be taken concurrently with Ech Ed 3314, Curriculum and Practice: Preschool.

## 3305 Curriculum and Practice Laboratory: Primary (1)

Classroom experience in primary classrooms under direction of university personnel. Must be taken concurrently with Ech Ed 4315, Curriculum and Practice: Primary.

## 3312 Introduction to Early Childhood Education

 (3)Prerequisites: Level I and Tch Ed 3310, and Tch Ed 3312. Students will use theoretical base as well as on-site observations to develop an awareness of teaching-learning strategies appropriate for the developmental needs of children from birth through age eight. Scheduling, classroom arrangement, and child management practices will be considered. Throughout the course, students will be expected to begin developing their own philosophy of early childhood education.

## 3313 Curriculum and Practice: Infant/Toddler (2)

Prerequisite: Ech Ed 3312. Focuses on planning integrated curriculum for child from birth to 30 months. Includes working with parents and community resources. Lab required.

## 3314 Curriculum and Practice: Preschool Education (2)

Prerequisite: Ech Ed 3312. Focuses on planning integrated curriculum for the preschool classroom with emphasis on science, social studies, creative activities and technology. Working with parents and parent education emphasized. Lab required.

## 3332 Literacy, Learning and Instruction for the Young Child (3)

Prerequisites: Level I and Level II. Attention on the home language and environment of young children as they construct knowledge of print from birth to age eight. Critical examination of the range of opportunities for early literacy learning available to children from economically advantaged and disadvantaged communities. Emphasis on meaningful, culturally, and developmentally appropriate activities for fostering beginning reading and writing. Focus on strategies for involving families and capitalizing on community resources in promoting language and literacy learning for young children. Eight hours of involvement in an early childhood setting is required. This course may be applied toward a Literacy Minor.

## 4315 Curriculum and Practice: Primary Education (2)

Prerequisite: Ech Ed 3312. Focuses on planning integrated curriculum for the primary classroom with emphasis on science, social studies, creative activities and technology. Working with parents and parent education emphasized. Lab required.

## 4317 Assessing Individual Needs for Early Childhood Instruction (3)

Prerequisites: Level I and Level II, admission to the teacher education program, Ech Ed 3312. Techniques of observing children and using assessment instruments to plan an individualized program for early childhood. Practicum experience required.

## 4320 Classroom Management (3)

Prerequisites: Level I and II courses or consent of instructor. Same as Spec Ed 4320, Ele Ed 4320, Sec Ed 4320. Understanding classroom management as the development of engaging instruction that establishes healthy and culturally appropriate teacher-student relationships, builds successful classroom community and enhances student learning. Participants develop a culturally relevant classroom management plan that includes rules, procedures, expected behaviors and uses problem solving strategies to resolve behavior problems. Emphasis is on the teacher developing the social competence of Pre K-12 students within culturally diverse classrooms and engaging families in supportive interactions.

## 4331 Language Acquisition and Development in Early

 Childhood (3)Prerequisite: Ed Psy 3312. Development of language and the effects environmental and cultural factors have on the acquisition process. Identification of language problems for purpose of referral. Includes preschool classroom practices to support language development. Practicum experiences included.

4346 The Acquisition of Mathematical Concepts (3) Prerequisites: Formal admission to the Teacher Education Program, Ed Psy 3312, and Math 1050. Applications of the major theorists to mathematics reasoning. Content is appropriate for pre-k to third grad learners. Research and its implications for practice in the areas of logical thinking, prenumber ideas, geometry, topology, problem solving and arithmetical operations are considered.

4990 Student Teaching in Early Childhood Education I (6) Prerequisites: Level II, Ech Ed 3313, Ech Ed 3314, Ech Ed 4989. Must be taken with Ech Ed 3291 , and must immediately precede Ech Ed 3291 in the semester.
This course is an intensive professional development experience ( 9 hours per week for 14 weeks) working in primary and/or preschool classroom with students. Activities on site include assisting the classroom teacher in all areas of instruction, assessment, and classroom management. This course is to be taken during the semester immediately preceding student teaching. Not available for graduate credit.

## 4991 Student Teaching in Early Childhood Education II (6)

Prerequisites: Level II, Ech Ed 3313, Ech Ed 3314, Ech Ed 4989. Must be taken concurrently with Ech Edc4991, and must immediately precede Ech Ed 4991 in the semester. Must follow Ech Ed 4990 in the same semester. Clinical teaching experience in early childhood education classrooms in the schools under University and school supervision. Assignments will be in different school districts buildings, serving families of different socio-economic and cultural backgrounds, and at different age/grade levels from those of the Ech Ed 4990 assignments, required of all majors in early childhood education. Not available for graduate credit.

## 5335 Inclusion Practices In The Early Childhood Classroom (3)

Prerequisites: Level I. This course provides theory and practice in the inclusion of young children with disabilities in a classroom setting. The focus of he course will be developing a team approach to supporting families as they make decisions for their children. Students will study development, observations, and assessment to be able to make appropriate referrals to support children with disabilities in the early childhood classroom. Other areas of understanding will include legal rights and responsibilities, development of individual plans for success, understanding of best practices for inclusion, and accessing community resources for families of children with disabilities.

## 6321 Parent and Community Resources in Early Childhood Education (3)

Prerequisite: Graduate standing. Competencies for working with parents and community agencies will be developed through a study of community and community resources. Procedures for parent participation and use of service agencies in the education of all young children, including those with special needs, will be examined.

## 6412 Foundations of Early Childhood Education

 (3)Prerequisite: A course in child psychology or equivalent. A study of the various types of early childhood programs and the philosophy upon wich they are based. Attention will also be directed to the implementation of such programs, problems of parent involvement, and the social environment of the children.

## 6413 The Educational Role of Play (3)

Prerequisite: Ech Ed 3312 or equivalent. Emphesizes play as a constructive process with applications to cognitive and social development. Special attenion to facilitating play in early childhood classrooms.

6415 Organization and Development of Early Childhood
Programs (3)
Prerequisites: Ech Ed 3312 or equivalent. Strategies for the effective organization and development of programs for children from diverse cultures, ages birth through eight years, will be studied. Research and theory in funding and budgeting, staffing and professional development, selection, development, and assessment of program curriculum will be emphasized. Long-range planning for program stability and involvement in advocacy issues will be covered.

## 6490 Internship (1-10)

Prerequisite: Consent of instructor, Closely supervised experience in a field setting under the direction of a graduate faculty member. An appropriate level of competence and evidence of growth in the professional role must be demonstrated by the intern. The internship will include planning, research, evaluation, and related professional activities.

## 6497 Problems (1-10)

Prerequisite: Graduate standing. Individual study on topics pertaining to early childhood education.

## Educational Foundations (Ed Fnd)

## 4330 History of American Education (3)

Prerequisite: A course in American history or consent of instructor. An overview of the evolutionary development of American educational theory and practice from the early colonial period to the present. Attention is also given to selected issues in professional education.

## 6421 Philosophy of Education (3)

Same as Philosophy 6421. Prerequisites: Graduate standing or consent of instructor. Critical examination of selected issues in education from the perspective of Western philosophy. Topics may include the distinctive features of education as an activity and achievement, concepts of teaching and learning, relations between education and values, and the role of public educational institutions.

## 6422 Analysis of Educational Issues (3)

Prerequisite: A course in philosophy of education or a course in history of education, or consent of instructor. A critical examination of issues about the elementary and secondary schools. This is done through the analysis of the procedures, resources, and goals that guide school policies and practices.

## 6435 History of Western Education (3)

A course designed to survey the educational development of Western civilization from approximately the eighth century BC until the present. Salient educational theory and practice will be considered in their appropriate social context.

## Educational Technology (Ed Tec)

2245 Audiovisual Equipment Operation for Classroom Teachers (1)
An entry-level course for all teacher education students. May be taken concurrently with Ed Tec 2246. A self-paced, modularized, and criterion referenced course. Students will demonstrate competence in operating standard audiovisual equipment normally found in the schools.

## 2246 Preparation of Inexpensive Materials for the Classroom (1)

An entry-level course for teacher education students. May be taken concurrently with Ed Tec 2245. A lecture-demonstration laboratory course in material preparation for classroom use.

## 2247 Integration of Media and Materials in Instructional Planning (1)

Prerequisites: Ed Tec 2246, and for secondary Education students, Sec Ed 3213. Course concentrates on the integration of media and materials in lesson planning. Through lecture, demonstration, and individualized instruction, the student designs an instructional unit and prepares appropriate material for that unit. Ed Tec 2246 must be taken prior to, or concurrently with, this course.

## 2248 Utilization of Computer-Based Materials in Instruction (1)

Utilizing a series of computer-based education modules, the instructional uses of the computer are explained and demonstrated. Students develop practical experience in using and evaluating computer materials for classroom use.

## 5301 Introduction to Computers and the Internet in Education (3)

The course focuses on how computers and the Internet have changed teaching and learning; how teachers can facilitate learning in inquire-based, technology-rich classrooms; and on the design and implementation of technology-rich activities and projects. Introduces students to the networked computer as an instructional tool. Course participants will be introduced to how teachers and their students can use computer tools in appropriate ways for different content areas and educational levels. Practices to be explored include making presentations; searching for information and educational resources; organizing, writing, and displaying information and data.

## 5340 Selection and Utilization of Educational Multimedia (3)

Prerequisites: Ed Tec 5301 or consent of instructor. Prepares students for selecting and utilizing multimedia technologies for learning. Students will conduct projects involving educational multimedia
programs available on computers or over telecommunications networks. The projects will incorporate graphics, sound, and video. The goal of working on these projects is to prepare students to facilitate others' use of multimedia in classrooms and other educational contexts.

## 5345 Preparation of Graphic Materials for Audiovisual Education (3)

Prerequisite: Ed Tec 5340 or consent of instructor. Not open to lower-division students. A lecture-demonstration-laboratory course that emphasizes the graphic arts component of audiovisual material production. Theories of learning and communication are used in the design and production of materials used for classroom settings.

## 5346 Instructional Television (3)

Prerequisite: Ed Tec 5340 or consent of instructor. Not open to lower-division students. A lecture-demonstration laboratory course designed to concentrate on the use of instructional television in formal and informal learning situations. Basic script writing, management of ITV systems, and design and production of low-budget programs will be emphasized.

6404 Seminar (1-10)
Prerequisites: Ed Tec 5340 or consent of instructor. Seminar in educational technology addressing special issues and topics not normally included in the regular educational technology courses.

## 6410 Computer-Based Graphics and Text Design and Production (3)

Prerequisite: Education 4301 or permission of the instructor. A lecture-demonstration-laboratory course that emphasizes the theoretical and practical design of graphic and textual material through the use of computer-based graphics programs. Emphasis will be placed on the utilization of commercial software to produce graphic designs and desktop publishing projects such as newsletters, workbooks, and other textual materials.

## 6412 Applications of Computers in Education (3)

Prerequisite: Educ 4301 or permission of instructor. Uses and capabilities of computers in the teaching, administration, and counseling areas of Education. Familiarization with computing facilities and package programs.

## 6415 Teaching and Learning with Technology: Authoring

 Tools (3)Prerequisite: Ed Tec 5340 or consent of instructor. A practical course in the design and development of computer-based educational materials and activities, utilizing "authoring" software tools. Authoring tools allow the development of interactive multimedia educational modules without the need for command-line programming. Emphasis will be placed on principled, theoretically sound, learner-centered design that meets curriculum needs.

6416 Teaching and Learning with Technolog. : Data Representational Tools (3)
Prerequisites: Ed Tec 5340 or consent of instructor. Examines the use of representations of different forms of data with technology for teaching and learning. Students will learn about techniques for graphing and visualizing data in science, math, the social sciences, and humanities, and will become familiar with research and practice pertaining to their use in a variety of learning activities and projects.

6417 Teaching and Learning with Technologv: Geographic Information Systems (GIS) (3) Prerequisites: Ed Tec 5340. Provides a foundational understanding of the Geographical Information System (GIS) and how it is integrated into midd e and high school classrooms. Students will learn how to represent data used in schools and carry out projects that can be used in middle and high school classrooms.

## 6433 Educational Technology Systems Management (3)

Prerequisite: Ed Tec 5340. Basic principles of management in design and operation of media programs and systems in various educational setrings. Emphasis on strategies and alternative structure: for achieving and evaluating functions of media centers.

## 6435 Instructional Technology and Education Reform (3)

Prerequisite: Ed Tec 5340 or consent of instructor. Students will learn how to foster changes in uses of technology for learning in schools, based on a historical understanding of previous technology reforms, and a critical assessment of recent reforms. Questions addressed include: What did stakeholders predict and hope for with earlier educational technologies, early uses of the computer and networking, and present technological innovations? What actually happened? Why? How can teachers and other educators help foster and spread effective use of technology for learning?

## 6436 Computer-Mediated Communication in Education (3)

Prerequisite: Ed Tec 5340 or consent of instructor. Explores the theory, research, and practice of using computer-mediated communication and compuersupported collaborative learning in education. Learning environments including elementary, secondary, higher, and adult education will be considered.

## 6437 Distance Learning via Networks and Telecommunications (3)

Prerequisite: Graduate standing. This course is an investigation in the ways the learning and teacting across the barriers of time and distance are sim.lar to
and different from face to face learning and teaching. Students will study the influence of interactive media: Videoconferencing, asynchronous discussions and other commonly used methods.

## 6444 Cognition and Technology (3)

Same as Ed Psy 6444. Prerequisites: Ed Psy 6111 or consent of instructor. Examines cognitive theories and computer-based tools for learning. Students will gain a critical understanding of the relationship between the design of technological tools, the use of those tools in educational settings, and their implications for learning.

6446 Advanced Instructional Television Production (3) Prerequisite: Ed Tec 5340 and Ed Tec 5346. Advanced management, script writing, and production of ITV programs. Laboratory activities in production of systematically designed instruction. Each student will produce ITV programs involving writing, production of graphics, directing, editing, and validating the programs.

6448 Technology-Supported Inquiry Learning (3)
Same as Ed Psy 6448. Prerequisites: Ed Tec 5340 and Ed Psych 6310 or consent of instructor. Educational technology such as networked computers and software can play a supportive role in inquiry-based learning. Students will explore the theoretical background, design issues, and pragmatic realities of technology-supported inquiry learning environments. Such learning environments are best understood as systems involving social, cultural, material and psychological aspects. Consideration will be given to the important properties of settings, activities and technologies, as well as to the role of instructors.

## 6449 Using Technology in Administration Processes (3)

Same as Ed Adm 6449. Prerequisites: A course in measurement, statistics or evaluation, or consent of instructor. The course will explore how the use of data analysis with technology can be applied in the administration of schools or other work settings. Administrators will explore software tools and their implications for making decisions. A case study will be completed on the implementation of a technology in a school or other appropriate setting.

## 6452 Educational Multimedia Design (3)

Prerequisite: Ed Tec 5340 or consent of instructor. Examines principles and techniques for design of visually and functionally effective multimedia educational resources. Emphasis on techniques for computer-based production of materials incorporating text, graphics, and video. Rapid prototyping and evaluation techniques incorporated.

## 6454 Instructional Video Production (3)

Prerequisites: Ed Tec 5340 or consent of instructor. Elements of digital video production will be studied and used to produce video for a variety of formats. Students will develop the skill to produce and stream programs for school news programs, video annuals, documentaries and staff development programs.

6460 Technology Coordination in Schools (3) Prerequisite: Ed Tec 5340 \& 6444 \& 6448 or consent of instructor. This course provides theoretical and practical knowledge for implementing technology in schools. A major focus will be placed on analyzing the total cost of implementations and methods for measuring educational success.

## 6462 Technical System Implementation for Educational Technology (6)

Prerequisites: Ed Tec 5340. Provides a foundational understanding of technical systems used in educational institutions, with a special emphasis on networked personal computers. Students learn theory and practice enabling them to set up, troubleshoot and configure networked computers for educational purposes.

## 6490 Internship (1-10)

Prerequisite: Consent of instructor. Closely supervised experience in a field setting under the direction of a graduate faculty member. An appropriate level of competence and evidence of growth in the professional role must be demonstrated by the intern. The internship will include planning, research, evaluation, and related professional activities.

6497 Problems ( $1-10$ )
Prerequisite: Ed Tec 5340 or consent of instructor. Individual study on topics pertaining to educational technology.

## Elementary Education (Ele Ed)

1082 Effective Reading and Study Skills (2)
Designed to increase reading rate and comprehension and to develop study techniques appropriate to the purpose and difficulty of materials. Use is made of mechanical pacer, comprehension tests, vocabulary materials, and lecture demonstrations. No credit toward a degree.

## 2177 An Introduction to Music for the Elementary School (3)

Same as Music 3770. An introduction to the elements of music and the expressive nature of music. Includes application of fundamentals to appropriate literature and activities for use with children in a classroom setting. This course will not apply toward requirements for a music major.

## 2179 Art Activities for Elementary Schools (3)

Same as Art 1179. A study of art principles; provides laboratory experiences with various media and materials. Stresses curriculum planning and developments of the elementary school program in art. Lab fee required. Basic studio equipment will be provided though students will need to supply some personal equipment and supplies.

## 2192 Educational Laboratory/Field Experience (1-3)

A laboratory/field experience requiring systematic observation and/or participation in appropriate educational settings. To precede student teaching. May be repeated to maximum of three hours.

## 3277 Curriculum and Methods of Teaching Elementary

 School Music (3)Prerequisites: Music 2311, 2312 and Level 1 Education courses. Same as Music Education 3570. Prerequisites: Music 2311 and Ed Fnd 1111. For the music Education major. A study of the elementary school music curriculum emphasizing the objectives, methods of teaching and staffing music classes, and analysis of instructional materials and resources. This course must be completed in residence.

## 3330 Literacy, Literature and the Learner (3)

Prerequisite: Level I and Level II. Exploration of literature and literacy-related resources available to teachers for children and young people. Emphasis on critical reading of literature for a variety of purposes, including communication, instruction, information, and recreation. Focus on the development of criteria for evaluating and selecting culturally and developmentally appropriate materials for motivating students to read in school and at home, as well as strategies for using literature to build family and school partnerships around reading. Twelve hours of participation in a school classroom setting are required. This course may be applied toward a Literacy Minor.

3336 Communication Arts Learning and Instruction (3) Prerequisites: Level I and Level II. Analysis of the six communication arts including listening, speaking, viewing, visually representing, writing, and reading across content areas. Attention on understanding children's home language and how children learn and develop communication skills. Special emphasis on strategies for assessing and teaching reading and writing, including workshop models, spelling, grammar, and grand conversations to meet the needs of every child. Twelve hours of involvement in a school classroom setting required. This course may be applied toward a Literacy Minor.

## 3389 Classroom Based Assessment to Guide Literacy Instruction (3)

Prerequisites: Tch Ed 3315 or Tch Ed 4391 or equivalent reading methods course. Strategies for differentiating instruction for a range of readers and writers across content areas. Focus on cultural and language considerations in the assessment of students' literacy skills. Emphasis on meeting the needs of individual readers and writers in the context of whole class instruction. Twelve hours of participation in a school classroom setting are required. This course may be applied toward a Literacy Minor.

3390 Elementary School Student Teaching III (6) Prerequisites: Ele Ed 3291 or equivalent and admission to student teaching. Clinical teaching experience in elementary school classrooms under university and school supervision with
seminar included. For students who wish an add tional student teaching experience.

## 4246 Teaching Mathematics in the Elementary School (3)

Prerequisites: Ed Fnd 1111, junior standing, and completion of mathematics requirements in gencral education. Organization and implementation of a modern elementary school mathematics program. A field experience involving several visits to local elementary schools is a required assignment of the course.

## 4253 Teaching of Social Studies in the Elementary School (3)

Prerequisites: Ed Fnd 1111, junior standing, anc completion of social science requirements in general education. Study of elementary school social strdies emphasizing the current social studies curricular content, methods of teaching, and instructional materials. Analysis of forces affecting objectives, materials, and teaching techniques.

4310 Elementary School Curriculum (3) Prerequisites: Level I and admission to teacher education program. Study of modern education with regard to objectives, content, and methods in elementary school curriculum.

4320 Classroom Management (3)
Same as Spc Ed 4320, Ech Ed 4320, Sec Ed 43:0. Prerequisites: Level I and II courses or consent of instructor. Understanding classroom management as the development of engaging instruction that establishes healthy and culturally appropriate teacherstudent relationships, builds successful classroom community and enhances student learning. Participants develop a culturally relevant classriom management plan that includes rules, procedures, expected behaviors and uses problem solving strategies to resolve behavior problems. Emphasis is on the teacher developing the social competence of PreK-12 students within culturally diverse classrooms and engaging families in supportive interaction;

4341 Teaching Science in the Elementary School (3) Prerequisites: Level I and Level II. An analysis of teaching science to elementary school children with emphasis on current science education trends, science curricular materials, and strategies of instruction.

## 4342 Addressing Needs in Mathematics Tearhing \& Learning (3)

Prerequisite: Ele Ed 4246. Instructional strateg.es for analyzing and addressing needs of students who have difficulties understanding and becoming profic ent in mathematics. Conceptual development and procedural fluency are approached in a diagnostic and prescriptive context. Course requires that students
participate in K-12 classrooms for a minimum of 10 hours, in addition to university class schedule.

4346 Advanced Methods in Elementary School Mathematics (3)<br>Prerequisites: Ele Ed 4246 and consent of instructor. Review, evaluate, develop, and provide classroom trial of instructional components prepared for teaching mathematics. Course will develop greater depth of preparation in: elementary program content; programs for exceptional children; and curricular extensions such as transformational geometry, rational numbers, and intuitive algebra.

## 4405 Seminar (1-10)

4989 Elementary Education Professional Internship (3)
Prerequisites: Level 1 \& Level 2 requirements. This course is an intensive professional development experience ( 9 hours per week for 14 weeks) working in an elementary school setting with students. Activities on site include assisting the classroom teacher in all areas of instruction, assessment, and classroom management. Particular emphasis will be given to literacy development. This course is to be taken during the semester immediately preceding student teaching. This course is to be taken in conjunction with Ele Ed 4253, Ele Ed 4246 and Ele Ed 4341. Assignments from these allied courses are carried out in the Internship, and Internship experiences inform the activities and discussions in these courses. Not available for graduate credit.

## 4990 Elementary School Student Teaching I (6)

Prerequisites: Completion of Level III and admission to teacher education program. Clinical teaching experience in elementary school classrooms under university and school supervision. Required for all majors in elementary education. Not available for graduate credit.

4991 Elementary School Student Teaching II (6) Prerequisite: Completion of Level III courses. Clinical teaching experience in elementary school classrooms under university and school supervision. Required for all majors in elementary education. Not available for graduate credit.

## 6387 Literacy Acquisition and Learning for Urban Students (3)

Prerequisites: Graduate standing. Designed to extend teacher understanding of children's literacy acquisition, development, and learning through the elementary grades. Emphasis on development of a teaching philosophy and skills which include maintaining effective literacy learning environments in urban classrooms, fostering culturally responsive classroom communities, understanding social and environmental issues that affect the literacy learning of urban leamers, using effective methods and materials to develop engaged and literate students, and fostering children's participation in literacy activities.

## 6410 Current Research in Early Childhood and Elementary Program (3)

Prerequisite: Graduate admission. A systematic examination of research related to early childhood and elementary school programs. Students will be expected to become effective consumers of educational research and to utilize appropriate research findings in their decision-making processes when planning instruction. This course should be taken as the first course in the M.Ed. in Elementary Education degree program.

6411 Curricular Issues in Early Childhood and Elementary Programs (3)
Prerequisite: Ele Ed 6410. Selected contemporary problems that affect classroom decisions. Technology, literacy, meeting individual needs, diversity, and dealing with discipline are studied through investigative discussions, reading, and a research paper.

6412 Microcomputers in Elementary Education (3) Focuses on principles and procedures for using microcomputers for instructional and classroom management activities in the elementary classroom.

## 6422 Curriculum Construction in Early Childhood

 and Elementary Programs (3)Prerequisite: Ele Ed 6410 and 6411 . A study of current and classic curricular models early childhood and elementary education. Using developmental learning theory, students will select appropriate curriculum and develop activities for the early childhood or elementary classroom. Students begin a research project by gathering data and evaluating curricular designs from the models studied.

6423 Curricular Implementation in the Early Childhood and Elementary Programs (3) Prerequisite: Ele Ed 6422. Implementation of a culminating project designed in Ele Ed 6422. Students will study implementation and evaluation strategies for the project. The project will be implemented during the semester and students will conduct an evaluation of the project by the end of the semester.

## 6425 Elementary School Supervision (3)

Organized to study such problems in field of supervision as will meet needs of superintendents, principals, and special supervisors.

## 6426 Elementary School Curriculum Reform in the Earth/Space Sciences (4)

Prerequisite: Graduate standing. Field-based experiences in improving the district-level elementary school science program, with special attention to the earth/space sciences. Emphasis is given to planning and implementing standards-based inquiry science
activities that include connections to other curricular areas.

## 6427 Supervision of Clinical Experiences in Teacher Education (3)

Prerequisite: Teaching experience and consent of instructor. A consideration of the clinical phase of the teacher Education program, with special emphasis on student teaching. Examination of role responsibilities and supervisory practices. Study of professional literature for research findings, theoretical formulation, and recent developments in the field.

## 6428 Elementary School Curriculum Reform in the Life Sciences (1-4)

Prerequisite: Graduate standing. Field-based experiences in improving the district-level elementary school science program, with special attention to the life sciences. Emphasis is given to planning and implementing standards-based inquiry science activities that include connections to other curricular areas. Credit to be determined by instructor.

## 6429 Elementary School Curriculum Reform in the Physical Sciences (4)

Prerequisites: Graduate standing. Field-based experiences in improving the district-level elementary school science program, with special attention to the physical sciences. Emphasis is given to planning and implementing standardsbased inquiry science activities that include connections to other curricular areas.

## 6432 Problems and Research in Elementary School Language Arts (3)

Prerequisites: Ele Ed 6430, Ed Rem 6710, and six hours of English. A systematic study of research in teaching speaking, listening, written composition, handwriting, spelling, and linguistics as it focuses on the problems of teaching these skills in the elementary school. Attention is given to innovations in the field.

6436 Children's Literature I: Survey and Analysis (3) Prerequisite: Ele Ed 3330 or equivalent. A survey of children's literature published in the last ten years. Special emphasis will be placed on the relationship between children's literature and contemporary issues of society. Students will experience the materials themselves rather than reading about books. In addition, students will begin to study the literary elements that make literature interesting and meaningful for children.

6437 Children's Literature II: Selection and Functions (3) Prerequisite: Ele Ed 3330 or equivalent. A study of literary elements that make literature interesting and meaningful for children will be completed. Further emphasis will focus on the application of trade books for children as resources in school curriculum planning. Children's Literature II may be taken either before or after Children's Literature I.

## 6441 Problems and Research in Teaching Elementary

 School Science (3)Prerequisites: Eight hours of science, Ele Ed 4341, and Ed Psy 6111. A thorough examination of research related to
elementary school science instruction with particular emphasis on innovative programs. Includes methods of investigation and techniques for interpreting the professional literature.

6442 Elementary School Curriculum Reform in the Health Sciences (4)
Prerequisites: Graduate Standing. Field-base experiences in improving the district-level elementary school science program, with special attention to the health sciences. Emphasis is given to planning and implementing standards-based inquiry science activities that include connections to other curriculum areas.

## 6443 Teaching Physical Science in the Elemertary School (3)

Activity-oriented experiences with basic physical science concepts, laboratory skills, and techniques that are appropriate for elementary school teachers. The physical science concepts in elementary school curricula will be analyzed in depth.

## 6444 Environmental Studies for Elementary Teachers (3)

Activity-oriented training in developing environmental awareness, field and/or laboratory skills and techniques, and the use of elementary environmental curricula. Materials and activities appropriate for one's students and locale will be developed.

## 6445 Problems of Teaching Mathematics in tie Elementary School (3)

A study of the mathematics program in the elementary school from the viewpoint of goals, content, techniques, and evaluation.

## 6446 Curriculum and Methods of Teaching Measurement in Mathematics: Metric and Standard Systems (3)

Prerequisite: Ech Ed 4346 or Ele Ed 4246. Curricular development and implementation on reflecting ecent research findings. Content, materials, methods of teaching the general topic: measurement. Applivations in both the metric and standard systems.

## 6447 Problems and Research in Teaching Elementary School Mathematics (3)

Prerequisite: Ele Ed 6445. A thorough examination of research related to recurrent problems in elementary school mathematics instruction, as well as current problems arising within modern programs. Includes methodology appropriate to investigation of such problems and techniques for assessment of the literature.

6448 Diagnosis and Remediation of Disabilities in Learning Mathematics (3)
Prerequisite: Ele Ed 6445. Causes of mathematical disabilities. Materials and techniques for diagnoses and corrective programs for children and youth.

## 6450 Problems of Teaching Social Studies in the Elementary School (3)

A classroom-oriented study of curricular and instructional problems encountered in social studies. Emphasis is placed upon development of materials, techniques, and resources.

## 6452 Problems and Research in Teaching Elementary School Social Studies (3)

Prerequisite: Ele Ed 6450. An advanced study of pedagogical problems germane to social studies education with particular emphasis on application of research findings to the solution of classroom problems.

## 6482 Problems and Research in Teaching Elementary School Reading (3)

This is the capstone course for the Master of Elementary Education-Emphasis in Reading. To be taken in the last 9 hours of Masters Program. The three foci for this course are (1) systematic study of research as it focuses on the problems of teaching reading in the elementary school, (2) innovations in the field, and (3) action research. Each student designs and completes an action research project related to literacy.

## 6490 Internship (1-10)

Prerequisite: Consent of instructor. Closely supervised experience in a field setting under the direction of a graduate faculty member. An appropriate level of competence and evidence of growth in the professional role must be demonstrated by the intern. The internship will include planning, research, evaluation, and related professional activities.

## 6493 Reading Specialist Practicum I (3)

Prerequisites: Ele Ed 6684, Ele Ed 6686, and Ed Rem 6707, 6709, or 6716. Application of reading theory and research in a supervised setting. Emphasis on assessing and analyzing the literacy strengths, needs, and interests of a range of readers with the goal of improving their reading abilities and attitudes. Focus is on establishing reading support for children with the assistance of formal and informal assessments, reading professionals, educators, and children's families.

## 6494 Reading Specialist Practicum II (3)

Prerequisite: Ele Ed 6493. Application of reading theory and research in a supervised setting. Emphasis on using appropriate materials and providing effective instructional techniques to address children's assessed literacy strengths, needs, and interests with the goal of improving their reading abilities and attitudes. Focus is on sustaining reading, support for children with the assistance of other reading professionals, educators, and children's families.

6495 Supervision of Practicum in Clinical Reading (3)

Prerequisites: Ele Ed 6486, Ele Ed 6494, Ed Rem 6716 or consent of instructor. Supervising graduate students in diagnosis and remedial process within the reading clinic.

## 6497 Problems (1-10)

Selected problems to meet the needs of individual students.

6630 Communication Arts Instruction (3) Designed to extend teacher understanding of children's acquisition, development, and learning of the six communication arts. Emphasis on development of a teaching philosophy and skills in which children actively engage in reading, writing, listening, speaking, viewing and visually representing. Focus on developing culturally responsive classroom communities using effective methods and materials to engage children while fostering their participation in authentic communication arts activities.

## 6684 Instructional Strategies for Teaching Reading

 (3)Prerequisite: Graduate standing. Designed to extend teacher knowledge of effective instructional strategies for teaching reading. Emphasis on development of a teaching philosophy which acknowledges children gain considerable knowledge about reading from their families and communities, long before they encounter formal reading instruction. Focus on fostering culturally responsive classrooms using children's prior experiences, their language systems, cross-cultural literature, authentic texts, and other print materials familiar to children's home environments, as well as on teaching effective strategies to promote children's reading success.

## 6686 Analysis and Correction of Reading Disabilities (3)

Prerequisites: Ed Rem 6707, 6709, or 6716 and at least one graduate level literacy course. Designed to develop teacher understanding of the roles and responsibilities of the teacher of reading, Reading Specialist, and Literacy Coach. Emphasis on the nature of specific reading difficulties, distinguishing reading difficulty/disability from language difference, becoming familiar with a range of tools for assessing reading skills and strategies, and developing a critical orientation for evaluating the purpose and utility of various literacy assessment tools. Teachers will use informal and formal literacy assessment tools to guide instructional planning for children in the UMSL Reading Center.

6688 Literacy Assessment to Guide Instruction (3) Prerequisites: Ed Rem 6707, 6709, or 6716 and Ele Ed 6686. Designed to apply teacher knowledge of the
roles and responsibilities of the teacher of reading, Reading Specialist and Literacy Coach. Emphasis on using literacy assessment tools and techniques to guide instruction for a range of children, especially in the areas of writing, comprehension and vocabulary. Teachers will use informal and formal literacy assessment tools to guide instructional planning for children in the UMSL Reading Center.

## Middle Education (Mid Ed)

## 4246 Teaching Mathematics in the Middle School (3)

 Prerequisites: Level 1 \& Level 2 and completion of mathematics area of concentration. A study of the middle school math curriculum with state standards and appropriate instructional strategies, materials and assessments.4253 Teaching Social Studies in the Middle School (3) Prerequisites: Completion of Level 1 and Level 2 courses. Study of middle school social studies emphasizing the current social studies curricular content, methods of teaching, and instructional materials. Analysis of forces affecting objectives, materials, and teaching techniques. A minimum of 30 field experience hours are required.

4315 The Middle Level School (3)
Prerequisites: Level 1 and admission to teacher education program. An in-depth study of the philosophical and historical basis of middle level schools, including a review of the research as the basis for organization, current trends and practices.

## 4316 Middle Level Curriculum and Instruction (3)

 Prerequisites: Completion of Level 1. Preparation for teaching and learning in a middle school, grades 5-9. Content focuses on curriculum development, methods, techniques, materials, planning, organization, and assessment in middle level education for early adolescents.4317 The Middle-Level Child (3)
Prerequisites: Completion of Level 2. Developmental characteristics and needs of early adolescents are studied through field experience in middle school classrooms. The relationship between needs and behavior is explored and skills for effective student teacher relationship are highlighted.

4989 Middle Level Education Professional Internship (3) Prerequisites: Level 1 \& Level 2 requirements, Mid Ed 4315, Mid Ed 4316. This course is an intensive professional development experience ( 9 hours per week for 14 weeks) working with students in a middle school setting. Activities on-site include assisting the classroom teacher in all areas of instruction, developing instructional materials, assessment, and classroom management. This course is to be taken prior to student teaching, ideally during the semester immediately preceding student teaching. This course should be taken concurrently with Mid Ed 4317. Not available for graduate credit.

5220 Science for the Middle School Teacher (5) Prerequisites: 10 hours of science at the college level. This course is intended to provide science contert and pedagogical methods for middle school teachers. Science content includes investigations of the properties of solids and solutions, chemical chan jes, and conservation of matter, forces and simple machines, food webs, the environment and ecosystems, heat and radiation, waves and diffraction, and static electricity and currents.

## Physical Education (Phy Ed)

Prerequisites may be waived by consent of the department or the instructor.

## 1124 Principles and Practice in First Aid and Cardiopulmonary Resuscitation (1)

The course provides theory and supervised practice in first aid and cardiopulmonary resuscitation leading to American Red Cross certification in those areas.

## 1190 Clinical Experience in Physical Gerontology

 (3)Same as Gerontology 1190. Early supervised experience in gerontological physical activity programming. Seminar precedes and accompanies clinical experience.

## 1193 Clinical Experience in Youth Support Programs (3)

Supervised clinical experience in youth sport programs. Seminar precedes and accompanies c inical experience.

## 2132 Personal Health (3)

A study of factors that contribute to physical and mental well-being at all stages of the life cycie. Particular attention will be given to the identification and analysis of individual health behaviors.

## 2134 Personal Physical Fitness (3)

A study of the relationship between vigorous physical activity and individual well-being. Emphasis will be placed on an individualized analysis of health fitmess, resulting in a prescribed program to develop optimal levels of physical fitness, including aerobic fitness, strength, muscular endurance, flexibility, body composition, and lifetime sports considerations.

3204 Special Topics in Physical Education (1-3) Prerequisite: Consent of instructor. Independen study through readings, reports, field study, or research.

3261 Physical Activity for the Exceptional Learner (2)

Prerequisites: Spc Ed 3311 and Spc Ed 3313. A study of the special physical activity and exercise needs, interests, and problems of the exceptional leamer,
with considerable errphasis on the development of methods and competencies in modifying physical activities.

3267 Performance Analysis in Physical Education (3) Prerequisite: College-Level Mathematics. A study of quantitative and qualitative approaches processes and instruments used in assessing student progress in physical education activities. Emphasis will be given to the application of statistical methods to the results of evaluations of human motor performance and the interpretation of those results, as well as to the construction and administration of measurement instruments.

3275 Psychological Aspects of Physical Education (3) Prerequisites: Psychology 1003. A study of the following aspects of psychology as they influence performance in sport and physical activity: learning, retention, transfer, practice, feedback, motivation, anxiety, perception, motor control, social facilitation, cohesion, leadership, and reinforcement.

## 3276 Sociocultural Aspects of Physical Education and Sport

 (2)Prerequisite: Junior standing. Study of the theoretical, methodological, experimental, and applied foundations of sport and physical activity programs in society and the schools. Applied issues included cultural, political, economical, legal, and educational aspects of sport and physical activity programs.

## 3277 Historical and Philosophical Foundations of Physical

 Education and Sport (2)Prerequisite: Junior Standing. A study of the history of physical education and sport programs, philosophical influences and issues related to the programs and applications of the knowledge base to current programs.

## 3280 Human Anatomy and Physiology (5)

Prerequisite: Bio 1012 and Bio 1003 or consent of instructor.. Study of the basic aspects of human anatomy and physiology and their relationship to concepts in sport and physical activity. Two hours of laboratory per week.

## 3282 Physical Growth and Motor Development (3)

Prerequisite: Psychology 2270. An examination of the physical growth and aging, and motor development of the human being over the life span. Emphasis on evaluative tools, techniques, and studies of research findings. Laboratory field experience for observing individuals. Attention is directed toward acquisition of basic skills, perceptual-motor development, fitness development, and age-related changes in information processing. A required course for physical education majors; an elective course for early childhood, special, and elementary education majors.

3283 Kinesiology (3)
Prerequisite: Phy Ed 3280 . Study of the biomechanics of human motion with particular application to performance in sport activities.

## 3284 Physiology of Human Exercise (3)

Prerequisite: Phy Ed 3280. Study of the physiological effects of human exercise, training, and sport activities upon the human body; understanding and evaluation of physical fitness components, with consideration given also to areas including work, fatigue, nutrition, age, sex, and environment.

## 3285 Sports Medicine (3)

Prerequisite: Phy Ed 3280 or equivalent. A study of the prevention and care of athletic/sport participation injuries. Emphasis is given to proper conditioning and training of the sport participant and on emergency responses, including CPR certification.

## 3287 Seminar in Exercise Science (3)

Prerequisites: Phy Ed 3283, 3284, or 3285. A review of current topics in the area of exercise science. Focus is on research and practice in various subdisciplines in the field. An emphasis will be placed on application of research to professional situations. Some field experience may be required.

## 3422 Teaching of Skills: Grades PK-4 (4)

Prerequisite: Completion of 27 designated credit hours of Level II courses. Study of skill analysis and techniques of teaching developmental games, education gymnastics and perceptual-motor activities. Emphasis will be given to biomechanical analysis of movement, application of motor learning concepts, and design and preparation of appropriate instructional experience and materials.

## 3423 Teaching of Skills: Grades 5-9 (4)

Prerequisite: Completion of 27 designated credit hours of Level II courses. Study of skill analysis and techniques of teaching track and field, outdoor education, soccer, softball, flag football, basketball; and volleyball. Emphasis will be given to biomechanical analysis of movement, application of motor learning concepts, and design and preparation of appropriate instructional experience and materials.

3424 Teaching of Skills: Grades 9-12 (4) Prerequisite: Completion of 27 designated credit hour of Level II courses. Study of skill analysis and techniques of teaching racquet sports, aquatics, bowling, golf, archery and team handball. Emphasis will be given to biomechanical analysis of movement, application of motor learning concepts, and design and preparation of appropriate instructional experience and materials.

## 3425 Teaching of Skills: Movement, Dance and Rhythms (3)

Prerequisites: Completion of 27 credit hours of Level II courses. Study of movement analysis and techniques of teaching fundamental movement skills, rhythmic activities, creative movement, and dance,
including folk, square, ballroom, modern, and jazz, in school settings. Emphasis will be given to biomechanical analysis of movement, developmental sequences of fundamental movement, application of motor learning concepts, and design and preparation of appropriate instructional experience and materials.

## 3430 Teaching Health in the Elementary School (3)

Prerequisites: Level I courses and admission to teacher education. A study of health programs in the elementary school. Emphasis is given to the teacher's responsibilities in the areas of health services, healthful school environment, and instruction in a comprehensive school health program.

## 3434 Teaching Wellness and Health-Related Fitness (4)

Prerequisite: Phy Ed 3280 or the equivalent, or consent of the instructor. Study and techniques of teaching wellness and health-related physical fitmess concepts across the life span. Evaluation, interpretation, and application of wellness concepts to the individual and groups.

## 3465 Physical Education Activities in the Elementary School (3)

Objectives of physical education for the elementary school child with applications of choice of activities, organization of program, theory, and practices.

## 3468 Curriculum and Methods of Teaching Physical Education (3)

Prerequisite: Tch Ed 2210 or equivalent. Study of the scope and sequence of the school program in physical education with emphasis on planning processes, content selection, management procedures, instructional strategies, and program assessment.

## 4989 Physical Education Professional Internship (3)

Prerequisites: Level II designated course requirement. This course is an intensive professional development experience ( 9 hours per week for 14 weeks) working in a school setting with students. Activities on site include assisting the classroom teacher in all areas of instruction, assessment, and classroom management. This course is to be taken prior to student teaching, ideally during the semester immediately preceding student teaching. Assignments from allied courses (Phy Ed $3422,3423,3424$ ) are carried out in the Internship, and Internship experiences inform the activities and discussions in these courses. Not available for graduate credit.

4990 Student Teaching in Physical Education: PK-5 (6) Prerequisites: Admission to Student Teaching clinical teaching experience in physical education settings in the schools under university and school supervision. Required for all majors in physical education receiving certification in physical education. Not available for graduate credit.

4991 Student Teaching in Physical Education: 5-9 (6) Prerequisites: Admission to Student Teaching clinical teaching experience in physical education settings in the schools under university and school supervision. Required for all majors in
physical education receiving only $\mathrm{K}-9$ certification in physical education. Not available for graduate credit.

4992 Student Teaching in Physical Education: 9-12 (6)

Prerequisites: Admission to Student Teaching clinical teaching experience in physical education settings in the schools under university and school supervis on. Required for all majors in physical education receiving K-12 certification in physical education. Not available for graduate credit.

## 5240 Community Health Education (3)

Prerequisites: Tch Ed 2211 or equivalent, junior or graduate standing, or permission of instructor. Study of community health issues and programs, within the school and the community, including spread and control of communicable diseases. Treatment and prevention programs, community resources, and educational issues for both communicable and cironic diseases will be examined.

5248 Teaching Health in the Secondary School: Grades 9-12 (3)
Prerequisites: Tch Ed 2211 or equivalent, junior or graduate standing, or permission of instructor. Study of methods of health education in the secondary school. Class will examine instructional prograrz, ways to provide healthful environment in the sciool, and health services for high school student.

## 5312 Management of Sports Programs (3)

 Prerequisite: Consent of instructor. A study of administrative theory, roles, responsibilities, and functions in the management of sports programs.
## 5330 Prescribing Physical Activity (3)

Same as Gerontology 5330. Prerequisite: Phy Ed 3280 or consent of instructor. Prescription of physical activity for individualized and group programming based upon physical fitness assessment. Health, nutrition, age, physical fitness, and testing asperts are considered in developing specialized exercise programming based upon current physiological and biomechanical research.

5380 Nutrition for Human Performance (3) A study of human nutrition and its relationship to human performance. Consideration is given to nutrients--function, food source, health concerrs and implications, and energy intake and expenditur's. Special consideration is given to the following: body composition including weight gain and loss, ergogenic aids, competitive athletes, older adults, children and teens, pregnant women, disease risk, fluid and electrolyte balance, and specific sport activities.

5931 Adult Exercise Leadership (3)
Prerequisites: Phy Ed 3284 or equivalent. A study of the roles, functions, and skills necessary to become certified as an American College of Sports Medicine Health/Fitness Instructor for adult exercise programs.

5990 Student Teaching in Physical Education III (5)
Prerequisites: Phy Ed 3991 or equivalent and admission to student teaching. Clinical teaching experience in physical education settings in the school under university and school supervision with seminar included. For students who wish an additional student teaching experience.

## 5992 Internship in Physical Gerontology (1-10)

Same as Gerontology 5992. Prerequisites: Phy Ed 1190 or consent of instructor. Supervised clinical experience in selected gerontological settings as a physical education practitioner under the supervision of university and program professionals. Internship may include two or more separate experiences completed concurrently or sequentially and involve planning of instruction, participant and program evaluation, research, and related activities.

6404 Seminar in Physical Education (1-10)
Prerequisites: Graduate Standing. Seminar in health and physical education addressing special topics not normally included in the regular health and physical education courses. May be repeated up to ten hours.

6462 The Physical Education Curriculum (3)
Prerequisite: Consent of instructor. A study of current practices, problems, trends, and research involved in the analysis and development of the physical education curriculum.

6464 Analysis of Teaching in Physical Education (3)
Prerequisite: Consent of instructor. A study of trends and research relating to teaching methodology, teacher effectiveness, and supervision of instruction in physical education. Emphasis will be given to the application of research on teacher effectiveness in the instructional process in physical education.

## 6474 Psychological Dynamics of Sport Performance (3)

 Prerequisite: Phy Ed 3275 or consent of instructor. Application of specific principles of social psychology to the teaching of physical education and sport and of mental aspects of peak physical performance. Explores the techniques of improving team and individual performance in interscholastic and elite competition through sport psychology. Attention is given to motivation, competitive anxiety, attitude, aggression, team cohesion and leadership, exercise adherence, personality, individual differences, and gender roles as they pertain to sport performance.
## 6475 Motor Learning and Control (3)

Prerequisite: Phy Ed 3275 or consent of instructor. Application of specific principles of learning and the control of movement to the teaching of motor skills in physical education and sport. Surveys neurologic systems involved in perception and motor
performance. Explores theoretical perspectives, including open versus closed loop control, schema theory, information processing, and dynamical systems theory. Attention is given to efficiency of learning skills by accommodating transfer of training, utilizing feedback, manipulating practice schedules, and promoting retention.

## 6476 Social Inquiry of Sport (3)

Prerequisite: Phy Ed 3276 or consent of instructor. A study of basic social processes in sport, such as socialization, social facilitation, and assimilation.

## 6478 Problems and Research in Physical Education

 (3)A study of potential research problems and research processes in specific physical education subdisciplines. A research project will be completed in the student's physical education subdiscipline interest area.

## 6482 Life Span Perceptual and Motor Development

## (3)

Prerequisite: Phy Ed 3282 or consent of instructor. A study of sensory and perceptual development and change, and the age-related qualitative and quantitative changes in motor skill. Both current theory and current empirical findings are stressed. Attention is given to methods of structuring learning environments to maximize development. Study is from a life span perspective.

6483 Biomechanics of Sport Techniques (3) Prerequisite: Phy Ed 3283 or consent of instructor. A study of the biomechanical concepts important to analysis of techniques used in selected sports. Explores recent research findings on efficient sports techniques. Provides experience in the analysis of skill performance.

## 6484 Physiological Bases of Physical Performance

(3)

Prerequisites: Phy Ed 3280 and Phy Ed 3284 or consent of instructor. Physiological bases and contemporary trends in the study of human performance and exercise stress; will analyze research literature and study experimental strategies with the focus upon application to teaching and coaching.

## 6485 Theory of Exercise and Cardiovascular Disease Risk Factor Management (3)

Prerequisite: Completion of Phy Ed 6484 or equivalent. A study of the effects of exercise on the basic epidemiology, physiology, and management of unavoidable and avoidable cardiovascular risk factors. Special attention will be given to the examination of the effect of exercise in the management of cardiovascular disease risk.

## 6497 Problems (1-10)

Prerequisite: Consent of instructor. Selected problems to meet the needs of individual students.

## 6990 Internship (1-10)

Prerequisite: Consent of instructor. Closely supervised experience in a field setting under the direction of a graduate faculty member. An appropriate level of competence and evidence of growth in the professional role must be demonstrated by the intern. The internship will include planning, research, evaluation, and related professional activities.

## 7492 Directed Readings in Curriculum and Instruction (1-

 6)Prerequisites: Graduate standing, one graduate course in curriculum and instruction, and consent of instructor. Independent study into the current research, literature, and issues I the areas of physical education and curriculum and instruction.

## 7494 Directed Readings in Motor Behavior (1-6)

Prerequisites: Graduate standing, one graduate course in motor behavior, and consent of instructor. Independent study into the current research, literature, and issues in the area of motor behavior.

## Secondary Education (Sec Ed)

## 3209 American Government for the Secondary Classroom

 (3)Same as Pol Sci 3090. Prerequisites: Tch Ed 3310 and Pol Sci 1100 , graduate standing or consent of instructor. Adapts the themes and subject matter of American government to the secondary classroom and trains teachers in techniques particularly designed to maximize the use of primary sources, foster critical inquiry, and encourage knowledge of subject matter. Particular emphasis will be placed on defining the broad and connecting themes of American government, on expanding bibliography, and on choosing methods of inquiry for use in an interactive classroom. Either History/Sec Ed 3257 or 3258 or Political Science/Sec. Ed. 3209 must be taken the same semester as History/Sec Ed 3255 except with special consent of the Social Studies Coordinator. Can be counted towards the Political Science major requirement, but not the American Politics subgroup. Counts towards Social Studies Certification.

## 3240 Curriculum and Methods of Teaching Physical

 Sciences (3)Same as Chemistry 4802 and Physics 4802 . Prerequisite: Tch Ed 3310 and a near major in the subject matter. A study of the scope and sequence of the physical science courses in the school curriculum, with emphasis on the selection and organization of materials and methods of instruction and evaluation. Attention is also directed toward learning the techniques and research tools of the scholar in the field of science. To be taken prior to student teaching. This course must be completed in residence.

3275 Philosophic and Practical Foundations ot the Secondary Music Education Curriculum (1) Prerequisites: Music 2311, 2312, Music 3570, Ele: Ed 3277, and Level I Education courses. Concurrent registration in Music 3680/Sec Ed 3276 and Music 3700/Sec Ed 3278 or Music 3710/Sec Ed 3279. Siame as Music 3670. For the music education major. 1 study of the secondary school music program: curricular objectives, philosophy, and general administrative procedures common to all secondary music classes. This course must be completed in residence.

## 3276 Curriculum and Methods of Teaching Instrumental Music I (2)

Prerequisites: Music 2311, 2312, 3410, 2510, 2610, Level I Education courses and two of the following: Music 1250, 1260, 1270, 1280. Concurrent registration in Music 3570/Ele Ed 3277. Same as Music 3680. A study of the teaching techniques, materials, curriculum, and organization of the beginning instrumental music Education prograra Topics include student recruitment, the elementary band/orchestra, small group instruction, jazz ensemble, and marching band. This course must be completed in residence.

3277 Curriculum and Methods of Teaching Middle School/Junir High School General Music (2) Prerequisites: Music 2311 and 2312. Music 357C/Ele Ed 3277, and Level I Education courses. Concurrent registration in Music $3670 / \mathrm{Sec}$ Ed 3275 and Music 3710/Sec Ed 3279. Same as Music 3690. For the music education major. A study of the middle school/ junior high school general music program emphasizing a conceptually based curriculum, objectives, methodologies, materials, innovatior.s, classroom organization, and management. This zourse must be completed in residence.

## 3278 The Curriculum and Methods of Teach ng Instrumental Music II (2)

Prerequisites: Music 2311, 2312, 3521, 3620, Nusic 3570/Ele Ed 3277, Music 3680/Sec Ed 3276.Level I Education courses and three of the following: Nusic 1250 , Music 1260 , Music 1270 , Music 1280 Concurrent registration in Music 3670/Sec Ed 3275. Same as Music Ed 3700. A continuation of Music $3680 / \mathrm{Sec} \mathrm{Ed} 3276$. Topics include large group rehearsal techniques, program development, administrative procedures, and evaluation. This course must be completed in residence.

## 3279 Curriculum and Methods of Teaching Secondary Choral Music (2)

Prerequisites: Music 2311, 2312, Music 3570/Ele Ed 3277, and Level I Education courses. Concurrent registration in Music 3670/Sec Ed 3275 and Music 3690/Sec Ed 3277. For the music education maijor. A
study of the secondary school choral music program: curriculum, methods, teaching techniques, organization, and administrative procedures for choral performance classes. This course must be completed residence.

## 3328 Art Education: Theory to Practice (3)

Prerequisites: Tch Ed 2210, 2211, 2212 and completion of Foundation Art Program. Development and application of concepts related to comprehensive art education and standardsbased curriculum in art education, with an examination of current theories, trends, publication, and on-line resources in the field.

## 4011 The Curriculum and Methods of Teaching History and Social Studies (3)

Same as History 4011. Prerequisites: Junior standing and Tch Ed 3310. A study of the scope and sequence of history and social studies courses in the school curriculum, with emphasis on the selection and organization of materials and methods of instruction and evaluation. This course must be taken in conjunction with Sec Ed 3289, Secondary Education Professional Internship. May not count toward history hours required for history major. Must be completed prior to student teaching. This course must be completed in residence. Not available for graduate credit.

## 4012 Social Studies Teaching Intern Seminar (1)

 Same as History 4012. Prerequisites: Concurrent enrollment with student teaching. Addresses the application of teaching strategies, social studies curriculum, and classroom management. Offered concurrently with Secondary School Student Teaching, Sec Ed 4990. Not available for graduate credit.4013 United States History for the Secondary Classroom (3) Same as History 4013. Prerequisites: Tch Ed 3310 or consent of the instructor. This course is required for Social Studies Certification. Adapts the themes and subject matter of American history to the secondary classroom and trains teachers in techniques particularly designed to maximize the use of primary sources, foster critical inquiry, and encourage knowledge of subject matter. Particular emphasis will be placed on defining the broad and connecting themes of American history, on expanding bibliography, and on choosing methods of inquiry for use in an interactive classroom. Cannot be counted towards the minimum 39 -hour history major requirement, but can be counted towards the 45 -hour maximum for Social Studies Certification. Not available for graduate credit.

## 4014 World History for the Secondary Classroom (3)

 Same as History 4014. Prerequisite: Tch Ed 3310 or consent of instructor. This course is required for Social Studies Certification. Adapts the themes and subject matter of World history to the secondary classroom and trains teachers in techniques particularly designed to maximize the use of primary sources, foster critical inquiry, and encourage knowledge of subject matter. Particular emphasis will be placed on defining the broad and connecting themes of Worldhistory, on expanding bibliography, and on choosing methods of inquiry for use in an interactive classroom. Cannot be counted towards the minimum 39-hour history major requirement, but can be counted towards the 45 -hour maximum and for Social Studies Certification. Not available for graduate credit.

4273 Curriculum and Methods of Teaching Art (3) Prerequisites: Sec Ed 3328 and completion of, or concurrent enrollment in Tch Ed 3310, 3312, 3313, 3386. A study of the scope and sequence of art education in the school curriculum, with emphasis on the preparation, selection, organization and application of materials and methods of instruction and assessment. Attention is also given to learning the research tools of the scholar in the field of art education. Not available for graduate credit.

## 4320 Classroom Management (3)

Same as Spc Ed 4320, Ech Ed 4320, Ele Ed 4320. Prerequisites: Level I and II courses or consent of instructor. Understanding classroom management as the development of engaging instruction that establishes healthy and culturally appropriate teacherstudent relationships, builds successful classroom community and enhances student learning. Participants develop a culturally relevant classroom management plan that includes rules, procedures, expected behaviors and uses problem solving strategies to resolve behavior problems. Emphasis is on the teacher developing the social competence of PreK-12 students within culturally diverse classrooms and engaging families in supportive interactions.

4393 Field Study in Secondary Education (1-10) Identification of specific problems in the area of secondary education. Course is conducted as a field study in the public schools. A maximum of 8 credit hours may be applied toward an advanced degree contingent upon adviser approval.

## 4399 Student Teaching in Music Education, K-12

(5)

Prerequisite: Sec Ed 3294 or equivalent and admission to student teaching. Clinical teaching experience in music Education settings in the schools under university and school supervision with seminar included. For students who wish an additional student teaching experience.

## 4589 Curriculum and Methods of Teaching Foreign Language (3)

Same as FLL 4589. Prerequisites: Tch Ed 3310 and passing the departmental language skill test. A study of the scope and sequence of the foreign language courses in the school curriculum with emphasis on the selection and organization of materials and methods of instruction and evaluation. Attention is also directed toward learning the techniques and research tools of
the scholar in the field of foreign language. To be taken prior to student teaching. This course must be completed in residence.

## 4590 Foreign Language Teaching Seminar (2)

Same as FLL 4590. Prerequisite: Concurrent enrollment in Sec Ed 4990 or consent of instructor. A practicum course in the teaching of foreign languages. Review and explanation of drills, dialogues, and a variety of classroom techniques, oral and written. A continuation of Sec Ed 4589, Curriculum and Methods, with an emphasis on specific practical skills. To be taken concurrently with Sec Ed 4990, Student Teaching.

## 4646 The Curriculum and Methods of Teaching Mathematics (3)

Prerequisites: Tch Ed 3310 and a near major in the subject matter. A study of the scope and sequence of the mathematics courses in the school curriculum with emphasis on the selection and organization of materials and methods of instruction and evaluation. Attention is also directed toward learning the techniques and research tools of the scholar in the field of mathematics. To be taken prior to student teaching. This course must be completed in residence. Not available for graduate credit.

## 4648 Mathematics Teaching Seminar (1)

Prerequisites: Concurrent enrollment in Sec Ed 3290. A seminat in the integration of mathematics curricula, educational philosophy, teaching strategies, and instructional technology in the classroom setting. To be taken concurrently with Secondary Student Teaching, Sec Ed 4990. Not available for graduate credit.

## 4880 Writing for Teachers (3)

Same as English 4880. Prerequisite: English 3100 or a comparable course in advanced composition. Designed for prospective as well as in-service teachers, the course includes: (1) writing--short papers to be shared in workshop groups; (2) reading--current theory and research on writing and the implications for teachers; (3) teaching--classroom activities that foster growth in writing.

4885 The Curriculum and Methods of Teaching English (3) Same as English 4885. Prerequisites: Tch Ed 3310 and a near major in the subject area. A study of the scope and sequence of the English courses in the school curriculum with emphasis on the selection and organization of materials and methods of instruction and evaluation. The course prepares students for reflective teaching by relating course readings to field experiences and theory to practice. To be taken prior to student teaching and concurrently with Secondary Education Professional Internship, Sec. Ed 4989. This course must be completed in residence. Not available for graduate credit.

## 4888 English Teaching Seminar (2)

Same as English 4888. Prerequisites: English 4885/Sec.Ed. 4885, Curriculum \& Methods of Teaching English. A seminar in the integration of English curricula, educational philosophy, teaching strategies, and instructional technology in the classroom setting. To be taken concurrently with Secondary

Student Teaching, Sec. Ed 4990. Not available for graduate credit.

## 4985 Curriculum and Methods of Teaching Life Sciences (4)

Same as Biology 4985. Prerequisites: Tch Ed 3310 and a near major in biology. A study of the scop* and sequence of the life science courses in the schoo. curriculum, with emphasis on the selection and organization of materials and methods of instruction and evaluation. The analysis of teaching/learning, and field experience observations in secondary school classrooms will be integrated into classroom act:vities and discussions. This course must be completed in residence.

## 4986 Laboratory in Teaching Life Sciences (2)

 Same as Biology 4986. Prerequisite: Tch Ed 3310. Discussion, development, utilization, and evaluation of equipment, materials, and techniques applicable to instruction in the life sciences. Must be taken concurrently with Biology 4985/Sec Ed 4985.
## 4989 Secondary Education Professional Internship

 (3)Prerequisites: Level I and Level II requirements This course is an intensive professional development experience ( 9 hours per week for 14 weeks) working in a secondary school setting. Activities on site include assisting the classroom teaching in all as eas of instruction, assessment, and classroom managerient. This course is to be taken during the semester immediately preceding student teaching. This c ourse must be taken in conjunction with methods of instruction course in specific content area. Assignments from these allied courses are carritd out in the Internship, and Internship experiences inform the activities and discussions in these courses. Not available for graduate credit.

## 4990 Secondary School Student Teaching (12)

 Prerequisites: Completion of Level II courses, the appropriate curriculum and methods course in the teaching field, and admission to student teaching. Clinical teaching experience in secondary schoc 1 classrooms under university and school supervision. Not available for graduate credit.
## 4993 Student Teaching in Music, K-6 (6)

Prerequisites: Level I and Level II Education Courses. *Music 3570/Ele Ed 3570, *Music 3670/Sec Ed 3670, Music 2180. *Music 3680/Sec Ed 3680 *Music 3700 (Sec Ed 3700) (Instrumental emphasis majors); Music 3290, *Music 3690/Sec Ed 3690, *Musi: 3710/Sec Ed 3710 (Choral/Vocal emphasis majors); and admission to student teaching. Must be taken "in
precede it in the semester. Clinical teaching experience in music education settings in the schools
under university and school supervision with seminar included.
Required of all majors in music education. *Courses must be taken in residence. Not available for graduate credit

4994 Student Teaching in Music Education, 7-12 (6) Prerequisite: Sec Ed 4993. Must be taken "in block" with Sec Ed 4993 and must immediately follow it in the semester. Clinical teaching experience in music education settings in the schools under university and school supervision with seminar included. Assignments will be in different settings from those of Sec Ed 4993. Required of all majors in music education. *Courses must be taken in residence. Not available for graduate credit.

## 4996 Student Teaching in Elementary Art (6)

Prerequisites: Sec Ed 4273, 45 hours Studio Art, 15 hours Art History and admission to student teaching. Intensive clinical teaching experience under university and school supervision, with seminar included. Must be taken in block with Sec Ed 4997. Not available for graduate credit.

4997 Student Teaching in Secondary Art (6)
Prerequisites: Sec Ed 4273, 45 hours Studio Art, 15 hours Art History, and admission to student teaching. Clinical teaching experience under university and school supervision in middle/junior high and/or high school, with seminar included. Must be taken in block with Sec Ed 4996. Not available for graduate credit.

4999 Biology Teaching Seminar (3)
Same as Biology 4999. Prerequisites: Sec Ed 4985 and Sec. Ed 4986.The application of educational philosophy, science curriculum, teaching strategies, and instructional technology in the classroom setting. Offered concurrently with Secondary School Student Teaching, Sec Ed 4990. Not available for graduate credit.

## 6387 Literacy Acquisition and Learning for Urban Students (3)

Prerequisites: Graduate standing. Designed to extend teacher understanding of adolescent's literacy acquisition, development, and learning through the secondary grades. Emphasis is on development of a teaching philosophy and skills which include maintaining effective literacy learning environments in urban classrooms, fostering culturally responsive classroom communities, understanding social and environmental issues that affect the literacy learning of urban learners, using effective methods and materials to develop engaged and literate students, and fostering adolescent's participation in literacy activities.

## 6404 Seminar (1-10)

6413 Secondary Teaching with Microcomputers (3)
Prerequisite: Educ 4301 or consent of instructor. A course designed for teachers, department heads, and school administrators. Research and theory on microcomputer-assisted instruction as a teaching method in the secondary schools will
be presented. Both hardware and software suitable for microcomputers will be used and analyzed.

## 6414 Teaching the Gifted/Talented Student in

 Secondary School (3)A survey of research and theory on teaching the gifted/talented student in secondary school. Ways to identify the gifted/talented with emphasis on teaching the gifted/talented in both heterogeneous and homogenous secondary classrooms. Models of gifted/talented programs in a school setting.

## 6415 The Secondary School Curriculum (3)

For secondary school principals, teachers, and superintendents. Present methods in curricular change and methods of curricular investigation.

## 6416 Curriculum Construction for Secondary Schools (3)

Prerequisite: Sec Ed 6415 or consent of instructor. Designed for those engaged in curriculum revision work and construction of new secondary school courses.

## 6420 The Improvement of Secondary School Teaching (3)

For secondary school teachers, principals, and superintendents with considerable training in education and experience in teaching. Recent developments in secondary school teaching.

## 6422 Individualizing Instruction in Secondary Schools (3)

This course surveys a variety of theoretical models and research findings related to individualized instruction in the secondary school and are designed for teaching and administrative personnel.

## 6426 Secondary School Curriculum Reform in the Earth/Space Sciences (4) <br> Prerequisites: Graduate standing. Field-based experiences in improving the district-level K-12 school science program, with special attention to the earth/space sciences. Emphasis is given to planning and implementing standards-based secondary school earth/space science activities that are built on the district K-6 science program.

## 6427 Supervision of Clinical Experiences in Teacher Education (3)

Prerequisites: Teaching experience and consent of instructor. A consideration of the clinical phase of the teacher education program, with special emphasis on student teaching. Examination of role responsibilities and supervisory practices. Study of professional literature for research findings, theoretical formulations, and recent developments in the field.

## 6428 Secondary School Curriculum Reform in the Life Sciences (1-4)

Prerequisites: Graduate standing. Field-based experiences in improving the district-level K-12 school science program, with special attention to the life sciences. Emphasis is given to planning and implementing standards-based secondary school life science activities that build on the district K-6 science program. Credit to be determined by instructor.

## 6429 The Department Head (3)

This course emphasizes the role of the department chairperson as an educational leader. Theoretical concepts are related to sound practice. The potential for the job is discussed, as well as the roadblocks to successful execution. Appropriate for practicing department chairpersons, school administrators, or classroom teachers interested in acquainting themselves with this position.

## 6430 Problems of Teaching English in the Secondary School

 (3)A review of recent developments in the teaching of secondary English. Special attention is given to research involving instructional problems in urban and suburban schools. The course is designed for teachers, department heads, and supervisors in secondary English programs.

## 6452 Problems of Teaching Social Studies in the Secondary Schools (3)

A review of recent developments in the teaching of secondary school social studies. Special attention is given to research and scholarship involving instructional and curricular problems, especially in the metropolitan St. Louis area. Emphasis is placed upon development of effective materials, techniques, and resources. The course is designed primarily for teachers and supervisors in secondary school social studies programs.

## 6482 Problems and Research in Teaching Secondary Reading (3)

This is the capstone course for the Master of Secondary Education-Emphasis in Reading. To be taken in the last 9 hours of Masters Program. The three foci for this course are (1) systematic study of research as it focuses on the problems of teaching reading in the secondary school, (2) innovations in the field, and (3) action research. Each student designs and completes an action research project related to literacy.

## 6484 Secondary School Curriculum Reform in the Health Sciences (4)

Prerequisites: Graduate standing. Field-based experiences in improving the district-le level K-12 school science program, with special attention to the health sciences. Emphasis is given to planning and implementing standards-based secondary school health science activities that build on the district K- 6 science program.

6485 Secondary School Curriculum Reform in the Physical Sciences (4)
Prerequisites: Graduate standing. Field-based experiences in improving the district-level K-12 science program, with special
attention to the physical sciences. Emphasis is given to planning and implementing standards-based secondary school physical science activities that build on the district K-6 science program.

## 6490 Internship (1-10)

Prerequisite: Consent of instructor. Closely supervised experience in a field setting under the direction 0 : a graduate faculty member. An appropriate level of competence and evidence of growth in the professional role must be demonstrated by the intern. The internship will include planning, research. evaluation, and related professional activities.

## 6493 Reading Specialist Practicum I (3)

Prerequisites: Sec Ed 6684, Sec Ed 6686, and Ed Rem 6707, 6709, or 6716. Application of reading theory and research in a supervised setting. Emphasis is on assessing and analyzing the literacy strengths, needs, and interests of a range of readers with the goal f improving their reading abilities and attitudes. Focus is on establishing reading support for adolescent: with the assistance of formal and informal assessments, reading professionals, educators, and adolescents" families.

## 6494 Reading Specialist Practicum II (3)

 Prerequisites: Sec Ed 6493. Application of reading theory and research in a supervised setting. Emphasis is on using appropriate materials and providing effective instructional techniques to address adolescent's assessed literacy strengths, needs, and interests with the goal of improving their reading abilities and attitudes. Focus is on sustaining reading, support for adolescents with the assistance of other reading professionals, educators, and adolescents' families.
## 6497 Problems (1-10)

## 6686 Analysis and Correction of Reading Disabilities (3)

Prerequisites: Ed Rem 6707, 6709, or 6716 and at least one graduate level literacy course. Designed to develop teacher understanding of the roles and responsibilities of the teacher of reading, Reading Specialist, and Literacy Coach. Emphasis is on the nature of specific reading difficulties, distinguishing reading difficulty/disability from language difference, becoming familiar with a range of tools for assessing reading skills and strategies, and developing a critical orientation for evaluating the purpose and utiliry of various literacy assessment tools. Teachers wil. use informal and formal literacy assessment tools tr. guide instructional planning for adolescents in the UMSL Reading Center

6986 Techniques in Teaching Biology for Graduate Students (2)
Same as Biology 5986. Prerequisites: Graduate standing and teaching assignment. Discussion and practice of techniques specific to instruction in the life sciences. Consideration will be given to teaching strategies, curriculum design, evaluation, instrumentation, and student teacher interactions.
Recommended for all graduate students with teaching assistantships

## Special Education (Spc Ed)

## 3192 Field Experience in Special Education (3)

Intensive early field experience involving on-site observation and limited participation with exceptional individuals in schools and/or other Educational agencies. This course is open to all students.

## 3242 Characteristics of Learning Disabilities (3)

A study of the divergent characteristics of children with perceptual impairments. This course consists of fifteen halfhour tapes, designed to offer instruction at an undergraduate level on the nature of children with learning disabilities, and the roles of educators, parents, and auxiliary personnel in diagnosis and remediation. Historical perspectives and future trends will be explored. The tapes are followed by student contact with the instructor, for discussion, work evaluation, and testing.

## 3290 Student Teaching in Special Education I (6)

Prerequisites: Tch Ed 2210, 2211, 2212, 3310, 3312, 3313, 3315, Spc Ed 4320, 3332 and admission to student teaching. Must be taken with Spc Ed 3291 and must immediately precede Spc Ed 3291 in the same semester. Clinical teaching experience in special education classrooms in schools under university and school supervision. Required of all majors in special education.

## 3291 Student Teaching in Special Education II (6)

Prerequisite: Completion of Level III courses. Clinical teaching experiences in elementary school classrooms under university and school supervision. Assignments will be in different grade levels from those of the Spc Ed 3290 assignments. Required for all majors in special education.

## 3311 Sex Education for Exceptional Individuals (3)

Prerequisite: Consent of instructor. Course is designed to give teachers a thorough knowledge and understanding of the issues, problems, teaching techniques, and the current curricular resources of teaching sex education to handicapped individuals.

## 3313 Introduction to Learners with Disabilities and Inclusive Education (3)

Prerequisite: Level I or equivalent. Same as Tch Ed 3313. Provides an overview of inclusive education and special education with an emphasis on relevant educational legislation, important historical developments, and necessary adaptations of instruction methods to meet the needs of students with disabilities. Issues related to inclusive education, such as professional collaboration, family involvement, multicultural
issues, transition services, and professional support for teachers are also covered.

## 3330 Introductions to Mental Retardation and Severe Handicaps (3)

Prerequisite: Spc Ed 3313. An introductory course describing characteristics, classification, and causes of mental retardation and severe handicapped.

## 3332 Educating Learners with Developmental Disabilities, Physical or other Health Impairments (3)

Prerequisites: Tch Ed 2211, Spe Ed 3313, and Spc Ed 3345. Methods and techniques for educating learners with developmental disabilities, physical or other health impairments. Required of all who are preparing for certification in special education with endorsement in Developmental Disabilities or Cross Categorical.

## 3345 Educational Programs for Students with Disabilities (3)

Prerequisites: Tch Ed 3313 or equivalent or consent of instructor. This course examines current research, theory, and practices of educational programs provided for students with disabilities. Particular emphasis is given to the effective inclusive education of students with mild/moderate learning disabilities, emotional/behavioral disorders, and developmental disabilities. Topics addressed include assessment for and of learning, assessment for eligibility for special education services, legal requirements for special education programs, various definitions and theories of mild/moderate disability types, collaboration with families and other professionals, and issues of race, ethnicity, class, and gender.

## 3347 Teaching Learners with Learning Disabilities

 (3)Prerequisites: Spc Ed 3313 and Spc Ed 3345.
Application of instructional techniques for learners with learning disabilities, including assessment for instruction, interdisciplinary teamwork, parental involvement, individualized education plans, and classroom techniques. Required for certification in special education of learners with learning disabilities.

## 3349 Learning and Social Supports for Students with Disabilities (6)

Prerequisites: All Level 2 courses and Spc Ed 3345. This course focuses on the development of professional practices for the provision of instructional, social, emotional, medical and behavioral supports for students with disabilities in general education classroom and buildings. Course content includes assessment, planning, action, and collaboration. Students seeking special education teacher certification must take this during the same
semester as Spc Ed 4989, Special Education Professional Internship.

## 3350 Teaching Learners with Emotional/Behavioral

 Disorders (3)Prerequisites: Spc Ed 3313 and Spc Ed 3345. A course designed to instruct students in the management and instructional strategies necessary to the education of learners with emotional/behavioral disorders.

## 4301 Special Education Orientation (2)

Prerequisites: Admission to Special Education Transition Program or consent of instructor. This course examines characteristics of students in cross-categorical placements. Examination of special education philosophy, historical and legal issues, special education process, and personal traits.

## 4302 Special Education Process and Performance

 Assessment (2)Prerequisite: Spc Ed 4301 or consent of instructor. This course examines the special education process from pre-referral to placement, and the roles of educators, parents and auxiliary personnel. Examines informal and formal assessment procedures and instruments for screening, diagnosis, placement and performance of school-aged individuals.

## 4315 Speech and Language Problems of Exceptional Children (3)

Prerequisites: Ed Fnd 1111, Spc Ed 3313, and admission to the College of Education. Study of the problems associated with speech and language development and the techniques employed by classroom teachers to lessen these problems for children. Required for all majors in special education.

## 4320 Classroom Management (3)

Prerequisites: Levels I and II courses or consent of instructor. Same as Ech Ed 4320, Ele Ed 4320, Sec Ed 4320. Understanding classroom management as the development of engaging instruction that establishes healthy and culturally appropriate teacher-student relationships, builds successful classroom community and enhances student learning. Participants develop a culturally relevant classroom management plan that includes rules, procedures, expected behaviors and uses problem solving strategies to resolve behavior problems. Emphasis is on the teacher developing the social competence of PreK-12 students within culturally diverse classrooms and engaging families in supportive interactions.

## 4322 Inclusive Education: Theory and Practice (3)

 Prerequisite: Spc Ed/Tch Ed 3313 or Spc Ed 6416, or equivalent. This course for general and special educators focuses on current theory, research, and practice of inclusion of students with disabilities in general education classrooms. Topics include instructional strategies, adaptations of curriculum, facilitation of friendship development and social support, consultation and collaboration with other professionals, and working with parents.
## 4342 Transition Issues and Planning (3)

Prerequisite: Tch Ed 3313, or equivalent, or consent of instructor. This course provides information to teachers and human service professionals who work closely with adolescents and young adults with disabilities. Emphasis is placed on understanding and planning for the transition from school to adult l fe for students with disabilities. Transition outcomes include employment, residential options, and other developmental concerns. Topics include selfdetermination, career education and planning. interagency collaboration, vocational and residential issues and resources, and family support and involvement.

## 4370 Sensory-Motor Development of the Severely Handicapped (3)

Prerequisite: Spc Ed 3330 or equivalent or consent of instructor. An examination of basic sensory-motor development and associated disorders to enable teachers to work more effectively with occupational and physical therapists. Basic techniques used by therapists are presented together with an explorction of the teacher's role regarding sensory-motor programming. Required for certification for teaching individuals with severe handicaps.

## 4371 Methods and Curricula for Severely Handicapped (3)

Prerequisite: Spc Ed 4370 or consent of instructor. This course begins with the application of the clinical teaching model to the severely handicapped population regarding objectives, training methois, and program process monitoring. It also includes critical analysis of existing curricula and methods of classroom or living unit organization. Required for certification in Severe Handicapped.

4382 An Introduction to Gifted Children (3)
Prerequisite: Spc Ed 3313. This course provides an introduction to gifted children. Their characteristics, cognitive abilities, special abilities, and creativity will be reviewed. Current problems, research, and issues concerning the gifted are covered.

## 4384 The Education of Gifted Children (3)

Prerequisite: Spc Ed 3313. This course deals with methods, techniques, and curricular modificaticns necessary for the effective education of gifted children.

4390 Student Teaching in Special Education III (6) Prerequisites: Spc Ed 3291 or experience in spfcial education classrooms in schools equivalent and admission to student teaching. Clinical teaching under university and school supervision with seminar included. For students who wish an additional student teaching experience.

4989 Special Education Professional Internship (3)
Prerequisites: Level I \& Level II requirements and Ele Ed 4989. This course is an intensive professional development experience ( 9 hours per week for 14 weeks) working in a school setting with students with disabilities. Activities on site include assisting the classroom teacher in all areas of instruction, assessment, and classroom management. This course is to be taken in conjunction with Spc Ed 3349. Assignments from this course are carried out in the Internship, and Internship experiences inform the activities and discussions in this course. Not available for graduate credit.

## 5303 Instructional Practices (3)

Prerequisite: Spe Ed 4301 or consent of instructor. This course provides an in-depth examination of methods and techniques for use in the education of students in cross-categorical placements.

5304 Structure of Teaching and Communication (2) Prerequisite: Spc Ed 5303 or consent of instructor. This course provides a study of the problems associated with speech and language development and the techniques employed by classroom teachers. Examination of transition requirements and strategies for students in cross-categorical placements in order to utilize communication skills for effective collaboration with students, parents, colleagues, and community agency representatives.

## 5305 Planning and Managing the Teaching and Learning

 Environment (3)Prerequisite: Spc Ed 5303 or consent of instructor. This course provides an in-depth exploration of various behavior management techniques that are particularly applicable for students in cross-categorical placements. Projects on functional behavioral assessment and behavior support plans will be conducted.

## 5306 Research Into Practice (4)

Prerequisite: Spc Ed 5305 or consent of instructor. This course provides an examination of current trends, issues and research in the education of students in cross-categorical placements with particular emphasis on instructional and management issues, effective inclusive education practices, and behaviorist and constructivist strategies for delivering instructional content and reflective practices.

## 5307 The Reflective Practitioner (4)

Prerequisite: Spc Ed 5306 or consent of instructor. This course provides reflection on all competency areas associated with the education of students in cross-categorical placements. Selfassessment on abilities and self-reflection on professional development. Selected problems on student-learner exceptionalities. A selective portfolio for K-12 Mild/Moderate Cross-Categorical endorsement is required.

6320 Advanced Studies in Classroom Management (3)
An advanced course designed for practicing educators examining current research, theory, and practice of classroom and behavior management. Enmphasis will be given to the
analysis of research and development of practical skills in the areas of conflict resolution, social problem-solving, classroom and school community building, and the promotion of social competence among children and youth.

## 6372 Screening and Diagnosis of the

 Developmental Delays: Birth to 5 Years (3) Prerequisites: Ed Rem 3721. This course addresses the content, techniques, and special problems related to the assessment of children at risk for developmental delays in the birth to five year age range. Students gain experience in construction, administration, and interpretation of assessment tools used with young children. Required for certification in severe handicapped and early childhood-special education.
## 6405 Introduction to Braille (4)

Braille reading and writing of Standard English Grade 2 braille and braille mathematics will be introduced. Information on transcribing printed matter into braille and the use of writing devices and technical aids will be presented. The objectives of this class will be met over two semesters due to the large amount of information and high level of proficiency required. A literary braille test and transcription test must be passed at the end of the course.

## 6410 Families and Schools in Inclusive

 Communities (3)Prerequisite: Graduate standing. This course focuses on how parents and other family members, teachers, administrators (and other education professionals) can collaboratively increase the capacity of families and schools to support inclusive education and community participation for all students, especially those with significant disabilities. This course draws upon the multiple perspectives of families, schools and the general culture to explore a shared context of family and disability history, educational issues, and personal perspectives.

## 6411 Law, Policy and Bureaucracy in Education and Disability Studies (3)

Prerequisite: Graduate Standing. This course focuses on the evolution and current status of law and educational policy affecting individuals with disabilities and their families. The course will provide a basic review of governmental structure and educational policy analysis in the United States, and explore statues, policies, and judicial decisions in areas of special education, adult services, family supports, and civil rights.

## 6412 Psychology of Exceptional Children (3)

An in-depth analysis of the unique psychological problems of exceptional children and youth. Current psychological theories and research emphasized.

## 6416 Current Research in Psychology of Learners with Disabilities (3)

Prerequisite: Consent of instructor/adviser. Study of current trends, issues, and research in special education. Areas of investigation focus on major developments in disabilities, situations related to programming for projected needs, and considerations and utilization techniques with leamers with disabilities. Students should have experience or an undergraduate background in the education of learners with disabilities prior to enrolling in this course.

6421 Prescriptive Teaching of Learners with Disabilities (3) Prerequisite: Spc Ed 3313 or equivalent. Course will instruct students on how to develop and implement prescriptive educational programs for learners with disabilities. Students will become familiar with prescriptive systems, which will enable them to use various sources of information in response to learner remedial and developmental needs.

6430 Introduction to Developmental Disabilities (3) Prerequisite: Spc Ed 3313 or equivalent. An advanced study of the theoretical and methodological problems related to developmental disabilities. Particular emphasis on the application of current research findings to the problems confronting learners with developmental disabilities.

## 6431 Education of Learners with Developmental Disabilities (3)

Prerequisite: Spc Ed 6430. A systematic study of current educational practices and procedures for the education of learners with developmental disabilities. Methods and materials are stressed.

## 6440 Disability, Schooling and Culture (3)

Prerequisites: Tch Ed 3313 or equivalent. An advanced course that will examine foundational issues in social and educational policy for students with disabilities. The course explores the historical, philosophical, sociological and economic dimensions of the recent emphasis on inclusive and community-based support systems for individuals with disabilities and their families. The course will review recent research and experience in the U.S. (primarily) concerning the evolving roles and relationships of families, teachers, administrators, and students with and without disabilities in increasingly diverse schools and communities.

## 6441 Curriculum \& Teaching for Diverse Learners and Students with Disabilities (3)

Prerequisites: Spc Ed 6440 Curriculum and methods for working within a general education environment with students with disabilities and other students who require extra support and assistance. The course examines approaches to assessment and curriculum design that can accommodate all students, including activity-and interest-based assessments, various strategies for developing integrated curriculum units, and developments of various learning outcomes that can be individually tailored or "personalized" for any student.

6443 Introduction to Learning Disabilities (3) Prerequisite: Spc Ed 3313 or equivalent. Advan:ed study of the theoretical and methodological problems related to learning disabilities. Particular emphasis on the application of current research findings to the: problems confronting learners with disabilities.

## 6444 Education of Learners with Learning Disabilities (3)

Prerequisite: Spc Ed 6443. Systematic study of current educational practices and procedures for the education of learners with learning disabilities. Methods and materials are stressed.

## 6450 Introduction to Emotional/Behavioral Disorders (3)

Prerequisite: Spc Ed 3313 or equivalent. Advarced study of the problems and characteristics of learners with emotional/behavioral disorders. Particular emphasis on the application of current research findings to problems confronting learners with emotional/behavioral disorders.

## 6452 Social, Emotional, and Environmental Supports for Learners with Disabilities (3)

 Prerequisite: Spc Ed 6450 or consent of instructor. This course provides advanced students with the research, theory, and practices of providing support to students with disabilities and other students experiencing emotional and behavioral problems. This course focuses on the development of professional skills necessary to assist and teach students with difficult behaviors. Additionally, this course helps classroom teachers learn how to work collaboratively with parents and other professionals in order to construct classroom environments that are supportive and productive for all students.
## 6462 Introduction to Early Childhood Special Education (3)

Prerequisite: Spc Ed 3313 or equivalent. A study of issues and concepts central to special Education of young children with disabilities, and at-risk for disabilities, and their families. Focus on progrem models, screening and assessment procedures, and curriculum concepts. An ecological perspective is emphasized.

## 6463 Curriculum, Methods, and Materials for

 Early Childhood Special Education (3) Prerequisites: Spc Ed 6462. In-depth study of integrated assessment-based curriculum development for learners in early childhood special education. Emphasis on individualized educational planniag and implementation for learners and their families.6481 Introduction to Orientation and Mobility (3) This course is an introduction to the principles of orientation and mobility and is designed to acquaint
the student with the effects of visual impairment on spatial orientation and movement within the environment. Topics will include instructional strategies for developing prerequisite concepts, basic travel techniques, structuring the classroom environment, low vision orientation and mobility, and orientation and mobility devices for individuals who are visually impaired.

## 6483 Instructional Strategies and Technology for Students

 with Visual Impairment (4)This course focuses on meeting the instructional needs of visually impaired and blind elementary and secondary students through the use of curricula adaptations and technology. Topics include designing and implementing instructional plans to teach keyboarding skill, math, science, and social studies; listening and recording devices; transition; and the use of computers with students who are visually impaired. The objectives of this class will be met through in class, lab, and out of class activities. Students will be expected to have an ongoing interaction with students who are visually impaired through directed experiences.

## 6490 Internship (1-10)

Prerequisite: Consent of instructor/adviser. Closely supervised experience in a field setting under the direction of a graduate faculty member. An appropriate level of competence and evidence of growth in the professional role must be demonstrated by the intern. The internship includes planning, research, evaluation, and related professional activities.

## 6492 Practicum in Special Education (3-6)

Prerequisite: Two courses in area of concentration (developmental disabilities, early childhood special education, emotional/behavioral disorders, or learning disabilities). Supervised experience in the education of learners with disabilities in a school or other appropriate setting.

6493 Practicum with Students with Visual Impairment (6) Prerequisites: Spc Ed 366, 6405, 6481, 482, 6483 and all required course work for certification for Teachers of Blind and Partially Sighted Students. This practicum focuses on the techniques and materials necessary to education students who are visually impaired and on procedures for evaluating their effectiveness. This supervised practicum involves both field placement and classroom instruction. It is limited to advanced students in the area of Blind and Partially Sighted.

6497 Problems (1-10)
Prerequisite: Spc Ed 3313 or equivalent and consent of instructor. Investigation of a selected problem related to the education of learners with disabilities. To be conducted under the direction of a graduate faculty member.

6510 History of Disability and Special Education (3) Prerequisites: Permission of Instructor. Provides a historical context for approaching contemporary issues in the education and support of people with disabilities and their families. Requires students to become familiar with methods of retrieval and analysis of historical material.

## Teacher Education (Tch Ed)

## 2210 Introduction to Teaching (3)

Explores the multiple roles and functions of professional teaching including: communication, leadership, management skills, use of technology, and identification of needs of diverse populations. Portfolio preparation will be introduced. A minimum of 15 field experience hours required.

## 2211 Introduction to American Schools (3)

One of three introductory, prerequisite courses to the Teacher Education Program. An examination of selected concepts and principles underlying American public education. A minimum of 4 field experience hours required.

## 2212 Introduction to Learners and Learning (3)

 Prerequisites: Psych 1003. Same as Ed Psy 2212. Foundational study of the development of infants, children and adolescents focusing on the role of appropriate educational environments in fostering positive physical, cognitive, social and moral outcomes. Reading relevant research will be combined with experiences in the field and technology-based assignments to investigate both biological and sociocultural forces that shape the development process. A minimum of 10 field experience hours required.3310 Introduction to Instructional Methods (3) Prerequisites: Tch Ed 2210, 2211, 2212, or equivalent and admission to Teacher Education Program. Beginning methods course for K-12 teachers. Skill development in planning instruction, selecting content, use of various teaching methods, designing assessment, developing classroom climate and management strategies. Participation in professional development through observing students in a school setting, microteaching, using educational technology, and portfolio development. A minimum of 12 field experience hours required.

3312 The Psychology of Teaching and Learning (3) Prerequisites: Tch Ed 2210, Tch Ed 2211, Tch Ed 2212 or equivalents and admission to Teacher Education program. Same as Ed Psy 3312. Application of the principles of psychology to an understanding of the dynamics of teaching behavior and learning behavior. Involves both theoretical and practical approaches to analysis of the learning environment of the school. Required of all who are preparing to teach.

## 3313 Introduction to Learners with Disabilities and

 Inclusive Education (3)Prerequisites: Level I or equivalent. Same as Spc Ed 3313. Provides an overview of inclusive education and special education with an emphasis on relevant
educational legislation, important historical development, and necessary adaptations of instructional methods to meet the needs of students with disabilities. Issues related to inclusive education, such as professional collaboration, family involvement, multicultural issues, transition services, and professional support for teachers are also covered.

## 3315 Literacy Learning and Instruction (3)

Prerequisites: Admission to the Teacher Education program. May take concurrently with Tch Ed 3312 and Tch Ed 3313 or equivalents; may not be taken before Tch Ed 3312 and Tch Ed 3313 or equivalents. Methods, materials, frameworks, and technology for the effective teaching of literacy to young children, children with special needs, and children in elementary education settings. Emphasis on role of language experience, phonics, semantics, syntactics, pragmatics, schema theory, and metacognition in literacy development. Observation, assessing children's literacy interests and development, and teaching lessons in a school classroom setting are required. This course may be applied toward a Literacy Minor.

## 4320 Educational Issues in the Cultural Construction of Diversity (3)

Prerequisites: None. In this course students will explore issues of human diversity and how these issues impact a wide range of educational settings. Students will be involved in a continued process of self-assessment regarding how each of us deals with others not like ourselves. Human similarity and diversity will initially be examined using anthropological and biological research. Socio-cultural constructions of this diversity will then be investigated. Diversity will be explored on the individual, local, national and global levels. Students will become familiar with the science of diversity and will investigate how this diversity plays out in a variety of sociocultural contexts. This class will provide students with a knowledge base about human diversity and will promote multicultural competencies for educators.

## 4361 Foundations of Service Learning (6)

Prerequisites: Admission to the BES program and completion of Level I and Level II courses. This is a foundations course in the history and fundamentals of service learning. The area of service learning will be examined from its origins including the philosophical concept of the servant as leader and the role of public service and civic engagement in a democracy. Students will work with partner schools and other organizations as a part of the fieldwork requirement for the course.

## 4391 Teaching Reading in Secondary School Content Areas

## (3)

Prerequisite: Tch Ed 3310 and 3312, or consent of instructor or equivalent. Methods and materials for improving reading and study strategies in content area classes in upper grades.

## 5310 Instructional Design (3)

Prerequisites: Graduate standing, Tch Ed 5311, participation in an initial teacher preparation program, and consent of instructor. Skill development in planning teaching units,
instructing lessons, selecting content, using varicus teaching methods, designing assessment, developing classroom climate and in management strategies. Professional skills are developed through reflecting on one's own practice, using educational technolog.', and developing a professional portfolio.

## 5311 Foundations of Education (4)

Prerequisites: Acceptance into the post-baccalau:eate teacher education certification program. Investigation into the history, philosophies, and purposes of public schools and the multiple roles played by profess:onal educators. Emphasis will be on the history of plblic education, the role of the teacher as change agent, the influence of technology, and the impact of diver sity on American classrooms.

## 5454 Cultural Diversity in Teaching (3)

Prerequisite: Graduate standing. An advanced study, application, and discussion of pedagogical issue; associated with cultural diversity and human origin. The course will emphasize application of research in order to help teachers develop effective strategits for preparing teachers to integrate.

## 5850 Topics in the Teaching of Writing (3-6)

Same as English 4850. Prerequisite: English 3100 or equivalent. Special topics in the practice of and pedagogy of writing designed for in-service teachers. Topics may include writing at specific grade levels, writing/reading workshops, writing in urban setings, writing across the curriculum, action research, rew technology, classroom and district-level assessment. May be repeated once for credit if topics differ. Counts toward Certificate in Writing and Graduate Certificate in the Teaching of Writing.

## 6010 Examining History, Community and Sccial Justice in Education (3)

Addresses the issues of equity and social justice from the context of personal and educational history. Students will develop a cultural understanding of their own previous school, community and family experiences and generalize those findings to their current work as educators. They will develop $: n$ understanding of the historical foundations of American education and the role of the teacher to be a catalyst for change. Curriculum, instruction and learning will be examined through a variety of lenses including race, class, gender, ability, sexual orientation and religion to become culturally responsive teachers.

6020 Teacher Action, Advocacy and Leaderihip (3) Investigates the relationships among students, yeneral and special education teachers, counselors, principals, parents, and other support and specialist persomel typically present in schools in Missouri and the: changing roles of all these individuals as a
consequence of general and special education reform initiatives. Develop systemic action plans and become advocates and leaders within the school and larger community for children, families, and the profession. Assists teachers to analyze and improve their management, planning and record keeping systems and professional development planning.

## 6030 Instruction, Learning and Assessment (3)

Prerequisites: Admission into Graduate School. Same as Ed Psy 6030 . Uses learning as the basis for the design of classroom instruction. By applying learning theories, teachers can improve their own unit development, lessons plans, assessment strategies, and the use of technology for effective teaching. Deals with the impact of cognitive educational research on the subject content and what is known about how people leam. Teachers will learn to critically evaluate and improve their own educational practices, design principled and appropriate assessments based on their instructional goals, and to assess their own professional development.

## 6040 Teacher Research (3)

Prerequisites: Tch Ed 6010 and Tch Ed 6020. Same as Ed Rem 6040. This course provides the knowledge, skills, and practice for experienced practitioners to engage reflectively in a process of systematic study of their own practice within educational systems and situated contexts. Educators will learn both analytic and practical tools to document multiple factors that can impact student learning and become more sophisticated consumers of research in order to engage in student advocacy and influence policy decision-making.

## 6440 Experiential Education (3)

Prerequisites: Tch Ed 6010. This course addresses facets of experiential learning beginning with the theoretical background. Reflection will be examined as a key component of the experiential learning cycle and reflective questioning techniques developed and practiced. Adventure education, cultural journalism, apprenticeship education and related areas will be investigated as approaches to experiential learning, Students will develop an understanding of the relationship between experience and learning and develop techniques for using that relationship to enhance learning in their own teaching situation.

## 6880 Gateway Writing Project (3-6)

Same as English 6880. An intensive course in the writing process and the writing curriculum, designed for experienced teachers. Readings of current theory and research will be related to participants' experience as writers and as teachers. Topics may vary. May be repeated for credit. No more than six hours may be applied toward the M.Ed. Counts toward the Graduate Certificate in the Teaching of Writing.

6890 Seminar in Professional Writing for Teachers (3) Prerequisite: Tch. Ed. /Eng 6880, and near-completion of Graduate Certificate in the Teaching of Writing. Capstone seminar for the Graduate Certificate in the Teaching of Writing. Participants will pursue the dual role of writer/writing
teacher by designing individual projects with one of these emphases: (1) research writing based on a classroom inquiry into the teaching of writing. (2) expository and creative writing based on an inquiry into the teacher's own evolution as a writer. Seminar meetings will include both face-to-face and on-line communication.

6910 Teacher Research Capstone (3)
Prerequisites: Completion of Tch Ed/Ed Rem 6040 and all but the last 6 hours of M.Ed. program. Same as Ed Rem 6910. This course applies the research knowledge, skills, and practice of experienced practitioners to a final research project that results from reflectively evaluating their own practice within educational systems and situated contexts. Educators will use both analytic and practice tools to research multiple factors that impact their own students learning. The final project will be presented to the faculty and students in the College of Education and displayed in a public forum as a capstone project for the M.Ed.

## The College of Fine Arts and Communication

## General Information

The College of Fine Arts and Communication at the University of Missouri-St. Louis includes the Departments of Art and Art History, Communication, Music, and Theatre Dance and Media Studies. The faculty and alumni of this College have distinguished themselves as scholars, visual artists, teachers, and performers. Students of the College pursue their activities in a variety of campus locations, including the Fine Arts Building, Lucas Hall, the Music Building and the General Services Building. The University's new, $\$ 55$ million Performing Arts Center opened the spring of 2003, affording two world class venues for performances by individual university students and faculty, campus ensembles, and visiting artists. In addition, Gallery 210, Gallery FAB, and Gallery VISIO in the Millennium Student Center, offer space for the display of student and faculty artwork, as well as visiting exhibitions.

The College of Fine Arts and Communication is distinguished by its collaboration with the community. Four endowed professorships link the University to the Saint Louis Symphony, the Saint Louis Art Museum, Opera Theatre of Saint Louis, the Laumeier Sculpture Park, and other local cultural institutions. The Des Lee Music Education Collaborative connects the University and a variety of partner cultural institutions to eleven local school districts.

The College of Fine Arts and Communication consists of some 50 full-time faculty members in the following departments, each offering work in specific undergraduate degree programs: art and art history, communication, and music. In addition, the Theatre Dance and Media Studies Department began to offer classes in the theatre and dance during the 2002-2003 academic year.

Graduate study degree programs, administered through the Graduate School, are also offered in the communication and music departments.

## Requirements for Undergraduate Study

In addition to the university general education requirements, all majors in the College of Fine Arts and Communication must meet the following requirements: To graduate, all majors in the college also must complete the following:

Requirements of their chosen baccalaureate degree (i.e., B.A., B.F.A., B.M., etc) in accordance with the policies of the College of Fine Arts and Communication.
Requirements of the department for their selected major or interdisciplinary program.

## Cultural Diversity Requirement

To expand cultural awareness, all students are requir to to complete a course that emphasizes Asian, African, Niddle Eastern, Latin American, Pacific aboriginal, Native American, or a comparable culture. Courses that sat sfy this requirement involve substantial material indeperdent of the cultures' interactions with European cultures. If a course focuses on one facet of a culture, it must treat the topic within the context of the culture as a whole. A list of courses which fulfill the Cultural Diversity requirement may be found elsewhere in this bulletin.

## Academic Policies

## Grade Requirements

To graduate, all majors in the college must satisfy one of the following grade point options:

- Earn 120 hours with a C grade or better, which constitutes a complete degree program. Neither a grade of C - nor a satisfactory grade may be counted.
- Have a minimum UM-St. Louis Campus grade point average of 2.0 and have met all other Grade Point restrictions that are required for the degree program and the major.


## Residency Requirements

Unless otherwise specified, a transfer student must complete 12 hours of graded work at UM-St. Louis at the 2000 level or above within the minimum number of hours required for each major.

Unless otherwise specified, a transfer student must complete at least six hours of graded work at UM-St. Louis at the 2000 level or above within the minimum nurr ber of hours required for each minor. Students should corsult the minor department for specific residency and grade requirements.

## Specific Baccalaureate Degree Requirements Course Requirements

After fulfilling the general education and specific major degree requirements, students are to take the remaining hours required to complete the bachelor's degree fr:m courses (which the appropriate department has evaluated as being of university level quality) from one or mare of the following areas or their university quality equivalents at other institutions: anthropology/archaeology, art (appreciation, history, studio), astronomy, biology, chemistry, communication, criminology and crimiral justice, economics, English, foreign languages/literatures, geology, history, mathematics/computer science, music (appreciation, history, performance), philosophy, paysics, political science, psychology, social work, sociology, business, education, engineering, or interdisciplina:y. Other areas or courses not listed require approval by the chair of the student's department.

## Bachelor of Arts (B.A.)

All B.A. degree candidates must successfully complete a curriculum which includes a departmental major or an approved interdisciplinary field. A major must include at least 30 credit hours but no more than 45 hours. The College offers the B.A. degree in art history, communication, and music.

## Foreign Language Requirement

Candidates for the B.A. degree are required to complete 13 credit hours or the equivalent in proficiency in one foreign language. Foreign language guidelines are as follows:

Students entering with no high school language units must enroll in Language 1 or may enroll in the 2115 series. Students with the degree of proficiency equivalent to 13 hours of college-level work may obtain exemption by passing the department's placement exam. The specific dates for the exam are announced in the Schedule of Courses or may be obtained from the admissions office or the Department of Foreign Languages and Literatures. Native speakers of language other than English may meet the foreign language requirement by presenting a transcript from a university or secondary school of their native country to the Department of foreign languages and literature. The department will certify native speakers of those languages which are taught at the university. Those who are proficient in other languages must submit certification of competence to the college. Language 2115 $a, b$, and $c$ (Intensive) will satisfy the foreign language requirement. 2115 and co-requisites must be completed with a grade of C -or better, to satisfy the foreign language requirement. Students may not repeat, for credit an elementary course if they have already completed a higherlevel course for which the elementary course, or its equivalent, is a prerequisite.

## Applied Music and Studio Art.

Students not majoring in music may count no more than eight hours in music-performing organizations (Music $1400,1410,1500,1520$, etc.) Students in the college majoring in music may count any number of hours of applied music (private lessons). Students not majoring in studio art may count any studio art course toward any degree in the college. This also includes transferred credit.

## Bachelor of Music (B.M.)

The requirements are the same as for the B.A. degree with the addition of music education courses for music majors seeking state teacher certification. Although foreign language proficiency is not required, foreign language study is required for applied voice students.

## Certificate Programs

A certificate program is offered in photographic studies.

## Evening Program

All the departments of the College of Fine Arts and Communication offer coursework in the evening or in other non-traditional modes (i.e. on-line and/or video). The Department of Communication offers sufficient coursework to complete its degree program in the evening. Consult the website of the department in which you are interested for details on degree requirements and 3-year schedule of planned course offerings.

Department HonorsError! Bookmark not defined. Majors in the following department may pursue departmental honors.

## Minors

A number of minors are available at UM-St. Louis. Some are offered by individual departments, while others, such as Classical Studies and Black Studies, are interdisciplinary in nature and involve a number of departments. The requirements for the various minors are listed in either the departmental or interdisciplinary sections of this Bulletin.

## Department of Art and Art History

## Faculty

Jeanne Morgan Zarucchi, Professor*, Chairperson
Ph.D., Harvard University
Kenneth Anderson, Professor*
M.F.A., Southern Illinois University, Edwardsville

Yael Even, Professor*
Ph.D., Columbia University
E. Louis Lankford, Professor, Des Lee Foundation

Endowed Professor Art Education*
Ph.D., Florida State University
Dan Younger, Professor*
M.F.A., University of Iowa

Marian Amies, Associate Professor*
M.F. A., Southern Illinois University, Edwardsville

Ruth L. Bohan, Associate Professor*
Ph.D., University of Maryland
Susan E. Cahan, Associate Professor, Des Lee Endowed Professor of Contemporary Art
Ph.D., Graduate Center, City University of New York
Glen P. Gentele, Associate Professor, Aronson Endowed
Professor of Modern and Contemporary Art History,
Director of Laumeier Sculpture Park
M.F.A., Maryland Institute, College of Art

Phillip E. Robinson, Associate Professor*
M.F.A. University of Illinois, Chicago

Jeffrey L. Sippel, Associate Professor*, BFA Coordinator M.F.A., Arizona State University

Terry L. Suhre, Associate Professor, Gallery Director* M.F.A., Southern Illinois University, Carbondale

Karen Cummings, Assistant Professor
Ph.D., University of Illinois at Urbana-Champaign
Jennifer McKnight, Assistant Professor
M.F.A., California Institute of the Arts

Gretchen Schisla, Assistant Professor
M.F.A., Boston University

Susan Waller, Assistant Professor
Ph.D. Northwestern University
Lucí Mauricio-McMichael, Lecturer
M.F.A., Fontbonne University
*members of Graduate Faculty
The Department of Art and Art History represents a diverse faculty actively engaged in the production of art and in its historical and critical evaluation. The department prides itself on its commitments to high standards of teaching and sound research achievements. Individual faculty have been cited for their teaching excellence. Art history faculty members have written books, articles, and critical reviews and regularly participate in national and internationally conferences. Studio art faculty exhibit nationally and internationally in group- and solo-juried and invited exhibitions. Their work has been accorded various show awards and received financial support from the National Endowment for the Arts, the Ford Foundation, and University Research grants.

## General Information

## Degrees and Areas of Concentration

The department offers course work leading toward the B.A. in art history and the B.F.A. in studio art.

Courses included in the B.A. in art history cover the ars of Asia, Africa, Europe, and North America, including Nz.tive American arts, from ancient times to the present. Courses examine the entire range of human visual expression from painting, sculpture, architecture, and photography to performance and festival arts. In each case the arts are examined within their historical, aesthetic, and cultural contexts.

The B.F.A. in studio art consists of a foundation art program and an emphasis area in one of the following: drawing, graphic design, painting, photography, printmaking, ard general fine arts. UM-St. Louis has a transfer agreeme:t with the St. Louis Community College District, which offers a direct credit transfer to upper division BFA courses for students who graduate with an AFA degree from the SLCC.

To support its teaching and research objectives, the department maintains a slide collection of over 110,000 slides and an expanding database of digital images. The collection, which includes examples of painting, sculpture, architecture, photography and decorative arts, is under the supervision of a professional museum curator, who is available for special assistance to staff and students.

## Gallery 210

Gallery 210, located in Building 7, 44 East Drive, offers visual arts programming of regional, national, and international importance. The gallery's exhibitions and related arts programming have enjoyed a long and distinguished history of service to the university and to the St. Louis community. Gallery activities are supervisec by a professional gallery director.

## Gallery FAB

Located in the Fine Arts Building, Gallery FAB exhitits a range of work by artists of regional and national significance. The exhibitions are coordinated by members of the Studio Art Faculty and complement the teaching emphases of the Fine Arts program.

## Gallery Visio

Gallery Visio is located in room 170 Millennium Student Center. It showcases work by students and faculty, and hosts exhibitions that address cultural and contemporary iscues.

## Scholarships/Internships

Three scholarships are available on a competitive basis within the department: the Art Department/Barbara St Cyr Scholarship, the William T. Isbell Jr. Scholarship, and the Aronson Scholarship. The department also sponsors : variety of internships with local arts institutions, including the St.

Louis Art Museum, Contemporary Art Museum St. Louis, Laumeier Sculpture Park, and various private art galleries.

## Undergraduate Studies

## General Education Requirements

Majors in art history must meet the college and university general education requirements. A foreign language is required. French or German is recommended. Art history courses required for the degree may not be taken on a satisfactory/ unsatisfactory (S/U) basis.

Art history courses can be applied toward minors in Anthropology, American Studies, Classical Studies, Philosophy, and Urban Studies, or certificates in Studies in Religions, Women's and Gender Studies, Photographic Studies and African Studies.

Majors in studio art must meet the college and university general education requirements. A foreign language is not required. Studio art courses required for the degree may not be taken on a satisfactory/ unsatisfactory ( $\mathrm{S} / \mathrm{U}$ ) basis. A minimum of 120 hours is required for graduation. Studio art courses do not fulfill the humanities general education requirement.

## Degree Requirements

## Bachelor of Arts in Art History

Art history majors must complete a minimum of 36 , but no more than 45 , hours in art history. The following four core courses are required:

1100, Introduction to Western Art
One course in non-Western art, chosen from 1104, 1105, or 1108 (may be taken concurrently with 1100):
1104, Indigenous Arts of North America
1105 ,The Arts of Africa
1108, Introduction to the Arts of Asia
3395, Sophomore/Junior Seminar: The Methods of Art History

4495, Senior Seminar
Students must take a minimum of three lower-division courses, one from each of the following categories:

## Ancient and Medieval

2211, Art and Archaeology of the Ancient World
2212, Greek Art and Archaeology
2213, Roman Art and Archaeology
2214, Early Christian and Byzantine Art
2225, Medieval Art

## Early Modern

2235, Italian and Northern European Renaissance Art 2237, Northern European Renaissance Art

2238, Italian Renaissance Art
2240, French Art and Architecture 1500-1715
2245, Baroque Art and Architecture
Modern and American
2250, Nineteenth Century European Art
2255, Modern Art
2265, History of Photography
2270, American Art to 1876
2272, American Art since 1876
2279, American Architecture
2281, Art Since 1960
Students must take a minimum of three upper division courses. One course must be a 4000 -level Topics course. The other two courses must be chosen from two different categories in the following list.

## Media in Art History

3303, Media and Technique in Art History
3350, History of Modern Design
3360, Photography and Society
3375, The Art of the Print
3385, Studies in Architectural History

## Themes in Art History

3365, The Artist and the City
3374, Philosophy of Art
3376, Women and the Visual Arts
3396, The Nude in Art
3397, Landscape Perspectives in Art
3398, The Portrait

## Topics in Art History

Courses listed as "Topics" at the 4000 level, including but not limited to:
4435, Topics in Renaissance Art
4445, Topics in Baroque Art
4455, Topics in Modern European Art
4475, Topics in American Art
4481, Topics in Contemporary Art
4490, Special Study

## Professional Studies

3387, Professional Internship
3388, UM-St. Louis-Saint Louis Art Museum Internship
3389, Visual Resources Management
4393, Art Museum and Gallery Management
4492, Museum Studies
Students must also take one course in studio art. Up to nine hours in studio art may be applied toward the B.A. in art history. Art 1134, Art Activities for Elementary Schools, does not fulfill this requirement.

Additional hours in art history, up to the maximum of 45, may be completed with electives at the 2000 level or above.

## Bachelor of Fine Arts in Studio Art

Candidates for the B.F.A. degree must complete a Foundation Art Program (which is largely satisfied by the A.F.A. degree) and an emphasis area in one of the following: drawing, graphic design, painting, photography, printmaking or general fine arts. An art education emphasis may be taken in combination with one of the studio art emphasis areas. Studio art majors are required to take 75 hours in studio art (this includes 30 hours in the foundation art program) and 15 hours in Art History, Art 1134, Art Activities for Elementary Schools, cannot be applied toward this degree. A minimum of 24 hours in Studio Art must be completed in residence at UM-St. Louis. Graduating students must also pass a faculty portfolio review.

Advanced Placement in Studio Art Classes: Studio Art Majors who have professional Graphic Design or Photographic experience may wish to submit a portfolio review to a committee of studio art faculty. Depending on the nature and the quality of the student's portfolio, they may be able to obtain exemptions from selected lower level division studio art courses. Students applying for these exemptions must submit their portfolios prior to the first day of class of their first semester at the University. A handout detailing the submission procedures and requirements can be obtained from the Studio Arts office. Students will be notified in writing if an exemption is granted. Students informed of these waivers will be advised of their requirements in the studio art major. All decisions of the portfolio reviews are final.

## Foundation Art Program

The following courses are required for the Foundation Art Program:

1140, Drawing I
1141, Drawing II
1142, Figure Drawing I
1150, Design I
1151, Design II
2240, Drawing III or 1143 Figure Drawing 11*
1030, Ceramics 1, or 1132 Sculpture 1 or 2251 Design 111
9 hours of Studio Art Electives
*Those planning an emphasis in drawing or painting must take Art 1142.

Students must complete 45 hours in one of the following emphasis areas:

## Drawing

2240, Drawing III
2241, Drawing IV
2242, Figure Drawing III
2243, Figure Drawing IV
2250, Composition or Studio Elective
3340, Advanced Problems in Drawing I
3341, Advanced Problems in Drawing II
4495/4496, Senior Studio Seminar ( 6 hours)

6 hours of Painting or Printmaking
12 hours of Studio Art Electives

## Graphic Design

Note: Enrollment in upper level graphic design courses.
beginning with Graphic Design III is limited to students who have been admitted to candidacy for the Bachelor of $F$ ne Arts with Graphic Design emphasis
1210, Graphic Design I
1220, Graphic Design II
2220, Computer Art I or Studio Art Elective
2221, Computer Art II or Studio Art Elective
3310, Graphic Design III
3311, Graphic Design IV
3312, Special Techniques in Illustration and Graphic Design or Studio Art Elective
3383, Advanced Problems in Graphic Design I
3384, Advanced Problems in Graphic Design II
3389, Graphic Design Studio or Studio Art Elective
4497, Senior Seminar in Graphic Design I
4498, Senior Seminar in Graphic Design II
9 hours of Studio Art Electives
Painting
1180, Painting I
1181, Painting II
2250, Composition or Studio Elective
2280, Painting III
2281, Painting IV
3380, Advanced Problems in Painting I
3381, Advanced Problems in Painting II
4495/4496, Senior Studio Seminar (6 hours)
6 hours from the following list:
2240, Drawing III
2241, Drawing IV
2242, Figure Drawing III
2243, Figure Drawing IV
12 hours of Studio Art Electives

## Photography

2250, Composition or Photography elective
2262, Color Photography I
2363, Digital Photography II
3260, Photography III
3362, Color Photography II
3363, Special Topics in Photography
3391, Advanced Problems in Photography I
3392, Advanced Problems in Photography II
4495/4496, Senior Studio Seminar (6 hours)
12 hours of Studio Art Electives
6 hours of Photography electives

## Printmaking

1170, Printmaking I
2241, Drawing IV
2243, Figure Drawing IV
2250, Composition or Studio Elective
2271, Printmaking II
2274, Printmaking and Relief

3370, Advanced Problems in Printmaking I
3371, Advanced Problems in Printmaking II
4495/4496, Senior Studio Seminar ( 6 hours)
6 hours from the following list:
1173, Printmaking: Screen printing I
2272, Printmaking: Lithography I
2277, Printmaking: Photolithography
3372, Advanced Lithography
9 hours of Studio Art Electives, including one course in photography

## General Fine Arts

30 hours of studio art electives must be taken at the 2000 level or above.

The following courses are required:
2250, Composition or Studio Elective
4495/4496, Senior Studio Seminar (6 hours)
Select 6 hours from the following:
3340, Advanced Problems in Drawing I and
3341, Advanced Problems in Drawing II or, 3370, Advanced Problems in Printmaking I and 3371, Advanced Problems in Printmaking II 3380, Advanced Problems in Painting I and 3381, Advanced Problems in Painting II or, 3391, Advanced Problems in Photography I and 3392, Advanced Problems in Photography II or, Students must complete 15 hours of Art History, with at least 9 hours taken in residence at UM-St. Louis.

Students choosing a double major in two studio art emphasis areas must complete all the requirements for each emphasis area. If the double major includes Graphic Design, students must take four semesters of Senior Studio Seminar. This includes Art 4490, Art 4491, Art 4497, Art 4498, Art 4495, and Art 4496.

## Minors

## Minor in Art History

A minor in art history requires the completion of at least 18 hours in art history courses. Students must take Art 1100 and at least one course in non-Western art. They must also take at least 2 courses at the 3000 level or above. A maximum of 3 hours of internship can be applied toward a minor in art history. The GPA for the courses for the minor must be 2.0 or better. Nine of the 18 hours must be taken in residence at UM-St. Louis.

## Minor in Studio Art

Students who wish to minor in studio art must take a minimum of 18 hours with a grade point average of 2.0 or better. The requirements for the minor are as follows:

1140, Drawing I
1141, Drawing II
1150, Design I
and two consecutive courses ( 6 hours) in any single area to be selected from the following (students should be aware that courses are not always available in all areas):

Painting<br>Printmaking (any one subfield)<br>Photography<br>Graphic Design<br>Advanced Drawing<br>plus a studio art elective: one three-hour course.

## Photographic Studies Certificate

UM-St. Louis students, graduates, and post-baccalaureate candidates may obtain a certificate in photographic studies by coordinating courses in and related to photography. To be eligible for the certificate, undergraduates must complete a degree in a chosen major field. A faculty member of the Interdisciplinary Photographic Studies Committee will act as adviser to all students and will consult with the faculty adviser in the student's major to plan appropriate credits. This certificate is designed for all who have an intense interest in the myriad aesthetic and practical aspects of the medium.

## Requirements

The following courses are required:
Art 1060, Photography I
Indsc 3360/Art 3360, Photography and Society
Art 2160, Photography II
Art 2265, History of Photography
Art 3260, Photography III, or
Interdisciplinary 3390, Independent Studies in Photographic Studies

Students must also take at least one 3-hour course selected from the following departmental offerings. New courses will be reviewed periodically for inclusion:

Art 1100, Introduction to Western Art
Art 2262, Color Photography I
Art 2263, Introduction to Digital Photography
Art 2264, Non-Silver Photography
Art 2265, History of Photography
Art 2268, Video Art I
Art 2277, Printmaking: Photolithography
Art 3260, Photography III
Art 3362, Color Photography II
Art 3364, Video Art II
Art 3374, Philosophy 3374, Philosophy of Art
Art 3390, Special Studies
Art 3391, Advanced Problems in Photography I
Art 3392, Advanced Problems in Photography II
Biol 4784, Techniques in Electron Microscopy
Comm. 1050, Introduction to Mass Media
Comm. 1070, Introduction to Cinema
Comm. 2210, Television Production
English 3140/Comm 3214, News Writing
English 3150, Feature Writing
Indsc 3390, Independent Studies in Photographic Studies

Psych 2213, Principles of Perception

## Pre-Professional Graduation: Architecture

The Department of Art sponsors the $3+4$ Program for the School of Architecture at Washington University. A student who transfers to the School of Architecture, Washington University, at the end of the junior year may graduate from UM-St. Louis after the satisfactory completion of the first year of professional school upon meeting one or more of the following conditions:

1) The student has completed all general education requirements and all requirements for a major and lacks only the total hours (electives) necessary for a degree.
2) A student who has not completed required courses for a degree must remedy the deficiency with courses taken at the University of Missouri-St. Louis within three years of entering the professional school. At the time of graduation the student must remain in good standing in the professional school or have successfully graduated from the professional school.
3) A student who has not completed all the courses required for a major may, if the major department at UM-St. Louis agrees, substitute up to six hours of appropriate course work from the professional school.

The requirement that 24 of the last 30 hours of course work for a degree be taken at UM -St. Louis shall be waived where necessary for students graduating under this procedure.

## Career Outlook

Study in art history broadens and enriches a general education, offering insight into the visual, architectural, and cultural artifacts left by earlier, as well as modern, civilizations. Art history graduates have found career opportunities in teaching, museums, galleries, libraries, historical societies, sales and auction houses, historic preservation, and arts administration.

Students with degrees in studio art find careers in teaching, advertising, public relations, graphic design, illustration, film and video production, arts administration, art restoration, product and industrial design, framing, and commercial photography.

## Course Descriptions

Courses in this section are grouped as follows: Art History and Studio Art. Prerequisites may be waived by consent of instructor. For the nonmajor, any number of studio courses will be accepted as electives.

Students who have earned 24 or more semester hours of credit at any accredited post-secondary institutions(s) before
the start of the fall 2002 semester must meet the general education requirements stipulated in the UM-St Louis 20012002 Bulletin. The following courses fulfill the Human ties breadth of study requirements as described in that Bulle in: ART HISTORY $1100,1103,1104,1105,1108,1109,1110$, 2211, 2212, 2213, 2214, 2225, 2235, 2237, 2238, 2240, $2245,2250,2255,2265,2270,2272,2279,2281,2291$, $2295,3303,3360,3365,3374,3375,3376,3385,3390$, $3391,3393,3394,3395,3396,3397,3398,4405,4408$, $4411,4425,4435,4445,4455,4465,4475,4481,4490$, 4495.

The following courses meet the Cultural Diversity requirement: ART HISTORY 1103, 1104, 1105, 1108, 1109 , 1110,4405 , and 4408.

## Art History

## 1100 Introduction to Western Art (3) [H]

An introduction to major historical movements in Western art.

## 1103 Pre-Columbian Art of Mexico and Central Arrerica (3) $[C D]$

A survey of the arts of native peoples of Middle Ameriva before the coming of the Spaniards in 1519. The cultural context and meaning of sculpture, painting, architecturt, and ritual among the Olmec, Maya, Aztec, and other tribes.

1104 Indigenous Arts of North America (3) [H, CD] A survey of the indigenous arts of North America from precontact through the present. Cultures to be covered inc ude Iroquois and Ojibway of the Northeast; Navajo and Pu:blo of the Southwest; Kwaguith and Gitsxan of the Northwes: Coast; and Inuit from the Arctic. The relationship of art to religion, philosophy, politics, and social life will be explored.

## 1105 Introduction to the Arts of Africa (3) [H, CD]

 A survey of the major achievements in painting, sculpture, and architecture of the continent of Africa, with an emphasis upon the religious and social contexts of the arts. This course satisfies the cultural diversity requirement.1108 Introduction to the Arts of Asia (3) $[\mathrm{H}, \mathrm{CD}]$ A survey of the major achievements in architecture, sculpture, and painting of India, China, Japan and Southeast Asia, with an emphasis on religious, historical, and so:ial context of the arts. This course satisfies the cultural d.versity requirement.

## 1109 The Arts of China (3) [CD]

A survey of the major achie vements in the history of Chinese art. Bronzes, sculpture, painting, calligraphy, ceramic:4, and jades will be considered within their historical, philos sphical, and social context.

1110 The Arts of Japan (3) [CD]
A survey of the art and architecture of Japan from prebistory to the present. Topics will include sculpture, architecture,
pottery, gardens, Japanese prints and paintings in their various forms, i.e. Chinese style, purely Japanese style, narrative scrolls, Zen, and Rimpa.

2211 Art and Archaeology of the Ancient World (3) [H] Prerequisite: Art 1100. A survey of art in Egypt, the Ancient Near East, Greece, and Rome, beginning in the Neolithic era ( $8000-4000 \mathrm{BC}$ ) and ending with the Barbarian invasions of Italy in the fifth century A.D. The major highlights of architecture and city planning, sculpture, painting, pottery, and the minor arts will be covered.

## 2212 Greek Art and Archaeology (3) [H]

Prerequisite: Art 1100. General survey of material culture in the Aegean basin, beginning with the Bronze Age (third millennium $B C$ ), and terminating in the late Hellenistic period (second century BC). For the Hellenistic period the course will trace Greek developments and influences outside of the Aegean, for example, in Italy and in Egypt.

## 2213 Roman Art and Archaeology (3) [H]

Prerequisite: Art 1100. General survey of material culture in Italy and its dependencies beginning with prehistoric Italy (ninth and eighth centuries B.C.) and terminating in late antiquity (the fifth century A.D.). The course will focus on the regional variants of Roman art in such places as Gaul, Spain, Great Britain, North Africa, and the Greco-Roman East.

## 2214 Early Christian and Byzantine Art (3) [H]

 Prerequisite: Art 1100. Survey of the development of Christian imagery during the Late Antique period, the Constantinian epoch, the development of the early Byzantine style during the sixth century, and later innovations in style and subject matter in later Byzantine art until AD 1453.
## 2225 Medieval Art (3) [H]

Prerequisite: Art 1100. A survey of the art and architecture of the Mediterranean World and northern Europe from late antiquity to the Late Gothic period (300-1300 A.D.). Focus on new styles and subject matter in painting, sculpture, and architecture.

## 2235 Italian and Northern European Renaissance Art (3)

 [H]Prerequisite: Art 1100 or permission of instructor. An introduction to selected artworks, artists and patrons in Italy and Northern Europe throughout the fifteenth and sixteenth centuries, beginning with Ghiberti and Van Eyck and ending with Michelangelo and Brughel.

2237 Northern European Renaissance Art (3) [H] Prerequisite: Art 1100. A review of Flemish, "FrancoFlemish", and German paintings, illuminations, and prints during the fifteenth and sixteenth centuries, before and after Luther.

2238 Italian Renaissance Art (3) [H]
Prerequisite: Art 1100. The study of sculpture, paintings, and architecture in Florence, Rome, and Venice during the fourteenth, fifteenth, and sixteenth centuries as reflections of cultural, religious, philosophical, and political beliefs.

2240 French Art and Architecture 1400-1715 (3) [H] Prerequisite: Art 1100 or permission of the instructor. A survey of art and architecture in France from the late medieval period to the late baroque. Topics will include the development of French chateaux and gardens, the rise of the Academy, and the influence of royal patronage on the arts.

## 2245 Baroque Art and Architecture (3) [H]

 Prerequisite: Art 1100 or permission of the instructor. A survey of the major paintings, statues, buildings, and their artists and patrons in seventeenth-century Italy, France, Flanders, Holland, and Spain. Special attention will be given to the study of the city of Rome.
## 2250 Nineteenth Century European Art (3) [H]

Prerequisites: Art 1100 or consent of the instructor. A survey of European art from 1780 to 1880 , focusing on developments in England, France, Germany, and Scandinavia. Topics to be addressed include Neoclassicism, Romanticism, Realism, and Impressionism.

## 2255 Modern Art (3) [H]

Prerequisite: Art 1100 or consent of the instructor. A survey of art from 1880 to 1960. Topics to be addressed include Post-Impressionism, Cubism, Surrealism, Abstract
Expressionism, and non-representational art.

## 2265 History of Photography (3) [H]

Prerequisite: Art 1100 or consent of instructor. A study of photography: its historical development, an examination of it as an art medium, and its influence on the development of modern art.

## 2270 American Art to 1876 (3) [H]

Prerequisites: Art 1100 or consent of the instructor. An overview of the major developments in painting, sculpture, and the decorative arts in the United States to 1876.

## 2272 American Art since 1876 (3) [H]

Prerequisites: Art 1100 or consent of the instructor. Major developments in American painting, sculpture, and the decorative arts since 1876.

## 2279 American Architecture (3) [H]

Prerequisite: Art 1100 or consent of the instructor. An overview of American architectural practice from 1600 to the present.

## 2281 Art since 1960 (3) [H]

Prerequisite: Art 1100 or consent of the instructor. A survey of art from 1960 to the present. Topics to be addressed include Pop Art, Conceptual Art, Minimalism, performance art, and other recent art forms and movements.

## 2291 Issues and Ideas in Art History (3)

Prerequisite: Art 1100 or permission of instructor. Intensive studies of a few selected works from various eras and cultures, with special attention to the particular social and cultural factors surrounding their creation. May be repeated for credit with change of topic and permission of adviser.

## 2295 Special Topics in Art History (1-3)

Prerequisite: Art 1100 or consent of instructor. Selected topics in art history. This course may be repeated for credit.

## 3303 Media and Technique in Art History (3)

Prerequisite: Art 1100, and two other courses in art history. Technical demonstration of and research into various materials and media used by artists. In addition to ancient media such as egg tempera and fresco, it will include modern media such as photography and video.

## 3350 History of Modern Design (3)

Prerequisites: Art 1100 or consent of instructor. The course examines the development of architectural, product, and graphic design within the context of the arts and crafts movement, the development of the modernist aesthetic, the industrial revolution, and the information age.

## 3360 Photography and Society (3)

Same as ID 3360. A study of photography as a means of information and expression, as an influence on culture, and as a reflection of concepts in politics, science, morality, and art. This course counts toward the major.

## 3365 The Artist and the City (3)

Prerequisite: Art 1100 . Examines the role of urban centers as a focus for significant artistic activity, as a recurring theme in art, and as a spatial and physical architectural reality. Aspects of urban planning, urban imagery in art, and the social, political, and personal networks artists develop as a result of living in particular urban centers at particular moments in history will be among the topics discussed.

## 3374 Philosophy of Art (3)

Same as Phil 3374. A study of issues concerning the definition of art, meaning and truth in the arts, aesthetic experience, and criticism.

## 3375 The Art of Print (3)

Prerequisite: Art 1100 or consent of the instructor. A study of the history of print forms: woodcuts, etchings, engravings, lithographs, silk-screens, monotypes, and mixed media. Special emphasis will be given to the importance of prints to the art and artists of our time.

## 3376 Women and the Visual Arts (3)

Prerequisite: Art 1100 or enrollment in the Women's Studies Certificate Program recommended. Selected topics conceming women as creators, users, and subject matter of art. Great women artists in the Western world will be studied, as well as women weavers, potters, and sculptors in non-western society.

## 3385 Studies in Architectural History (3)

Prerequisite: Art 1100 or consent of instructor. A study of selected topics in architectural history. The content of the course will vary, and the course may be repeated for credit with permission of the instructor and departmental adviser. Possible topics include the history of the castle, factory architecture, the evolution of the Gothic cathedral, and domestic and vernacular architecture.

## 3387 Professional Internship (1-6)

Prerequisites: Art 1100 and 6 additional credit hours in art history and consent of instructor. The internship provides experience in museums, bistorical societies, galleries, design firms, or visual resource collections. Students will assist in the diverse duties associated with the day-to-day functions of the institution, under the joint direction of a faculty adviser and a supervisor at the institution. Course requirements may include readings, research assignments, and/or a paper. This course may be counted for art history or studio art cred t with the department's consent.

## 3388 Saint Louis Art Museum Internship (3)

Prerequisites: Art \& Art History or Anthropology major, Art 1100 and 6 additional credit hours in art history or consent of instructor. Students selected by the Internship Committee will work 15-20 hours per week under the direction of staff at the Saint Louis Art Museum. Projects may include research on the collection, exhibitions, and programs.

## 3389 Visual Resources Management (1-3)

Prerequisites: Art 1100 and additional 6 credit hours in art history, or consent of instructor. A hands-on course in he Department of Art and Art History's media center that will cover collection development and management as well as technical and theoretical issues in the visual resources profession.

## 3390 Special Study (1-10)

Prerequisites: Junior or senior standing and consent of department and instructor. Independent study through readings, reports, or field research.

## 3391 Advanced Issues and Ideas in Art History (3)

 Prerequisites: Art 1100 and three additional courses in art history, or permission of the instructor. Seminar format. Intensive study of a few objects or issues in the history of art, focusing on issues which crosscut periods or geographic regions.
## 3394 Art Criticism (3)

Prerequisite: Art 2255 or Art 2281 or permission of instructor. An overview of the history and function of art criticism, focusing principally on the theory and critic sm of twentieth-century art. Students will attempt their own critical writings on contemporary art.

3395 Sophomore/Junior Seminar: The Methods of Art
History (3)
Prerequisites: Art 1100 and nine additional hours in art history. An introduction to the methods of art historical analysis. Emphasis on research techniques and writing. This course must be taken before a student's senior year.

3396 The Nude in Art (3)
Prerequisites: Art 1100 and one other course in art history. An exploration of the various meanings of nudity in art. The cultural, social, and psychological contexts of nudity in art will be examined in different historical periods and geographic regions, both Western and non-Western. Representations of both males and females will be analyzed in terms of gender construction, political authority, and personal identity.

## 3397 Landscape Perspectives in Art (3)

Prerequisite: Art 1100. This seminar considers the various conventions for representing landscape and nature, and human relationships to landscape, throughout history and across cultures. Issues to be considered may include landscape as metaphor in European painting, contemporary earthworks, landscape photography, and the relationship of artist to landscape in the non-Western world.

## 3398 The Portrait (3)

Prerequisite: Art 1100 or permission of instructor. An examination of portraiture in its social, economic and political contexts. Group and individual portraits will be analyzed in terms of gender construction, social status, family history and personal and public identity throughout selected periods of Western and non-Western culture.

## 4393 Art Museum and Gallery Management (3)

Prerequisites: Art 1100 and 6 additional credit hours in art history. This course will consider the practical application of professional training in art history as it applies to not-forprofit gallery management. Topics covered will include: grant writing in the arts, the development of art exhibits, the role of the art curator, and the operation of a gallery.

4405 Topics in the Arts of Africa (3) [CD]
Prerequisite: Art 1105 or consent of instructor. Intensive study of selected of selected topics in the arts of Africa. The content of the course will vary. May be repeated for credit with permission of instructor and adviser. This course satisfies the cultural diversity requirement.

## 4408 Topics in the Arts of Asia (3) [CD]

Prerequisite: Art 1108 or consent of instructor. Intensive study of selected topics in the arts of Asia. The content of the course will vary. May be repeated for credit with permission of instructor and adviser. This course satisfies the cultural diversity requirement.

4411 Topics in Ancient Art and Archaeology (3) Prerequisites: One of the following: Art 2211, 2212, 2213, 2214 , or consent of instructor. Intensive study of some
aspect of ancient art and archaeology, with emphasis prior to the common era. May be repeated for credit with permission of instructor and adviser.

## 4425 Topics in Medieval Art (3)

Prerequisite: Art 2225 or consent of instructor. A study of selected topics in Medieval art. The content of the course will vary, focusing on single topics such as manuscript painting, the Gothic cathedral and its sculptural decoration, or the art of pilgrimage churches. May be repeated for credit with permission of instructor.

## 4435 Topics in Renaissance Art (3)

Prerequisite: Art 2235, 2237 or 2238 or consent of instructor. Studies of selected topics, which will vary. Subjects to be considered may include the art of Florence, the role of patronage in Renaissance Italy, and Papal art. May be repeated for credit.

## 4445 Topics in Seventeenth and Eighteenth-Century European Art (3)

Prerequisite: Art 2245 or consent of instructor. A study of selected topics in Baroque and Rococo art. The content of the course will vary, focusing on single areas, such as the Baroque in Rome; or on major artists, such as Bemini, Rubens, and Rembrandt. May be repeated for credit with permission of instructor and adviser.

## 4455 Topics in Modern Art (3)

Prerequisite: Art 2255 or consent of instructor. Intensive study of selected topics in art of the nineteenth and/or twentieth centuries. May be repeated for credit with permission of instructor and adviser.

## 4465 Topics in Photographic Studies (3)

Same as ID 4465. Prerequisite: Permission of instructor. Advanced study of specific styles, periods, or issues within photographic history.

## 4475 Topics in American Art (3)

Prerequisite: Art 2270 or 2272 or 2279 or consent of instructor. Intensive study of selected topics in American art. May be repeated for credit with permission of instructor and adviser.

## 4481 Topics in Contemporary Art (3)

Prerequisites: Art 1100 and Art 2281 or consent of the instructor. Intensive study of selected topics in art since 1960. May be repeated for credit with permission of instructor and adviser,

## 4490 Special Study (1-10)

Prerequisites: Junior/senior standing and consent of department chairperson and instructor. Independent study through readings reports or field research.

4492 Museum Studies (3)
Prerequisites: Art 1100 and 6 credit hours in other art history courses. This course is intended as an introduction to the
function and operation of the art museum. Sessions will include the history of art museums and collecting policies; the organization of art museums; the tasks of the curator; the registration practices; art conservation; the museum as an educational institution; the organization and planning of permanent galleries; and the planning and installation of temporary exhibitions.

## 4495 Senior Art History Seminar (3)

Prerequisite: Art 3395, Eng 3100 and senior standing in art history or consent of instructor. Intensive reading, discussion, and writing on topics to be announced.

## 5578 Topics in American Art (3)

Prerequisite: Graduate standing and consent of instructor.
This course examines a discrete aspect of the history of American art within the changing social, cultural and historical contexts of Euro-American and/or Native American experiences and traditions.

## 5588 Museum Education and Visitor Research (3)

Prerequisite: Consent of director of Museum Studies Program. Development and operation of museum educational programs: learning theory; program design; relationships with exhibit development; programming for children and adults. Visitor research: theoretical foundations; research design; field experience; impact on programming and strategic planning.

## 5592 The History of the Visual Arts in American Museums (3)

Prerequisite: Graduate standing and consent of instructor. This course is an introduction to selected topics in the history of museology, focusing on art and anthropology museums as sites for the interpretations of art and culture, and as contested meeting grounds for various views of history and culture.

## 6035 Foundations of Museology I (3)

Prerequisite: Consent of Director of Museum Studies Program. Same as Anth 6035 and Hist 6035. Concepts for understanding museums in their social and cultural context; history of museums; museology and general social theory; information transfer vs. Meaning-making models; museums and communities; the changing role of museums; museums as complex organizations; process models of museology.

## 6036 Foundations of Museology II (3)

Prerequisite: Art 6035 and consent of Director of Museum Studies Program. Same as Anthr 6036 and Hist 6036. Audience-centered approaches to museology; visitor research and learning theory; philosophical and practical considerations in museum planning; the physical design of museums; creativity; exhibit and program development; collections and curation; the challenge of diversity; the future of museums.

6037 Effective Action in Museums (3)
Prerequisite: Consent of Director of Museum Studies Program. Same as Anth 6037 and Hist 6037. The nature of the work done in museums; how museums are organized to accomplish this work; professional roles and practices; technology and resources used by museums, skills for creative and effective leadership in project managemen: and administration in museums; planning, flow charting, budgeting, team dynamics, and related skills. The course will include several site visits to area museums and guest lectures by a variety of museum professionals.

## 6038 Museum Studies Master's Project (4)

Prerequisite: Consent of Director of Museum Studies Program. (Same as Anthro 6038 and Hist 6038). Research and writing/exhibit development on a selected topic.

## Studio Art

## 1002 Introduction to Studio Art (3)

An introduction to drawing, painting, and design in a beginning studio environment. This course is designed to provide basic skills and understanding of studio experience for the non-art major. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

1030 Ceramics I (3)
An introduction to basic methods and theory of cerames including work with hand-built construction, wheel techniques, and glazing. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 1060 Photography I (3)

An introduction to the techniques and aesthetics of black and white photography, the camera and the darkroom. Students must provide a camera with adjustable speeds and aperture. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 1074 Special Topics in Studio Art (1-3)

Selected topics in studio studies. This course may be repeated for credit. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 1080 Comics and Cartoon Illustration (3)

A course in creating and appreciating the world of co nics and cartoons. This course will investigate the tools and techniques for creating cartoons, cartoon illustrations and the world of comics. Students will create their own certoons with traditional media and also with computers. While designed for beginners, experienced artists will be encouraged to perfect their personal styles. The class will create and print its own comic book. Lab fee requirec. Basic studio equipment will be provided, though students w'ill need to supply some personal equipment and supplies.

## 1130 Ceramics II (3)

Prerequisite: Art 1030. A continuation of Art 1030. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 1132 Sculpture I (3)

An introduction to traditional and contemporary materials, aesthetics, and theories of three-dimensional art. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 1133 Introduction to Fibers and Textiles (3)

Prerequisites: Art 1150. Exploration of a variety of on - and off-loom weaving and other fiber and textile media and techniques. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 1134 Art Activities for Elementary Schools (3)

Same as Ele Ed 2179. A study of art principles and laboratory experiences with various media and materials. Stresses curriculum planning and development of the elementary school program in art. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

1140 Drawing I (3)
An introduction to drawing through the study of figure, object, and environment. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 1141 Drawing II (3)

Prerequisite: Art 1140. The development of drawing skills through continued observation and problems of invention. A further exploration of varied drawing materials and techniques including graphite, charcoal, conte crayon, and inks. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 1142 Figure Drawing I (3)

Basic studies of the human form and anatomy from the model in a variety of drawing media. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 1143 Figure Drawing II (3)

Prerequisite: Art 1142. Continuation of Figure Drawing I. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 1150 Design I (3)

Studio problems in the creative use and integration of the elements of two-dimensional design: line, form, space,
texture. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 1151 Design II (3)

Prerequisite: Art 1150. A continuation of Art 1150, twodimensional design, with introduction to color theory. Some application of mixed media problems. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 1170 Printmaking I (3)

Prerequisite: Art 1150 and Art 1141 or consent of instructor. An introduction to printmaking techniques, materials, and theories. The course will include work in a variety of print materials. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 1173 Printmaking: Screen-printing I (3)

Prerequisite: Art 1170. An introduction into the techniques, methods, and aesthetics of screen-printing. Studio problems involving uses and approaches will be emphasized. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 1175 Arts and Ideas (3)

Same as English 1175, History 1175, Music 1175, Philosophy 1175, Theatre \& Dance 1175. An interdisciplinary course tied to the semester's offerings at the Blanche Touhill Performing Arts Center as well as other events on campus featuring the visual arts, literature, music, and film. Each semester the course will provide background on the arts in general and will critically examine particular performances and offerings. Special themes for each semester will be selected once the Touhill schedule is in place. Students will be expected to attend $6-8$ performances or exhibitions. Can be repeated once for credit.

## 1180 Painting I (3)

Prerequisite: Art 1140, Art 1150 or consent of instructor. An introduction to the use of oil and/or acrylic painting media. Studio problems to develop technical and expressive skills on various surfaces. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 1181 Painting II (3)

Prerequisite: Art 1180 or consent of instructor. Continuation of basic studio problems in painting media. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 1210 Graphic Design I (3)

Introductory studio problems in layout, lettering, and design with typographic elements. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 1220 Graphic Design II (3)

Prerequisite: Art 1220, Art 1150 and Art 1140. Continuation of Graphic Design I. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2160 Photography II (3)

Prerequisite: Art 1060. Continuation of Photography I at the intermediate level. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2210 Introduction to Typography (3)

## Prerequisites: Art 1220 or consent of instructor.

This course intends to instill a sense of responsibility relative to typographic and production design, while developing the student's capacity for critical thinking and general typographic rules, visual hierarchy of typographic elements, classical typographic tradition, book design, awareness of typographic aesthetic.

## 2220 Computer Art I (3)

Prerequisite: Art 1150. An introduction to the use of computer graphics software for the creation of artwork applicable to the advertising and graphic design industry. No previous computer experience is necessary. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2221 Computer Art II (3)

Prerequisite: Art 2220. Designed to familiarize students with the methods and processes and computer functions used in graphic art and illustrations. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2232 Sculpture II (3)

Prerequisite: Art 1132. Continuation of Sculpture I. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2240 Drawing III (3)

Prerequisites: Art 1140 and Art 1141. This course offers studio problems designed to further the development of drawing skills in various media. Limited color will also be introduced. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2241 Drawing IV (3)

Prerequisite: Art 2240. Studio problems with emphasis on color and multi-material approach to drawing. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2242 Figure Drawing III (3)

Prerequisites: Art 1142 and Art 1151. Advanced study of the human form and anatomy from the model in a variety of drawing media. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2243 Figure Drawing IV (3)

Prerequisite: Art 2242. Continuation of Figure Drawing III. Lab fee required. Basic studio equipment will be proviled, though students will need to supply some personal equipment and supplies.

## 2250 Composition (3)

Prerequisites: Art 1150 and Art 1151. An investigatior of the use of formal design elements as used in historic and contemporary art. Weekly studio problems and discussions will concentrate on skills, application, and unifying effects of compositional elements on a variety of visual art forms. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2251 Design III (3)

Prerequisites: Art 1150 and Art 1151. Advanced studi, problems in design materials. Use of two-dimensional and three-dimensional mixed media. Experimental use of materials and media will be introduced. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2262 Color Photography I (3)

Prerequisite: Art 1060 or equivalent. An introduction to the techniques and aesthetics of color photography. Mastering the printing and finishing processes and producing a color print portfolio will be the requirements of this class. L.ab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipmen: and supplies.

## 2263 Introduction to Digital Photography (3)

Prerequisite: Art 1060 or consent of instructor. An introduction to computer usage in photography. The basic computer techniques and software applications for diyitizing, retouching, enhancing and altering photographic images will comprise the core of this course. This class will involve both learning exercises and the creation of original compueraided photographic art. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2264 Non-Silver Photography (3)

Prerequisites: Art 1060 and Art 2160. An introduction to the aesthetics and techniques of non-traditional photographic processes. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

2265 Commercial Applications in Photography
Prerequisites: Art 2160 and permission of adviser. Exploration of issues and applications in commercial photographic production. Topics will vary. Course may be repeated for credit with permission of adviser. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2268 Video Art I (3)

Prerequisite: Art 2160 or permission of instructor. An introduction to video as an art form. Knowledge of contemporary uses and video techniques will be stressed. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2271 Printmaking II (3)

Prerequisite: Art 1170 or consent of instructor. A continuation of Printmaking I. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2272 Printmaking: Lithography I (3)

Prerequisite: Art 1150 and Art 1141 or consent of instructor. An introduction to printmaking skills and theory in stone and plate lithography. Studio problems in the use of materials and equipment. Attention will be given to individual development. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2277 Printmaking: Photolithography I (3)

Prerequisite: Art 1060 or departmental consent. An introduction to printmaking skills and theory in stone and plate lithography with particular emphasis on the photographic applications of the process. Some attention will also be given to commercial printmaking applications while studio problems in the use of materials and equipment will be stressed. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2281 Painting IV (3)

Prerequisite: Art 2280. A continuation of Painting III. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2283 Watercolor Painting (3)

Prerequisites: Art 1150 and Art 1141. Beginning problems in watercolor painting. Includes the study of traditional and contemporary approaches to color, color techniques, and treatment of papers. May be repeated for credit. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

2290 Special Study (1-10)
Prerequisites: Junior/Senior standing and consent of department and instructor. Independent study through readings, reports or field research. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 2363 Digital Photography II (3)

Prerequisite: Art 2263. Intermediate exploration of the aesthetics and techniques of digital photography. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 3260 Photography III (3)

Prerequisite: Art 2160 . An exploration into contemporary theories and trends in photography. Advanced projects, portfolios and techniques will be expected from those enrolled. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 3274 Printmaking and Relief (3)

Prerequisites: Art 1170 and Art 2271. Advanced problems in printmaking. Problems in relief printmaking. Work in wood and mixed materials. Development of skills and aesthetic judgments in the media. May be repeated for credit with consent of instructor. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 3280 Painting III (3)

Prerequisite: Art 1181 or consent of instructor. Advanced studio problems in painting media. Attention paid to individual development of theory, expression, and technique. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 3310 Graphic Design III (3)

Prerequisites: Art 1220. Advanced studio problems to further the understanding of design and its relationship to typographic elements, illustration, and communication. The course will encourage both conceptual and technical development of the designer. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 3311Graphic Design IV (3)

Prerequisite: Art 3310. Further studio problems in the graphic arts. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 3312 Special Topics in Illustration and Graphic Design

 (3)Prerequisite: Art 3311 or consent of instructor. Illustration and graphic design techniques as diverse as cartooning, Web page design, multi-media animation, and interactive kiosk
design (among others) are explored in this class. Each semester, one or more of these specialties are offered. Emphasis is placed on the practical applications of these approaches as well as the production of a strong student portfolio that will demonstrate the mastery of these skills.

3334 Contemporary Art Education: Craft and Theory (3) Prerequisite: Upper-division standing or consent of instructor. Intensive study for advanced students and art teachers, emphasizing specialized techniques and innovative concepts. Topics to be announced. May be repeated for credit. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 3340 Advanced Problems in Drawing I (3)

Prerequisite: Art 2241. This course is focused on professional-level art and portfolio production. It offers studio problems designed to further the development of drawing skills. Emphasis will be given to the study of drawing as an independent art form. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 3341 Advanced Problems in Drawing II (3)

Prerequisite: Art 3340. A continuation of Art 3340. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 3362 Color Photography II (3)

Prerequisite: Art 2262. An advanced exploration into the aesthetics and techniques of color photography. Students will be expected to refine their vision utilizing color processes. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 3363 Special Topics in Photography

Prerequisite: Art 2160: Photography II and permission of adviser. Selected topics in photographic practice. May be repeated for credit with permission of adviser. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 3364 Video Art II (3)

Prerequisite: Art 2268. An advanced exploration of video as a visual art. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 3370 Advanced Problems in Printmaking I (3)

Prerequisite: Art 3274. This course is focused upon professional-level art and portfolio production. After completion of this and the preceding course, students should be ready to meet the artistic and intellectual demands of today's visual art world. Lab fee required. Basic studio
equipment will be provided, though students will need $o$ supply some personal equipment and supplies.

3371 Advanced Problems in Printmaking II (3)
Prerequisites: Art 3370. A continuation of Art 3370. Leb fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 3372 Advanced Lithography (3)

Prerequisites: Art 1173. Continuing problems in lithogaphy with problems in black and white, photolithography, and/or color. May be repeated for credit. Lab fee required. Basic studio equipment will be provided, though students wil need to supply some personal equipment and supplies.

## 3380 Advanced Problems in Painting I (3)

Prerequisite: Art 2281. Course is focused on professio: $1 a l$ level art and portfolio production. Non-traditional materials might be explored. Attention is focused on individual development of painting theory, self-expression, and advanced techniques. The student is expected to assume a substantial responsibility with regard to direction, motivation, and content. Lab fee required. Basic studis equipment will be provided, though students will neec to supply some personal equipment and supplies.

## 3381 Advanced Problems in Painting II (3)

Prerequisite: Art 3380. A continuation of portfolio production in Art 3380. Lab fee required. Basic studic equipment will be provided, though students will need to supply some personal equipment and supplies.

## 3383 Advanced Problems in Graphic Design I (3)

Prerequisite: Art 3311. This course is focused on professional-level art and portfolio production. Lab fee required. Basic studio equipment will be provided. th Jugh students will need to supply some personal equipment and supplies.

## 3384 Advanced Problems in Graphic Design II (3)

 Prerequisite: Art 3383. A continuation of Art 3383. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipmert and supplies.
## 3390 Special Study (1-10)

Prerequisites: Junior/senior standing and consent of department. Independent study through readings, reports, or field research. Lab fee required. Basic studio equipnent will be provided, though students will need to supply some personal equipment and supplies.

## 3391 Advanced Problems in Photography I (3)

Prerequisite: Art 3260. This course is focused on professional-level art and portfolio production. Students may employ black and white, color, non-silver or other traditional or non-traditional press for projects in this course. Lab fee required. Basic studio equipment will be provided, tiough
students will need to supply some personal equipment and supplies.

## 3392 Advanced Problems in Photography II (3)

Prerequisite: Art 3391. A continuation of Art 3391. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 4389 Graphic Design Studio (3)

Prerequisite: Art 3384 or consent of instructor. Students will work on actual client projects in a studio setting from creative concept through client presentation. Studies will include client interviews, project planning, studio operations, project budget and estimating, vendor selection, prepress preparation, working in creative groups and professional presentations.

## 4490 Senior Seminar in Photography I (3)

Prerequisites: Senior standing and Art 3392. Weekly critiques and discussions of technical and professional issues. Will instruct students in methods of portfolio display, documentation, gallery representation, grant writing, and professional preparation. Lab fee required. Basic studio equipment will be provided though students will need to supply some personal equipment and supplies. Offered only during Fall semester.

4491 Senior Seminar in Photography II (3) Prerequisites: Senior standing and Art 4490. Weekly critiques and discussions of technical and professional issues. Will instruct students in methods of portfolio display, documentation gallery representation, grant writing, and professional preparation. Lab fee required. Basic studio equipment will be provided though students will need to supply some personal equipment and supplies. Offered only during Spring semester.

## 4495 Senior Studio Seminar I (3)

Prerequisites: Senior standing and Art 3381, 3341, 3392 or 3371. Weekly critiques and discussions of technical and professional issues. Will instruct students in methods of portfolio display, documentation, gallery representation, grant writing, and professional preparation. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies. Offered only during fall semester.

## 4496 Senior Studio Seminar II (3)

Prerequisites: Senior standing and Art 4495. Weekly critiques and discussions of technical and professional issues. Will instruct students in methods of portfolio display, documentation, gallery representation, grant writing, and professional preparation. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies. Offered only during winter semester.

## 4497 Senior Seminar in Graphic Design I (3)

Prerequisite: Senior standing and Art 3384 . Weekly critiques and discussions of technical and professional issues. Will instruct students in the methods of professional preparation. Lab fee required. Basic studio equipment will be provided, though students will need to supply some personal equipment and supplies.

## 4498 Senior Seminar in Graphic Design II (3)

 Prerequisite: Art 4497. Continuation of Art 4497. Will instruct students in the methods of professional preparation. Lab fee required. Basic studio equipment will be provided though students will need to supply some personal equipment and supplies.
## Department of Communication

## Faculty

Michael Beatty, Professor; Chairperson
Ph.D., Ohio State University
Donald Shields, Professor Emeritus
Ph.D., University of Minnesota
Alice E. Hall, Associate Professor
Ph.D., University of Pennsylvania
Alan D. Heisel, Associate Professor
Ed.D., West Virginia University
Su Ahn Jang, Assistant Professor
Ph.D., University of Texas
Elizabeth Kizer, Associate Professor Emerita
Ph.D., Purdue University
Amber Reinhart, Assistant Professor
Ph.D., University of Buffalo
Yan Tian, Assistant Professor
Ph.D., Temple University
Jina Yoo, Assistant Professor
Ph.D., Michigan State University
Alan Akerson, Lecturer
M.A., University of Missouri-St. Louis

Leighanne Heisel, Lecturer
M.A., West Virginia University

Clark McMillion, Lecturer
M.A., State University College of New York at Brockport

The faculty represents many fields within the discipline of communication including interpersonal communication, organizational communication, mass communication, and rhetoric in addition to public relations. Most faculty members contribute to the continued growth of the knowledge base, publishing the results of their research in scholarly journals and presenting papers at national and international professional conferences. By integrating theory, research, and practice, the faculty is able to offer a comprehensive approach to contemporary communication problems.

## General Information

## The Bachelor of Arts in Communication

The B.A. in communication is a flexible degree program that allows the student to tailor a specific concentration to meet the student's individual needs and interests. The faculty encourages all students to meet early and often with their faculty adviser to select a meaningful group of courses for a coherent, career-oriented academic program.

## Minors and Certificates for Communication

The department actively supports the following minor and certificate programs open to students majoring in communication: Minor in Public Affairs Journalism, Minor in Photographic Studies, Minor in Legal Studies, Certificate in Writing, and Certificate in Secondary Education. For more information, see Certificate Programs and Interdisciplinary Studies in this Bulletin.

## Master of Arts in Communication

The Master of Arts program, provides the opportunity for an advanced degree program in communication with emptasis in organizational and mass communication. For further details, please see the Graduate Studies section of the Communication Department listings.

## Undergraduate Studies

## General Education Requirements

Majors must satisfy the university and college general education requirements. The college's foreign language requirement may be taken in any language. Communicution courses may not be taken on a satisfactory/unsatisfactory basis.

## Degree Requirements

## Bachelor of Arts in Communication:

Majors must complete a minimum of 36 semester hours in Communication courses. At least 18 of these must be aken at UM-St. Louis. Furthermore, at least 12 semester ho urs of the Communication courses completed must be numbered 3000-4999. Finally, all students must complete the recuired courses.

Required courses for the major:
1030, Interpersonal Communication
1050, Introduction to Mass Media
2231, Communication in the Organization
3330, Research Methods in Communication I
3331, Research Methods in Communication II
3332, Intercultural Communication
At least 3 hours from practicum courses (1193, 1194, 1197 or 1198 ) or internship courses $(3393,3394,3396$, or 3397$)$.

Bachelor of Arts in Communication with Certificanion in Secondary Education
In addition to the requirements for the B.A. in communication and general requirements set by the College of Education, students must meet the state requirements for certification.

The B.A. and certification for grades 7-12 can be corrpleted by taking a minimum of 39 hours in communication, :elected according to departmental recommendations. The B.A. and certification for grades 7-9 can be obtained by taking 36 hours in communication, selected according to departmental recommendations. Requirements of the College of Education include courses in professional education and Engl 3600, The Curriculum and Methods of Teaching English (same as Sec Ed 3600).

## Department Activities and Internships

Cocurricular projects and activities relevant to student interests and vocational plans are sponsored and advi:sed by
the department. In addition to the traditional classroom experience, students receive practical training in internships at community agencies, and public relations, marketing, and advertising firms, and a variety of business organizations provide valuable opportunities for majors to apply their communication studies.

## Minors in Communication

Coursework for a minor in Communication consists of 15 semester hours of the core requirements for the major. Credit hours in Comm 1195, and/or Comm 3395, may be substituted for credit hours listed below with written consent of the communication department chairperson.

Core Requirements:
Com 1030, Interpersonal Communication I
Com 1050, Introduction to Mass Media
Com 2231, Communication in the Organization
Com 3330, Research Methods in Communications I
Com 3332, Intercultural Communication
At least 9 of the 15 hours required for the minor must be taken at UM-St. Louis.

A minimum GPA of 2.5 is required in the minor.

## Graduate Studies

The department offers the Master of Arts degree in communication.

## Admission requirements:

Applicants must have a baccalaureate in communication or a related discipline by the end of the semester in which they apply. The minimum cumulative GPA required for regular admission to the graduate program in communication is 3.25 on a 4 -point scale. Three letters of recommendation, at least two of which address the applicant's potential to succeed in graduate studies in communication, are also required.
Finally, International students must obtain a TOEFL score of at least 600 ( 233 for the computer-based exam) to be considered for admission.

## Degree Requirements:

Candidates selecting the thesis or internship option for the M.A. degree will complete at least 30 semester hours of approved study, at least 21 of which must be taken in courses offered by the department. Candidates electing the nonthesis, non-internship option must complete 36 semester hours of approved study, 27 of which must be taken in courses offered by the department.

## Communication

6400, Seminar in Communication Theory
6405, Introduction to Communication Research Methods
6411, Seminar in Mass Communication
6431, Seminar in Organizational Communication

6435, Seminar in Advanced Applied Communication Research
Students complete one of the following exit projects: No less than a 6 -hour thesis or a 6 -hour internship. After consultation with the graduate coordinator the student selects either the 36 hour or the 30 hour program and, in the latter case, selects the appropriate exit project with input from prospective exit project committee members, the internship option requires submission of an essay in which the coursework and internship experiences are integrated. Internship essay and thesis must be approved by the student's committees and assigned a grade by the advisor. The candidate must pass an oral examination conducted by student's committee regardless of exit option selected.

## Career Outlook

The B.A. in communication prepares students for careers in numerous fields. Past graduates are working in the following positions: promotion and public relations, administration, advertising, marketing, Web page design, market research, corporate media, sales, training, speech writing, teaching, and research. Other students have pursued graduate education in communication programs offering the M.A. and Ph.D. degrees.

## Course Descriptions

Prerequisites may be waived by consent of the department.
Students who have earned 24 or more semester hours of credit at any accredited post-secondary institutions(s) before the start of the fall 2002 semester must meet the general education requirements stipulated in the UM-St Louis 20012002 Bulletin. The following courses fulfill the Humanities breadth of study requirements as described in that Bulletin: $1070,1160,2271,2272,3337,3340,3341,3342,3343,3344$, 3350,3352.
The following courses fulfill the Social Sciences breadth of study requirements:
1065,1135, 2218, 2230, 2231, 2243, 3330, 3331 3332, 3333, 4335,3350, 3354, 4356.

## 1030 Interpersonal Communication I (3) [C]

Introduction to the theories of interpersonal communication. Emphasis on basic principles involved in one-to-one interactions.

## 1040 Introduction to Public Speaking (3) [C]

 Theories and techniques of organization, evidence, argumentation, persuasion, and delivery in public speaking.
## 1041 Basic Public Debate (3)

History and practice of debate in the public arena, with opportunities to prepare for a variety of public forums for argumentation. Various debate formats, including panel discussions, joint news conferences, and audienceparticipation debates, in a variety of settings, will be surveyed.

## 1050 Introduction to Mass Media (3) [C,SS]

Introduction to oral, print, and electronic media of communication. Emphasis on history, theory, and criticism of the mass media as cultural institutions.

## 1135 Communication Theory (3)

Survey of elements and processes critical to human communication behavior. Comparison of influential communication theories.

## 1140 Advanced Public Speaking (3)

Prerequisite: Comm 1040. Application of advanced public speaking skills, with emphasis on special occasion speaking situations.

## 1141 Business and Professional Speaking (3)

Prerequisite: Comm 1040. Application of communication skills in the business and professional environment with emphasis on presentational speaking, organizational constructs germane to professional careers, and uses of various media.

## 1143 Parliamentary Procedure (2)

Prerequisite: Comm 1040. Study and practice in rules of procedure by which self-governing groups transact business.

## 1150 Introduction to Public Relations (3)

Prerequisite: Comm 1040 or 1050 . Publicity methods and public relations representation of profit and nonprofit institutions to the public; use of communication research and media, as applied to the public relations profession.

## 1193 Practicum in Applied Communication (1-3)

Prerequisite: Consent of instructor. Practicum work at any of the UM-St. Louis public relations offices, sports and school newspapers, Office of Research or Photography Services. Work must be done on campus, under supervision of a working professional in the field, in consultation with a faculty member.

## 1194 Practicum in Debate/Forensics (1-3)

Prerequisite: Consent of instructor. Practical work in the University debate and forensics program, supervised by a faculty member. Repeatable, but no more than 6 credit hours may be earned in departmental practicum courses.

## 1195 Seminar in Communication (3)

Prerequisite: Consent of instructor. In-depth study of topics pertaining to current research in the department or otherwise of timely interest to students or faculty.

## 2230 Small Group Communication (3)

Prerequisite: Comm 1040. Development of communication skills needed in small group decision making. Application of these skills to contemporary problems.

2231Communication in the Organization (3)
Prerequisite: Junior standing or consent of instructor. Course integrates communication theories applicable to the
structure and function of organizations. The effect of communication variables on departmental interface, member satisfaction and motivation, leadership and subordinate styles, and perception of the organization by the externil environment.

## 2232 Effective Communication in the Organization: Tool for Leadership (3)

Prerequisites: Junior standing or consent of instructor. Telecourse designed to equip students with communication skills applicable to the organizational context. The course will present effective strategies for the articulation of i ieas, with particular emphasis on the development of leader:hip skills.

## 2240 Persuasive Communication (3)

Prerequisite: Comm 1040. A study of persuasive communication, including theories, techniques, forms, functions, applications, potential, and limitations for the individual and organizations. Insights from both classical rhetoric and contemporary communication theory.

## 2241 Argumentation and Debate (3)

Prerequisite: Comm 1040, or 1041, or consent of instructor. Principles of argumentation and debate with practice in preparing briefs and in delivering spoken arguments in formal debate. Emphasis on analysis of issues, logical reasoning, and audience analysis.

## 2243 Communication in American Politics (3)

Prerequisite: Comm 1040. Analysis of audience respense and media preferences in political campaigns, campaign speeches, candidates' uses of television and other mass media, and measuring effectiveness of campaign communications.

3130 Advanced Interpersonal Communication (3) Prerequisite: Comm 1030. Continuation of Comm 1(130, focusing on contemporary theories and research regarding interpersonal relationships.

## 3330 Research Methods in Communication I (3)

Introduction to the fundamental tools of quantitative esearch in communication. Focus of the course is on reading and comprehending communication research reports rather than conducting quantitative research.

## 3331 Research Methods in Communication II (3)

Prerequisite: Comm 3330. Extends the study of research methods covered in Com 3330 to the planning and e:eccuting of research projects. Students acquire data analysis, research design, and basic measurement skills. Problems of quantitative study unique to the study of communication are explored.

## 3332 Intercultural Communication (3)

Prerequisite: Junior standing or consent of the instruitor. Study of culture as a variable in both interpersonal and collective communicative situations. Emphasis upor
opportunities and problems arising from similarities or differences in communication patterns, processes, and codes among various cultural groups.

## 3333 Communication Audit (3)

Prerequisite: Comm 2231. The application of specific empirical research designs to evaluate communication flows, effectiveness, or channels in complex organizations.

## 3337 Male/Female Communication (3)

Prerequisite: Junior standing or consent of instructor. This course explores the influence of gender upon contemporary American communication behavior. Topics include semantic and syntactic variations in male and female speech, genderrole development as process and product of communication, analysis of communication patterns and barriers within gender groups. Mass, public, interpersonal, and dyadic communication contexts are considered.

## 3340 Rhetorical Criticism (3)

Prerequisite: Comm 1040. The application of rhetorical theories to the analytical and critical explanation of persuasive messages.

## 3341Classical Rhetoric and Public Address (3)

Prerequisite: Comm 1040 or consent of instructor. A survey of the history and theories of persuasion and public address from ancient times to the Renaissance.

## 3342 Modern Rhetoric and Public Address (3)

Prerequisite: Comm 1040 or consent of instructor. A survey of the history and theories of persuasion and public address from the post-Renaissance era to the present.

## 3343 The Rhetoric of Protest (3)

Prerequisite: Comm 1040. An examination of the persuasive messages and tactics used in social movements and their campaigns.

## 3344 Advanced Argumentation Theory (3)

Prerequisite: Comm 2241 or consent of instructor. This course focuses on advanced argumentation theory. It is aimed at providing an advanced understanding of the complex issues faced by argumentation scholars.

## 3345 Theory and Practice of Interviewing (3)

Prerequisite: Comm 1040 and junior standing, or consent of instructor. The application of modern communication theory to interview situations. This theory and practicum course is designed to aid the student in mastering specific skills appropriate to specialized settings.

## 3346 Advanced Interviewing Techniques (3)

Prerequisite: Comm 3345. Examination and application of problem solving and information-gathering methods, with emphasis on specialized situations such as journalistic; health, crisis intervention, and counseling; superiorsubordinate relationships and employment. In-class study approach and field interview assignments.

## 3352 Mass Media Criticism (3)

Prerequisite: Comm 1050 or 1060. The study of media content and its effect on society. Reading and viewing of selected works. Independent reading and critical analysis required.

## 3358 Communication in Public Relations I (3)

Prerequisite: Comm 1150. An overview of communication within the area of public relations. Emphasis on ethics, law, professional standards, and written communication. Case study approach.

3359 Communication in Public Relations II (3) Prerequisites: Com 3358. A continuation of Com 3358 with special attention given to communication theories and strategies that underlie public relations initiatives.

## 3360 Health Communication in Mass Mediated Contexts

 (3)Prerequisite: Comm 1050 or consent of instructor. Examination of the theories and literature dealing with the role of mass media in health behavior. Topics include health promotion and prevention campaigns and the effect of news and entertainment media on health behaviors.

## 3361 Health Communication in Interpersonal and Organizational Contexts (3) <br> Prerequisites: Comm 1030 and 2231, or consent of instructor. Examination of the theories and literature dealing with the role of interpersonal organizational communication in health behavior and health care organizations.

## 3362 Storytelling (1-3)

Prerequisite: Junior standing or consent of instructor. This course gives an overview of the history of storytelling, types of tales, and appropriate uses for storytelling. The primary emphasis of the course is in developing storytelling skills through preparation, performances, and evaluation.

3392 Administration of Cocurricular Activities (3)
Prerequisites: Communication 1040 or Consent of Instructor. A survey of skills required to administer the various cocurricular activities associated with teachers who teach speech and communication courses in the secondary schools. Practical experience in skills such as: operation of debate tournaments, public speaking competitions, and mock trial competitions.

## 3395 Special Topics in Communication (3)

 Prerequisite: Senior or graduate standing. In-depth study of topics pertaining to current research in the department. May be repeated up to six credit hours if topic is different.[^3]4335 Seminar in Applied Communication Research (3) Prerequisites: Comm 1135 and consent of instructor. This course explores the use of communication concepts, theories, methods, and designs in applied field settings with an emphasis on original research.

## 4390 Directed Readings (3)

Prerequisites: Consent of instructor; not open to students who have any $Y$ or delayed grades outstanding. Supervised independent study involving readings, conferences, papers, etc., in one of the department's disciplines: communication theory and rhetoric, or mass communication.

## 4391 Supervised Research (1-5)

Prerequisites: Junior/senior standing and consent of instructor; not open to students who have any Y or delayed grades outstanding. Supervised field or laboratory research, data collection, literature searches, qualitative or quantitative data analysis, report writing and other techniques used by communication researchers. Repeatable, but no more than 5 credit hours may be earned in supervised research courses.

## 4393 Internship in Applied Communication (3-6)

Prerequisites: Senior standing, with a least 12 hours of course work in Communication, consent of instructor; open to communication majors only. Advanced practical work in business and organizational communication, public relations, or campaign communication. Work must be done under the supervision of a working professional in consultation with a faculty member. Repeatable, but no more than six hours total credit may be earned in internship courses toward the 36 -hour minimum required for the degree.

6400 Seminar in Communication Theory (3)
Prerequisites: Graduate Standing. Examination of the theoretical, methodological, and philosophy of science issues in the discipline of communication. Examines general, micro, contextual, and interdisciplinary (symbiotic) communication theories. Required of all graduate communication students. (Core Course.)

## 6405 Introduction to Communication Research Methods

 (3)Prerequisites: Graduate Standing. Concerns the logic of scientific inquiry including the discovery, counting, and analysis of material, social, and symbolic facts, and reviews research methods guided by general, micro and contextual communication theories. Provides an orientation to graduate research including proposal development for thesis, internship and paper requirements and includes a theorybased research project of the student's choice. Required of all graduate communication students. (Core Course.)

## 6406 Introduction to Communication Education

 Research (3)Prerequisites: Graduate Standing. The development of educational communication research as a social scientific
field. Critical evaluation of techniques and problem selection. Emphasis on the function of communication education concept formation and theory.

## 6411 Seminar in Mass Communication (3)

Examines the communication research literature pertaining to media planning, content, and effects. A broad range of nedia forms and possible effects are considered.

## 6431 Seminar in Organizational Communication (3)

 Prerequisites: Graduate Standing. Explores communication theories and topics related to organizational, institutional, and social system contexts and reviews the communication literature on behavior in organizations. Emphasizes a case study approach to the communication strategies used by agencies and corporations. (Core course.)6435 Seminar in Advanced Applied Communication (3) Prerequisites: Graduate Standing. Examines the logic and forms of communication inquiry in solving client-centered problems. Topics include audience ratings and segmentation, targeting, applied and basic research paradigms and approaches to grounding theory. Reviews the use of research by agencies, campaigns and organizations. Includes a leam research project. (Core Course.)

## 6445 Seminar in Advanced Organizational Communication (3)

Prerequisite: Com 6431. Extends the exploration of communication in organizations covered in Com 6431 to more advanced quantitative models of organizational communication. Focuses heavily on the quantitative studies published in communication research literature.

## 6454 Seminar in Communication Systems and Technologies (3)

Prerequisites: Graduate Standing. Examines innovation in modern communications technologies, their impact or. society, and their contribution to the information revo ution.

6490 Directed Readings in Communication (1-10)
Prerequisites: Graduate Standing. Individual research on a problem defined by the graduate student and the faculty member in conference. May be repeated once with the: consent of the departmental graduate faculty.

6491 Supervised Research in Communication (1-3) Prerequisites: Graduate Standing, Special Consent Collaborative research with a faculty member on a communication topic of mutual interest. May be repeated up to 10 hours.

## 6492 Practicum in Computer-Mediated Communication

 (1-3)Prerequisites: Graduate Standing, Special Consent Collaborative research with a faculty member on a communication topic of mutual interest. May be repeated up to 6 hours.

6495 Seminar in Special Topics in Communication (3-9) Prerequisites: Graduate Standing. Selected topics in the study of communication. Review of the communication theory and methods appropriate to the topic. The course includes a research project. May be repeated if the topic is different.

## 6498 Thesis Research and Preparation (1-10)

Prerequisites: Graduate standing. Individual research for and preparation of the graduate thesis.

## 6499 Graduate Internship (3-6)

Prerequisites: Graduate standing and approval of graduate coordinator. Individual on-site internship in organizational or mass communication setting.

The following courses have been moved to Media Studies:

| Original | Course \# | Course Title |
| :--- | :--- | :--- |
| Comm | 1065 | Introduction to Information <br> Technology |
| Comm | 1070 | Introduction to Cinema |
| Comm | 1108 | Advertising Copywriting |
| Comm | 1110 | Introduction to Radio and Television <br> Broadcasting |
| Comm | 1113 | Basic Television Studio Production |
| Comm | 1114 | Radio Production I |
| Comm | 1118 | Radio and Television Announcing |
| Comm | 1196 | Practicum in Radio |
| Comm | 1197 | Practicum in Television/Film |
| Comm | 2210 | Television Production I |
| Comm | 2212 | Broadcast Writing and Reporting |
| Comm | 2215 | Radio Production II |
| Comm | 2216 | Radio News |
| Comm | 2217 | Script Writing for Business and <br> Industry |
| Comm | 2118 | Public Policy in Telecommunication |
| Comm | 2119 | Promotion, Publicity, and Advertising <br> in Broadcasting |
| Comm | 2228 | Public Relations Writing |
| Comm | 2256 | International Communication |
| Comm | 3214 | News Writing |
| Comm | 3310 | Television Production II |
| Comm | 3311 | Broadcast Management |
| Comm | 3313 | Advanced Video Editing |
| Comm | 3316 | Television News |
| Comm | 3317 | Radio and Recording Industry |
| Comm | 3334 | Advertising Media Planning |
| Comm | 3336 | Communication in Advertising |
| Comm | 3350 | Mass communication History |
| Comm | 3354 | Comparative Telecommunication <br> Systems |
| Comm | 3355 | Media Law and Regulation |
| Comm | 3360 | Health Communication |
| Comm | 3370 | Documentary Film |
| Comm | 3394 | Internship In Journalism |
| Comm | 3395 | Special Topics in communication |
| Comm | 3396 | Internship in Radio |
| 4357 | Internship in Television/Film |  |
| Media Ethics |  |  |
|  | 3397 |  |

## Department of Music

## Faculty

James Richards, Professor*, Chair
Ph.D., University of Rochester, Eastman School of Music
John Hylton, Dean, College of Fine Arts and
Communication, Professor*,
D.Ed., Penn State University

Gearoid O'hAllmhurain, Jefferson Smurfit
Professor of Irish Studies*
Ph.D., The Queen's University of Belfast
Robert Nordman, E. Desmond Lee
Professor of Music Education
M.M., Saint Louis Conservatory of Music

Douglas Turpin, E. Desmond Lee
Professor Emeritus of Music Education*
D.Ed., Washington University

Mark Madsen, Associate Professor
D.M.A., University of Arizona

Kenneth E. Miller, Professor Emeritus
Ph.D., Northwestern University
Evelyn Mitchell, Professor Emerita
Arnold Perris, Professor Emeritus
Ph.D., Northwestern University
Barbara Harbach, Professor*
D.M.A., University of Rochester

Eastman School of Music
Robert J. Ray, Professor*
B.M., Northwestern University

Diane Touliatos, Professor*
Ph.D., Ohio State University
Fred Willman, Professor*
Ph.D., University of North Dakota
James E. Henry, Associate Professor*
Ph.D., Washington University
Leonard Ott, Associate Professor*
Ph.D. Michigan State University
Gary Brandes, Assistant Professor
M.M., University of Missouri-Columbia

Kurt S. Baldwin, Arianna String Quartet, Artist-in-
Residence (Violoncello)
M.M., New England Conservatory of Music

David Gillham, Arianna String Quartet,
Artist in Residence (Violin)
M.M., Peabody Conservatory

John McGrosso, Arianna String Quartet,
Artist in Residence (Violin)
M.M., Juilliard School of Music

Robert Meyer, Arianna String Quartet,
Artist in Residence (Viola)
M.M., Rice University

James Widner, Artist in Residence (Jazz)
M.A., Memphis State University

William Hammond, Affiliate Associate Professor
D.Ed. Boston University

Kathryn Haggans, Adjunct Associate Professor (Voice)
Ph.D., University of Arizona

Carol Koch, Senior Lecturer (Music Education and Pino)
M.M.E., University of Missouri-St. Louis

Robert A. Borgstede, Lecturer (Jazz Guitar)
M.M., Southern Illinois University-Edwardsville

Jennifer Garrison Brown, Lecturer (Flute)
M.M., Southern Illinois University at Edwardsville

Billie Jo Derham, Lecturer (Piano)
M.M., Southern Illinois University-Edwardsville

Matthew Henry, Lecturer (Percussion)
M.M., Webster University

Doris Hylton, Lecturer, (Music Education)
M.Ed., Lindenwood University

Ann Homann, Lecturer (Oboe)
M.M., St. Louis Conservatory of Music

Joseph Kaminsky, Lecturer (String Pedagogy)
M.M., Southern Illinois University-Edwardsville

Kenneth W. Kehner, Lecturer (Jazz Piano)
B.M., Truman State University

Katharine Lawton-Brown, Lecturer, (Voice)
M.M., James Madison University

Robert Mottl, Lecturer (Bassoon)
M.M., Indiana University

Gerry Pagano, Lecturer (Trombone, Euphonium, Tuba)
M.M., Juilliard School of Music

Alan Rosenkoetter, Lecturer (Guitar)
B.S., Washington University

Henry Smith, Lecturer (Saxophone and Jazz)
B.M., University of Texas

Jermaine Smith, Lecturer (Voice)
B.M., University of Missouri-St. Louis

Sue Stubbs, Lecturer (Double Bass)
M.M., University of Missouri-Columbia

Andrew Tichenor, Lecturer (Trumpet and Jazz)
B.A., Southern Illinois University-Edwardsville

Miles Vandiver, Lecturer (Jazz Percussion)
B.A., Southern Illinois University-Edwardsville

Alla Voskoboynikova, Lecturer (Piano)
M.M., Gnessins Academy of Music-Moscow, Russia

Jeanine York-Garesche, Lecturer (Clarinet)
M.M., St. Louis Conservatory of Music

Susan Warner, Lecturer (Voice)
M.M., University of Illinois-Champaign-Urbana

Meiko Hironaka-Bergt, Specialist (Piano)
M.M. Toho Academy of Music

Vera Parkin, Specialist (Piano)
M.M., Southern Illinois University at Edwardsville

Donna Pyron, Specialist (Piano)
B.M., University of Missouri-Columbia

Sharon Tash, Specialist (Piano)
B.A., University of Missouri-St. Louis
*members of graduate faculty
Music faculty members have received recognition fo: distinguished achievements in conducting, composition, and performance. The faculty is also recognized for research in musicology and music education. Part-time applied ruusic lecturers are professional musicians.

The Department of Music is accredited by the National Association of Schools of Music.

## Performing Ensembles

Membership in Music Department performing ensembles (choral, orchestral, concert and pep band, jazz, chamber, etc.) is open to UM-St. Louis students in all majors and minors. Admission to most ensembles is by audition (consent of the instructor). Music 1400 , University Chorus, is open to all university students without audition.

## General Information

## Degrees and Areas of Concentration

The Department of Music offers programs of study leading to the B.M. degree in music education (and state teaching certification in grades K-12); the B.M. degree with an emphasis in performance; the B.M. degree with elective studies in business; and the B.A. degree in music. Instruction in piano, organ, voice, and all band and orchestral instruments is given by full-time faculty and part-time professional musicians, some of whom are members of the St. Louis Symphony Orchestra. Faculty recitals are regularly scheduled.

Music Minors Three minors in music are available: a minor in music; a minor in music education (choral/vocal, grades $\mathrm{K}-9$ ); and a minor in jazz studies.

Facilities The Department's facilities, classrooms, studios, practice rooms, and listening labs are located in the Music Building. Rehearsal rooms are in the Villa.

Ensembles Fourteen performing ensembles are open to all by audition with credit optional:
1400, University Chorus
1410, University Singers
1500, University Orchestra
1520, University Band
1530, University Wind Ensemble
1541, Chamber Ensemble Brass
1542, Jazz Combo
1543, Chamber Ensemble Percussion
1544, Chamber Ensemble Strings
1545, Chamber Ensemble Voice
1546, Chamber Ensemble Woodwind
1550, Jazz Ensemble
1560, Opera Workshop
1600, Advanced Opera Workshop
Each year more than 100 recitals and concerts are presented.
Additional information may be obtained by contacting the Department of Music: (314) 516-5980, website
http://www.umsl.edu/~music/

## Undergraduate Studies

## General Education Requirements

General education requirements apply to all majors, except students in the B.M. with elective studies in business and B.M. in music education degree programs who are not required to take a foreign language. Courses required for degree programs may not be taken on a satisfactory/ unsatisfactory basis. Students must receive at least a C - in each music course and maintain an overall GPA of 2.5 in all music courses to meet degree requirements.

Students may complete any number of hours of applied music (private lesson) toward a degree. Non-music majors may complete no more than 8 hours in music-performing organizations (Music 1400, University Chorus; 1410, University Singers; 1500, University Orchestra; 1520, University Band, et. seq.) toward graduation, including credit transferred. Courses in applied music (private lessons and performing organizations) do not fulfill the humanities general education requirement. Department courses, which meet the non-Euro-American study requirement, are Music 1090, Non-Western Music I, and Music 1100, Non-Western Music II.

## Degree Requirements

Admission to all music degree programs is by audition and interview to demonstrate musical aptitude and potential, moderate technical proficiency, and seriousness in selecting music as a four-year course of study. In addition to the applied music audition, placement examinations in music theory and music history may be required to confirm students' prior experience in these areas. Auditions are scheduled from January to May for the fall semester; a limited number are held in December for the spring/winter semester. Students in applied music must pass a juniorstanding examination to confirm their level of performance skills for enrollment in Music 3440-3459 or Music 44404459. This examination is usually taken at the same time as the applied music jury for the fourth semester of enrollment in Music 1440-1459.

Evidence of sound musicianship, a close acquaintance with an appropriate portion of musical literature, and the ability to bring it to actual performance are required for graduation in all music degree programs. Students in the bachelor of music-performance emphasis fulfill this requirement with junior and senior recitals. Those in all other degree programs must satisfy the requirement by participating in three regularly scheduled student recitals during the last two semesters of applied music study, or by performing for a special jury of faculty members. The faculty may invite students who are not in the bachelor of music-performance emphasis program to give public senior recitals with the recommendation of the applied music instructor.

Music majors are required to enroll in an approved ensemble (University Band, University Singers, University Chorus, or University Orchestra), to study one applied area
progressively each semester, and to enroll in the appropriate pedagogy and literature seminar each semester of the degree program. (Music education majors are exempt from these requirements during the student teaching semester.) The following specific ensemble enrollments, depending upon the applied music area, are required:

Wind and percussion students-University Band; string students--University Orchestra; voice students --University Singers (or by special permission, University Chorus); keyboard and guitar students--any approved ensemble, but those in the bachelor of music in music education program must enroll in an ensemble compatible with the teaching certification they are pursuing. Instrumental students may be required to participate in additional ensembles to enhance their musical development. Majors are required to appear in performance at the department's discretion and to attend a prescribed number of departmental recitals. Non-keyboard players are required to pass an exam in piano proficiency: Music 2180, Intermediate Piano Proficiency, or equivalent for instrumentalists, or Music 3290, Intermediate Piano Proficiency, or equivalent for vocalists.

The music department may require students to pass a placement test in order to enroll in the next level course, provided this or an equivalent test is administered to all students seeking to enroll in that course.

## Core Curriculum

The following core courses are required for all music majors:

## Music Theory

1301, Theory of Music I
1302, Aural Training I
1311, Theory of Music II
1312, Aural Training II
2301, Theory of Music III
2302, Aural Training III
2311, Theory of Music IV
2312, Aural Training IV
3410, Orchestration

## Piano Proficiency

1140, Piano Proficiency
1150, Piano Proficiency
2160, Intermediate Piano Proficiency
2180, Intermediate Piano Proficiency

## Music History and Literature

1010, History of Western Music I
1020, History of Western Music II
and at least one upper level history course 4000-4270.

## Applied Music

$1460,3460,4460$, Seminar in Pedagogy and Literature

In addition to the core curriculum, students must fulfill the requirements for the specific degree program or emphasis area as listed below:

## Bachelor of Arts in Music

In addition to the required core curriculum, candidates rust complete the following:
1090, Non-Western Music 1, or
1100, Non-Western Music II
2510, Conducting I
3920, Senior Research

## Applied Area

8 credit hours of private lessons

## Ensemble

4 hours maximum credit

## Bachelor of Music in Music Education

In addition to the required music core curriculum, candidates must complete the following:

## General Education Requirements

At least one course from two of the following fields: music (excluding applied music), art, foreign language, Western and Non-Western cultures, philosophy, literature, classical studies, and theatre and drama.

## Communication Skills

At least two courses in English composition and one in oral communications.

## Social Studies

Courses in American history, American government a: ld general psychology.

## Natural Science

One course in physical or earth science; one course in a biological science. At least one of these courses must have a laboratory component.

## Mathematics

One college-level mathematics course. (Note: All of the courses in the General Education Requirement Area must be a minimum of two semester hours.)

## Applied Area

7 credit hours of private lessons

## Practicum

2510, Conducting I

## Instrumental Certification

1250, 1260, 1270, 1280, Instrumental Techniques
2610, Elementary School Instrumental Literature Laboratory
3521, Conducting II - Instrumental

3620, Junior - Senior High School Instrumental Literature Laboratory

## Vocal Certification

1250, Singer's Diction: English, Italian and German
1260, Singer's Diction: Latin, French, and Spanish
2611, Elementary School Choral Literature Laboratory
3190, Intermediate Piano Proficiency
3290, Intermediate Piano Proficiency
3420, Choral Arranging
3430, Instrumentation and Score Technique (in lieu of Music 3410)
3522, Conducting II - Choral
3621, Junior - Senior High School Choral Literature Laboratory

For vocal certification students whose applied area is not voice, the following course is also required:
1240, Intermediate Vocal Techniques
Ensemble 4 hours maximum credit
Curriculum ad Methods of Teaching
*3570, Curriculum and Methods of Teaching Elementary School Music
*3670, Philosophic and Practical Foundations of the Secondary Music Education Curriculum

## Instrumental Certification

*3680, Curriculum and Methods of Teaching Instrumental Music I
*3700, Curriculum and Methods of Teaching Instrumental Music II

## Vocal Certification

*3690, Curriculum and Methods of Teaching Middle School/Junior High School General Music
*3710, Curriculum and Methods of Teaching Secondary Choral Music
*Must be taken in residence before enrolling in Secondary Education 3293 and Secondary Education 3294.

## Proficiency Exam

Students working toward certification in choral/vocal or instrumental music K-12 are required to pass a proficiency examination before admission to student teaching in music, usually before or during the sixth semester of their program.

## Professional Education and Student Teaching

## Level I Courses:

Tch Ed 2210, Introduction to Teaching
Tch Ed 2211, Introduction to Schools
Tch Ed 2212, Introduction to Leamers

## Level II Courses:

Tch Ed 3310, Introduction to Instructional Methodology
Tch Ed 3312, Psychology of Teaching and Learning

Tch Ed 3313, The Psychology and Education of Exceptional Individuals
Sec Ed 4391, Teaching Reading in Secondary School Content Area

## Level III Courses:

Sec Ed 3293, Student Teaching in Music, K-6
Sec Ed 3294, Student Teaching in Music 7-12

## Bachelor of Music with an Emphasis in Performance

In addition to the required core curriculum, candidates must complete the following:
1090, Non-Western Music I, or
1100, Non-Western Music II
1560, Piano Pedagogy (Keyboard students only)
2510, Conducting I
3110, Analysis of Twentieth-Century Techniques
3120, Tonal Counterpoint
3190, Intermediate Piano Proficiency (voice majors only)
3290, Intermediate Piano Proficiency (voice majors only)
3521 or 3522, Conducting II
3920, Senior Research
Music History and Literature
An additional upper level course is required 4000-4270.

## Applied Area

12 credit hours of Applied Music, including 8 credit hours at the Music 4440-4459 level (junior and senior recitals required)

Students in Applied Music must pass a junior standing exam to confirm their level of performance skills for enrollment in Music 4440-4459.

## Ensemble

Participation required as follows:
Large Ensemble 4 hours maximum credit
Chamber Ensemble/Accompanying 6 hours

## Foreign Language

Candidates pursuing this emphasis area with an applied area in voice must complete two semesters of one foreign language selected from French, German, or Italian.

## Bachelor of Music with Elective Studies in Business

In addition to the required core curriculum, candidates must complete the following:

## Applied Area

8 credit hours of applied music
Music History and Literature:
An additional upper 4000-4459 level course is required.
1090, Non-Western Music I, or
1100, Non-Western Music II

## Practicum

2510, Conducting I

## Ensemble

4 hours maximum credit

## Internship

4920, Internship (replaces Music 3920 Senior Research in Core Curriculum)

## English

One of the following English courses is required:
3100, Advanced Expository Writing
3120, Business Writing
3130, Technical Writing

## Business Administration

The following courses in business administration are required:
2400, Fundamentals of Financial Accounting
2410, Managerial Accounting
3600, Management as a Behavioral Science I
3700, Basic Marketing
Two courses selected from the following list must also be taken:
1800, Computers and Information Systems
2900, Legal Environment of Business
3270, Management of Promotion
3441, Income Taxes
3500, Financial Management
3611, Advanced Management and Organizational Behavior
3621, Human Resource Management
3622, Industrial and Labor Relations
3710, Consumer Behavior
3900, Business Law: Contracts, Sales, Secured
Transactions, Bankruptcy

## Note:

The following courses fulfill general education requirements and are prerequisites to the required business administration courses:
Psych 1003, General Psychology, or
Sociology 1010, Introduction to Sociology
Economics 1001, Principles of Microeconomics

## Curricula for Minors

Minor in Music
Candidates must complete the following courses ( 26 hours):

## Music Theory

1301, Theory of Music I
1302, Aural Training I
1311, Theory of Music II
1312, Aural Training II
Music History and Literature
1010, History of Western Music I

## 1020, History of Western Music II

## Applied Area

4 credit hours of private lessons

## Ensemble

2 credit hours ( 4 hours maximum credit)
Six additional credit hours to be chosen from courses such as the following:
2160, Intermediate Piano Proficiency (Prerequisite: Music 1150)

2180, Intermediate Piano Proficiency
2301, Theory of Music III
2302, Aural Training III
2311, Theory of Music IV
2312, Aural Training IV
3410, Orchestration
Any 4200-level music history and literature course
Music education methods courses and instrumental techniques courses may not be taken to complete this minor.

Non-keyboard players are required to pass an exam of piano proficiency Music 1150 or equivalent.

A GPA of 2.5 for all music hours is required to complete this minor.

## Minor in Music Education

(choral/vocal, grades K-9)
The minor in music education is designed to provide a second classification area for students enrolled in oth er education programs that lead to initial teaching certif cation. Candidates must complete the following courses (41 nours):

## Music Theory

1301, Theory of Music I
1302, Aural Training I
1311, Theory of Music II
1312, Aural Training II
Music History and Literature
1010, History of Western Music I
1020, History of Western Music II

## Music Education

3570, Curriculum and Methods of Teaching Elementary School Music*
3670, Philosophic and Practical Foundations of the Secondary Music Education Curriculum*
3690, Curriculum and Methods of Teaching Middle School/Junior High School General Music*
*Elementary education majors will omit Music 3770 from their regular elementary program to take these courses. Also required, as applicable, is Sec Ed 4399, Student Teaching.

## Practicum

1140/1150, Piano Proficiency
2160/2180, Intermediate Piano Proficiency
2510, Conducting I
2611, Elementary School Choral Literature Laboratory
3621, Junior-Senior High School Choral
Literature Laboratory

## Ensemble <br> 1400/1410, University Chorus or University Singers

Applied Music, voice (at least 2 hours must be private rather than class voice)

The student must receive at least a $C$ - in each music course and maintain a 2.5 GPA in all music courses (Chorus/Singers is not included in the GPA).

## Minor in Jazz Studies

Candidates must complete 31 credit hours from the following:

## Music Theory

1301, Theory of Music I
1302, Aural Training I
1311, Theory of Music II
1312, Aural Training II
1320, Theory of Jazz
Music History and Literature
1020, History of Western Music II
1070, Introduction to Jazz
Applied Area 4 credit hours of private lessons
Jazz Improvisation
1200, Jazz Improvisation Laboratory ( 2 credit hours/ Music 1200 repeated)

Piano Proficiency
1140/1150, Piano Proficiency
2160, Intermediate Piano Proficiency
2170, Jazz Keyboard Harmony

## Ensemble

2 credit hours minimum, to be selected from:
1542, Jazz Combo
1545, Chamber Ensemble Voice
1550, Jazz Ensemble

## Graduate Study

## Master of Music Education

The master of music education degree is designed to enable music specialists in grades K-12 to pursue continued professional growth in an emphasis area of their choice: choral, general music, instrumental, or music technology.

## Admission Requirements

Admission to the program requires a bachelor of music in music education (or equivalent) degree, admission to the Graduate School, and three letters of recommendation.

A written examination in music education (including applications of music history and music theory/ear-training) will be taken during the first semester or term of enrollment in the program for advising purposes and to identify the possible need for review in the areas of music theory and history.
The program requires completion of 32 hours of graduate credit, 22 of which must be earned in residence.

## Required Courses and Options:

Each candidate will choose one of the following emphasis areas:

Choral music education
Instrumental music education
General music education
Music education and technology
The minimum 32-hour program includes the following requirements.

## Major Area (9 credit hours)

5810, Foundations of Music Education (3)
5910, Music Education Research (3)
5990, Master's Project in Music Education (3)
Advanced Methods ( $\mathbf{3}$ credits from the following)
5510, Graduate Instrumental Methods (3)
5610, Graduate Choral Methods (3)
5710, General Music: A Model for Multi-Faceted Musical
Learning (3)
Choose 9 credits from the following:
5010, Studies in Style and Performance (3)
5020, Choral Literature (3)
5030, Band Literature (3)
5040, Orchestra Literature (3)
5110, Scoring and Arranging (3)
5210, Advanced Conducting (3)
5620, Guitar in the Classroom (3)
5750, Microcomputer Applications in Music Education (3)
5760, Microcomputer Assisted Instruction
Curriculum Development in Music (3)
5770, Graduate Microcomputer Applications in Music (3)
5920, Psychology of Music (3)

## Cognate in Education

Choose one 3-credit curriculum course such as:
Sec Ed 6415, The Secondary School Curriculum (3)
Ele Ed 6422, Curriculum Construction in Elementary Schools (3)

Choose one other 3-credit education course such as:
Ed Rem 5730, Educational Statistics (3)
Ed Fnd 6421, Philosophy of Education (3)
Sec Ed 6425, Secondary School Supervision (3)
Ele Ed 6425, Elementary School Supervision (3)
Ed Rem 6707, Classroom Testing and Measurement (3)
Ed Rem 6710, Educational Research Methods (3)

## Electives

Choose 5 credits from elective courses such as:
4010, Marching Band Techniques (3)
5020, Choral Literature (3)
5030, Band Literature (3)
5040, Orchestra Literature (3)
5060, Graduate Workshop in Music Education (1-3)
5070, Techniques and Literature for the Jazz Ensemble (3)
5110, Scoring and Arranging (3)
5120, Advanced Composition Techniques (3)
5130, Teaching Music Theory in the High School (3)
5210, Graduate Conducting (3)
5310, Graduate Chamber Ensemble (0)
Ed Tec 5340, Selection and Utilization Education Media (3)
5430, Special Applied Studies (1)
5440, Graduate Applied Studies (1)
5490, Graduate Ensemble (1)
5510, Graduate Instrumental Methods (3)
$\mathbf{5 5 2 0}$, Instrumental Music Administration (3)
5610, Graduate Choral Methods (3)
5620, Guitar in the Classroom (3)
5650, Music Theatre in the School (3)
5710, General Music: A Model for Multi-Faceted Musical Learning (3)
5720, Electronic Music Techniques for Teachers (3)
5730, Individualizing Music Instruction (3)
5740, Techniques of Group Keyboard Instruction (3)
5750, Microcomputer Applications in Music Education (3)
5760, Microcomputer Assisted Instruction: Curriculum Development in Music
5770, Graduate Microcomputer Applications in Music (3)
5800, Musical Acoustics (3)
5820, School Music Administration and Supervision (3)
5830, Contemporary Music Education (3)
5840, Problems of Urban Music Education (3)
5920, Psychology of Music (3)
5950, Special Problems in Music Education (3)
Spe Ed 6412, Psychology of Exceptional Children (3)
Sec Ed 6414, Teaching the Gifted/Talented in the Secondary School (3)
Sec Ed 6418, The Junior High/Middle School (3)
Sec Ed 6427, Supervision of Clinical Experiences in Teacher Education (3)
Sec Ed 6429, The Department Head (3)
Ed Rem 6710, Educational Research Methods (3)

## Career Outlook

## Undergraduate

A music degree builds the foundation for a career in professional performance, for teaching in a school or private studio or for serving as a church music director. A masic degree may also prepare one for positions in the musco industry (recording, publishing, radio programming, manufacturing, or music retail). A trained artistic mind can also be valuable in the fields of advertising, public relations, and consumer services.

A number of UM-St. Louis music graduates have been readily accepted into outstanding graduate programs, including our own Master of Music Education degree program. Many are pursuing successful careers in masic education, business, and industry, or as professional performers.

## Graduate

Many graduate students in music education will already hold full-time music teaching positions. A graduate degret: in music education allows for continued professional growth. Music specialists may refine their teaching expertise, add to their understanding and knowledge about music and educational processes, become more specialized in a specific emphasis area of music education (choral, instrumental, general music or music technology), or any combination of these professional growth areas.

Graduate-level work in music education is often required to renew a teacher's certificate or to satisfy professional growth requirements specified by an employing school or school district or to advance to new positions within the field of music education.

## Course Descriptions

Prerequisites may be waived by consent of the department. Students who have earned 24 or more semester hours of credit at any accredited post-secondary institutions(s) before the start of the fall 2002 semester must meet the general education requirements stipulated in the UM-St Louis 20012002 Bulletin. The following courses fulfill the Hurranities breadth of study requirements as described in that Bulletin: $1001,1010,1020,1030,1050,1060,1070,1080,109$ ), 1100, $1110,1190,1301,1311,1320,2301,2311,3020,37: 0$, $3920,4000,4210,4220,4230,4240,4250,4260,42 \%$, 5000, 5750.

The following music history courses satisfy the Cultural Diversity requirement: Music 1090 and 1100

## Applied Music

1410-1429 Secondary Applied Music (1)
Prerequisites: By audition and consent of department Courses are offered in the following areas: 1410-bassoon; 1411-clarinet; 1412-classical guitar; 1413-euphoniur:; 1414-
-flute; 1415-French horn; 1416-harp; 1417-oboe; 1418organ; 1419-percussion; 1420-piano; 1421-saxophone; 1422-trombone; 1423-trumpet; 1424 -tuba; 1425-violin; 1426-viola; 1427-violoncello; 1428 -string bass; 1429 -voice. Not applicable to the applied music requirement for music majors or music minors. May be repeated for credit.

1430 Secondary Applied Music: Jazz Studies (1) Prerequisites: By audition and consent of department. Individual instruction in jazz performance and literature on designated instrument. Not applicable to applied music requirement for music major or music minor degrees. May be repeated for credit.

## 1440-1459 Applied Music (1)

Prerequisites: By audition and consent of department. Courses offered in the following areas: 1440-bassoon; 1441-clarinet; 1442-classical guitar; 1443-euphonium; 1444flute; 1445-French horn; 1446-harp; 1447-oboe; 1448organ; 1449-percussion; 1450-piano; 1451-saxophone; 1452-trombone; 1453-trumpet; 1454-tuba; 1455-violin; 1456 -viola; 1457 -violoncello; 1458 -string bass; 1459 -voice. May be repeated, up to 4 credit hours. Applied Music registration requires concurrent registration in a large ensemble and seminar Music 1460.

## 1460 Seminar in Pedagogy and Literature (0)

Prerequisites: Concurrent registration with parallel Applied Music course. Seminars are offered in pedagogy and literature for all areas of Applied Music. May be taken on a satisfactory/unsatisfactory grading basis.

## 3440-3459 Applied Music (1)

Prerequisite: The completion of Junior Standing Exam in major applied area. Courses offered in the following areas: 3440-bassoon; 3441 -clarinet; 3442-classical guitar; 3443euphonium; 3444-flute; 3445-French horn; 3446-harp; 3447 -oboe; 3448 -organ; 3449-percussion; 3450 -piano; 3451-saxophone; 3452-trombone; 3453-trumpet; 3454tuba; 3455-violin; 3456-viola; 3457-violoncello; 3458string bass; 3459 -voice. May be repeated, up to 6 credit hours. Applied Music registration requires concurrent registration in a large ensemble and seminar Music 3460.

## 3460 Seminar in Pedagogy and Literature (0)

Prerequisite: Concurrent registration with parallel Applied Music course. Seminars in pedagogy and literature are offered for all areas of Applied Music. May be taken on satisfactory/unsatisfactory grading basis.

## 4440-4459 Applied Music (2)

Prerequisites: Completion of Junior Standing Exam in major applied area and admission to Performance Degree Program. Courses offered in the following areas: 4440- bassoon; 4441clarinet; 4442-classical guitar; 4443-euphonium; 4444-flute; 4445-French horn; 4446-harp; 4447-oboe; 4448-organ; 4449percussion; 4450-piano; 4451-saxophone; 4452-trombone; 4453-trumpet; 4454- tuba; 4455-violin; 4456-viola; 4457violoncello; 4458-string bass; 4459 -voice. May be repeated,
up to 12 credit hours. Applied Music registration requires concurrent registration in a large ensemble and seminar Music 4460.

## 4460 Seminar in Pedagogy and Literature (0)

 Prerequisite: Concurrent registration with parallel Applied Music course. Seminars in pedagogy and literature offered for all areas of Applied Music. May be taken on satisfactory/unsatisfactory basis.
## 5430 Special Applied Studies (1)

Prerequisites: Graduate standing in music and consent of department. Individual instruction in performance and literature of an instrument or instrumental family for pedagogical or review purposes in applied area other than student's primary performance study. No jury examination required. May be repeated for credit.

## 5440 Graduate Applied Music (1)

Prerequisites: Graduate standing in music and consent of department. Instruction offered in the following areas: bassoon, clarinet, classical guitar, euphonium, flute, French horn, harp, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, violin, viola, violoncello, string bass, and voice. May be repeated for credit.

## Ensemble Performance

1400 University Chorus (1)
Prerequisite: Consent of instructor. Preparation and performance of choral literature.

## 1410 The University Singers (1)

Prerequisite: Consent of instructor. Study and performance of music for vocal chamber ensemble.

## 1500 University Orchestra (1)

Prerequisite: Consent of instructor. Study, preparation, and performance of orchestral repertory.

## 1520 University Band (1)

Prerequisite: Consent of instructor. Study, preparation, and performance of music for the wind ensemble and band.

## 1530 University Wind Ensemble (1)

Prerequisite: Consent of instructor. Study, preparation, and performance of music for wind ensemble and chamber band.

## 1541-1546 Chamber Ensemble (1)

Prerequisite: Consent of instructor. Study, preparation, and performance of music for small ensembles: 1541-brass; 1542-jazz combo; 1543-percussion; 1544-strings; 1545voice; 1546-woodwinds.

1550 Jazz Ensemble (1)
Prerequisite: Consent of instructor. Study, preparation, and performance of jazz music for big band.

## 1560 Opera Workshop (1)

Prerequisite: Consent of instructor. Instruction in movement, basic stage techniques, technical theater, repertory and performance techniques and preparation. May be repeated for credit.

## 1570 Music Theatre Ensemble (1)

Prerequisite: Consent of instructor. Course provides practical experience in vocal performance, acting, and stage movement/choreography through rehearsal and performance in Music, Theatre and Dance Department music theatre productions. Required of all cast members. Laboratory time will be scheduled and will include evening and weekend rehearsals and performances. May be repeated for credit.

## 4560 Advanced Opera Workshop (1)

Prerequisite: Consent of instructor. Instruction in movement, stage technique, technical theater, repertory, and performance based on advanced vocal skills. May be repeated for credit.

## 5310 Graduate Chamber Ensemble (1)

Prerequisite: Graduate standing in music and consent of department. Study and performance of traditional and nontraditional chamber literature.

## 5490 Graduate Ensemble (1)

Prerequisite: Graduate standing in music and consent of department. Study, preparation, and performance of ensemble literature from the choral, orchestral, or band/wind ensemble repertory. May be repeated for a total of four hours of credit.

## Music Education

## 3570 Curriculum and Methods of Teaching Elementary

 School Music (3)Same as Ele Ed 3277. Prerequisites: Music 2311/2312 and Level I Education courses for the music education major. A study of the elementary school music curriculum emphasizing the objectives, methods of teaching and staffing music classes, and analysis of instructional materials and resources. This course must be completed in residence.

## 3670 Philosophic and Practical Foundations of the Secondary Music Education Curriculum (1)

Same as Sec Ed 3275. Prerequisites: Music 2311,2312, Music 3570, Ele Ed 3277 and Level I Education courses. Concurrent registration in Music 3680/Sec Ed 3576 and Music 3700/Sec Ed 3278 or Music 3710/Sec Ed 3279. For the music education major. A study of the secondary school music program: curricular objectives, philosophy, and general administrative procedures common to all secondary music classes. This course must be completed in residence.

## 3680 Curriculum and Methods of Teaching Instrumental

 Music I (2)Same as Sec Ed 3276. Prerequisites: Music 2311,2312, 3410, 2510, 2610, Level I Education courses and two of the
following: Music $1250,1260,1270$, and Music 1280. Concurrent registration in Music 3570/Ele Ed 3277. A study of the teaching techniques, materials, curriculum, and organization of the beginning instrumental music education program. Topics include student recruitment, the elementary band/orchestra, small group instruction, jazz ensemb e, and marching band. This course must be completed in res idence.

## 3690 Curriculum and Methods of Teaching Middle School/Junior High School General Music (2)

Same as Sec Ed 3277. Prerequisites: Music 2311, 23 12, Music 3570/Ele Ed 3277, and Level I Education courses. Concurrent registration in Music 3670/Sec Ed 3275 and Music 3710/Sec Ed 3279. For the music education major. A study of the middle school/ junior high school general music program emphasizing a conceptually based curriculun: objectives, methodologies, materials, innovations, cls.ssroom organization, and management. This course must be completed in residence.

3700 Curriculum and Methods of Teaching Instrumental Music II (2)
Same as Sec Ed 3278. Prerequisites: Music 2311,231 :, 3521, 3620, Music 3570/Ele Ed 3277, Music 3680/Sec Ed 3276, Level I Education courses and three of the following: Music 1250 , Music 1260, Music 1270, Music 1280. Concur:ent registration in Music 3670/Sec Ed 3275. A continuation of Music 3680/Sec Ed 3276 . Topics include large group rehearsal techniques, program development, administrative procedures, and evaluation. This course must be completed in residence.

## 3710 Curriculum and Methods of Teaching Secondary Choral Music (2)

Same as Sec Ed 3279. Prerequisites: Music 2311,2312, Music 3570/Ele Ed 3277, and Level I Education courses. Concurrent registration in Music 3670/Sec Ed 3275 and Music 3690/Sec Ed 3277. For the music education major. A study of the secondary school choral music program: curriculum, methods, teaching techniques, organization, and administrative procedures for choral performance cla:ses. This course must be completed in residence.

## 3770 An Introduction to Music for the Elementary School

 Teacher (3)Same as Ele Ed 2177. An introduction to the element: of music and the expressive nature of music. Includes application of fundamentals to appropriate literature and activities for use with children in a classroom setting. This course will not apply toward requirements for a music major.

4000 Advanced Techniques in Music Education (1-2)
Prerequisite: A 3000 level music education course or permission of the department. Intensive study for advanced music education students and music teachers, emphasizing specialized techniques and innovative concepts. Topics to be announced. May be repeated for credit.

4010 Marching Band Techniques (3)
Prerequisite: Junior Standing. Techniques for organizing and training school marching bands. Content will include planning and charting shows, rehearsal problems, corps and traditional styles, and auxiliary units.

4060 Advanced Workshop in Music Education (1-5)
Prerequisite: Junior standing and consent of the instructor. An intensive variable-topic workshop in music education presenting knowledge and skills to supplement specific areas in existing courses.

## 5000 Directed Research in Music: Variable Topic (1-5)

 Prerequisite: Consent of instructor. Directed independent research in music through readings, conferences, writings, and projects. This course may be repeated, but no more than 5 hours may be applied toward a degree.
## 5060 Graduate Workshop in Music Education (1-5)

Prerequisite: Graduate standing and consent of instructor. Intensive workshop in music education. Variable topics. To gain skills and knowledge in specific areas not readily available in existing courses.

## 5070 Techniques and Literature for the Jazz Ensemble

 (3)Prerequisite: Graduate standing in music. An examination of jazz music education. Includes methods, materials, improvisational techniques, and administration.

## 5130 Teaching Music Theory in the High School (3)

Prerequisite: Graduate standing in music. A study of the Course content and pedagogical techniques for high school music theory courses.

## 5510 Graduate Instrumental Methods (3)

Prerequisite: Graduate standing in music. Development of objectives for instrumental programs and methods of achieving those objectives. Comprehensive musicianship through instrumental performance, analysis of instrumental literature, instrumental philosophies and methodologies, rehearsal organization, and recent research in instrumental music education will be discussed.

## 5520 Instrumental Music Administration (3)

Prerequisite: Graduate standing in music. Study of the organizational problems of the instrumental program; library management; budgeting; awards and incentive systems; selection, care, and handling of uniforms and equipment; instrumental balance; seating plans; and operation of festivals and contests.

## 5610 Graduate Choral Methods (3)

Prerequisite: Graduate standing in music. Development of objectives for choral programs and methods of achieving those objectives. Comprehensive musicianship through choral performance, analysis of choral literature, the changing voice, choral philosophies and methodologies,
rehearsal organization, and recent research in choral music education will be discussed.

## 5620 Guitar in the Classroom (3)

Prerequisite: Graduate standing in music. A study of guitar instruction in grades 5 -12 with a focus on curricular sequence that includes chords, strums and picking patterns essential for song accompaniment skill development. Current materials, suitable for upper elementary and secondary students will be explored.

## 5650 Music Theatre in the School (3)

Prerequisite: Graduate standing in music. Techniques appropriate for school musical productions. Aspects of production and planning, including makeup, staging, lighting, and costuming.

## 5710 General Music: A Model for Multifaceted Musical Learning (3)

Prerequisite: Graduate standing in music. An exploration of the general music class as a learning laboratory model designed to actively engage the learner in a series of comprehensive music learning experiences. Emphasizes techniques and materials that will motivate the nonperformance-oriented student.

## 5720 Electronic Music Techniques for Teachers (3)

 Prerequisite: Graduate standing in music. Basic electronic music instruments, their operation and use as teaching tools. Materials and techniques suitable for use with students in both elementary and secondary school settings will be presented.
## 5730 Individualizing Music Instruction (3)

Prerequisite: Graduate standing in music. The development of learning strategies, materials, and evaluation techniques suitable for better accommodating the varying interests, abilities, and learning styles of individual students in music classes.

5750 Microcomputer Applications in Music Education (3)
Prerequisites: Graduate standing in music. An examination of the potential of microcomputers in the music education field. Experiences with available hardware and software suitable for applications that include inventory, budget, music library cataloging, digital music synthesis, and computer-assisted instruction at all levels.

## 5760 Microcomputer-Assisted Instruction Curriculum Development in Music (3)

Prerequisites: Graduate standing in music. Design and development of Computer-Assisted Instruction (CAI) lessons in music. Commercial courseware and various CAI models will serve as the basis for creating original programs that can be used effectively to implement objectives of the music curriculum for a specific school or school district. The design, refinement, and production of a major CAI program for use in an elementary, secondary or postsecondary setting is required.

5770 Graduate Microcomputer Applications in Music (3) Prerequisite: Graduate standing in music. The study of complex microcomputer applications including music synthesis, MIDI, music-oriented graphics, voice and pitch recognition, administrative applications and computerassisted instruction.

## 5800 Musical Acoustics (3)

Prerequisite: Graduate standing in music. The acoustical properties of the human voice, acoustic and electronic musical instruments, rehearsal rooms and performance spaces. Applications for musicians/teachers in the choice, design and acoustical treatment of rehearsal/performance space, requirements and techniques for quality musical recordings and the use of acoustic principles in the design of original classroom musical instruments.

## 5810 Foundations of Music Education (3)

Prerequisite: Graduate standing in music. A study of the historical, philosophical, and psychological foundations of music education. Includes principles necessary for development, implementation, and evaluation of the total school music program.

5820 School Music Administration and Supervision (3) Prerequisite: Graduate standing in music. Theory and practice of administration and supervision of school music programs.

## 5830 Contemporary Music Education (3)

Prerequisite: Graduate standing in music. A study of recent trends and issues in music education.

5840 Problems of Urban Music Education (3)
Prerequisite: Graduate standing in music. An analysis of current practices, problems, trends, and research involved in developing strategies for the improvement of music programs in inner-city schools.

## 5910 Music Education Research (3)

Prerequisite: Graduate standing in music. Applications of various approaches in defining and analyzing research problems in music education. Historical, experimental, descriptive, and philosophical research will be included.

## 5920 Psychology of Music (3)

Prerequisite: Graduate standing in music. A study of the effects of music on behavior. Tuning and temperament, psychoacoustics, measurement of musical behavior, aesthetic response to music, and functional music.

## 5950 Special Problems in Music Education (1-3)

Prerequisite: Graduate standing in music. Selected problems to meet the needs of the individual student.

## 5990 Master's Project in Music Education (3)

Prerequisite: Graduate standing in music. A project utilizing historical, experimental, philosophical, descriptive, or
analytical research techniques. The project will include a written report.

## Music History and Literature

1001 Introduction to Music (3) [V,H]
A historically oriented study of art music, its styles, and forms from the Baroque period to the present day. This course will not apply toward requirements for a music major.

## 1010 History of Western Music I (3)

Prerequisite: Music 1301/1302 or consent of deparmxnt. A general survey of the history of Western music. Inclucles the evolution and development of styles, forms, and their social setting.

## 1020 History of Western Music II (3)

Prerequisite: Music 1301/1302 or consent of department. A continuation of Music 1010.

1060 Introduction to African-American Music (3) H] A survey of the African-American musical heritage from its African origins through its role and development in twentieth-century American society. All genres will be discussed, including African-American composers who wrote in the European tradition. This course will not apply toward requirements for a music major or minor.

## 1070 Introduction to Jazz (3) [H]

A survey course that examines the musical, historical, and social aspects of the subject. This course will not court toward requirements for a music major.

1080 Introduction to Irish Traditional Music (3) [V,H]
This music appreciation course will survey the rich tapestry of Irish traditional music, song and dance. Particular attention will be given to the cultural history of the traditional music maker in Irish society, as well as among the constituent communities of the Irish Diaspora in Euroje and North America. The course will introduce students to the instruments, performance settings and regional styles of Irish traditional music. Using field recordings and archive materials collected in Ireland and North America, it will also focus on celebrated folk performers of the past and present, and evaluate the impact of contemporary media on their ancient, yet evolving, musical genre. No prior experience of Irish traditional music is necessary to pursue this course.

## 1090 Non-Western Music I (3) [CD,V,H]

The music of Oceania; folk and classical music and dance of East Asia, Tibet and Southeast Asia; the influence of Buddhism, Islam, and Western acculturation on the functions of music in these societies.

## 1100 Non-Western Music II (3) [CD,V,H]

Music of the African continent, West Asia, and South Asia; a survey of the tribal, folk, and classical music and performing arts of these cultures.

## 1110 Introduction to Irish Traditional Music in North America (3) [V,H]

Will examine the cultural history of Irish traditional music and music makers in North America since the end of the eighteenth century. Drawing on a diversity of ethnomusicological sources, will evaluate the contribution of Irish musicians, singers and dancers to the growth of American popular culture in the nineteenth and twentieth centuries. Will explore the role of Irish musicians in rural communities from Newfoundland and Quebec to the Mid Western States and Califormia. In reviewing the music history of the Irish Diaspora in North America, will compare and contrast historical recordings of Irish music made in the 1920s with those produced by modern masters of Irish music. No prior knowledge of Irish traditional music is necessary to pursue this course.

## 1175 Arts and Ideas (3)

Same as Art and Art History 1175, English 1175, History 1175, Philosophy 1175, Theatre \& Dance 1175. An interdisciplinary course tied to the semester's offerings at the Blanche Touhill Performing Arts Center as well as other events on campus featuring the visual arts, literature, music, and film. Each semester the course will provide background on the arts in general and will critically examine particular performances and offerings. Special themes for each semester will be selected once the Touhill schedule is in place. Students will be expected to attend $6-8$ performances or exhibitions. Can be repeated once for credit.

4000 Directed Studies: Variable Topic (1-5)
Prerequisite: Consent of department. Directed independent study of selected topics in music. May be repeated, if topic is substantially different but no more than 5 hours may be applied toward a degree.

## 4210 Music of the Middle Ages (3)

Prerequisite: Music 1010 or consent of department. Study of music and musical thought from the beginning of Christianity to 1450 . Gregorian chant, polyphonic music, the Ars Antiqua, and the Ars Nova.

## 4220 Music of the Renaissance (3)

Prerequisite: Music 1010 or consent of department. A study of the theoretical and practical impact of humanism on music, musicians, and musical thought from 1450 to 1600 . Sacred and secular music; the rise of an instrumental idiom.

## 4230 Music of the Baroque (3)

Prerequisite: Music 1010 or consent of department. A detailed study of music from 1600 to 1750 . The rise of the new style, national styles in the seventeenth century, and the culmination of the Baroque period.

4240 Music of the Classic Period (3)
Prerequisite: Music 1020 or consent of department. A study of the growth of classical style; galant and expressive styles; Mozart, Haydn, and Beethoven.

## 4250 Music of the Romantic Period (3)

Prerequisite: Music 1020 or consent of department.
Composers, forms, and styles in nineteenth-century music.
The literary and social background of musical romanticism.
4260 Music of the Twentieth Century (3)
Prerequisite: Music 1020 or consent of department. A detailed study of trends in modern music and of influential composers; impressionism, serial composition, electronic music, and other recent techniques.

## 4270 A History of Byzantine Music and Hymnography

 (3)Prerequisite: Music 1020 or consent of department. A study of the liturgical and secular music of the Byzantine Empire and post-Byzantine period during the Ottoman occupation; a historical investigation of the Oriental and Ancient Greek origins of the music along with an evolution of the types of music and poetical forms. A study of the types of notation and transcription analyses from the Medieval neumes into Western staff notation is included.

5000 Directed Research in Music: Variable Topic (1-5) Prerequisite: Consent of instructor. Directed independent research in music through readings, conferences, writings, and projects. This course may be repeated, but no more than 5 hours may be applied toward a degree.

## Music Theory and Composition

## 1190 Fundamentals of Music (3) [V]

This course provides basic music vocabulary: scales, intervals, and chords, and systematic instruction in the melodic, rhythmic, and harmonic aspects of music. This course will not apply toward requirements for a music major.

## 1301Theory of Music I (3) [V,H]

Prerequisite: Consent of the department. The basic materials of music and their use in analyzing and writing music. Concurrent registration in Music 1302 is required for music majors and minors.

## 1302 Aural Training I (1)

Prerequisite: Consent of the department. Systematic instruction in ear training and sight singing. Includes diatonic melodic and rhythmic dictation, chord quality recognition, sight singing of diatonic melodies, and the reading of units and divisions of units in simple and compound meters.

## 1311 Theory of Music II (3) [V,H]

Prerequisites: Music 1301 and Music 1302 or consent of department. The study of seventh chords, secondary dominants, and modulation; composition in small forms. Concurrent registration in Music 1312 is required for music majors and minors.

1312 Aural Training II (1)
Prerequisites: Music 1301 and Music 1302 or consent of department. The systematic instruction in ear training and
sight singing begun in Music 1302 is continued. Includes further diatonic melodic and rhythmic dictation, primary chord progressions, sight singing of diatonic melodies, and the reading of unit subdivisions in simple and compound meters.

## 2301 Theory of Music III (3) [V,H]

Prerequisites: Music 1311 and Music 1312 or consent of department. Study of chromaticism in eighteenth and nineteenth centuries; composition in simple part forms. Concurrent registration in Music 2302 is required for music majors and minors.

## 2302 Aural Training III (1)

Prerequisites: Music 1311 and Music 1312 or consent of department. Systematic instruction in ear training and sight singing of Music 1312 is continued. Chromatic melodic dictation, rhythmic dictation continues, secondary and altered chords in progressions are introduced. Sight singing of chromatic, modulating, and modal melodies, and the reading of syncopated rhythmic patterns are included.

## 2311 Theory of Music IV (3) [V,H]

Prerequisites: Music 2301 and 2302 or consent of department. Study of late nineteenth- and early twentiethcentury tonal harmony; analysis of large forms; composition in large forms. Concurrent enrollment in 2312 is required for all music majors and minors.

## 2312 Aural Training IV (1)

Prerequisites: Music 2301 and 2302 or consent of department. Systematic instruction in sight singing and advanced aural perceptions. Includes drill in recognition of formal events and key relationships, sight singing of twentieth-century melodies, and rhythmic drills in borrowed divisions and changing meters.

## 3110 Analysis of 20th Century Technique (2)

Prerequisite: Music 2311/2312 or consent of department. Study of compositional devices in tonal and atonal music of the twentieth century.

## 3120 Tonal Counterpoint (2)

Prerequisite: Music 2311/2312 or consent of department.
Study of tonal counterpoint with emphasis on the eighteenthcentury style. Composition in two and three parts.

## 3300 Seminar in Composition (2)

Prerequisite: Music 3110 or consent of instructor. The study of composition in theory and practice.

## 3410 Orchestration (3)

Prerequisite: Music 2311/2312 or consent of department. Study of the instruments of the brass, woodwind, percussion, and string families; scoring, transcription, and arranging for various instrumental ensembles.

## 3420 Choral Arranging (2)

Prerequisite: Music 2311/2312 or consent of department. Study of vocal ranges, characteristics and capabilities at various ages and scoring for choral ensembles comprised of singers in these varying stages of development.

3430 Instrumentation and Scoring Technique (2)
Prerequisite: Music 2311/2312 or consent of department. Study of the modern orchestral instruments; scoring for various instrumental ensembles with emphasis on idic matic technique and transcription from keyboard models. This course will not fulfill the music degree requirement fcr students with instrumental or keyboard emphases.

4000 Directed Studies: Variable Topic (1-5) Prerequisite: Consent of instructor. Directed indepencent study of selected topics in music. May be repeated, if topic is substantially different but no more than 5 hours mey be applied toward a degree.

5000 Directed Research in Music: Variable Topic (1-5) Prerequisite: Consent of instructor. Directed indepencent research in music through readings, conferences, writ ngs, and projects. This course may be repeated, but no more than 5 hours may be applied toward a degree.

## 5110 Scoring and Arranging (3)

Prerequisite: Graduate standing in music. Experience in scoring and arranging music for a variety of ensembles.

## Pedagogy

## 1240 Intermediate Vocal Techniques (2)

Prerequisite: Consent of department. Open to non-voi $e$ majors and to non-music majors who participate in a university choral program.

## 1250 Brass Techniques (2)

Prerequisite: Consent of the department. The objectiv: of this course is to familiarize students with materials and techniques for teaching all brass instruments including, trumpet, horn, trombone, euphonium, and tuba in the ichool setting.

## 1260 Woodwind Techniques (2)

Prerequisite: Consent of the department. The objectiv: of this course is to familiarize students with materials and techniques for teaching all woodwind instruments inc uding flute, clarinet, oboe, bassoon, and saxophone in the school setting.

## 1270 String Techniques (2)

Prerequisite: Consent of the department. The objectiv: of this course is to familiarize students with materials and techniques for teaching all string instruments including violin, viola, cello, and bass in the school setting.

1280 Percussion Instrumental Techniques (2)
Prerequisite: Consent of the department. The objective of the course is to familiarize students with materials and techniques for teaching all percussion instruments including snare drum, tom-tom, bass drum, cymbals, drumset, timpani, mallet instruments and miscellaneous percussion instruments in the school setting.

1560 Piano Pedagogy (2)
Prerequisite: Successful completion of 2 semesters of Applied Music 1450, Piano or consent of instructor. A study of methods, repertoire, and technical problems pertaining to private studio teaching for all levels of performance ability.

## 2210 Pedagogy of Jazz Improvisation (1)

Prerequisites: Music 2311/2312 and consent of instructor. Study of the techniques, systems, and instructional materials used in teaching jazz improvisation.

4000 Directed Studies: Variable Topic (1-5)
Prerequisite: Consent of department. Directed independent study of selected topics in music. May be repeated, if topic is substantially different but no more than 5 hours may be applied toward a degree.

5000 Directed Research in Music: Variable Topic (1-5) Prerequisite: Consent of instructor. Directed independent research in music through readings, conferences, writings, and projects. This course may be repeated, but no more than 5 hours may be applied toward a degree.

## Practicum

## 1140 Piano Proficiency (1)

Prerequisite: Consent of department. Group instruction for music majors who do not meet beginning keyboard requirements.

## 1150 Piano Proficiency (1)

Prerequisite: Consent of department. Group instruction for music majors who do not meet beginning keyboard requirements.

## 1200 Jazz Improvisation Laboratory (1)

Prerequisite: Consent of instructor. The study and application of the theoretical, technical, and performance aspects of jazz improvisation. May be repeated for credit.

1250 Singer's Diction: English, Italian, and German (1) Prerequisite: Music 1440-1459 or Music 1240. A study of English, Italian, and German pronunciation using the International Phonetic Alphabet.

1260 Singer's Diction: Latin, French, and Spanish (1) Prerequisite: Music 1440-1459 or Music 1240. Study of Latin, French, and Spanish pronunciation using the International Phonetic Alphabet.

1530 Accompanying I (1)
Prerequisite: Consent of department. Accompanying and ensemble practices, including rehearsal techniques, for keyboard majors. Public performance of works studied is required.

## 1540 Accompanying II (1)

Prerequisite: Consent of department. Continuation of Music 1530.

## 1550 Accompanying III (1)

Prerequisite: Consent of department. Continuation of Music 1540.

2160, 2180, 3190, 3290 Intermediate Piano Proficiency (1) Prerequisite: Music 1150 or permission of department. Continuation of piano proficiency study.

## 2170 Jazz Keyboard Harmony (1)

Prerequisite: Applied Music 2160 or consent of department. Group keyboard instruction in the application of chordal structures and harmonic functions commonly used in mainstream jazz performance.

## 2510 Conducting I (2)

Prerequisite: Music 2301/2302. Concurrent registration in Music 2610 required for bachelor of music in music education program. Techniques and problems in conducting.

## 2610 Elementary School Instrumental Literature Laboratory (1)

Prerequisite: Music 2301 \& 2302. Active conducting experience while analyzing and evaluating selected instructional and concert materials for elementary grades.

## 2611 Elementary School Choral Literature Laboratory

 (1)Prerequisites: Music 2301 \& 2302. Active conducting experience while analyzing and evaluating selected instructional and concert materials for elementary grades.

## 3521 Conducting II Instrumental (2)

Prerequisite: Music 2510. Concurrent registration in Music 3620 required for bachelor of music in music education program. Advanced study of instrumental conducting and rehearsal techniques, score reading, and interpretation.

## 3522 Conducting II Choral (2)

Prerequisite: Music 2510. Concurrent registration in Music 3620 required for bachelor of music in music education program. Advanced study of choral conducting and rehearsal techniques, score reading, and interpretation.

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## 3621 Junior-Senior High School Choral Literature Laboratory (1)

Prerequisites: Music 2311 \& 2312. Analysis and evaluation of selected instructional and concert materials for junior and senior high school performance groups.

## 3920 Senior Research (2)

Prerequisite: Consent of department. Required of all senior music majors. Directed readings and research in an area mutually acceptable to the student and instructor.

4000 Directed Studies: Variable Topic (1-5)
Prerequisite: Consent of department. Directed independent study of selected topics in music. May be repeated, if topic is substantially different but no more than 5 hours may be applied toward a degree.

## 4920 Internship (1-3)

Prerequisites: Senior standing in bachelor of music business emphasis program and permission of the instructor. Supervised experience in the area of the student's career objective, such as music or instrument merchandising, arts management, mass communication, publishing, manufacturing or other, as available. May be repeated once for credit in different area.

5000 Directed Research in Music: Variable Topic (1-5) Prerequisite: Consent of instructor. Directed independent research in music through readings, conferences, writings, and projects. This course may be repeated, if topic is substantially different, but no more than 5 hours may be applied toward a degree.

## 5020 Choral Literature (3)

Prerequisite: Graduate standing in music. Study of choral literature appropriate for ensembles from elementary to senior high school. Criteria for evaluating choral literature will be developed, and pedagogical implications of choral music as a means of developing comprehensive musicianship will be discussed.

## 5030 Band Literature (3)

Prerequisite: Graduate standing in music. Study of band literature appropriate for soloists and ensembles from elementary to senior high school. Criteria for evaluating the literature will be developed, and related technical problems will be studied.

## 5035 Instrumental Literature (3)

Prerequisites: Graduate standing in Music. Study of literature appropriate for soloists and ensembles for elementary to senior high school band, orchestra and jazz ensemble. Criteria for evaluating the literature will be developed and related technical problems will be studied.

## 5040 Orchestra Literature (3)

Prerequisite: Graduate standing in music. Study of orchestral literature appropriate for soloists and ensembles from elementary to senior high school. Criteria for evaluating the
literature will be developed, and technical problems will be studied.

## 5210 Graduate Conducting (3)

Prerequisite: Graduate standing in music. Conducting techniques, score reading, and interpretation of choral orchestral, and band literature.

## 5480 Graduate Applied Conducting (1-2)

Prerequisite: Music 5210 and consent of the department. Private conducting study of the choral, orchestral, or tand repertoire. Does not fulfill the applied music requirement for the master of music education degree.

Additional information may be obtained by contacting us: Department of Music: 314-516-6980.
http://www.umsl..edu/~music/

- The Cultural Diversity requirements may be satisfied by General Education courses or loweror upper-level courses in various departments.
- State Government/History graduation requirements may be satisfied by General Education courses or by other lower-or upperlevel courses in various departments.
- 13 hours of a foreign language


## Degree Requirements

## Bachelor of Arts in Theatre and Dance

Theatre and Dance majors must complete a minimum of 36 , but not more than 52 hours in Theatre and Dance courses. A core of 26 hours is required for all majors and 10-26 additional hours in Theatre and Dance are required. At least 24 hours in the major must be taken at UM-St Louis and must include 6 hours at the 2000 or higher level and 9 hours at the 3000 or higher level. All courses required for the major must be completed with a minimum grade of C - to be accepted, and the overall total grade point average must be at least 2.0 to graduate. To be eligible to participate in Internship classes, each student must have an overall grade point average of 3.0

In addition to the major's required core and elective Theatre \& Dance courses, students will choose elective courses to bring their total credit hours to 120 . Practicum courses may be repeated for credit; an overall limit of 20 hours in Practicum courses will be accepted towards the 120 hour degree.

## Required Core Courses for all Theatre and Dance Majors

1210, Fundamentals of Acting (3 hours)
1900, Introduction to Theatre Technology (3 hours)
1910, Introduction to Theatrical Design (3 hours)
1023, Fundamentals of Dance ( 3 hours)
2810, History of World Theatre \& Drama I; or 2840, History of Dance I (3 hours)
2820, History of World Theatre \& Drama II; or 2841, History of Dance II ( 3 hours)
2 hours chosen from these Production related courses:
1060, Theatre Workshop
2260, Introduction to Theatrical Costume Production
3060, Advanced Theatre Workshop
3254, Costume Production \& Construction Techniques
6 hours chosen from these Practicum courses ( 3 hours
of which need to be above the 3000 level)
2195, Practicum in Performance Studies
2196, Theatre Practicum: Scenery/Lighting/Sound in Theatre Production
2197, Practicum in Costume
2198, Practicum in Dance
3195, Advanced Practicum in Performance Studies
3196, Advanced Theatre Practicum:
Scenery/Lighting/Sound in Theatre Production
3197, Advanced Practicum in Costume
3198, Advanced Practicum in Dance

26 hours total - Additional hours in Theatre and Dance electives are to be selected based on individual students' areas of interest. The core courses of 26 hours plus the Theatre and Dance electives must equal a minimum of 36 hours, but not more than 52 hours, for Theatre and Dance majors.

## Minor in Theatre and Dance

Students with other majors may choose to minor in Theatre and Dance to complement their academic and career goals. The minor requires 18 hours of Theatre and Dance courses, nine of which must be taken at UM-St. Louis. A minimum GPA of 2.0 is required in the minor.
A. Minor in Theatre and Dance Consists of the following:
a. 3 hours chosen from these Performance related courses:
1600, Voice and Diction/Vocal Performance
2105, Script analysis
2211, Acting Styles
2230, Aesthetics of Theatrical styles
2240, Movement for Actors, Dancers \& Performers
2300, Stage Management
3210, Ensemble Acting
3305, Writing for Performance
4220, Directing for the Theatre
4230, Theatre Management
b. 3 hours chosen from these Design/Technology related courses:
2250, Stagecraft
2260, Introduction to Theatrical Costume Production
2280, Lighting and Sound Technology
3252, Costume Design
3254, Costume Production \& Construction Techniques
3260, Scenic Design
3261, Lighting Design
c. 2-3 hours chosen from these Dance related courses:

1006, Beginning Ballet Technique
1007, Beginning Jazz Dance Technique
1008, Beginning Modern Dance Technique
2006, Intermediate Ballet Technique*
2007, Intermediate Jazz Dance Technique*
2008, Intermediate Modern Dance Technique*
3006, Advanced Ballet Technique*
3007, Advanced Jazz Dance Technique*
3008, Advanced Modern Dance Technique*
3009, Dance Choreography for the Stage, Television, and Video
3105, Advanced Dance Repertory*
d. 2 hours chosen from these Production related
courses:
1060, Theatre Workshop
2260, Introduction to Costume Design \& Production
3060, Advanced Theatre Workshop
3254, Costume Production \& Construction Techniques
e. 1 hour chosen from these Practicum courses:

2195, Practicum in Performance Studies
2196, Theatre Practicum: Scenery/Lighting/Sound n
Theatre Production
2197, Practicum in Costume
2198, Practicum in Dance
3195, Advanced Practicum in Performance Studies
3196, Advanced Theatre Practicum:
Scenery/Lighting/Sound in Theatre Production
3197, Advanced Practicum in Costume
3198, Advanced Practicum in Dance

## f. 6-7 hours chosen from any additional Theatre and Dance courses

*Enrollment in Intermediate-and Advanced-level Lance Technique courses is by audition only. Beginning-level courses may be repeated for credit until sufficient proficiency has been achieved to advance to higher-level courses

The Bachelor of Science in Media Studies is a new degree program to be offered by the newly created Theatre, Dance and Media Studies department pending approval by the CBHE.

## Bachelor of Science in Media Studies

## General Education Requirements

- All Media Studies majors must satisfy the University and the College of Fine Arts ard Communication 42 hour General Educarion core requirements which include English 1100 and the Math proficiency requirement.
- A Junior level writing class is required.
- The Cultural Diversity requirements may be satisfied by General Education courses or כy other lower or upper level courses in various departments.
- State Government/History graduation requirements may be satisfied by General Education courses or by other lower or upper level courses in various departments.
- There is no foreign language requirement, but foreign language proficiency is recommended.


## Degree Requirements

## Bachelor of Science in Media Studies

Media Studies majors must complete a minimum o: 51 hours in the Department of Theatre, Dance, and Media Studies courses. A core of 21 hours is required of $\varepsilon 1 l$ majors. An additional 27 hours, 9 hours in Theatre and Dance classes, 9 hours in Media Studies classes at the 2000 level or above, and 9 additional hours in Med: a Studies classes at the 3000 level or above, must be completed with a minimum grade of C -. At least 24 of these hours must be taken at UM-St. Louis. Of the 24 hour
minimum, at least 18 hours of classes must be taken at the 2000 level or above at UM-St. Louis.

In addition to the major core and required courses, students will choose elective courses to bring their total credit hours to 120. Practicum and Internship courses may be repeated for credit, but an overall limit of 20 hours in Practicum and Internship will be accepted towards the 120 hours degree.

## Required Core Courses for all Media Studies majors:

Media 1050, Introduction to Media Studies (3 hours)
Media 1065, Introduction to Information Technology (3 hours)
Media 1135, Media Theory (3 hours)
Th\&Dan 1900, Introduction to Theatre Technology (3 hours)
Media 1070, Introduction to Cinema (3 hours) or Media 1100, Introduction to Advertising
or Media 1110, Introduction to Radio/TV Broadcasting
Media 1194-8, Practicum (6 hours)
and/or Media 3194-8, Internship (Students must have a 3.0 G.P.A. in the major or consent of instructor to take an internship)

## 21 hours total

Additional hours in Theatre, Dance and Media Studies electives are to be selected on individual students' areas of interest. The core courses of 21 hours plus the Theatre, Dance, and Media Studies electives must equal 27 hours, for Media Studies majors.

| 9 hours | Any other Theatre and Dance class |
| :--- | :--- |
| 9 hours | Any other Media Studies class at the |
|  | 2000 level or above |
| 9 hours | Any other Media Studies class at the |
|  | 3000 level or above |

## 27 hours total

## Theatre, Dance \& Media Studies

Prerequisites may be waived by consent of the department.

## Course Descriptions: Theatre and Dance

## 1005 Dance Conditioning (2)

This course provides basic methods to increase personal strength, flexibility, and endurance. Course of study will include stretching, strengthening and relaxation techniques and elements of Therabands, Pilates and Yoga. Prior dance experience is not required. Course may be repeated for credit up to 10 hours.

## 1006 Beginning Ballet Techniques (2)

An introduction to the art of ballet emphasizing basic movement, technique and terminology. Course study will
include basic barre exercises, center work, and across the floor progressions for proper alignment, strength, flexibility, and coordination. Prior dance experience is not required. Dance attire and ballet slippers will be required. Course may be repeated for up to 10 credit hours.

## 1007 Beginning Jazz Dance Technique (2)

An introduction to the art of jazz dance emphasizing basic principles of traditional and contemporary forms of jazz dance movement, technique, terminology, and style. Course will focus on increasing strength, flexibility, coordination, and creative expression. Prior dance experience is not required. Dance attire and jazz shoes will be required. Course may be repeated for up to 10 credit hours.

## 1008 Beginning Modern Dance Technique (2)

An introduction to the art of modern dance movement, technique, and terminology. Course of study will introduce the elements of time, space, and energy through basic structured exercises and improvisation. Emphasis will be focused on alignment, strength, flexibility, coordination, and creative expression. Prior dance experience is not required. Dance attire is required. Shoes are not required. Course may be repeated for up to 10 credit hours.

## 1023 Fundamentals of Dance (3)

This course provides an introductory exploration of movement through various styles of dance, emphasizing movement vocabulary, stretching, strengthening, body alignment, and creative expression. Prior dance experience is not required. Dance attire and shoes will be required.

## 1060 Theatre Workshop (1-2)

Course provides practical application of technical theatre practices through 45 hours of lab work within the areas of scenery, lighting, properties, and sound in conjunction with departmental productions. Personal safety equipment and basic tools will be required. Course may be repeated for up to 8 credit hours.

1100 Introduction to Dance (3) (C), (H)
A non-movement class that introduces the general student to the art, appreciation, and aesthetics of dance. Course will include a survey of prominent dancers, choreographers, performance artists, and companies; and analysis of video and live performances.

## 1105 Dance Repertory (1-3)

Prerequisites: Consent of instructor. Students will learn and rehearse original choreography created by faculty and guest artists. At the end of the semester, students will perform original works at a dance concert. Dance attire and appropriate dance shoes are required. Course may be repeated for credit up to 6 hours.

1106 Dance Ensemble I (1-3)
Prerequisites: Consent of instructor or Audition Students will create and produce dance lectures and demonstrations. The Dance Ensemble will also travel and perform. Dance attire and appropriate dance shoes are required. Course may be repeated for up to 6 credit hours.

## 1175 Arts and Ideas (3)

Same as Art and Art History 1175, English 1175, History 1175, Music 1175, Philosophy 1175. An interdisciplinary course tied to the semester's offerings at the Blanche Touhill Performing Arts Center as well as other events on campus featuring the visual arts, literature, music and film. Each semester the course will provide background on the arts in general and will critically examine particular performances and offerings. Special themes for each semester will be selected once the Touhill schedule is in place. Students will be expected to attend 6-8
performances or exhibitions. Can be repeated once for credit.

## 1210 Fundamentals of Acting (3) (H)

Course develops personal communication and presentational skills through vocal, physical, and emotional exercises designed for the beginning actor. Course emphasizes relaxation, concentration, improvisation, script analysis, characterization, and scene work exercises to develop elementary performance skills.

## 1230 Production Aesthetics (3)

An analysis of the visual components of dramatic presentation, including an introduction to theatrical styles and forms, technical design elements, and presentational techniques. A broad survey of theatre production.

## 1600 Voice and Diction/Vocal Performance (3)

Course promotes development of clear distinct enunciation and correct pronunciation for mass media communication, public address, theatre, and oral interpretation. Course includes development of oral presentational and self promotional skills for voice acting/voice-over in contemporary theatre and media.

1800 Introduction to Theatre (3) (H)
A study of Theatre as an art form, emphasizing the audience's appreciation of the art of the playwright, actor, director, designers, and technicians. Major periods, genres, dramatic forms from classical to modern to the avant garde as well as performance art will be will be covered. Students will attend performances and learn about how theatre functions as an art and an industry in today's world. Attendance at several live theatrical (theatre, play, musical, opera and dance) performances will be required.

## 1850 Introduction to Non-Western Theatre (3) (C), (H), (CD)

Survey of theatre forms of the non-European world in which primary attention is concentrated on analysis of traditional dance drama and puppet theatres of East Asia,

South Asia, the Middle East and Africa. Similar forms of European theatre will be included for comparative purposes. Focus on the development of world theate from a visual point of view, from earliest storytelling rituals through international stage development to contemporary theatrical forms, with a view to understanding the global perspective. Course will survey visual media and writings on dance and theatre traditions found around the nontWestern World.

## 1900 Introduction to Theatre Technology (3)

Introductory course covering the basic theories and techniques of Theatre Technology including stage equipment and safety, scenery, lighting, costuming, properties, sound and box office. Course includes practical application through a minimum of 25 hour: of lab work in conjunction with a departmental production

## 1910 Introduction to Theatrical Design (3)

Prerequisites: Th \& D 1900 or Consent of instructor Introductory course covering the elements and principles of design in the areas of scenery, lighting, and costu nes. Course will include various creative projects in two and three dimensions. Some graphic materials will be required.

## 2006 Intermediate Ballet Technique (2)

Prerequisites: 2.0 Credit Hours of Th \& D 1006 or Consent of instructor. Ballet movement, technique, vocabulary, and aesthetics with particular focus on precision and performance. Course of study will be a continuation of Beginning Ballet Technique barre exercises, center work, and across the floor progressions. Dance attire and Ballet slippers will be required. Ccurse may be repeated for up to 10 credit hours.

## 2007 Intermediate Jazz Dance Technique (2)

Prerequisites: 2.0 Credit Hours of Th \& D 1007 or Consent of instructor. Jazz dance movement, technique, vocabulary, and aesthetics with particular focus on personal movement style and expression. Course w.ll also study unique dance styles and artists that have influenced the stage video, film, and commercial media industr $\gamma$. Dance attire and jazz shoes will be required. Courst may be repeated for up to 10 credit hours.

## 2008 Intermediate Modern Dance Technique (2)

 Prerequisites: 2.0 credit hours of Th \& D 1008 or Consent of instructor. Modern dance movement, technique, vocabulary, and aesthetics. Course of study will be continuation of Beginning Modern Dance Techniqut: through incorporation of more complex movement and patterns. Emphasis on accuracy and performance w.ll be explored. Dance attire is required. Dance shoes are not required. Course may be repeated for up to 10 credit hours.2105 Script Analysis (3) (C), (H)
This course introduces students to elementary script analysis. Students learn basic structural and interpretative strategies for analyzing play scripts and other forms of performance texts.

## 2195 Practicum in Performance Studies (1-3)

Prerequisites: Consent of instructor
Provides practical experience in acting, directing, or dramaturgy through rehearsal and performance in conjunction with department productions, or other approved independent study projects. Laboratory time will be scheduled and may include evening and weekend rehearsals and performances. Course may be repeated for up to 8 credit hours.

## 2196 Practicum in Scenery/Lighting/Sound in Theatre

 Production (1-3)Course provides practical experience in scenery, lighting, sound, and properties implementation and/or running crew work in conjunction with departmental productions, or other approved independent study projects. Running crew work will involve evening and weekend assigned times. Additional daytime hours will vary according to assignment. Credit hours are determined based on the scope of the project. Course may be repeated for up to 6 credit hours.

## 2197 Practicum in Costume (1-3)

Practicum in costume construction, cutting, draping, millinery, fabric dyeing/painting, distressing, crafts including wardrobe and makeup running crews, in conjunction with the theatre and dance department productions, or other approved independent study projects. In addition to daytime lab hours, occasional weekend and/or evening laboratory time will be required. Appropriate clothing and personal safety equipment will be required. Personal sewing equipment will be required. Course may be repeated for up to 8 credit hours.

## 2198 Practicum in Dance (1-3)

Prerequisites: Consent of Instructor. Course provides practical experience in dance, stage movement, stage combat, choreography and/or running crew work in conjunction with departmental productions, or other approved independent study projects. Running crew work will involve evening and weekend assigned times. Additional daytime hours will vary according to assignment. Credit hours are determined based on the scope of the project. Course may be repeated for up to 6 credit hours.

## 2211 Acting Styles (3) (C), (H)

Prerequisites: Th \& D 1210 or Consent of instructor. This course explores diverse acting styles; including historical and cultural distinctions in manners, movement, and vocal practice. Course includes additional emphases on nonrealistic acting, non-Western theatrical performance, plus
style distinctions between stage acting, vocal acting, television acting, and acting for cinema.

2230 Aesthetics of Theatrical Styles (3) (C), (H)
Course investigates and analyzes theatre as an art form focused on manipulation of spatial aesthetics. Course includes emphasis on the development of dramatic and artistic styles and their effect on the visual presentation of ideas in theatre.

2240 Movement for Actors, Dancers \& Performers (2) Prerequisites: Th \& D 1023. A study of movement techniques and theories for actors, dancers, performance artists and musical theatre performers. Training in movement techniques for the stage, theatrical combat, nonverbal theatre including mime, impersonation and dramatic dance forms. This course will look at the body as an expressive tool of the performer and as a narrative to the playwright/director.

## 2250 Stagecraft (3)

Prerequisites: Th \& D 1900 or Consent of Instructor. A survey of the theories, terminology, and practices of methods and equipment of scenic and properties construction, painting, and rigging. Course includes practical application through 45 hours of lab work in conjunction with departmental productions. Personal safety equipment will be required.

## 2260 Introduction to Theatrical Costume Production

 (3)A survey of the theory, practices and vocabulary of theatrical costuming; the visualization and realization of the costume through the arts of pattern cutting; construction techniques; draping; dyeing, painting, and distressing. Course includes practical application of techniques through required 45 hours of lab work in conjunction with current department productions.

## 2280 Lighting \& Sound Technology (3)

Prerequisite: Th \& D 1900 or Consent of instructor. A survey of the theories, terminology, and practices of methods, equipment, and control systems of lighting and sound technology for the stage. Course includes practical application through 45 hours of lab work in conjunction with departmental productions. Basic personal tools will be required.

## 2290 Drafting for the Theatre (3)

Prerequisites: Th \& D 1900 or Consent of instructor. Survey course covering the fundamental techniques of two dimensional drafting. Drafting equipment will be required.

## 2300 Stage Management (3)

Prerequisites: Consent of instructor. Course develops fundamental stage management skills needed to supervise all operative aspects of play production from auditions through performance. These skills include: interpersonal and leadership skills, conflict resolution techniques, venue
and staff management/scheduling, and technical script analysis. Course includes production experience.

## 2810 History of World Theatre and Drama Through the Restoration (3) (C) (H)

Prerequisite: Th \& D 1800 or Consent of instructor. Survey of the history of influence of different cultures, traditions, and technologies on development of theatre as a social institution. History of Theatre and drama from ancient cultures to the Restoration period. Ritual and religious drama. Study of the origins of theatre and drama from oral tradition, myth, storytelling, Shamanism and collective ritual, Greek festival drama, and cloister drama of different cultures. Rise of secular drama, the traditions of classical Greek theatre. Study of the Renaissance, and drama in Europe, Asia, Africa and the New World.

> 2820 History of World Theatre and Drama from $18^{\text {th }}$ Century to Contemporary Times $(\mathbf{3})(\mathbf{H})(\mathbf{C})$ Prerequisites: Th \& D 1800 or Consent of instructor. History of theatre from the $18^{\text {th }}$ century to contermporary times. Survey of history of influence of different cultures, traditions, and technologies on the development of theatre as a social institution. Study of realism and subsequent departures from realism in theatre, drama and performance.

2840 History of Dance to the $19^{\text {th }}$ Century (3) (C) (H) Prerequisites: Th \& D 1800 or Consent of instructor. Survey of western dance from pre-history through the middle ages and renaissance to $19^{\text {th }}$ century. Study of dance in historical and cultural context, its function in society and its relationship to contemporary artistic expression.

## 2841 History of Dance from the $19^{\text {th }}$ Century to

 Contemporary Times (3) (H) (C) Prerequisites: Th \& D 1800 or Consent of instructor. Survey of western dance practice from 1850 to the present. History of modern dance: art dance from Isadora Duncan to Martha Graham.
## 3006 Advanced Ballet Technique (2)

Prerequisites: 4.0 credit hours of Th \& D 1006 and/or 2006 or Consent of instructor. Advanced ballet movement, technique, vocabulary, and aesthetics with particular focus on precision and performance. Course of study will include advanced barre exercises, center work, and across the floor progressions. Variations, partnering, and pointe work may be incorporated at the discretion of the instructor. Dance attire and ballet slippers will be required. Course may be repeated for up to 6 credit hours.

## 3007 Advanced Jazz Dance Technique (2)

Prerequisites: 4.0 credit hours of Th \& D 1007 and/or 2007 or Consent of instructor. Advanced jazz dance movement, technique, vocabulary, and aesthetics with particular focus on personal movement style and performance. Study of unique dance styles and artists that have influenced the
stage, video, film, and commercial and media industry. Dance attire and jazz shoes will be required. Course may be repeated for up to 6 credit hours.

## 3008 Advanced Modern Dance Technique (2)

Prerequisites: 4.0 credit hours of Th \& D 1008 and/or 2008 or Consent of instructor. Advanced level of moden dance movement, technique, vocabulary, and aesthetics. Incorporation of more complex movement and patterns. Emphasis on accuracy and performance will be explored.
Dance attire is required. Dance shoes are not required.
Course may be repeated for up to 6 credit hours.

## 3009 Dance Choreography for the Stage, Television, and Film (3)

Prerequisites: 4 Credit hours of any level and comb nation of Th \& D 1006, 1007, 1008, 2006, 2007, 2008, 3106, 3007 \& 3008. Course will focus on directed moverzent studies and composition techniques for the stage, television, and film. Personal creativity and original movement inventions will be explored, as well as the creation, development, and transformation of original movement studies into completed works. Dance atire and dance shoes are required. Course may be repeated or up to 6 credit hours.

## 3060 Advanced Theatre Workshop (1-2)

Prerequisites: Th \& D 1060 or Consent of instructo: Practical application of technical theatre practices through 45 hours of lab work within the areas of scenery, lighting, properties, and sound in conjunction with departmental productions. Personal safety equipment and basic tools will be required. Course may be repeated for up to 8 credit hours.

## 3100 Tap Dance Technique (2)

Prerequisites: 8 Credit hours of any combination of Th \& D 1005, 1006, 1007, 1008, 1023, 2006, 2007, 2008. 3006, 3007, and/or 3008. An introduction to the art of taf dance movement, technique, and vocabulary. Dance attire and tap shoes are required.

## 3105 Advanced Dance Repertory (1-3)

Prerequisites: Consent of instructor or Audition. Dancers are selected through audition or consent of instructcr to participate in the dance repertory. Students will lea:n and rehearse original choreography created by faculty and guest artists. At the end of the semester, students will perform original works in a dance concert. Dance attire and appropriate dance shoes are required. Course may be repeated for credit up to 12 hours.

## 3106 Dance Ensemble (1-3)

Prerequisites: Consent of instructor or Audition. Sudents create and produce dance lectures and demonstratio is. Dance attire and appropriate dance shoes are required. Course may be repeated.

3195 Advanced Practicum in Performance Studies (1-3)
Prerequisites: Consent of instructor. Course provides advanced practical experience in acting, directing, or dramaturgy through rehearsal and performance in conjunction with department productions, or other approved independent study projects. Laboratory time will be scheduled and may include evening and weekend rehearsals and performances. Course may be repeated for up to 8 credit hours.

## 3196 Advanced Theatre Practicum: Scenery/Lighting/Sound in Theatre Production (1-3)

Prerequisites: Consent of instructor. Course provides advanced practical experience in scenery, lighting, sound, and properties implementation and/or running crew work in conjunction with departmental productions, or other approved independent study projects. Running crew work may involve evening and weekend assigned times. Additional daytime hours will vary according to assignment. Credit hours are determined based on the scope of the project. Course may be repeated for up to 6 credit hours.

## 3197 Advanced Practicum in Costume (1-3)

 Prerequisites: Consent of instructor. This course provides advanced practical experience in costume construction, cutting, draping, millinery, fabric dyeing/painting, distressing, crafts including wardrobe and makeup running crews, in conjunction with the theatre and dance department productions, or other approved independent study projects. In addition to daytime Lab hours, occasional weekend and/or evening laboratory time may be required. Appropriate clothing and personal safety equipment will be required. Personal equipment will be required. Course may be repeated for up to 8 credit hours.
## 3198 Advanced Practicum in Dance (1-3)

Prerequisites: Consent of instructor. Course provides practical experience in dance, stage movement, stage combat, choreography and/or running crew work in conjunction with departmental productions, or other approved independent study projects. May involve additional hours including evening and weekend assigned times. Credit will be based on the scope of the project. Course may be repeated for up to 6 credit hours.

## 3210 Ensemble Acting (3)

Prerequisite: Th \& D 1210. Laboratory acting course emphasizing group dramatic analysis and collaborative play development and rehearsals culminating in an ensemble performance. Course emphasizes collaboration, cooperation, and team-building skills for performers in the theatre. Special attention is paid to the creation of dramatic works through collaborative means.

## 3250 Designing for the Theatre (3)

An introduction to the theories and practices of scenic and costume design for the theatre. The course will survey the
evolution of theatrical designs through different cultures, dramatic genres, and theatre architecture.

## 3252 Costume Design (3)

Prerequisites: Th \& D 1910, 2260 or consent of instructor. Content of course includes study of theories, styles, visualization of ideas, and techniques of costume design; discussion of principles of design, script analysis, the collaborative roles of designers in the theatrical production; research, and exploration of character representation; study of the human figure, drawing, and rendering techniques. Course may be repeated for up to 6 credit hours.

## 3254 Costume Production and Construction Techniques (3)

Prerequisites: Th \& D 1900, 2260 or Consent of instructor. Study of theory and application of pattern making, fitting, construction techniques for costumes and undergarments to achieve authentic-appearing costumes using contemporary methods. Provides practical experience in costume construction, as well as wardrobe and makeup. Participation in running crews, in conjunction with the theatre and dance department productions, or other approved independent study projects may be required. Personal equipment will be required. Weekend and evenings may be required. Appropriate clothing and personal safety equipment required. Course may be repeated for up to 8 credit hours.

## 3257 Makeup for Theatrical Productions (3)

Prerequisites: Th \& D 1800, 1910, or Consent of instructor. The art of makeup and its relation to production. Overview of European history and tradition of makeup. Theory, history and the practice of makeup traditions for theatre, dance and performance will be included.

## 3260 Scenic Design (3)

Prerequisites: Th \& D 1900, 1910, 2250, 2290, or Consent of instructor. Survey of the theories and practices of scenery design for the theatre. This course will emphasize the creative process from conceptual script analysis through final design projects, sketching, drafting, rendering, and model making. Personal graphics and drafting materials will be required.

## 3261 Lighting Design (3)

Prerequisites: Th \& D 1900, 1910, 2280, or Consent of instructor. Survey of the theories and techniques of lighting design for theatre and dance. This course will emphasize the creative process from script and choreographic concepts through final design projects, sketching, drafting, rendering, and related paperwork. Personal graphics and drafting materials will be required.

## 3262 Theatrical Rendering and Model Making (3)

Prerequisites: Th \& D 1900, 1910, or Consent of instructor. Course provides opportunities to further
explore techniques in scenery, lighting, and costume design. This course will include 2-D and 3-D projects designed to strengthen skills in drawing, rendering, model making, and publicity materials.

## 3263 Scene Painting (3)

Prerequisites: Th \& D 1900, 1910, or Consent of instructor. Survey of theories, materials and techniques of scene painting for the stage. Course includes 45 lab or studio hours for application and practice of painting projects, and possible evening and/or weekend studio hours.

## 3305 Writing for Performance (3)

Prerequisites: Consent of instructor. An introduction to writing for performance, including playwriting and dramatic adaptation. Students' particular interests will determine course content; ranging from sketch comedy or adaptation of literature for the stage, to full-length comic or dramatic plays. This course is writing intensive and may require additional laboratory hours.

## 3394 Practicum in Performing Arts Management: Theatre and Dance (3)

Prerequisites: None. Study of issues related to the management of arts organizations. This course will consider grant writing, creation and administration of community boards, financial issues in arts management, and the mainstream of both high artistic standards and effective organizational processes.

3820 Theatre from the $18^{\text {th }}$ Century to the 1980s (3) Prerequisite: Theatre 1800 or consent of instructor. History of theatre and drama from the eighteenth century to present.

## 4100 Teaching for Dance (3)

Prerequisites: 8 credit hours of any level and combination of Th \& D 1005, 1006, 1007, 1008, 2006, 2007, 2008, 3006, 3007, and/or 3008. A pedagogy class that focuses on theory and fundamental methods of teaching various genres of dance. Emphasis will be in the development, structure, and application of creating \& teaching a variety of dance classes. Course will involve research, analysis, and practical examination of teaching methods appropriate to experience, age, gender, culture, and location. Dance attire and dance shoes are required.

## 4210 Acting Styles (3)

Prerequisite: Th 3210. Studies in period acting styles, emphasizing cultural distinctions in manners, movement, and vocal practice.

## 4220 Directing for the Theatre (3)

Prerequisite: Th \& D 1210 or consent of instructor. A survey of the theories and practices of theatrical directing, beginning with the theories and techniques of accomplished directors. The stage director's role in performance development will be studied through script
analysis, production planning, and the rehearsal process, culminating with a live performance. Final projects are laboratory scenes or a short one-act play.

## 4221 Advanced Directing for the Stage (3)

Prerequisites: Th \& D 4220 or Consent of instructor A survey of period styles and abstract theories and pra :tices of theatrical directing. Explores the stage director's expanded role in performance development, througt script analysis, adaptation, and production planning through the rehearsal process. Final project is a one-act play.

## 4230 Theatre Management (3)

Prerequisite: Th \& D 2230, Comprehensive study and practice of theatre production and management techiques, including season selection, fundraising, budget cont:ol, venue analysis and acquisition, box office, facility management, production scheduling, interpersonal skills, conflict resolution, and promotional techniques for theatre.

## 4261 Advanced Projects in Design and Technology (13)

Prerequisites: Junior level with Consent of instructor. Provides opportunities for supervised advanced projects in theatre design or technology in conjunction with departmental productions, or other independent stucy projects. Credit assigned based on scope of project. Course may be repeated for up to 6 credit hours.

4262 Advanced Problems in Costume (1-3)
Prerequisites: Th \& D 2260 or 3252 or Consent of instructor. Provides opportunities in supervised special projects in costume design and technology in conjunction with actual productions or other advanced independent projects. Includes design research process, script ard character analysis, study of historical context and sc cial environment, development of conceptual designs, study of current costume design and wardrobe practices. Personal equipment will be required. Credit based on scope of project. Course may be repeated for up to 6 credit tours.

## 4390 Theatre Internship (1-3)

Prerequisites: Junior level with Consent of instructor. Provides opportunities for supervised projects in conjunction with off-campus professional theatre ard/or dance companies in performance, management, des gn or technology. Credit based on scope of assignment. Course may be repeated for up to 6 credit hours.

## 4391 Dance Internship (1-3)

Prerequisites: Junior level with Consent of instructor. Provides credit for approved supervised projects in conjunction with off-campus professional theatre ard/or dance companies. Credit based on scope of assignnent. Course may be repeated for up to 6 credit hours.

## 4980 Internship in Theatre (3)

Prerequisites: Senior standing, with at least 12 hours of course work in theatre; an overall GPA of at least 3.0 ;
consent of instructor; open to communication majors only; not open to students who have any Y or delayed grades outstanding. Supervised practical work at a theatre off campus in one of the following areas: acting, directing design, stage management. Repeatable, but no more than six hours total credit may be earned in internship courses. Only three hours in internship courses may be counted toward the 36 -hour minimum required for the degree.

- State Government/History graduation requirements may be satisfied by General Education courses or by other lower or upper level courses in various departments.
- There is no foreign language requirement, but foreign language proficiency is recommended.


## Course Descriptions: Media Studies

1050 Introduction to Media Studies (3)
Introduction to print and electronic media studies.
Emphasis on history, theory, and criticism of mass media
as cultural institutions.
1065 Introduction to Information Technology (3) The production and consumption of information by individuals, the work place and society. Emphasis on the changing nature of communication processes as a result of the expansion of communication technologies. (Previously Comm 1065)

## 1070 Introduction to Cinema (3)

An introduction to the history, rhetoric, and aesthetics of film. Film theory and criticism will be studied as well as major genres, authors, and artists. (Previously Comm 1070)

## 1100 Introduction to Advertising (3)

An introduction to the history, rhetoric, and aesthetics of Advertising. A basic understanding of industry issues and key areas such as account management, research, strategy, creative, media, and production.

## 1108 Advertising Copywriting (3)

Same as English 2080. To give students a hands-on approach for writing advertising material for print and broadcast against tight deadlines in a professional setting. (Previously Comm 1108)

## 1110 Introduction to Radio and Television Broadcasting (3)

An introduction to broadcasting, including the areas of history, government regulations, station operation, and program development. (Previously Comm 1110)

## 1113 Basic Television Studio Production (3)

Study of basic television studio production techniques and practices. The class will provide the student with practical experience in studio camera operating, directing, producing, switching, audio mixing and lighting, as well as
basic straight cut editing. Lab arranged. (Previously Comm 1113)

## 1114 Radio Production I (3)

Prerequisites: MS 1110. Theory and practice in the creation of radio programs. Laboratory experience included. (Previously Comm 1114)

1118 Radio and Television Announcing (3) Prerequisites: MS 1113, or MS 1114, or Consent of Instructor. Training in radio and television studio procedures. Production and criticism of lab programs, including news, continuity, interviews, and oral improvisation. Classroom meetings at the radio lab and the television lab, plus lab hours to be arranged.
(Previously Comm 1118)

## 1135 Media Theory (3)

Theory based explanation of the relationship between mass media and society. Topics will include agenda-setting, violence and television, and other current issues from a critical perspective.

## 1160 Fundamentals of Oral Interpretation (3)

Prerequisite: Th \& Dan 1210 or consent of instructor. An introduction to the analysis of literature and to the principles of its oral presentation by the interpreter.

## 1194 Practicum in Journalism (1-3)

Prerequisites: Consent of Instructor. Open to Theatre, Dance, and Media Studies majors or minors only. Not open to students who have any delayed grades outstanding. Practical work in the journalism program or the student newspaper, supervised by a faculty member. This course may be repeated for up to 6 credit hours.

## 1195 Practicum in Advertising (1-3)

Prerequisites: MS 1108 or Consent of instructor. Open to Theatre, Dance, and Media Studies majors or minors only. Not open to students who have any delayed grades outstanding. Practical work in the advertising program, the student newspaper, or an on-campus agency, supervised by a faculty member. This course may be repeated for up to 6 credit hours.

## 1196 Practicum in Radio (1-3)

Prerequisites: MS 1114 or Consent of Instructor. Open to Theatre, Dance, and Media Studies majors or minors only. Not open to students who have any delayed grades outstanding. Practical work at the campus radio station, supervised by a faculty member. This course may be repeated for up to 6 credit hours. (Previously Comm 1196)

## 1197 Practicum in Television/Film (1-3)

Prerequisites: MS 1113 or Consent of Instructor. Open to Theatre, Dance and Media Studies majors only; not open to students who have delayed grades outstanding. Practical work at one of the campus television studios or for the UM-St. Louis Television/Film Club, supervised by
a faculty member. This course may be repeated for up to 6 credit hours. (Previously Comm 1197)

## 1198 Practicum in Media Studies (1-3)

Prerequisites: Consent of Instructor. Open to Theatre, Dance and Media Studies majors or minors only; not open to students who have any delayed grades outstanding. Practical work in media studies, supervised by a faculty member. This course may be repeated for up to 6 credit hours.

1775 Introduction to Non-Western Cinema (3) Prerequisites: Media Studies 1070 with a grade of C or better. This course examines the art and history of nonwestern cinema. Significant films from Asia and Africa will be examined. The artistic, technical, historical, and social significance of these films will also be examined. This course will satisfy the University's cultural diversity requirement.

## 2210 Television Production I (3)

Prerequisites: MS 1113 or Consent of Instructor. A study of the basic theories and practices of remote television production. The areas of producing and directing in the field will be studied. The class will provide the student with practical experience in remote camera operation and basic non-linear editing techniques. Lab arranged.
(Previously Comm 2210)
2211 Introduction to Digital Multimedia Production (3) Students will explore different state-of-the-art digital multimedia applications, including audio, video, and computer generated graphics, that are presently used in television, radio, $\mathrm{CD}, \mathrm{DVD}$, and online presentation. Current media related software such as Quick Time, Window Media, and Flash multimedia creation will be demonstrated and utilized to develop skill sets in those areas.

## 2212 Broadcast Writing and Reporting (3)

Prerequisites: MS 1110 or Consent of Instructor. Elementary principles and practice of writing for radio and television in varied program formats, emphasis on preparation of written materials for news and public affairs presentation. Lecture and lab. (Previously Comm 2212)

## 2215 Radio Production II (3)

Prerequisites: MS 1114. Study of advanced theories and techniques of audio production, building on principles and skills leamed in Radio Production I. Exploration of complex program formats such as radio drama and special problems such as those encountered in recording live music. (Previously Comm 2215)

## 2216 Radio News (3)

Prerequisites: MS 1114. Theory and laboratory practice in the gathering, writing, and delivery of news through radio. Lab hours to be arranged. (Previously Comm 2216)

2217 Script Writing for Business and Industry (3)
Prerequisites: MS 2210, MS 2212, or Consent of Instructor. Script writing for training, motivation, education, and other applications. Students will idenify and discuss communication problems and solutions in live, slide/tape, video, and film script formats. (Previously Comm 2217)

## 2218 Public Policy in Telecommunication (3)

 Prerequisites: MS 1065, or 1110, or Consent of Instnictor. An examination of the structure and operation of donestic, international, commercial and public telecommunication. Regulatory agencies, both private and public, will be considered in terms of their effect on programming and ownership. (Previously Comm 2218)
## 2219 Promotion, Publicity, and Advertising in Broadcasting (3) <br> Prerequisites: Media Studies 1110. Introduction to theory and practice in the planning, execution, and evaluatic $n$ of persuasive campaigns involving radio and television. <br> Emphasis on concept developments and production elements. Discussion of broadcast ethics.

## 2228 Public Relations Writing (3)

Same as English 3280. Prerequisite: English 3140 or equivalent. An introduction to the process of planning, producing, and evaluating written public relations messages. Writing assignments include media releases, letters, memos, position papers, background papers, brochures, and reports and proposals.

## 2271 History of American Film (3)

Prerequisites: Media Studies 1070 or Consent of Instructor. History of American Film from the late nineteenth century to the present.

## 2272 Contemporary Cinema (3)

Prerequisites: Media Studies 1070 or Consent of Instructor. History of World Cinema from the 1940s to the present day.

## 2275 Introduction to International Cinema (3)

 Prerequisites: Media Studies 1070 with a grade of C or better. This course provides an understanding of the art and history of international cinema; and helps to better understand film and filmmakers' intentions as well as the culture in which the film was produced. Films from Europe, Asia, South America, Africa and Australia will be examined. The artistic, technical, historical and social significance of these films, as well as their impact uron American cinema, will also be studied.
## 3035 Advanced Media Theory (3)

Prerequisites: MS 1135 or Consent of Instructor. This course examines major schools, ownership and theorists in mass media fields. The writings of the Frankfurt School, Marshall McLuhan, Ben Bagdikian, and others will ze examined.

3070 International Cinema (3)
Prerequisites: Media Studies 1070 \& 2275. Understanding international film, its properties, methods, aesthetics, and its impact on culture and society.

## 3214 News Writing (3)

Prerequisites: Engl 1100 or equivalent. An introduction to news writing and reporting. Course covers basic components of news reporting principles, and news writing style and structure. Daily writing assignments inclue coverage of speeches, meetings and interviews, accidents, deaths, courts, sports, consumer affairs, and government. Emphasis on clarity, accuracy, and speed.

## 3310 Television Production II (3)

Prerequisites: MS 2210. Study of advanced theories of television production. Refinement of studio television principles learned in MS 2210. Exploration of complex program formats, and advanced non-linear editing techniques. Lab arranged.
(Previously Comm 3310)

## 3311 Broadcast Management (3)

Prerequisites: MS 1110. Introduction to theories of management, with application to radio and television station operations. Discussion of economic, legal, and ethical problems and issues.
(Previously Comm 3311)

## 3313 Advanced Video Editing (3)

Study of advanced non-linear editing techniques, animation, and advanced graphics development. Exploration of state of the art editing formats. Lab arranged. (Previously Comm 3313)

## 3316 Television News (3)

Prerequisites: MS 1113 or 2110 . Theory and laboratory practice in the gathering, writing, and delivery of news through television. Lab arranged.
(Previously Comm 3316)

## 3317 Radio and the Recording Industry (3)

Historical development and current status of the recording industry, particularly as it interacts with the broadcast industry. Impact of radio and recording technology on the development of rock and other popular music. (Previously Comm 3317)

## 3330 Research Methods in Media Studies (3)

Prerequisites: MS 1135. Introduction to the fundamental tools of qualitative and quantitative research in Media Studies. Focus of the course is on reading and comprehending media research reports.

## 3334 Advertising Media Planning (3)

Prerequisites: MS 1050. A hands-on study of how to determine an advertising budget, select media and develop a strategic plan. (Previously Comm 3334)

## 3336 Communication in Advertising (3)

Prerequisites: Comm 1050 and junior standing, or consent of instructor. Overview of components in persuasive messages and how advertising messages and campaigns use various media to reach target audiences.

## 3338 Advertising Techniques (3)

Prerequisites: Media Studies 1050, junior standing, or consent of instructor. Techniques for creating advertising messages and campaigns to reach target audiences.
Practical applications of messages and campaigns will be stressed.

## 3350 Mass Media History (3)

Prerequisites: MS 1050 or 1110 . Examination of the social, economic, and political factors contributing to the development of American mass media. Emphasis on significant personalities who helped shape its course; analysis of select critical works. (Previously Comm 3350)

## 3354 Comparative Telecommunication Systems (3)

Prerequisites: MS 1065 or Consent of Instructor. Historical aspects of various systems of telecommunication throughout the world. Examination of American, Canadian, European Community (EC), and other telecommunication systems. (Previously Comm 3354)

## 3355 Media Law and Regulation (3)

Prerequisites: MS 1050 or 1110 . Discussion of laws affecting the mass media. Exploration of problems and issues in legal regulation of media content, ownership, access, and accountability. Discussion of industry selfregulation and the influence of citizens' organizations. (Previously Comm 3355)

## 3356 Global Media Systems and Trends (3)

Prerequisites: MS 1050 or 1110 . This course will survey major theories, global trends, and key stakeholders in the field of mass and multi-media. Designed to foster substantive comprehension of issues raised by transnational media corporations and their impact on other cultures and languages. Details about the BBC,CNN, MTV, Euro Disney, and the internet will be major components of the class.

## 3362 Storytelling (1-3)

Prerequisite: Junior standing or consent of instructor. This course gives an overview of the history of storytelling, types of tales, and appropriate uses for storytelling. The primary emphasis of the course is in developing storytelling skills through preparation, performances, and evaluation.

## 3370 Documentary Film (3)

Prerequisites: MS 1070. Consideration of the history, theory, and criticism of nonfiction film. Screening of
representative documentary films. (Previously Comm 3370)

3392 Administration of Co-curricular Activities (3) Prerequisites: Junior Standing or consent of instructor. A survey of skills required to administer the various cocurricular activities associated with teachers in the secondary schools, such s theatre performances and mass media centers.

## 3394 Internship in Journalism (3-6)

Prerequisites: Senior standing, with at least 12 hours of course work in journalism, mass communication; an overall GPA of at least 3.0 ; consent of instructor; open to Media Studies majors only; not open to students who have any delayed grades. Practical work with an off-campus newspaper, magazine, or other news organization, supervised by a journalism professional in consultation with a faculty member. This course may be repeated for up to 6 credit hours. (Previously Comm 3394)

## 3395 Internship in Advertising (3-6)

Prerequisites: Senior standing, with at least 12 hours of course work in television, film video; an overall GPA of at least 3.0; consent of instructor; open to Media Studies majors only; not open to students who have any delayed grades. Practical work at an off-campus advertising agency, supervised by a professional in consultation with a faculty member. This course may be repeated for up to 6 credit hours.

## 3396 Internship in Radio (3-6)

Prerequisites: Senior standing, with at least 12 hours of course work in radio, broadcasting; an overall GPA of at least 3.0; consent of instructor; open to Media Studies majors only; not open to students who have any delayed grades. Practical work at an off-campus radio station, supervised by a professional in consultation with a faculty member. This course may be repeated for up to 6 credit hours. (Previously Comm 3396)

## 3397 Internship in Television/Film (3-6)

Prerequisites: Senior standing, with at least 12 hours of course work in television, film, video; and overall GPA of at least 3.0; consent of instructor; open to Media Studies majors only; not open to students who have any delayed grades. Practical work at an off-campus television, film or video organization, supervised by a television, film or video professional in consultation with a faculty member. This course may be repeated for up to 6 credit hours. (Previously Comm 3397)

## 3398 Internship in Media Studies (3-6)

Prerequisites: Senior standing, with at least 12 hours of course work in television, film, video, journalism, broadcasting, mass communication; an overall GPA of at least 3.0; consent of instructor; open to Media Studies majors only; not open to students who have any delayed grades. Practical work at an off-campus agency, supervised
by a professional consultation with a faculty membe :
This course can be repeated for up to 6 credit hours.
3990 Directed Readings in Media Studies (3)
Prerequisites: Consent of Instructor; not open to stucents who have any delayed grades. Supervised independent study involving readings, conferences, papers, in one of the department's disciplines: advertising, radio, television, film, or journalism.

4050 Media Studies and Education Topics (3)
Prerequisites: Senior or Graduate standing. A criticel examination of issues concerning media and education. Special topics may include the classification and typslogy of media studies as it pertains to education, the relationship of differing cultural systems as defined by media and education, or the impact of distance learning via differing media on formal education systems. This course may be repeated for credit with permission of instructor and advisor.

## 4357 Media Ethics (3)

Prerequisites: Same as Phil 4357. Nine hours of philosophy, communication, or media studies, or Consent of Instructor. This course is concerned with some of the issues that arise from the intersection of ethics and nodern media communications. Attention is given to some of the more specific concerns of media ethics, such as truth, honesty, fairness, objectivity and bias; personal privacy and the public interest; advertising; conflicts of interest; censorship and offensive or dangerous content (pornography, violence). Particular attention will be given to problems posed by the development of personal computer communications through bulletin boards on-line services and the Internet. (Previously Comm 4357)

The Bachelor of Interdisciplinary Studies degree (B.I.S.) provides a flexible, individualized program of study for the self-directed adult learner. The area of study is developed by each student with advisement by faculty.

Oversight of the B.I.S. degree is the responsibility of the Interdisciplinary Studies committee, composed of faculty Arts and Sciences (Humanities, Social Sciences, and Natural Sciences), Business, Education, Engineering, Fine Arts and Communication, and Nursing. The Interdisciplinary Studies Committee will be convened and supported by the Office of the Provost.

## Admission Requirements for the B.I.S. Program

 Candidates for the B.I.S. degree must complete an application for admission to the program. Applications must be approved by the Interdisciplinary Studies Committee. The appropriate College to grant the student's degree will be determined by the Interdisciplinary Studies Committee.- Students must have well-designed, coherent programs of study that are structured to meet the student's unique educational goals, and should not be readily available under any other UM-St. Louis degree program.
- Students must have demonstrated the equivalent of academic proficiency required for any other undergraduate degree at UM-St. Louis.


## Degree Requirements for the B.I.S. Program <br> General Education Requirements

Students must complete the university's general education requirements. For details refer to the general education requirements section of this Bulletin.

## Area of Study

In consultation with faculty and staff advisers, students will carry out an area of study of at least 36 advanced semester hours of graded credit that meets their educational goals. Graded credit consists of degree credit courses in which the student received a letter grade of $A$, A-, B+, B, B-, C+, C, C-, D+, D, D-

Regardless of the focus, theme, or purpose, the area of study should contribute to an advanced level of academic competence and achievement

The program must be approved by the faculty adviser, and Interdisciplinary Studies Committee. Students and advisers will periodically review the program and make appropriate modifications when necessary.

## Hour and Grade Requirements

The degree requires completion of 120 semester hours with a 2.0 campus grade point average overall and in the area of study. No more than 30 hours must be taken in one department. At least 45 hours must be earned in courses beyond the introductory level. A minimum of 24 hours of
graded credit must be completed in residence at UM-St. Louis, of which 18 hours must be in the area of study and completed after admission to the B.I.S. program. No more than 18 hours may be taken on a satisfactory/unsatisfactory basis. Each candidate must be in residence for 24 of the last 30 hours of graded credit (exclusive of courses taken on a satisfactory/unsatisfactory basis).

Supervised Professional or Service Internship and Independent Research
Credit not exceeding 6 hours may be earned for department-approved professional internship, service internship, or independent research. The projects or activities must be formulated by the student and carried out under the supervision of a faculty member with the approval of the adviser. Students must submit a written report approved by the supervisor upon completion of the projects or activities.

## Graduate School

## Gerontology

## Faculty

Diane Beckerle O'Brien, Interim Director, Instructor in Social Work and Gerontology
MSW, Washington University
Margo-Lea Hurwicz, Associate Professor* of Anthropology and Gerontology
Ph.D., University of California-Los Angeles
Ann M. Steffen, Associate Professor* of Psychology and Gerontology
Ph.D., Indiana University
Chikako Usui, Associate Professor* of Sociology and Gerontology
Ph.D., Stanford University
Kuei-Hsiang (Grace) Hsueh, Assistant Professor* of Nursing
Ph.D., R.N., University of Arizona
Joseph Pickard, Assistant Professor* of Social Work Ph.D., Washington University
*members of Graduate Faculty
Faculty from 11 departments and programs are involved in the undergraduate and graduate programs in gerontology.

## Master of Science in Gerontology

The master of science degree in gerontology program is a multidisciplinary program designed to prepare students for management or direct service positions working with the aged. The program of study includes courses from a variety of departments including anthropology, nursing, psychology, sociology, social work, public policy administration, and optometry. Courses are offered primarily in the evening to accommodate part-time, as well as full-time students.

## Admission Requirements

Program applicants must have the following:

- Baccalaureate degree.
- 3.0 or B average (students with exceptions should contact the director of the gerontology program).
- Official transcripts of all previous undergraduate/graduate work.
- Three letters of recommendation

In addition, students must meet the other general requirements for admission to the Graduate School as explained in the Graduate Study section of the Bulletin.

## Degree Requirements

The students are required to complete 30 credit hours, including 24 hours in gerontology courses, a 3 -hour statistics
course, and a 3-hour research methods course. The re fuired courses are listed below.

## Gerontology Distribution Requirements

A. Public Policy and Aging-3 credits from the follow ng:

Ger (PPA, Pol Sci) 6443. Health Care Policy
Ger (Soc) 5449, Issues in Retirement
B. Health and Physical Aspects of Aging - 3 credits from the following:
Ger 5610 (Soc Wk 5610), Mechanics of Aging I: Th: Aging Body (1 credit hour)
Ger 5611 (Soc Wk 5611), Mechanics of Aging II: The Aging Brain (1 credit hour)
Ger 5612 (Soc Wk 5612), Mechanics of Aging III: Diseases of Aging ( 1 credit hour)
Ger (Nur) 6401, (5000) Health and Wellness in the $£$.ging
Ger 6441, Aging and Health Behavior
Ger 6458 (Opt 8650), Geriatric Optometry
C. Psychosocial Aspects of Aging-3 credits from the following:
Ger (Psych) 4373, Psychology of Aging
Ger (Psych) 4376, Mental Health and Aging
Ger (Soc) 4361, Sociology of Aging
Ger (Anthro) 5440, Cultural Aspects of Aging
Ger (Psych) 4380, Psychology of Death, Dying and End of Life Concerns
D. Practica in Gerontology, 6 credits from the following:

Ger 6495, Practicum in Gerontology
Ger 6496, Advanced Practicum in Gerontology
E. Gerontology Electives -9 credits
F. Graduate-level statistics course -3 credits and gracuate level research methods course -3 credits.
Students should consult Director of Gerontology for approved courses.

## Graduate Certificate in Gerontology

The graduate certificate in gerontology is designed fo: students who wish to receive post-baccalaureate train ing in gerontology. The certificate can be taken by itself or in conjunction with pursuit of a graduate degree in anotter field. Eighteen credit hours are required.

## Admission Requirements

Program applicants must have the following:

- Baccalaureate degree.
- 2.75 grade point average (students with excestions should contact the director of the gerontolog. program).
- Official transcripts of all previous undergrad jate/ graduate work.
- Two letters of recommendation.


## Distribution Requirements

A. Public Policy- 3 credits from the following: Ger (PPA, Pol Sci ) 6443, Health Care Policy Ger (Soc) 6449, 5449, Issues in Retirement
B. Health and Physical Aspects of Aging-3 credits selected from the following:
Ger (Nur) 6401,5000, Health and Wellness in the Elderly Ger 6441, Aging and Health Behavior
Ger 5610, Soc Wk 5610, Mechanics of Aging II: The Aging Brain (1 credit hour)
Ger 5611, Soc Wk 5611, Mechanics of Aging II: The Aging Brain (1 credit hour)
Ger 5612, Soc Wk 5612, Mechanics of Aging III: Diseases of Aging (1 credit hour)
Ger 6458, Opt 8650, Geriatric Optometry
C. Psychosocial Aspects of Aging - 3 credits selected from the following:
Ger (Psych) 4373, Psychology of Aging
Ger (Psych) 4376, Mental Health and Aging
Ger (Soc) 4361, Sociology of Aging
Ger (Psych) 4380, Psychology of Death, Dying and End of Life Concerns
D. Ger 6495, Practicum in Gerontology -3 credits
E. Electives in Gerontology - 6 credits

## Graduate Certificate in Long-Term Care Administration (18 credit hours)

The graduate certificate in long-term care administration is designed for individuals who either work in or wish to consider entering the field of long-term care administration. This field (home, community, and institutionally-based) is the fastest growing segment of the health care industry, and there is a critical need for professionally trained personnel with the knowledge and skills to address the complex issues in gerontology. This program can be applied towards meeting nursing home administration licensure requirements. (Missouri contact hour requirements vary with education and long-term care experience. Please check with the Missouri Board of Nursing Home Administration, Jefferson City, MO (573) 751-3511 for a copy of licensure eligibility requirements.)

The graduate certificate can be earned by itself or in conjunction with the pursuit of the Master of Science in Gerontology, the Master's in Social Work, or a graduate degree in another field.

The graduate certificate in long-term care administration requires the completion of 18 graduate credit hours which will apply toward the Master of Science in Gerontology for students who elect to continue their graduate studies in gerontology at UM-St. Louis.
A. Six of these 18 hours are gerontology courses:

- GER 6441, Aging and Health Behavior (3 hours) or GER 6443, Health Care Policy ( 3 hours) (same as Soc. Wk. 6443, PPA 6430, or Pol. Sci. 6443)
- GER 6498, Advanced Seminar in Gerontology: Long-term Care Administration (3 hours)
B. Nine of these hours are in management. Students much choose the selection of courses in either Business Administration (1) or Nonprofit Management (2).

1. 9 hours of coursework in Business Administration consisting of:
2. Mgmt. 5600, Organizational Behavior and Administrative Process ( 3 hours) (same as PPA 6600)
3. Acctg. 5400, Financial Accounting: Theory and Practice ( 3 hours)
4. Mgmt. 5621, Managing Human Resources (3 hours)

Or
2. 9 hours of coursework in Nonprofit Management, consisting of:
A. PPA 4940, Leadership and Management in NonProfit Organizations (3 hours)
B. PPA 4960, American Philanthropy and NonprofitResource Development (3 hours)
C. PPA 4911, Management Issues in Nonprofit Orgs.:Staff Management Issues (1 hour)
D. PPA 4912, Management Issues in Nonprofit Orgs.:Legal Issues in Governing and Managing Nonprofit Orgs. (1 hour)
E. PPA 4913, Management Issues in Nonprofit Orgs.:Financial Issues (1 hour)

Three hours of internship (Practicum in Gerontology, GER 6495), are also required. Graduate students who already have professional field experience equivalent to the internship may request an exemption. Any request for an exemption from the internship requirement must be approved by the gerontology program director after a review of the student's professional or managerial field experience with appropriate documentation. Students who receive an exemption must take another 3 hours of elective coursework from the gerontology program offerings.

Requirements of admission to the graduate certificate program are the same as those required for admission to the Graduate School: an undergraduate degree, 2.75 or better GPA, and three letters of recommendation.

## Undergraduate Certificate in Gerontological Studies

A certificate in gerontological studies, a multidisciplinary course of study, is available at the University of Missouri-St. Louis. This program provides an opportunity for students to obtain a focused specialty in gerontology in addition to their majors. It utilizes offerings in the College of Arts and Sciences, College of Nursing, the College of Business, and the College of Education. It is appropriate for students in any of the colleges of the University.

## Certificate Requirements

A student may earn the certificate in gerontological studies by completing a total of 15 hours. Courses must be chosen from at least two of the following four topic areas. No more than 3 credit hours from Research/ Practicum Experience courses will be allowed. The student must have the approval of the director of the gerontology program before enrolling in the course. Courses taken to fulfill the requirements may not be taken on a satisfactory/unsatisfactory basis. New courses continually are added, so it is advisable to check with the director each term. Many courses are cross-listed and also have a gerontology designation.

## Humanities

Ger (Eng) 1115, Images of Age in Film
Ger (Eng) 1116, Images of Age in Literature
Ger (Philos) 2256, Bioethics

## Social Sciences

Ger (Psych) 2272, Developmental Psychology: Adulthood and Aging
Ger (Psych) 4380, The Psychology of Death, Dying, and End-of-Life Concerns
Ger (Psych) 4373, The Psychology of Aging
Ger (Psych/Social Work) 4376, Mental Health and Aging
Ger (Soc) 4361, Social Gerontology
Ger (ID) 2170, Aging in America Concepts and
Controversies
Ger (ID) 1220, Special Topics in Gerontology
Ger (Anthro) 3215, Growing Old in Other Cultures

## Career Outlook

The increasing number of elderly in the population has greatly expanded job opportunities in gerontology in the last decade, and job prospects for the future are equally bright. Career possibilities include nursing home administration, administration and planning of community-based programs for the elderly, recreational programming, and counseling of the elderly.

## Course Descriptions

## 1115 Images of the Elderly in Film (3)

Same as Eng 1150. Analysis of the portrayal of older adults in various films. Class discussions focus on the style and thematic content of the film, as well as intergenerational relationships.

## 1116 Images of Age in Literature (3)

Same as Eng 1160. Reading and discussion of literame that portrays aging and old age in various settings. Discussion and short essays enable consideration of how literaturt helps in the study of aging and also how the process of aging; can be a creative force within literature.

## 1220 Special Topics in Gerontology (1-3)

Same as ID 1220. Selected topics dealing with various aspects of gerontology. The specific contents of this course will vary from semester to semester. The course may be repeated for credit with permission of the Gerontolog) director.

2170 Aging in America: Concepts and Controversits (3) Same as Soc 2170, SW 2170, ID 2170. This course examines the major theoretical and service issues connected to tie study of older adults and their families, using multidisciplinary perspectives. Students are provided with an introduction to the field of aging through an examination of current social issues and controversies. This course emphasizes student involvement through class discussion, and is appropriate for students in the arts and sciences business, communication, education, and nursing.

## 2256 Bioethics (3)

Same as Phil 2256. An examination of ethical issues in health care practice and clinical research and in public policies affecting health care. Topics include abortion euthanasia, health care, experimentation, informed consent, and the right to health care.

## 2272 Developmental Psychology: Adulthood and Aging

 (3)Same as Psy 2272. Personality, social, and physiologival development from the onset of early adulthood through maturity and old age.

## 2280 Psychology of Death and Dying (3)

Same as Psy 2280. Prerequisite: Psych 1003. A begimuing exploration of end-of-life issues.

## 3215 Growing Old in Other Cultures (3)

Same as Anth 3125. This course examines the wide ranging variability in the roles of older people across different cultures and the effects these have on older people, their families, and their societies.

## 4361 Social Gerontology (3)

Prerequisite: Soc 1010 and junior standing or consent of instructor. Same as Soc 4361. Topics include sociological theories of aging, technological and social change and its effects on the environment of older people, and prejucice and discrimination against the elderly.

4373 Psychology of Aging (3)
Prerequisite: Nine hours of Psychology or consent of
instructor. Same as Psy 4373.This course focuses on the developmental changes associated with aging including sensation, memory, emotions, and attitudes.

## 4376 Mental Health and Aging (3)

Prerequisites: 9 hours of psychology, graduate standing or consent of instructor. (Same as Psy 4376 and SW 4376). (MSW students normally take all foundation courses prior to enrolling in this course.) A survey of recent theory and research in mental health issues for older populations. The primary focus is on major psychological disorders prevalent among the elderly and in treatment approaches for elders.

## 4380 Psychology of Death, Dying, and End-of-Life

 Concerns (3)Same as Psy 4380. Prerequisites: Nine hours of psychology. This course will address the psychological aspects of a variety of end of life issues, including death attitudes, funeral practices, ethics, grief theory, family communication practices, health care system approaches, and current research regarding these.

## 4490 Directed Readings (1-3)

Prerequisite: Consent of instructor. Directed readings and research or field work. May be repeated for a maximum of three hours.

## 5361 Advanced Social Gerontology (3)

Prerequisites: Graduate Standing. An advanced examination of sociological theories of aging, technological and social change and its effects on the environment of older adults. It includes the study of prejudice and discrimination against the elderly.

## 5376 Psychopathology and Aging (3)

Prerequisites: Graduate Standing. Recent theory and research in mental health issues for older populations. The primary focus is on major psychological disorders prevalent among older adults and in assessment and treatment approaches for aging populations.

## 5440 Cultural Aspects of Aging (3)

Same as Anth 5440 . Focuses on the variety of solutions encountered in different sociocultural contexts for dealing with the problems, challenges, and opportunities of growing old. It is organized around topics that are of concern to both anthropology and social gerontology: the status of the aged, intergenerational relations, aging in modernizing societies, ethnic dimensions of aging in complex societies, health in later life, death and dying. Both in-depth case studies and cross- cultural comparisons are examined in an effort to arrive at a culturally informed assessment of factors affecting aging and the aged in the United States.

5610 Mechanisms of Aging I: The Aging Body (1)
Prerequisites: Graduate standing and Bio 1102 or equivalent. (Same as SW 5610 and Psy 5610). (MSW students normally take all foundation courses prior to enrolling in this course). Introduces students with a social sciences/ humanities
background to the normal changes in the biology and chemistry of the aging human body and how these changes affect behavior.

5611 Mechanisms of Aging II: The Aging Brain (1)
Prerequisites: Ger 5610 or SW 5610 or Psy 5610 or equivalent or consent of instructor. (Same as SW 5611 and Psy 5611 ). (MSW students normally take all foundation courses prior to enrolling in this course.) Provides students with a social sciences/humanities background a basic introduction to the biology and chemistry of the aging human brain and nervous system and how these systems impact behavior.

5612 Mechanisms of Aging III: Diseases of Aging (1) Prerequisites: Ger 5610 and Ger 561 lor SW 5610 and 5611 or Psy 5610 and Psy 5611 or equivalents or consent of instructor. (Same as SW 5612 and Psy 5612). (MSW students normally take all foundation courses prior to enrolling in this course) Provides students with a social sciences/humanities background with information on how diseases associated with aging exacerbate the effects of aging on the human body, mind, and behavior.

## 6401 Health and Wellness in the Elderly (3)

Prerequisite: Graduate standing. Same as Nurs 5000. Factors contributing to longevity and health in old age, including genetic predisposition, lifestyle, culture, and environment are related to aspects of maintaining health and promoting wellness. Through a holistic approach, explores aspects of nutrition, exercise and activity, prevention of hazards to health, maintaining self-responsibility, managing stress, and meeting continued developmental, emotional and spiritual needs. Considers cross-disciplinary interventions to promote health and wellness in the elderly. Introduces the "Putting Prevention into Practice" model adapted to health promotion in the elderly.

## 6441 Aging and Health Behavior (3)

Prerequisite: Graduate standing. (Same as Psy 6441). This course examines sociocultural influences on health care practices of older adults. The role of social support and other social resources in the health behavior of older adults is emphasized. Topics include self-care decisions, formal service utilization, family caregiving, and planned interventions for older adults.

## 6443 Health Care Policy (3)

Prerequisites: Graduate standing and consent of instructor. Same as Pol Sci 6443, PPA 6430 and SW 6443. (MSW students will normally take the social policy foundation course prior to enrolling in this course). Survey course examining current issues in health policy that face the nation. Policies are placed in a historical context to show how issues have been influenced by different political and economic conditions. Secondary consequences and limitations of current trends in health policy are explored.

## 6444 Seminar in Public Policy and Aging (3)

Prerequisite: Consent of instructor. Same as PPA 6440 and Pol Sci 6444. The study of specialized issues and methods related to federal, state, and local policies that affect the elderly. Potential policy areas to be covered include housing, taxation, mental health, transportation, etc. May be repeated for credit, provided the subject matter is different.

6445 Sociological Dimensions of Chronic Illness (3) Prerequisite: Soc 5400 or consent of instructor. Same as Soc 6445. The consequences of chronic illness for social roles, family and organizational dynamics, and the functioning of society are examined. Chronic illness is presented as both a medical problem and a social phenomenon that is shaped by the changing age structure of society.

## 6449 Issues in Retirement (3)

Same as Soc 5449. Prerequisite: Graduate standing. This course examines macro and micro issues of retirement in the United States. It considers experiences of older persons in retirement: its processes, causes, and consequences-in relation to economic market conditions, demographic changes, and programs and policies that are targeted to support the elderly (e.g., Social Security). It also examines issues relating to older women and retirement.

6450 Gerontological Assessment (3)
Prerequisites: Graduate Standing (Same as SW 6450) This course provides an overview of psychosocial assessment with older adults and their family caregivers. Major areas of gerontological assessment practice are considered, including dementia, mood disorders, suicide, grief, alcoholism, elder abuse/neglect, family caregiving, and interdisciplinary team issues.

## 6458 Geriatric Optometry (2)

Same as Opt 8650. Special examination and management considerations of the geriatric patient will be discussed. Psychological, physiological, social, and demographic aspects of aging, as well as ocular changes associated with the aging process will be taught.

## 6460 Long Term Care Administration (3)

Prerequisites: Graduate Standing. This course provides an overview of long term care programs and services for older adults. Administrative issues are reviewed, including patient services, state licensure requirements, human resource management, and reimbursement practices. Characteristics of well-functioning facilities are addressed, as well as consultation with families during the placement decision process.

## 6490 Directed Study (1-3)

Prerequisite: Consent of instructor. Designed to give the student an opportunity to pursue a more in-depth study of a problem area in gerontology than is normally covered in more formal courses. May be repeated for a total of 6 credit hours.

6494 Integrative Research Seminar in Gerontology (3) Same as Psy 7494. Prerequisite: A graduate level research methods course (e.g., PPA 6401. This seminar require; students to critically examine research in terms of methodology. Topics covered include: reliability and validity of measures; internal and external validity; needs asse:sment; treatment implementation and process evaluation, and qualitative methods.

## 6495 Practicum in Gerontology (3)

Prerequisite: Consent of instructor. Supervised work experience in an agency that serves older adults. Students are required to complete a minimum of 150 clock hours at the practicum site.

## 6496 Advanced Practicum in Gerontology (3)

Prerequisites: Ger 6495 and consent of instructor. Advanced practicum experience beyond Gerontology 6495. Students must complete a minimum of 150 clock hours of supervised fieldwork (service or research) with older adults.

## 6497 Interdisciplinary Geriatric Care (2)

Same as Opt 6497. Prerequisite: Consent of instructor, Interdisciplinary approaches that address the medical End social needs of the elderly will be examined. Information about geriatric care and social issues affecting the well being of older adults will be provided. Clinical, theoretical, end educational perspectives will be presented.

## 6498 Advanced Seminar in Gerontology (3)

Prerequisite: Graduate standing. This course will provide in-depth analysis of specialized topics in gerontology, which are not covered in required courses. (Course may be repeated for a maximum of nine credits, assuming topics are different.)

## 6499 Topics in Gerontology (1-2)

Prerequisite: Graduate standing. Analysis of a current problem in gerontology. (Course may be repeated for maximum of five credits, assuming topics are different.)

## Public Policy Administration

## Faculty

Brady Baybeck, Associate Professor of Public Policy
Administration and Political Science,* Director of Public
Policy Administration
Ph.D., Washington University
Glen H. Cope, Professor of Public Policy Administration and Political Science*, Provost and Vice Chancellor for Academic Affairs
Ph.D., Ohio State University
E. Terrence Jones, Professor of Public Policy

Administration and Political Science*
Ph.D., Georgetown University
Carol W. Kohfeld, Professor Emeritus of Public Policy
Administration and Political Science
Ph.D., Washington University
George J. McCall, Professor Emeritus of Public Policy
Administration and Sociology
Ph.D., Harvard University
Donald Phares, Professor Emeritus of Public Policy
Administration and Economics
Ph.D., Syracuse University
Lana Stein, Professor of Political Science and Public Policy Administration*
Ph.D., Michigan State University
Anne E. Winkler, Professor of Public Policy Administration and Economics*
Ph.D., University of Illinois
Deborah B. Balser, Associate Professor of Public Policy
Administration and Business Administration*
Ph.D., Cornell University
Andrew D. Glassberg, Associate Professor of Public Policy Administration and Political Science*
Ph.D., Yale University
Jean Germain Gros, Associate Professor of Public Policy
Administration and Political Science*
Ph.D., University of California-Berkeley
Nancy T. Kinney, Assistant Professor of Political Science and Public Policy Administration*
Ph.D., University of Colorado at Denver
James M. Krueger, C.P.A., Assistant Professor of Public
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## General Information

The University of Missouri-St. Louis' Public Policy
Administration (PPA) program has three components: the Master of Public Policy Administration (MPPA) degree
program, the Nonprofit Management and Leadership Program, and the Local Government Partnership.

The Master's Program in Public Policy Administration (MPPA) is an interdisciplinary program designed to prepare students for managerial and policy analysis positions in the public and nonprofit sectors or in organizations having substantial interaction with the public and nonprofit sectors. The program is a unit of the Graduate School and is accredited by the National Association of Schools of Public Affairs and Administration. Core faculty are on joint appointments in public policy administration and disciplines such as economics, political science, sociology, or business administration. The program includes courses in policy analysis, public administration, management, budgeting, and economics in the core curriculum. The University of Missouri-St. Louis' MPPA program differs from existing programs available in the Missouri-Illinois region in its interdisciplinary nature and emphasis on the development of analytic and administrative skills. It is designed to meet the needs of prospective full-time students, as well as those who wish to earn a degree in the evening while continuing to work.

In addition to the distinguished doctoral-level faculty in public policy administration, students have access to courses and faculty in business and other social sciences, to the Public Policy Research Center, and to the Center for International Studies. The PPA program serves as an editorial home of the American Review of Public Administration.

The full facilities of Campus Computing, and the Laboratory for Quantitative Analysis are available. UM-St. Louis is a member of the Inter-University Consortium for Political and Social Research.

## Admission Requirements

Applicants to the MPPA program must meet the general requirements for admission to Graduate School as explained in the Graduate Study section of this Bulletin. Students entering the MPPA program may be required to display proficiency in college algebra.

## Prerequisites

Students must demonstrate competency in computer-based applications, including spreadsheets, databases, and Internet applications. These competencies must be demonstrated in the first semester of the degree program by completing a computer proficiency examination.

## Core Curriculum

All candidates for the MPPA degree must complete 28 hours in the core curriculum sequence composed of the following public policy administration courses:

Administration<br>6400, Proseminar in Public Policy Administration 6600, Organizational Behavior and Administrative Processes<br>\section*{Budgeting}<br>6180, Governmental Budgeting and Financial Control

## Economics

6080, Microeconomics for Policy Analysis
6210, Public Sector Microeconomics

## Policy Analysis

6000, Introduction to Policy Analysis
6900, Cases in Public Policy Administration

## Statistics and Applications

6010, Introduction to Policy Research
6750, Introduction to Evaluation Research Methods

## Exit Project <br> 6990, Exit Project Research

A thesis is not required, but students must complete written analyses as part of their course work and/or internships. A thesis is not required to complete the program. However, writing is an important component of the degree, and students will complete written analyses as part of their coursework and/or internships. There is also a one credit hour exit project, PPA 6990, taken in the final semester. This exit project is a written analysis of a public policy administration problem, and is defended in an oral examination.

PPA 6000 should be taken at the beginning of the program. It is strongly recommended that PPA 6010 and PPA 6080 be taken early. PPA 6900 is a capstone course and must be taken at the end of the program.

Students may select one of five emphasis areas in which to concentrate their advanced studies: (1) managing human resources and organizations, (2) policy research and analysis, (3) local government management, (4) health policy, or (5) nonprofit organization management. Students also may select an individualized emphasis area in consultation with their advisors.

Prior to the completion of 15 hours in the MPPA program, students should identify an emphasis area. In each of the emphasis areas students may be able to substitute another course for a specified elective, with the MPPA Director's approval. Specific requirements for each emphasis area are as follows:

## 1) Managing Human Resources and Organizations a. Required (3 hours) <br> PPA 6490, Human Resources in the Public Sector

b. Electives ( 9 hours) chosen from:

MGMT 5611, Advanced Organizational Behavior anci Administrative Processes
MGMT 5624, Organizational Training Econ 6400, Labor Economics
PPA 6680, Negotiating Workplace Conflict
Pol Sci 3470, Collective Bargaining
PPA 6950, Internship - 3 hours (in assignment relevant to emphasis area)

## 2) Policy Research and Analysis a. Required ( 3 hours)

Pol Sci 6402, Intermediate Techniques in Policy Restarch OR Econ 4100, Introduction to Econometrics

## b. Electives (9 hours) chosen from:

Pol Sci 6403, Advanced Techniques in Policy Resears h OR Econ 4110, Applied Econometrics
Econ 3510, Public Finance: State and Local
Econ 4550, Natural Resource Economics
Econ 4160, Geospatial Economic Analysis
Econ 6760, Health Economics
Econ 6400, Labor Economics
Econ 6900, Advanced Topics in Economic Analysis
Pol Sci 6404, Multi-Method Research
Pol Sci 6414, Topics in Public Policy Analysis
Pol Sci 6422, Law, Courts, and Public Policy
Soc 4040, Survey Research Practicum OR
Soc 5432, Survey Research Methods
PPA 6950, Internship (in assignment relevant to the
emphasis area)
3) Local Government Management
*a. Required (6 hours)
PPA 6340, Seminar in City Administration OR
PPA 6350, Issues in Urban Management
AND EITHER
Pol Sci 6470, Proseminar in Urban Politics OR Pol Sci 6471, Seminar in Urban Politics
b. Electives ( 6 hours) chosen from:

PPA 4940, Leadership and Management in Nonprofit Organizations
PPA 6490, Human Resources in the Public Sector
PPA 6680, Negotiating Workplace Conflict
Economics 3510, Public Finance: State and Local
Economics 6700, Political Economy of Metropolitan Areas Pol Sci 6432, Intergovernmental Relations
PPA 6950, Internship (in assignment relevant to emplasis area)

* For Local Government Management specialization, courses not taken to fulfill "required 6 hours" may be taken as electives (s).

NOTE: Students interested in careers in local government management are strongly encouraged to take PPA 6450,

Human Resources in the Public Sector, as one of their electives.
4) Health Policy
a. Required ( 6 hours)

PPA 6430, Health Care Policy
PPA 6460, Selected Topics in Health Care Policy: Comparative Health Policy
b. Electives ( 6 hours) chosen from:

PPA 6460, Selected Topics in Health Care Policy (with different substantive area from Comparative Health Policy)
Econ 6750, Political Economy of Health Care
Econ 6760, Health Economics
Ger 4376, Mental Health and Aging
Ger 6401, Health and Wellness in the Elderly
Ger 6441, Aging and Health Behavior
PPA 6950, Internship (in assignment relevant to the emphasis area)
5) Nonprofit Organization Management and Leadership a. Required ( 9 hours)

PPA 4911, 4912, 4913, Management Issues in Non-Profit Organizations: Staff Management Issues; Legal Issues; Financial Issues
PPA 4940, Leadership and Management in Non-Profit Organizations
PPA 4960, American Philanthropy and Non-Profit Resource Development
b) Electives - ( 3 hours) chosen from: PPA 6490, Human Resources in the Public Sector
PPA 6550, Strategic and Program Planning for Nonprofit Organizations
BA 3451, Accounting for Governmental and Nonprofit Entities
BA 5100, Managerial Communication
BA 5700, Contemporary Marketing Concepts
BA 5900, Public Policies Toward Business
Psych 7412, Social Psychology
PPA 6680, Negotiating Workplace Conflict
PPA 6950, Internship (in assignment relevant to the emphasis area)

## Individualized Emphasis Area

Prior to the completion of 15 hours in the MPPA program, the student must present a proposal for 12 hours of specific coursework for approval by the MPPA faculty. The 12 hours must include PPA6950, Internship (in an assignment relevant to the emphasis area) unless the student has significant public or nonprofit sector experience.

## Internships

There currently exists a need for well-trained policy administrators and analysts. Frequent contact is maintained with public and nonprofit practitioners and public officials in the St. Louis metropolitan area, providing valuable input for program development, creation of a wide variety of
internship possibilities, and assistance with a vigorous placement program for MPPA graduates. Interns may be placed in planning agencies, city managers' offices, administrative departments, or budgeting offices. An internship is required for students without substantial experience in the public or nonprofit sectors. MPPA students employed in public agencies can receive 3 hours of credit for internships in those agencies. To do so, students must develop, in consultation with their advisors, special research projects outside the scope of their regular employment duties. Credit is granted after successful completion of the project and a written paper at the end of the semester.

## Graduate Certificate Program in Nonprofit Organization Management and Leadership

Through the Public Policy Administration Master's Program, the University offers a graduate certificate program for students who are current professional staff, board members, and other leaders of nonprofit and voluntary organizations, as well as those who plan to work in the field. There are only two such graduate programs in Missouri. The certificate can be taken by itself or in conjunction with the pursuit of the master's in public policy administration or a graduate degree in another field. Course credits earned in he certificate program can be applied to the MPPA, but a separate application may be required.
A. The graduate certificate in nonprofit management and leadership requires the completion of 18 credit hours. Nine of these are the following core courses:

1. PPA 4940, same as Pol Sci 4940, Soc, or SW 4940, Leadership and Management in Nonprofit Organizations (3 hours)
2. PPA 4911, same as Pol Sci and SW 4911, Management Issues in Nonprofit Organizations: Staff Management Issues (1 hour)
3. PPA 4912, same as Pol Sci and SW 4912, Management Issues in Nonprofit Organizations: Legal Issues in Governing and Managing Nonprofit Organizations (1)
4. PPA 4913, same as Pol Sci and SW 4913, Management Issues in Nonprofit Organizations: Financial Issues
5. PPA 4960, same as Pol Sci and SW 4960, American Philanthropy and Nonprofit Resource Development (3 hours)
B. Six hours of electives are to be taken from selected courses in accounting, business administration, economics, management, marketing, political science, psychology, public policy administration, and sociology. A student may choose among these courses or other courses approved by the program director. (All Graduate electives must be at the 6000 course level.)
C. Three hours of internship are also required, or graduate students should demonstrate either a professional field experience equivalent to the internship or be required to participate. Any request for an exemption from the internship requirement must be approved by the nonprofit program director after a review of the student's professional or managerial field experience with appropriate documentation. Students who receive an exemption must take another 3 hours of electives from the selection in area B .
The internship will include learning activities in management and governance processes in nonprofit organizations, as well as a seminar in which students will critically reflect on their field experience with a faculty supervisor.

Requirements of admission to the graduate certificate program are the same as those required for admission to the Graduate School: an undergraduate degree, and a GPA of 2.75 or better.

## Graduate Certificate Program in Local Government Management*

(*Pending approval by the Coordinating Board of Higher Education)
Through the Public Policy Administration Master's Program, the University offers a graduate certificate program in local government management for students who are current professional staff, elected or non-elected local government officials or who are interested in pursuing a career in the local government sector. The certificate can be taken by itself or in conjunction with the pursuit of the master's in public policy administration or a graduate degree in another field. Course credits earned in the certificate program can be applied to the MPPA, but a separate application may be required.
A. The graduate certificate in local government management requires the completion of 18 credit hours. Twelve of these are the following core courses:

1. PPA 6340, Seminar in City Administration OR

PPA 6350, Issues in Urban Management (3 hours)
2. POL SCI 6470, Proseminar in Urban Politics OR POL SCI 6471, Seminar in Urban Politics ( 3 hours)
3. PPA 6449, Human Resources Management (3 hours)
4. PPA 6180, Government Budgeting and Financial Control (3 hours)
B. Three hours of electives are to be taken from selected courses in, business administration, criminal justice, economics, political science, public policy administration, and sociology. A student may choose among these courses or other courses approved by the program director. Electives will be chosen from the following:
PPA 6340, Seminar in City Administration
PPA 6350, Issues in Urban Management
POL SCI 6470, Proseminar in Urban Politics
POL SCI 6471, Seminar in Urban Politics
POL SCI 6440/PPA 6400, Proseminar in Public Policy
Administration

PPA 6449, Human Resources Management
PPA 6180, Government Budgeting and Financial Cortrol PPA 4940, Leadership and Management of Non-Profit Organizations
PPA/BUS 6680, Negotiating Workplace Conflict
PPA 6600, Organizational Behavior and Administrative Processes
ECON 6700, Political Economy of Metropolitan Aretis CCJ 6442, Communities and Crime
SOC 5430, Policy Mediation Processes
ECON 6750, The Political Economy of Health Care
POL SCI 6433, Elections, Public Opinion, and Public Policy
*Other courses may be added as deemed appropriate for content.
C. Three hours of internship are also required, or gracuate students should demonstrate either a professional field experience equivalent to the internship or be required to participate. Any request for an exemption from the internship requirement must be approved by the local government program director after a review of the student's professional or managerial field experience with apprispriate documentation. Students who receive an exemption must take another 3 hours of electives from the section in area 1 B . The internship will include learning activities in management and governance processes in local government jurisdictions, as well as a seminar in which students will critically refl ect on their field experience with a faculty supervisor.

Requirements of admission to the graduate certificate program are the same as those required for admission to the Graduate School: an undergraduate degree, and a GPA of 2.75 or better.

## Career Outlook

The current outlook for graduates of the interdisciplinary Master's Degree in Public Policy Administration Program is quite promising. Recent graduates of this program bave found careers as budget analysts, personnel analysts, transportation planners, and human resources planner; with local, regional, state, and federal agencies, and the norprofit sector.

## Course Descriptions

## 4911 Management Issues in Nonprofit Organizaticns: Staff Management Issues (1)

Prerequisite: Junior Standing. Same as Pol Sci 491 land SW 4911. This course addresses issues involved in managing staff in nonprofit organizations. The course will cover the following topics: fundamentals of staff supervision; balancing supervisory processes with counseling and coaching; selecting, hiring, evaluating, and terminating staff; legal issues that affect these processes.

4912 Management Issues in Nonprofit Organizations: Legal Issues in Governing and Managing Nonprofit Organizations (1)
Same as Pol Sci 4812 and SW 4912. This course addresses legal issues involved in managing and governing nonprofit organizations. The course will cover the following topics: The Board as steward of the organization; Director and officer liability; tax laws concerning charitable giving; legal issues in managing staff and volunteers (e.g., hiring, evaluating, and terminating employees); Missouri nonprofit law.

## 4913 Management Issues in Nonprofit Organizations: Financial Issues (1)

Same as Pol Sci 4913 and SW 4913. This course addresses financial issues involved in governing and managing nonprofit organizations. The course will cover the following topics: Cash flow analysis; budgeting; fund accounting; cost accounting (determining costs for programs and services); understanding and using standard financial statements, including balance sheets, cash flow statements, statements of activity, and operating and capital budgets.

## 4940 Leadership and Management in Nonprofit

 Organizations (3)Prerequisite: Junior standing. Same as Pol Sci 4940, SW 4840 , and Soc 4940. Addresses the role and scope of the independent sector in the United States, as well as the leadership and management of nonprofit organizations within that sector. Topics include the economic and political scope of the independent sector, the role of volunteerism in a democratic society, and the role and scope of philanthropy. Topics in voluntary organization management and leadership include the dynamics, functions and membership structure of NPOs, especially staff-board and other volunteer relations; governance and management of NPOs; resource mobilization; and program development management and evaluation.

## 4960 American Philanthropy and Nonprofit

 Resources Development (3)Prerequisite: Junior standing or consent of instructor. Same as Pol Sci 4960 and SW 4960. This course addresses the history, philosophy, roles and scope of philanthropy in the United States, including its role in the nonprofit, voluntary sector. It further examines the contemporary forces which impact philanthropy and charitable giving, both by institutions and individuals. The course examines the effective planning and management of development programs (e.g., annual giving), fund raising vehicles (e.g., mail solicitations) and the fund raising process, form planning through donor relations.

6000 Introduction to Policy Analysis (3)
Same as Pol Sci 6410. Systematic development of a critical/analytic base for dealing with public policy.

## 6010 Introduction to Policy Research (3)

Same as Pol Sci 6401. Procedures for testing explanations, including research design, principles of measurement, probability sampling, methods of data collection, and techniques for analyzing data.

## 6080 Microeconomics for Policy Analysis (3)

Prerequisites: Graduate student standing. Same as Econ 5010. This course introduces microeconomic analysis of consumers, firms, and government, with an emphasis on policy applications. It assumes no prior training in economics and is appropriate for graduate students in public policy administration, nonprofit management, political science, gerontology, criminology and criminal justice, and other related fields.

## 6150 Directed Reading and Research in Public Policy (1-10)

Same as Pol Sci 6415. Prerequisite: Consent of Instructor. Independent study through readings, reports, research projects, and conferences. May be repeated for credit, provided the subject matter is different.

6170 Income and Pension Policy for the Aged (3) Prerequisite: Graduate standing or consent of instructor. Same as Pol Sci 6417, Ger 6417, and SW 6417. (MSW students normally take the social policy foundation course prior to enrolling in this course.) Examination of federal, state, and local policies that affect the economic well being of the elderly. The development of social security programs and pension programs is explored within a historical context. Emphasis is placed on the analysis of current policy problems and proposed solutions.

6180 Governmental Budgeting and Financial Control (3) Prerequisite: BA 5400. Same as BA 5450. A study of municipal and federal financial control and budgeting procedures with emphasis on public policy. The impact of financial control on top management decisions and the effect of budget strategies on the allocations of public funds.

## 6210 Public Sector Microeconomics (3)

Prerequisites: Econ 3001, or BA 5001, or PPA 6080. (Same as Econ 5500). Application of tools of intermediate microeconomics to address public sector issues. Special emphasis is placed on critically analyzing current public policy debates using the models developed. Topics covered include: cases in which competitive market fails to allocate resources efficiently (e.g., externalities and public goods), importance of property rights, incentive effects of the tax and transfer system, and the fundamentals of cost-benefit analysis.

## 6340 Seminar in City Administration (3)

This course provides an overview of the working environment of a city administrator and is jointly sponsored by the local city managers association. Professional city personnel make presentations to the students on six major
topics: political structure, organizational structure, service delivery, finance, personnel policies and practices, and leadership. The course provides direct observation of city council meetings, visits to various city facilities, exposure to different philosophies and styles of city management, and provides students a chance to assemble facts, evaluate options, and present policy recommendations for real problems that local administrators face.

## 6350 Issues in Urban Management (3)

Designed to evaluate management issues that confront managers in local government from a political perspective. The format will include an intense review and discussion of original case studies from actual local government situations. The specific focus of this course will vary. Course may be repeated.

## 6400 Proseminar in Public Administration (3)

Same as Pol Sci 6440. Examination of major approaches to analyzing public policies and their administration. Emphasis is on the effects of administrative organization and procedures on policy decisions and their impacts. Specific topics may include administrative accountability, intergovernmental relations, public-private interaction, implementation processes, bureaucratic expertise, the legal environment of public policy administration, and public service and merit issues.

## 6430 Health Care Policy (3)

Prerequisites: Graduate standing and consent of instructor. Same as Pol Sci 6443, Ger 6443, and SW 6443. (MSW students will normally take the social policy foundation course prior to enrolling in this course).
Survey course examining current issues in health policy that face the nation. Policies are placed in a historical context to show how issues have been influenced by different political and economic conditions. Secondary consequences and limitations of current trends in health policy are explored.

## 6440 Seminar in Public Policy and Aging (3)

Prerequisite: Consent of instructor. Same as Ger 6444 and Pol Sci 6444. The study of specialized issues and methods related to federal, state, and local policies that affect the elderly. Potential policy areas to be covered include housing, taxation, mental health, transportation, etc. May be repeated for credit, provided the subject matter is different.

## 6460 Selected Topics in Health Care Policy (3)

Prerequisite: Consent of instructor. Same as Pol Sci 6446 and Soc 6446. The study of specialized issues and methods relating to health care policy. May be repeated for credit, provided the subject matter is different.

## 6490 Human Resources in the Public Sector (3)

Prerequisite: PPA 6600 or consent of instructor. Same as Pol Sci 6449 and SW 6449. Presents an overview of personnel and labor relations in the public sector. Particular emphasis
placed on issues which are unique to the public sector, such as the merit system, the questions of representative bureaucracy and the constraints of personnel in the nonprofit sector. The topics include personnel reforms in the federal sector, equal employment and affirmative action policies, testing, selection, hiring, comparable worth, job evaluation, and labor relations including grievance arbitration ans. collective bargaining.

6510 Urban and Regional Planning and Public Policy (3) Prerequisites: Graduate standing or consent of instruct or. Focuses on the interdependent processes of urbanization and public policy. Students will acquire an understanding of urban planning and public policy in North America.

## 6550 Strategic and Program Planning for Nonprofit Organizations (3)

Prerequisites: Graduate standing or consent of instructor. Same as Pol Sci 6490 and SW 6491. Strategic and program planning enable an organization to concentrate on efforts and set priorities guided by a mission, vision, and an understanding of its environment. Focus is on preparing a strategic plan and a program plan for a nonprofit organization and analyzing an organization's ability tc deliver goods and/or services to its constituents in today's economic, social and political climate.

## 6600 Organizational Behavior and Administrative

 Processes (3)Same as MGMT 5600. The theoretical and research contribution of the behavioral sciences to management and administration are examined and applied to selected organizational situations. Areas to be considered from the standpoint of both individual and organizational performance are communication, motivation, conflict, decision making, goal setting, leadership, organizational design, climate, development, and control. Utilizing a systems perspective, the course attempts to develop in each student an ability to analyze and solve organizational problems.

## 6680 Negotiating Workplace Conflict (3)

Prerequisites: PPA/MGMT 5600, and Graduate Standing. Same as MGMT 5612 and Soc 5451. Examines conflict and cooperation between individuals, groups, and organizations over the control of work. A central theme is how this conflict is expressed, controlled, and resolved. Students will participate in exercises to learn the basics of two-party' negotiations.

6750 Introduction to Evaluation Research Method: (3) Prerequisites: At least one course in Research Design and Statistics at the graduate level. Same as Ps 5475, So: 5475, and CCJ 5475. A comparative study of research strategies with regard to data sources, data collection, and mode; of analysis that are appropriate for program evaluation research. Attention is given to observational, survey, and quasi-experimental designs.

6800 Management Information Systems (3)
Prerequisite: None. (Same as IS 5800). This course provides an overview of the established and contemporary issues related to information systems within organizations. Topics include the practices and tools associated with topics such as the management of IS-based investment projects, the design and implementation of IS, the alignment of IS strategy with organizational strategy, information security and privacy, and gaining a competitive advantage through IS.

## 6900 Cases in Public Policy Administration (3)

Prerequisites: 24 hours of public policy administration courses, at least 15 of which are in core courses. This capstone course intensively analyzes public policy administration cases drawn from a variety of issues and settings.

## 6950 Internship (3)

Independent study involving work with an appropriate public, private, or nonprofit agency.

## 6990 Exit Project Research (1)

Prerequisites: Completion of or simultaneous enrollment in other degree requirement courses. The exit project is viewed as the capstone of the MPPA program. As such, it is meant to be undertaken toward the end of a student's program, usually during the final semester. Its purpose is to provide evidence to the faculty that the degree candidate has mastered the skills acquired in the various courses completed during residence at the University and can apply them to the analysis of a practical research problem.

## Pierre Laclede Honors College

The Pierre Laclede Honors College mission is to enrich the educational experience of a select group of highly motivated and intelligent undergraduates. With this in mind, it enrolls promising students who give clear indication that they are ready to accept academic challenges and become creatively involved in the learning process.

Given this special mission, the college has a unique structure and identity. Unlike the university's other schools and colleges, it has no academic departments or areas of its own, and it grants no degrees. Instead, it brings together a cross section of the university's students and teachers in a special curriculum, designed to meet students' general education and other breadth of study requirements.

- A four-year program open to entering freshmen and extending over a student's entire undergraduate career;
- A two-year program open to a select group of third-year students who are either continuing at or have transferred to the university and are engaged in work on a major.
Honors College courses are generally taught seminar style, with a stress on reading, small group discussion, and writing.


## The Honors College Writing Program

Both programs include participation in the Honors College writing program, Writing through the Curriculum, which involves formal courses in composition (including at least two of Honors 1100, 3100, and 4100) and informal consultations with the director of the writing program. In the final year, this culminates in the compilation of a personal Honors College writing portfolio (4100).

## Undergraduate Research

All Honors College students must fulfill a 6-credit-hour independent study requirement (see below under Curriculum). Many students meet all or part of this requirement by undertaking a research project supervised by faculty in their major department. Additional financial support is available for supervised undergraduate research projects in all majors.

## Faculty

Honors College instructors are drawn from faculty in all academic divisions of the university but mainly from the "traditional disciplines" of the College of Arts and Sciences. What all these teachers share in common is a willingness to work closely with intellectually curious and academically high-achieving students. Faculty design courses directed toward such an audience and based on small discussion seminars. Thus the honors faculty is an organic body, growing each semester as new faculty join in the honors project. Their talents add to the Honors College's already rich instructional pool of more than 100 regular and full-time
faculty, many of whose teaching and scholarship have been singled out for special professional and university awards.

## Honors Scholars

Honors College scholars are our students, highly qualified and motivated individuals from a broad range of publi: and private secondary schools and colleges. They enter th: college with diverse backgrounds and interests and rernain part of it while simultaneously enrolling in classes anc pursuing bachelor's degrees in other academic divisions of the university.

Most honors students major in the traditional liberal arts disciplines spanning the humanities, social sciences, mathematics, and natural sciences, but about a third fccus on using their undergraduate education to prepare for careers in business, education, nursing, or engineering. Whatever their undergraduate majors, most Honors College students jplan to go on to graduate study or professional schools, although a significant number successfully seek employment immediately after graduation. Honors faculty and staff provide advice and guidance in both course choice and career plans.

Four-Year Program ( 40 credit hours total):
Approximately one-third of the 120 hours honors students earn toward graduation are taken in the Honors College or under its auspices. Most of these credits are associate 1 with a sequence of honors courses designed specifically for the college, the majority of which are taken during the firs. two years. During this period, these students fulfill virtually all of the university's general education requirements, uscally in innovative ways. In their junior and senior years, honcrs scholars also earn honors credit for work done within heir major fields, work which includes the possibility of internships, independent study projects, and advanced undergraduate research.

## First Year

Scholars take Honors 1100, 1200, and 1201, and one zourse each from the Western Traditions and Non-Westerm Traditions seminar series. Students may take a seminar from the American Traditions series as an elective or in pla:e of the Western Traditions seminar. **
1100, Freshman Composition
1200, Freshman Symposium: Cultural Traditions I
1201, Cultural Traditions II
1110-1150, The Western Traditions Series
1210-1250, The American Traditions Series (elective) 1310-1350, The Non-Western Traditions Series

Second Year ( 6 credit hours):
Scholars take two of the following Honors classes:
2010, Inquiries in the Humanities
2020, Inquiries in the Fine and Performing Arts
2030, Inquiries in the Social and Behavioral Sciences
2040, Inquiries in Mathematics and Computing 2050, Inquiries in the Sciences

2060, Inquiries in Business
2070, Inquiries in Education
2080, Inquiries in Nursing
Honors students in the four-year program who take Honors 3100 ("Writing the City") may present it for their honors certificate as one of their 3000 -level seminars. They may also, depending on their major, present it to meet their graduation requirement for Junior level composition.

During the first two years, honors scholars will take additional course work in other areas, such as mathematics, natural science, foreign language, and major prerequisite classes to satisfy various university, Honors College, and specific degree requirements.

## Third and Fourth Years (19 credit hours):

Honors scholars in the four-year program take at least four seminars ( 12 credit hours) from the Advanced Seminar (3010-3080) and/or Research Seminar (3510-3580) series. They may take more, and many do where this is compatible with their major and/or minor requirements. In addition, honors students do 6 credit hours in independent study projects, normally in or closely related to their major field. These independent study projects normally carry credit in the major, but can be done as Honors College independent study or research projects (Honors 4900-4990). During the final year, students also take Honors 4100, a 1-credit capstone for the Honors College writing program.

Two-Year Program (22 credit hours total):
Scholars in this program will take a combination of Honors College courses and also earn honors independent study credit for work done in their major fields. The 22 credit hours must include 6 credits of independent study, as for the four-year program.

Third Year ( 9 credits):
During the first year of the two-year program, students take three honors seminars, including 3100, Advanced Composition: Writing the City; one course from the Inquiries series (2010-2080; one course from either the Advanced Seminar (3010-3080 or Research Seminar (35103580 series. In addition, 3 credit hours of independent study may be taken during this year, normally in or closely related to their major.

## Fourth Year (7 credits):

The final year of the two-year program involves three courses chosen from the 3000 and 4000 level options, including 4100, the honors writing portfolio ( 1 credit hour) and at least one course chosen from the $\mathbf{3 0 1 0 - 3 0 8 0}$ or $\mathbf{3 5 1 0}$ 3580 series. In addition, students will complete their independent study requirements with 3 or 6 hours of project, internship, or research work.

## Other academic features and requirements.

## Pass/Fail

The satisfactory/unsatisfactory option does not apply to any course work undertaken for Honors College credit.

## Admission and Retention

To be considered for admission to either the two-year or four-year honors program, a candidate must file a special Honors College application as well as a general university application. These application forms and additional information concerning scholarship and stipend awards, general eligibility guidelines, and the admissions process are available from the Honors College administrative office at (314) 516-6870 or from the office of admissions.

## Scholarships and stipends

Every new freshman or transfer student admitted in good standing to the Honors College receives academic scholarship support. Scholars continue to receive these awards as long as they meet the criteria associated with their particular scholarship grant.

## Good academic standing

To remain in good standing, a student must maintain a cumulative GPA, in all his or her UM-St. Louis courses, of at least 3.2 , and must continue to meet the requirements of the honors program for which he or she was initially admitted. Unless other arrangements have been made, Honors College students are also expected to be full time, that is, to register for and satisfactorily complete at least 12 credit hours per semester. Students wishing to enter the Honors College as part-time students, or to change to part-time status, must make prior arrangements with the Honors College dean.

## UM-St. Louis: an Urban Land Grant Institution

 Given its location in St. Louis, and because it is part of an urban land grant university, Pierre Laclede Honors College seeks to encourage awareness of the manifold benefits of pursuing an undergraduate education in a dynamic and varied urban community. This is accomplished partly through the Honors Curriculum through facilitating cultural and other outings in the city, and by encouraging students to include in their academic program courses, research projects, and/or internships which exploit the university's manifold connections with city people and its partnerships with leading city institutions such as the Missouri Botanical Gardens, the Missouri Historical Society, and the Mercantile Library of St. Louis. Many honors students fulfill all or part of their independent study requirements working through such partnerships.
## International Study and Other Exchange Programs

 Honors students are encouraged to consider a semester's or a year's study at another institution. This can be done through the University's Center for International Studies, which administers exchanges with more than 70 universities in Europe, Africa, Asia, Australia, and South and Central America as well as the Missouri-in-London program. Students in the Honors and International Business program are normally required to spend at least a semester abroad as an exchange student or on an approvedinternational business internship. Or students may, through the National Student Exchange, which is administered for the university by the Honors College, attend any one of more than 100 universities in the United States and Canada.

## Course Descriptions

Please note that all honors courses are planned to fulfill UMSt. Louis graduation requirements, primarily in general education and the state requirement for American history and government. For further guidance on these requirements, please see the university general education matrix.

Selected Honors courses may also meet divisional area study requirements, for instance in international studies or cultural diversity. Please note also that several Honors courses in the 3000 and 4000 levels, can be used to fulfill major, minor, and certificate requirements, where that has been agreed by other divisions or departments of the university.

Honors course lists and descriptions, published each semester before the beginning of the registration period, identify clearly which seminars fulfill these various requirements. When in doubt, students are urged to consult their Honors College advisor.

Important note: Unless otherwise indicated, all Honors seminars and courses require students to obtain the consent at the Honors College during registration. In practice, "consent of the dean of the Honors College" means consent of the student's Honors advisor.

## 1100 Freshman Composition (3) [C]

Prerequisite: Consent of the dean of the Honors College. Theory and practice of writing expository prose. Emphasis on individual tutorial. Assignments will be linked with topics discussed in Honors 101.

## 1110-1150 Western Traditions (3)

Prerequisite: Consent of the dean of the Honors College. All Western Traditions seminars will be based on the reading and discussion of works of exceptional importance in the development of western culture and civilization. The works to be discussed in each seminar will follow a central theme (defined by its particular relevance to the traditional academic disciplinary areas of the humanities, arts, social sciences, mathematics, or sciences) but will relate that theme to wider developments in Western Traditions and to the American concept of a liberal education.

1110 Western Traditions: Humanities [C, H].
1120 Western Traditions: Arts
1130 Western Traditions: Social and Behavioral Sciences [C, SS]
1140 Western Traditions: Mathematics
1150 Western Traditions: the Sciences
1200 Freshman Symposium: Cultural Traditions I (3)
Prerequisite: Consent of the dean of the Honors College.

This course surveys Western and Non-Western Cuirural Traditions from their begimnings until 1800. It will introduce the intellectual traditions of a wide variety of cultures through major works of literature, religion and philosuphy.

1201 Freshman Symposium: Cultural Traditions II (3) Prerequisites: Consent of the Dean of the Honors College. This course surveys Western and Non-Western cultural Traditions from the 1800 's to current times. It will in roduce intellectual traditions of a wide variety of cultures through major works of literature, religion and philosophy.

## 1210-1250 American Traditions (3)

Prerequisite: Consent of the dean of the Honors Colle ze. Honors seminars in the American Traditions series involve readings and discussion of major importance in the development of the culture, politics, ideologies, and values which are or have been characteristic of the United Stites of America. Every American Traditions seminar will cover a broad range of time, and each may include contemporary issues. American Traditions 1230 (Social Sciences) satisfies the American history and government requirement ard any course in the American Traditions sequence may be taken to satisfy one of the core requirements for the American Studies minor.
1210 American Traditions: Humanities (C, H) 1220 American Traditions: The Arts 1230 American Traditions: Social and Behavioral Sciences (V, SS)
1240 American Traditions: Mathematics
1250 American Traditions: The Sciences

## 1310-1350 Non-Western Traditions (3)

Prerequisite: Consent of the dean of the Honors Colle ge. Study of Non-Western societies, "traditional" or "mocern," offers a reminder that, however defined, "the West" dres not encompass the full range of human potentiality whether in terms of culture, values, behavior or ideas. Based on reading of significant primary texts and/or important secondary works, these seminars remind us of the realities of humnan diversity and provide perspectives on our own world. NonWestern Traditions seminars may be used to satisfy cultural diversity general education requirements.

1310 Non-Western Traditions: Humanities [MI, C.D, H] 1320 Non-Western Traditions: The Arts [CD] 1330 Non-Western Traditions: Social and Behavio :al Sciences [C, V, CD, SS]
1340 Non-Western Traditions: Mathematics [CD] 1350 Non-Western Traditions: The Sciences [CD]

1310 Non-Western Traditions Series Humanities (i) Seminars focus on different topics in the humanities tut address themes and problems in non-western cultures that are related to the freshmen core classes (Honors 1200 anc 1201). These topics will be examined in depth through reading discussion, and students will produce formal papers and participate in individual or small group presentations.

1330 Non-Western Traditions Series-Social Sciences (3)
Seminars focus on different topics in the social sciences but address themes and problems in non-western cultures that are related to the freshmen core classes (Honors 1200 and 1201). These topics will be examined in depth through reading discussion, and students will produce formal papers and participate in individual or small group presentations.

## 1900 Independent Cross-Cultural Readings (1-3)

This course is an independent readings course centered on cultural interactions. Students will select readings from an approved list of choices related to Western and Non-Western texts. Students will discuss the works with the faculty member online or in person. One formal paper is required for the class with the length relative to the number of credit hours of the course (1-3).

## 2010-2080 Honors Inquiries (3)

Prerequisite: Consent of the dean of the Honors College. Inquiries seminars focus on the particular contributions academic disciplines can make to relatively broad areas of inquiry, and reading, discussion, writing and where appropriate, laboratory work or field trips will enhance students= understanding of the strengths, frailties, and particular characteristics of one or more disciplinary strategies. Inquiries courses may be used to meet relevant General education requirements. Where special arrangements have been agreed, they can meet more specific departmental and divisional requirements. The course number may be repeated for credit whenever the topic is substantially different.

2010 Inquiries in the Humanities [C, H]
2020 Inquiries in the Fine and Performing Arts [C, H]
2030 Inquiries in the Social and Behavioral Sciences [SS]
2040 Inquiries in Mathematics and Computing [MS]
2050 Inquiries in the Natural Sciences [C, MS]
2060 Inquiries in Business
2070 Inquiries in Education
2080 Inquiries in Nursing

## 2310 Cultural Diversity in the Humanities (3) [CD]

This seminar focuses upon cultural diversity themes, texts, and perspectives within the humanities.

2330 Cultural Diversity in the Social Sciences (3) [CD] This seminar focuses upon cultural diversity themes, texts, and perspectives within the social science.

## 3100 Honors Advanced Composition: Writing the City

 (3)Prerequisite: Consent of the Dean of the Honors College. Enhances critical thinking, research, discussion, and writing skills by focusing on the city of St . Louis and on the specific fields of study of those enrolled in the course. Issues such as depth and development of content, voice, style, tone, correct expression, and research techniques are among the topics emphasized. Students maintain a Commonplace Book of journals, drafts, and creative writings; they also submit a
minimum of four formal papers. This course is required for transfer students (two-year Honors Program) and an elective for students on the four-year program. For students on either program, Honors 3100 meets the Advanced Composition requirement of the university.

3010 Advanced Honors Seminar (3)
Prerequisite: Consent of the dean of the Honors College. Open only to Honors College Students and not acceptable for graduate credit. Usually restricted to juniors and seniors, these advanced seminars focus on in-depth study of a significant body of subject matter. The perspective employed will normally be interdisciplinary or multidisciplinary and will underscore the value of making connections between diverse areas of study. These courses will not usually require specific prerequisites, but may (with the consent of the appropriate department or division) be taken as major or minor courses. The course number may be repeated for credit whenever the topic is substantially different.

## 3010 Advanced Honors Seminar in the Humanities 3020 Advanced Honors Seminar in the Fine and Performing Arts <br> 3030 Advanced Honors Seminar in the Social and Behavioral Sciences <br> 3040 Advanced Honors Seminar in Mathematics and Computing <br> 3050 Advanced Honors Seminar in the Sciences <br> 3060 Advanced Honors Seminar in Business <br> 3070 Advanced Honors Seminar in Education <br> 3080 Advanced Honors Seminar in Nursing

## 3510-3580 Research Seminar (3)

Prerequisites: Consent of the Dean of the Honors College. Open only to Honors College students and not acceptable for graduate credit. Modeled on and for some students affording a preview of the postgraduate or professional research seminar, Honors Research seminars bring students face to face with primary research, as appropriate in the library, the laboratory, and/or field work, utilizing appropriate disciplinary perspectives and secondary reading. These courses may be cross-listed with other advanced courses in appropriate departments/divisions of the university, and as such may carry specific course prerequisites and/or require the specific consent of the instructor.

## 3510 Research Seminar in the Humanities

3520 Research Seminar in the Fine and Performing Arts 3530 Research Seminar in the Social and Behavioral Sciences
3540 Research Seminar in Mathematics and Computing 3555 Research Seminar in the Sciences
3560 Research Seminar in Business 3570 Research Seminar in Education 3580 Research Seminar in Nursing 4100 Independent Portfolio Writing (1)

Prerequisites: Consent of the Dean of the Honors College and senior status. Open only to Honors College students and not acceptable for graduate credit. Students in this course will meet on a regular basis with the Director of Writing and other appropriate Honors faculty to revise and polish samples in the Honors writing portfolio which the student has compiled during his or her Honors College enrollment. With the assistance of the Director, the student will write an indepth analysis of his or her writing and will select the best examples of writing in his or her Honors Portfolio. During this independent study, the student may request help with research skills, writing issues, or application procedures for post-graduate courses or employment. Required of all students admitted and enrolled after August 1998; optional for others.

4900 Independent Study in Honors (1-6)
Prerequisites: Consent of the Dean of the Honors College. Open only to Honors College students and not acceptable for graduate credit. Most Honors students will fulfill their Honors independent study requirements in another department or division of the university. Where this is not possible, and where academic credit seems an appropriate reward for the independent study in question, the project may be undertaken as Honors 4900 , normally as a 3-credit course. This will involve substantial reading, research, and/or field work, and will be supervised by a permanent member of the Honors College academic staff. Completed proposal forms for this course must be submitted to the Honors College no later than the deadline for university registration.

## 4910 Independent Study (1-6)

Prerequisites: Junior/Senior Standing
This independent study course is designed for students who are participating in an approved, non-paid or paid internship. Often in conjunction with the student's major, the class requires an on-going journal and formal paper varying in length according to credit hours and hours of the internship work. Evaluation is based on the student's work, the completed form by supervisor of internship, and assigned papers and journal.

## 4910-4990 Honors Independent Research (3)

Prerequisites: Consent of the Dean of the Honors College. Open only to Honors College students and not acceptable for graduate credit. Honors students who wish to conduct individual research projects under the supervision of a member of the university's regular or full-time faculty may register for undergraduate credit and receive financial support on a cost-of-research basis. Such projects will usually be given appropriate course numbers in the student's major (or minor) department. Where this is not possible or otherwise inappropriate, students may register for credit in the Honors 39xx Independent Research series. In order to qualify for financial support and academic credit, completed proposal forms, together with a brief description of the research project, must be approved and signed by an appropriate member of the faculty and submitted to the Honors College not later than the semester deadline for
university registration. May be repeated for credit where the research topic/problem is substantially different or where it can be significantly extended. Faculty approval must be obtained for repeat credit.
4910 Honors Independent Research/Internship in the Humanities
4920 Honors Independent Research in the Fine and Performing Arts
4930 Honors Independent Research in the Social a.ad Behavioral Sciences
4940 Honors Independent Research in Mathematics and Computing
4950 Honors Independent Research in the Sciences
4960 Honors Independent Research in Business
4970 Honors Independent Research in Education
4980 Honors Independent Research in Nursing 4990 Honors Independent Research in Engineering;

## College Of Nursing

## Faculty

Juliann Sebastian, Dean
Ph.D., University of Kentucky
Shirley A. Martin, Dean Emeritus
Ph.D., Saint Louis University
Roberta K. Lee, Hubert C. Moog
Endowed Professor of Nursing*, Dr. PH, University of Texas-Houston
Jean Bachman, Associate Professor*, D.S.N., University of Alabama-Birmingham

Anne Fish, Associate Professor*
Ph.D., University of Michigan-Ann Arbor
Ruth L. Jenkins, Associate Professor*
Ph.D., Saint Louis University
Donna Taliaferro, Associate Professor*
Ph.D., Texas Women's University-Denton
Kathleen Borcherding, Assistant Professor
Ph.D., Saint Louis University
Wilma Calvert, Assistant Professor
Ph.D., University of Missouri-St. Louis
Dawn Garzon, Assistant Professor*
Ph.D., University of Missouri-St. Louis
Kuei-Hsiang Hsueh, Assistant Professor*
Ph.D., University of Arizona
Kimberly Stieglitz, Assistant Professor*
D.N.S., Rush University

Judith Maserang, Clinical Professor*, Ph.D, Saint Louis University
Dottye Akerson, Clinical Associate Professor
Ph.D., Saint Louis University
Cynthia Billman, Clinical Associate Professor
MSN, University of Missouri-Columbia
Susann Farberman, Clinical Associate Professor M.Ed., PNP, Washington University

Susan Kendig, Clinical Associate Professor
MSN, University of Missouri-Kansas City
Deborah Kiel, Clinical Associate Professor MSN, Saint Louis University
Sandy Lindquist, Clinical Associate Professor* Interim Associate Dean
Ph.D., Saint Louis University
Ann C. Seckman, Clinical Associate Professor
MSN, Clarkson College
Bussen, Jennifer, Clinical Assistant Professor
MSN, University of Missouri-St. Louis
Julie Campbell, Clinical Assistant Professor
MSN, University of Missouri-St. Louis
Kathy Lee, Clinical Assistant Professor
MSN, Jewish Colleges of Nursing and Allied Health
Elizabeth Mantych, Clinical Assistant Professor
MSN, Saint Louis University
Jean Nelson, Clinical Assistant Professor
Ph.D., University of Missouri-St. Louis

Melodie Rowbotham, Clinical Assistant Professor
MSN, University of Missouri-St. Louis
Diane Saleska, Clinical Assistant Professor
MSN, University of Missouri-St. Louis
Linda Sherman, Clinical Assistant Professor
MSN, Southern Illinois University-Edwardsville
Darlene Sredl, Clinical Assistant Professor
Ph.D., University of Missouri-St. Louis
Yakima Young-Shields, Clinical Assistant Professor
MSN, University of Missouri-St. Louis
Vicky Becherer, Clinical Instructor
MSN, Jewish Hospital College of Nursing
Beth Dudley, Clinical Instructor
BSN, McKendree College
Gary Frandsen, Clinical Instructor
MSN, University of Missouri-St. Louis
Chris Recktenwald, Clinical Instructor
MSN, University of Missouri-St. Louis
Chris Spencer, Clinical Instructor
BSN, Southern Illinois University-Edwardsville
Jennifer Taylor, Clinical Instructor
MSN, University of Missouri-St. Louis
Janet Whitworth, Clinical Instructor
MSN, University of Missouri-St. Louis
Mary Kay Wolf, Clinical Instructor
MSN, Saint Louis University
*Members of Graduate Faculty

## General Information

The College of Nursing offers programs at the undergraduate and graduate levels. Knowledge and skills needed to complete the professional licensure examination to become a registered nurse are available through a basic baccalaureate option. Nurses who have obtained their basic nursing education through associate degree or diploma nursing programs may fulfill the requirements for the B.S.N. completion option without repetition of previous nursing education. The master of science in nursing program is offered in cooperation with the School of Nursing at University of Missouri-Kansas City. The Ph.D. program in Nursing is offered in cooperation with the Schools of Nursing at University of Missouri- Columbia and Kansas City. Admission to the $\mathrm{Ph} . \mathrm{D}$. program is available at the post B.S.N. and M.S.N. levels.

## Undergraduate Studies

The College of Nursing provides course work leading to the Bachelor of Science in nursing. The program is accredited by the Commission on Collegiate Nursing Education and approved by the Missouri Board of Nursing. The undergraduate program offers two means for achieving the bachelor's degree in nursing: studies that are preparatory for completion of the professional nurse licensure examination (pre-licensure track) and advanced placement for the professional registered nurse without repetition of fundamental nursing courses (RN/BSN track). An accelerated prelicensure option is available for
qualified persons who hold earned degrees in nonnursing fields, or outstanding students who have completed all prescribed general education and science course work. Baccalaureate students meeting admission criteria may participate in the Pierre Laclede Honors College.

## Admission Policies

## BSN Traditional Admission Criteria

## NURSING MAJOR (Pre-clinical)

Students admitted to the nursing major begin by completing all nursing prerequisites and general education coursework. Admission to the nursing major does not guarantee enrollment in clinical nursing courses unless a student is admitted into the Freshmen Honors Program. In order to be considered for the nursing major students must meet the following criteria:

## Freshmen Honors Program

First-time freshmen and applicants with fewer than 24 college credit hours:

- Minimum cumulative G.P.A. of 3.0 on 4.0 scale
- High school class rank in upper $1 / 4$ of graduating class.
- Minimum ACT of 24 .
- Admission to the Pierre Laclede Honors College. (http://www.umsl.edu/divisions/honors/index.html)

Note: Students admitted to the Honors Nursing Program will be guaranteed a space in the clinical major, providing satisfactory academic progress,

## General Freshmen Admission Nursing Major (Preclinical)

First-time freshmen and applicants with fewer than 24 college credit hours:

- Minimum cumulative G.P.A. of 2.5 on 4.0 scale
- High school class rank in the upper 1/3 of graduating class
- Minimum ACT of 21


## Transfer Admission Nursing Major (Pre-clinical)

Applicants with 24 or more transferable college credit hours:

- Minimum 2.5 G.P.A. on 4.0 scale on 24 or more transferable credit hours from an accredited college or university.


## CLINICAL MAJOR

Spaces for the clinical nursing major are assigned on a competitive and space available basis for each admission period Applicants must meet the following criteria:

- Minimum 2.5 cumulative G.P.A. on 4.0 scale
- Completion of all prerequisites courses
- Minimum 2.5 cumulative G.P.A. in Chemistry, Anatomy and Physiology I \& II, and Microbiology (first attempt calculated only)
- Required science courses completed withir 10 years prior to enrollment

To Apply For Nursing Major (Pre-clinical)
First-time freshmen and applicants with fewer than 24
college credit hours, send the following:
Completed University application
Official high school transcripts or GED score
Official ACT or SAT score
Official college transcripts, if applicable
Applicants with 24 or more transferable college credit hours, send the following:

Completed University application
Official college transcripts

## To Apply For Clinical Major

To be considered for the clinical major, students must file a separate application available through the College's website or Office of Student Services. Students should complete an application for clinicals during their last semester of enrollment in.prerequisite coursework and send the following:

Completed University application
Completed College of Nursing clinical applicat on Official college transcripts

Application deadlines: For fall semester clinicas apply by February 1 ; for spring semester clinicals apply by October 1.

Study plans are samples. A student's progressicn through the program may vary. In addition, adnission requirements and curriculum are subject to change.

## Degree transfer pathway to accelerated opticn

- Admission to the university (see Undergracuate Admission and Application Procedure sect on in this Bulletin)
- Baccalaureate or higher degree from regiorally accredited college or university. Applicants not holding a baccalaureate degree must have completed 62 semester hours of general education academic credit before beginning the program, including prescribed course work, as evidenced by official transcript.
- Minimum grade point average of 3.0 on 4.C scale for students with baccalaureate or higher degree or 3.2 on a 4.0 scale for students not hold a baccalaureate degree.
- Completion of all prerequisites general education and science courses for major in nursing with grade of C or higher.
- Two letters of recommendation that addres: applicant's ability to be a self-directed leanner.
- Basic computer literacy prior to beginning nursing courses required in nursing major.

Admission as a nursing major does not guarantee enrollment in clinical nursing courses for the traditional BSN track. You must apply for admission to the clinical nursing major during the last semester of your general education and prerequisite course work. Spaces in the clinical nursing major are competitive and limited. Admission to the clinical major will be based on:

- Successful completion (minimum grade of C -) of General Education and prerequisite course work.
- Cumulative grade point average.
- Cumulative grade point average in required science courses (Anatomy \& Physiology I \& II, Microbiology, Chemistry). When calculating your grade point average for these courses we will be using the first grade you earned in each course.

To be admitted to the clinical nursing course all material must be submitted to the Office of Student services by the following date:

- Fall admission - July $1^{\text {st }}$
- Spring admission - October $1^{\text {st }}$

Clinical Nursing admission forms may be picked up in the Student Services Office

Students are required to furnish their own transportation to and from campus and clinical agencies. Students must have automobile access for all community experiences through the program. For specific information regarding the B.S.N. degree program, contact Nursing Student Services and Records office at (314) 516-6066 or 1-888NURSEUM or http://www.umsl.edu/divisions/nursing.

## Credit by Transfer and Examination

Credit may be granted for selected general studies. See Admission and Application Procedure section in this Bulletin for credit information.

## Degree Requirements

The bachelor of science in nursing degree requires comprehensive course work in general education and nursing. Basic undergraduate nursing course work includes theory, on-campus laboratory and clinical activities. Clinical experiences require weekday, evening, and/or weekend commitments. Full-time study in the prelicensure baccalaureate track can be completed in four academic years. The prelicensure accelerated track requires full-time study and can be completed in 15 months. RN/BSN course work is offered at selected metropolitan sites, on-campus, and by Internet. Clinical activities in the RN/BSN Program are community-based and may be completed in the student's home community.

## Satisfactory/Unsatisfactory

Undergraduate nursing majors may not take required related area general education or nursing courses on a satisfactory/unsatisfactory basis.

## Support Course Requirements

Nursing majors must complete all general education requirements of the university as outlined in this Bulletin (see Undergraduate Studies, General Education Requirements).

In addition to meeting the university's general education requirements, the following specific courses must be completed prior to initiation of the nursing major. See a curriculum planning guide for specific courses and proper sequencing.

1) Natural science course work

Biology 1131, Human Physiology and Anatomy I
Biology 1141, Human Physiology and Anatomy II Biology 1162, General Microbiology
Chem 1052, Chemistry for Health Professions (or equivalent)
2) Behavioral science course work

Psych 1003, General Psychology
Psych 1268, Human Growth and Behavior
Econ 1000, Introduction to American Economy (or equivalent)

## 3) Humanities

Any Philosophy course

## 4) Nursing

Nursing 0100, Orientation to Nursing
Nursing 2103, Nutrition and Health (or equivalent)
Nursing 2105, Communication in the Nursing Profession (or equivalent)
Nursing 3799, Quantitative Analysis in the Health Sciences (or equivalent)

## Nursing Course Work Requirements

## Prelicensure

3101, Nursing and Health*
3106, Assessment of Clients in Health and Illness*
3110, Pathophysiological Bases of Nursing Practice
3111, Pharacotherapeutics in Nursing Practice
3205, Adult Health Nursing I*
3206, Adult Health Nursing II*
3214, Psychiatric Mental Health Nursing*
3215, Nursing of Women and Childbearing Families*
3216, Child and Family Health Nursing*
3804, Ethical and Legal Dimensions of Nursing Practice
3807, Nursing Research
3808, Management and Leadership in Nursing
3817, Information Systems Utilized in Health Care
4300, Community Health Nursing*

4310, Senior Synthesis*

## RN/BSN-C

The RN/BSN-C curriculum is designated to be completed in six consecutive semesters and takes two years to complete. The innovative FLEX Program offers flexibility and accessibility in a part-time program. The FLEX Program allows students to choose to complete their BSN online, on campus, or at various satellite sites in the St. Louis area.

## Admission Requirements RN/BSN-C

- Admission to the University
- Computer literacy
- Associate or diploma from State Board approved nursing program
- Minimum cumulative grade point of 2.5 (4.0 scale)
- Current professional licensure with eligibility for licensure in Missouri
- Completion of a minimum of 30 academic credit hours


## RN/BSN-C

3807, Nursing Research (or equivalent)
3808, Management and Leadership in Nursing
3817, Information Systems Utilized in Health Care
3900, Dimensions of Professional Nursing
3920, Health Assessment*
4901, Family and Community Nursing*
4905, Values in Professional Nursing
4911, Synthesis in Nursing Practice*

* Includes a laboratory and/or clinical component


## Graduate Studies

## Cooperative Graduate Programs in Nursing

## Master of Science in Nursing

The College of Nursing at St. Louis, in cooperation with the School of Nursing at University of Missouri-Kansas City, offers graduate nursing studies in three functional roles nurse educator, nursing leadership, and advanced practice nurse.

Clinical specialization for students in the advanced practice role is offered in the areas of:

- Health care of the family.
- Health care of the adult.
- Health care of women.
- Health care of children.
- Health care of the neo-nate.

This graduate program offers students three ways of completing the master of science in nursing degree: completion of a minimum of 36 credit hours with emphasis in the role of the nurse educator; completion of a minimum
of 36 credit hours with emphasis in the role of the nurse leader of health systems; and completion of a mininum of 43 credit hours with emphasis in the role of advanced practice nurse (clinical nurse specialist or nurse practitioner). Those selecting the practitioner functional role option will be eligible to complete national cert fying examinations. Opportunities are also available for completion of post M.S.N. requirements leading to eligibility for practitioner certification. Graduates completing the clinical specialization or practitioner functional options are eligible for endorsement as advanced practice nurses in Missouri.

## Admission Requirements

## Nurse Educator:

- B.S.N. from an accredited nursing program or B.S.N. program comparable to UM-St. Louis College of Nursing B.S.N. degree.
- Minimum cumulative grade point average of 3.0 (4.0 scale).
- Current professional licensure with eligibility for licensure in Missouri.
- Successful completion of an undergraduate descriptive and inferential statistics course.
- Successful completion of an undergraduate health assessment course or equivalent
- Computer literacy.
- Basic cardiac life support certification


## Nursing Leadership of Health Systems

- B.S.N. from an accredited nursing program or B.S.N. program comparable to UM-St. Louis College of Nursing B.S.N. Program
- Minimum cumulative grade point average cf 3.0 ( 4.0 scale)
- Current professional licensure with eligibility for licensure in Missouri
- Successful completion of an undergraduate descriptive and inferential statistics course
- Computer literacy
- Successful completion of an undergraduate health assessment course or equivalent.
- Basic cardiac life support certification


## Advanced Practice Nurse (Clinical Nurse Specialist or Nurse Practitioner)

- B.S.N. from accredited nursing program or B.S.N. program comparable to UM-St. Lou:s College of Nursing B.S.N. Program
- Minimum cumulative grade point average of 3.0 (4.0 scale)
- Current professional licensure with eligibility for licensure in Missouri
- Basic cardiac life support certification
- Successful completion of an undergraduate descriptive and inferential statistics course
- Successful completion of an undergraduate health assessment course
- Computer literacy

The Nurse Practitioner option also requires:

- Two letters of reference
- Narrative outlining goals.
- Two years of clinical experience with chosen population
Availability of clinical resources may limit the number of applicants accepted to the practitioner option. Students are required to find their own Preceptors for the Nurse Practitioner Clinical Courses N6954 and N6955. Deadline for Fall admission is July $1^{\text {st }}$. Deadline for Spring Admission is October $1^{\text {st }}$.


## All MSN Programs

## Degree Requirements

## Nurse Educator

6104, Values and Diversity in Health Care
6106, Policy, Organization, and Financing of Health Care
6140, Health Promotion Across the Life Span
6111, Theoretical Foundations of Nursing Practice
6112, Nursing Research Methods
6114, Evidenced Based Nursing
6309 , Role of the Nurse Educator
6320, Nursing Program and Curriculum Development
6321, Instructional Strategies in Nursing Education
6952, Synthesis Practicum
Educ 6410, The Adult Leamer
Ed Rem 6707, Classroom Measurement and Evaluation or
Ed Rem 6709, Educational and Psychological
Measurement
Nursing Leadership of Health Systems
6104, Values and Diversity in Health Care
6106, Policy, Organization and Financing of Health Care
6111, Theoretical Foundations of Nursing Practice
6112, Nursing Research Methods
6114, Evidenced Based Nursing
6140, Health Promotion Across the Life Span
6409, Role of the Nurse Leader
6425, Managed Care Services
6426, Health Resources Management
6428, Theory and Practice in Nursing Leadership
6952, Synthesis Practicum
Elective from Nursing, Business, or Managerial Decision Making and Informatics

Advanced Practice Nurse (Clinical Nurse Specialist or Nurse Practitioner)
6104, Values and Diversity in Health Care
6106, Policy, Organization and Financing of Health Care
6111, Theoretical Foundations of Nursing Practice
6112, Nursing Research Methods
6114, Evidenced Based Nursing

6140, Health Promotion Across the Life Span 6509, Role of the Clinical Nurse Specialist/ Nurse Practitioner
6518, Pathophysiology for Advanced Nursing Practice
6524, Health Assessment for Advanced Nursing Practice
6520, Pharmacology for Advanced Nursing Practice
6739, Adult Primary Care I: Diagnosis \& Management in Advanced Nursing Practice or
6741, Family Health I: Diagnosis \& Management in Advanced Nursing Practice or
6743, Child Health I: Diagnosis \& Management in Advanced Nursing Practice or
6746, Women's Health I: Diagnosis \& Management in Advanced Nursing Practice or
6740, Adult Primary Care II: Diagnosis \& Management in Advanced Nursing Practice or
6742, Family Health II: Diagnosis \& Management in Advanced Nursing Practice or
6744, Child Health II: Diagnosis \& Management in Advanced Nursing Practice or 6747, Women's Health II: Diagnosis \& Management in Advanced Nursing Practice
6954, Advanced Practice Nursing: Internship I
6955, Advanced Practice Nursing: Internship II

## Doctor of Philosophy in Nursing

The Ph.D. in nursing program at the University of Missouri-St. Louis affords students with academic, clinical, and research resources of the University of Missouri system through a cooperative arrangement with the Schools of Nursing in Kansas City and Columbia.

The curriculum is divided into three general categories of knowledge:

- Nursing Theory/Science/Modes of Inquiry
- Quantitative and qualitative research methods,
- Philosophical foundations of science
- Cognates outside of the discipline of nursing


## Admission Requirements

Doctoral students are admitted at various times during the academic year. Applicants are evaluated based on the following criteria:

- Graduation from an accredited baccalaureate program with 3.2 minimum GPA ( 4.0 scale).
- Graduation from an accredited master's program with a 3.5 minimum GPA ( 4.0 scale).
- Graduate Record Examination (GRE).
- Two letters of reference.
- Original essay on professional goals and research interests.
- International applicants should meet minimum requirements on tests of written and spoken English (TOEFL, Minimum 550 or better is desired).
- International students must also apply through the International Student Services http://www.umsl.edu/services/intelstu.
- Interview by invitation.


## Degree Requirements

While each program of study is individualized, Ph.D. students complete a minimum of 72 hours of graduatelevel course work that include a minimum of 12 hours for the dissertation. A maximum of 30 M.S.N. hours, which support the program of study, are individually evaluated to determine eligibility for transfer.

The following defines the overall structure of the program:

## Nursing Theory/Science/Modes of Inquiry

Nursing Theory, 6-9 hours within the College of Nursing that include the development of nursing science and theory.
Philosophical foundations of science.
Advanced nursing theory development and validation.
Nursing Science, $9-16$ hours within the College of Nursing. Of these courses, students choose at least one course from one of the three substantive areas:

- Health Promotion and Protection
- Health Restoration and Support
- Health Care Systems


## Quantitative \& Qualitative Research Methods, Philosophical Foundations of Science

Research and Inquiry, 6-12 hours external to the College of Nursing, such as advanced statistics, research design, or computer applications.
Nursing Research and Inquiry, 12-18 hours within the College of Nursing that include quantitative design, and methods in nursing research; advanced qualitative design, methods and analysis of nursing data; advanced quantitative measurement and analysis of nursing data; and qualitative methods in nursing research.

Dissertation, 12 hours.
Cognates, 9-12 hours outside the discipline of nursing which support the selected substantive area.

## Professional Organizations

## Sigma Theta Tau

The college is an official chapter--Nu Chi--of Sigma Theta Tau International Honor Society. Membership is offered by invitation to the Nursing students in the upper third of their class and to nurses recognized as outstanding community nursing leaders.

## Student Nurses' Association

The College of Nursing is a constituent of the Natic nal Student Nurses' Association. The purpose of the organization is to provide baccalaureate students an opportunity to connect with the nursing profession through service and professional development activities. The organization is open to all nursing majors and clinical nursing majors.

## Black Student Nurses' Association

The College of Nursing is a constituent of the Black Student Nurses' Association. The purpose of this organization is to provide black nursing students in the prelicensure baccalaureate track the opportunity to serve as a support group for African-American students, collaborate with other African-American groups to compile arciives relevant to African-American nurses, and to promote participation in interdisciplinary activities.

## Continuing Education-Extension

Continuing Education offerings in the field of nursing are currently presented to provide nurses with new information, techniques, and trends within the nursing profession.

## Course Descriptions

All general education requirements must be success âlly completed before beginning 3100 level nursing courses.

All previous level nursing courses must be successfully satisfied prior to progressing to the next level nursing courses.

0100 Orientation to Professional Nursing (0) Prerequisites: Admission to four-year baccalaureate program. Mandatory six-week introduction to the nirsing program provides a comprehensive orientation to the program. Students are introduced to the academic ard clinical expectations of the curriculum. Concerns critical for academic success (i.e., time management, effective study skills, stress management and dealing with tes: anxiety) are addressed.

## 2103 Nutrition and Health (3)

This course examines the nutritional needs througho at the life span with emphasis on nutritional principles related to health promotion and protection. Content includes assimilation, digestion and absorption of nutrients ard cultural and economic influences on dietary practice.:

## 2105 Communication in the Nursing Profession (i)

Prerequisite: None. This course focuses on the development of communication abilities utilized in professional nursing. The individual's relationship w th self, others, and groups is discussed. Students learn verbal and non-verbal communication skills, self-awareness, and sensitivity to others. Interpersonal skills are introduced to enable the student to develop effective human caring
relationships with a diverse population of clients and colleagues.

## 3101 Nursing and Health (6)

Prerequisites: Bio 1131, Bio 1141, Bio 1162, Chem 1052, Nursing 1010; pre- or co- requisites: Nurs 3106, Nurs 3110, Nurs 3111. An introduction to the discipline of nursing, the historical and theoretical development of nursing is explored with an emphasis on critical thinking, the teaching/learning process, and foundational practice concepts. Through modular laboratory experiences, the student acquires psychomotor skills to provide safe and effective nursing care to clients promoting health and wellness. Includes classroom, laboratory and clinical experiences.

## 3106 Assessment of Clients in Health and Illness (3)

 Prerequisite: Bio 1131, Bio 1141, Bio 1162, Chem 1052, Psych 1268, Nurs 0100 . This course integrates theoretical knowledge and interpersonal skills in the assessment of clients, focusing on differentiating normal from abnormal findings. It emphasizes the use of problem solving, critical thinking and cultural competency in identifying multidimensional health variations across the life span. The course includes classroom and laboratory experiences.3110 Pathophysiological Bases of Nursing Practice (3) Prerequisite: Bio 1131, Bio 1141, Bio 1162, Chem 1052 (or equivalent), Nurs 0100 . This course focuses on the nature of disease, its causes, and the bodily changes that accompany it. Includes a study of general principles of disease, specific diseases of individual organs and systems and the clinical implications.

3111 Pharmacotherapeutics in Nursing Practice (3) Prerequisite: Bio 1131, Bio 1141, Bio 1162, Chem 1052, Nurs 0100; pre/co requisite: Nurs 3110 . This course introduces key terminology, legal foundations, general principles and clinical applications of pharmacology.

3205 Adult Health Nursing I (5)
Prerequisite: All 3100 level nursing courses, Psych 1268.
This course focuses on the nursing care of the adult experiencing selected pathophysiological processes affecting body regulatory mechanisms. These mechanisms are related to immune responses, problems of oxygenation, ventilation, transport and perfusion; kidney function; regulatory mechanisms and digestion, absorption and elimination. Emphasis is placed on health restoration, maintenance and support as well as the continued development of the nurse-client relationship, critical thinking processes, and research-based nursing practice. This course includes classroom and clinical activities in a variety of settings.

## 3206 Adult Health Nursing II (5)

Prerequisite: All 3100 level nursing courses, Psych 1268.
This course focuses on the nursing care of the adult
experiencing selected pathophysiological processes
affecting body regulatory mechanisms. These mechanisms are related to endocrine, sensory-perceptual, gynecological, and genitourinary functions. Emphasis is placed on health restoration, maintenance and support as well as the continued development of the nurse-client relationship, critical thinking processes, and researchbased nursing practice. This course includes classroom and clinical activities in a variety of settings.

## 3214 Psychiatric Mental Health Nursing (4)

Prerequisite: All 3100-level nursing courses; Psych 1268. This course focuses on health and illness across the lifespan of clients who have acute and chronic emotional and psychosocial difficulties and psychiatric illnesses The course emphasizes development of students' decisional capabilities, self-awareness and professional behaviors as they utilize theory and research from nursing, psychology and related disciplines for the provision of nursing care to individuals, families and groups. Clinical experiences in community and acute care settings are designed for students to engage in individual and group strategies that promote and maintain mental health. Course includes classroom and clinical activities in a variety of settings.

## 3215 Nursing of Women and Childbearing Families (4)

 Prerequisite: All 3100 level nursing courses, Psych 1268. This course focuses on the childbearing family and women's reproductive health, including family dynamics and growth and development. Health promotion, protection, maintenance and restoration are covered in experiences that include hospital and community settings. Health care policy and systems as relevant to these populations are included. Course includes classroom and clinical activities in a variety of settings.
## 3216 Child and Family Health Nursing (4)

Prerequisite: all 3100 level nursing courses, Psych 1268. This course focuses on pediatric health and illness with emphasis on family dynamics, growth and development and communication with children and their families. Health promotion, protection, restoration, maintenance and support concepts are covered in experiences that include hospital and community settings. Health care policy and systems are studied as relevant to this population. Course includes classroom and clinical activities in a variety of settings.

3799 Quantitative Analysis in the Health Sciences (3) Prerequisite: Math 1030 or equivalent. This course focuses on concepts and applications of statistics in the health sciences. Topics include descriptive and inferential statistics, probability distributions of random variables, sampling and estimation. The course uses examples and content from health sciences to provide the basic concept structure for quantitative analysis.

## 3804 Ethical and Legal Dimensions of Nursing Practice

 (3)Prerequisites: Philosophy ( 3 credits). This course explores the ethical and legal dimensions of nursing practice. The relationship between ethical and legal issues is examined within nursing situations. The student participates in dialogue addressing ethical-legal issues in professional nursing practice to explore personal value, increase sensitivity to others and to develop ethical reasoning abilities.

## 3807 Nursing Research (3) RN/BSN

Prerequisite: Nurs 3799 (or equivalent). This course introduces the values and characteristics of quantitative and qualitative research within an ethical perspective. Students examine the research process through analysis and critique of nursing research.

## 3808 Management and Leadership in Nursing (3) RN/BSN

Prerequisites: All 3000-level nursing courses; Nurs 3807; Nurs 3817. Econ 1000 or equivalent. This course prepares the nurse to coordinate and manage client care in diverse health care settings. Emphasis is placed on leadership and management theory and related skills, collaboration, delegation, coordination, and evaluation of multidisciplinary work and the application of outcome-based nursing practice.

## 3817 Introduction to Nursing and Health Informatics

 (3)Prerequisite: None. This online laboratory course establishes competency in fundamental information management and computer technology skills. It enables students to use existing information systems and available information to manage nursing practice. Students critically evaluate technology, information, and its sources; use decision support systems designed for clinical decision making; and focus on the representation of nursing data, information, and knowledge.

## 3873 Guided Study in Nursing (1-3)

Prerequisite: Consent of instructor. This course is an indepth independent study of selected topics in nursing under the guidance of a specific instructor. No more than six hours may be taken under this option.

## 3900 Dimensions of Professional Nursing Practice (3) RN/BSN

Prerequisites: Admission to the College of Nursing as RN. Investigates the roles and responsibilities of the professional nurse within a rapidly changing health care delivery system. Key issues are explored with emphasis on health promotion and health. Graduates of diploma nursing \& associate programs will be awarded college credit for successful validation of basic nursing knowledge as part of this course.

## 3920 Health Assessment (3) RN/BSN

Prerequisites: Nurs 3900 and Nurs 3817 (may be tal:en concurrently) or consent of instructor. This laboratory course focuses on the knowledge, communication abilities, and technical skills necessary for comprehensive assessment of individuals of all ages.

## 4300 Community Health Nursing (4)

Prerequisites: All 3000 -level nursing courses. This course provides a conceptual foundation for nursing that recognizes the community as client in society. The course examines socioeconomic, environmental, epidemiological, and legislative influences, ethical/legal issues, and the impact of health beliefs and practices on health prornotion and protection in communities and society. The stuc.ent applies various theories and concepts when encountering families, groups and communities with diverse value systems and cultural backgrounds. Course includes classroom and clinical activities in a variety of settings.

## 4310 Senior Synthesis (5)

Prerequisites: all 3000 -level nursing courses, Nurs $\mathbf{- 3 0 0}$ and 3808 may be taken concurrently. This course integrates theory and practice from previous nursing; and general education courses with the goal of preparing, the student for entry into professional nursing practice. Within a seminar context, students explore a variety of clinical and professional nursing topics. The course include; research-based strategies utilized for health promotion and protection, health restoration, maintenance and support. Areas of study are selected from across the lifespan including diverse populations in a variety of health :are systems. Course includes classroom and clinical experiences in a variety of settings. Not for graduate credit.

## 4338 Sociology of Health (3)

Same as Soc 4338. Prerequisites: Soc 1010 and junior standing. Exploration of social dimensions and issu:s related to health and illness such as access to the heilth care delivery system; factors influencing preventior, utilization, and compliance; changing relationships among health care providers and consumers; health care costs, trends, and cross-cultural variations.

## 4720 Perioperative Nursing (3)

Prerequisite: Consent of instructor. Provides experiences in preoperative, intraoperative, and postoperative settilgs. Includes a clinical component.

## 4722 Transcultural Nursing (3)

Prerequisite: Consent of instructor. Examines transcultural nursing concepts, theories and practices in relations sip to human caring. Focuses on application and analysis of health care and scope of practice within selected cuitural contexts. Includes practicum experiences.

4723 Nurse Externship (3)
Prerequisites: Senior level status; GPA 3.0 ( 4.0 scale) This course provides the opportunity to apply theoretical and conceptual knowledge and skills in a structured clinical environment under the guidance of a mentor.

## 4724 Emergency/Trauma Nursing (3)

Prerequisites: Nurs 3205 and 3206 or consent of instructor. This course provides a framework for the roles and responsibilities of the professional registered nurse in Emergency and Trauma nursing care.

## 4725 Education and the Psychology of Human

 Sexuality (3)Same as Ed Psych 3525. The course is designed to provide educators and other human services personnel with knowledge and understanding of various personal and social dimensions of human sexuality.

## 4741 Advanced Nursing Assessment and Management of Clients with Cardiac Dysrhythmias (3)

Prerequisite: Senior status. Focuses on advanced nursing assessment and management of clients with cardiac rhythm problems and conduction disturbances. Includes a clinical component.

4742 Critical Care Nursing of the Adult (3) Prerequisite: RN or completion of Nurs 3205 and 3206 or equivalent. Focuses on health restoration, health maintenance, and health support of individuals with dysfunctions or trauma to major organ systems. Emphasis is on understanding pathophysiology and psychosocial processes related to nursing and collaborative interventions, and the development of a functional framework for data organization and analysis.

## 4752 Primary Care Nursing (3)

Prerequisites: Completion of all junior level courses; Corequisite: Nurs 4911. This course introduces the role of the advanced practice nurse as a principal provider of primary health care to families across the life span. Major issues relate to health care provided in a variety of community settings are addressed.

## 4765 Women's Issues in Health Care (3)

This course is open to nursing majors and other persons interested in women's issues in health care. This seminar offers students the opportunity to explore women's issues in health care from the perspectives of both providers of health care and consumers of health care. Wellness, rather than pathology, is the emphasis of discussion of specific health care issues related to women. Student interest will determine specific issues to be examined.

## 4770 Topics in Nursing (1-3)

Prerequisite: Consent of instructor. Explores special topics in the areas of clinical practice, nursing education, nursing administration, and professional development. No more than six hours may be taken under this option.

4901 Family and Community Nursing (5) RN/BSN
Prerequisites: Nurs 3900, 3817 and 3920 . This practicum course introduces the concepts, principles, skills, and professional nursing roles essential to practice community-based professional nursing with families and groups.

## 4905 Values in Professional Nursing (3) RN/BSN

 Prerequisites: All 3000 level RN/BSN nursing courses or consent of instructor. Explores values and beliefs as they shape professional nursing practice and influence clinical decision making and interventions in the evolving health care system. Attention is given to the impact of sociocultural factors and health/illness beliefs and practices of the diverse populations served by the professional nurse. Students examine their own understanding of the moral nature of professional nursing within the context of a diverse society.
## 4911 Synthesis in Nursing Practice (5) RN/BSN

Prerequisites: Nurs 4901. This practicum course focuses on community-based application and synthesis of professional nursing roles and responsibilities with selected populations determined to be at risk for a variety of health related problems. The course includes assessment of cognitive and affective growth achieve while in the BSN Completion Program.

5000 Health and Wellness in the Elderly (3) Prerequisite: Graduate standing and consent of instructor. Same as Ger 6401. Factors contributing to longevity and health in old age, including genetic predisposition, lifestyle, culture, and environment are related to aspects of maintaining health and promoting wellness. Through a holistic approach, explores aspects of nutrition, exercise and activity, prevention of hazards to health, maintaining self-responsibility, managing stress, and meeting continued developmental, emotional and spiritual needs. Considers cross-disciplinary interventions to promote health and wellness in the elderly. Introduces the "Putting Prevention into Practice" model adapted to health promotion in the elderly.

## 5100 Nursing Case Analyses in Acute and Critical Care of the Elderly (3)

Prerequisite: Nurs 5110, 6748, 6742. From clinical practice with elderly, case analyses of acutely and critically ill elderly are developed and discussed in seminar. This is a clinical course.

## 6104 Values and Cultural Diversity in Advanced Nursing Practice (3)

Prerequisites: Admission to MSN Program. This course explores the diversity of cultural influences and the moral/ethical influences on advanced nursing practice. The values and cultural beliefs of the individual student and the underlying values of the health care system are analyzed for their impact on communities and health care. Health/illness beliefs and practices of individuals, families
and communities are explored as well as folk health care and complementary medicine.

## 6106 Policy, Organization and Financing in Health

 Care (3)Prerequisite: Admission to MSN program or consent of instructor. This course is designed to explore the underpinnings of health policy as it relates to advanced nursing practice. It provides an overview of health care policy, organization and financing with emphasis on current health care trends within the framework of the workplace, government, professional organizations, and community. The policy making process at the organizational, local, state, national, and international level is explored. The variety of forces influencing policy and the policy making process are analyzed with emphasis on the nurses' role in influencing health care delivery, outcomes of client care, and nursing professional issues. Use of Health services and nursing research to influence policy is introduced.

## 6111 Theoretical Foundations in Nursing (3)

Prerequisite: Admission to the MSN program. This course analyzes major concepts and theories relevant to nursing. Ethical issues and dilemmas inherent in advanced nursing practice are also addressed.

## 6112 Nursing Research Methods (3)

Prerequisites: Nurs 3799 or equivalent; Nurs 6111 (may be taken concurrently). This course provides the principles and techniques common to scientific investigation as applied to nursing. A plan of study for a nursing problem is developed.

## 6114 Evidence Based Nursing (3)

Prerequisites: Nurs 6112. This course prepares nurses to implement a research utilization model to validate practice. The theoretical basis for research utilization and practical instances of its application in nursing is examined. Opportunities are provided to develop a research utilization plan to address a clinical area of practice.

6140 Health Promotion Across the Life Span (3)
Pre or corequisite: Nurs 6111. This course is designed to provide students with a conceptual basis of health promotion and health protection for clients across the life span. Clients are conceptualized as individuals, families and populations. An application of various developmental theories for the child, adult, older adult, and family will provide the basis to individualize health care needs for various age and family groups. Core concepts include theories of health, health promotion ad protection, epidemiology, disease and injury prevention, health education, growth and development, nutrition, and family systems theory.

6309 Role of the Nurse Educator (3)
Prerequisite: Admission to the MSN program or consent of instructor. This course is designed to explore the various
aspects of a nurse educator role. Issues, opportunitits, and challenges are explored. The culture of nursing education, as well as the various roles of the nurse educator, is examined.

## 6320 Learning and Curriculum Development in Nursing (3)

Prerequisite: None. This course is designed to help the student learn about the components and process of designing an overall nursing curriculum. The students will develop an understanding of the theories of learning, components of a nursing curriculum, the principle o: curriculum development of program goals and objectives, the effects of the environment on the nursing curricilum, and assessing program needs.

6321 Instructional Strategies in Nursing Education (3) Prerequisite: Nurs 6320 or consent of instructor. Provides students in the master's level nursing education option with knowledge about a variety of instructioral strategies used in nursing education to help students leam. Students will become familiar with the when, where, and how of instructional strategies used in the classroorr and clinical areas. The use of technology and distance strategies in nursing education will be explored. Stuitents will learn to assess learner needs and manage the learning environment.

## 6323 Educational Evaluation in Nursing (2)

Prerequisites: Nurs 6324. This course is designed to help the student learn methods of assessing nursing student's learning and achievement of goals in the classroom and clinical areas. Different methods of assessment in narsing will be explored. Students will be exposed to nursing program evaluation and learn how to maintain apprcpriate academic records.

## 6324 Nursing Education Research (2)

Prerequisites: Nurs 6112. This course is designed to explore research in nursing education. Current resesrch related to nursing education will be explored as well as future opportunities for research. Methodology in n rrsing education research will be discussed. This course also examines scholarly writing and grant writing.

## 6409 Role of the Nurse Leader (3)

Prerequisite: Admission to the MSN program or consent of instructor. Examines roles and responsibilities of the nurse leader in a complex health care system.

## 6425 Managed Care Services (3)

Prerequisite: Admission to MSN or consent of insmictor. Provides analysis of health care environment in managed care and its impact on nurse's role.

## 6426 Health Resources Management (3)

Prerequisite: Nurs 6409. Focuses on roles and responsibilities of nurse leader for fiscal and human resource management in both public and private sectors.

Includes analysis of environment, health care organization within the system, and impact of resource management on nursing and health care.

6428 Theory and Practice in Nursing Leadership (3) Prerequisite: Nurs 6409. Focuses on theories and practices of advanced nursing leadership and management within complex health care organizations.

## 6509 Role of the Clinical Nurse Specialist/Nurse

 Practitioner (2)Prerequisite: Admission to the MSN program. In this course, the student explores professional role issues affecting advanced practice nurses (APNs). The course facilitates the role development of nurses who desire to function as primary care providers (nurse practitioners) or as specialists within a particular clinical area (clinical nurse specialists). Core concepts include: communication, collaboration, advocacy, negotiation, standards of practice, and subroles of advanced nursing practice.

## 6518 Pathophysiology for Advanced Nursing Practice

 (3)This course focuses on implications for advanced nursing practice through examination of selected
pathophysiological phenomena which occur frequently in the diverse populations to whom advanced nurses provide care.

## 6519 Advanced Pediatric Pathophysiology (3)

This course focuses on embryology of the major organ systems, as well as specific physiologic and pathophysiologic processes relevant to the child from birth through age 18. Implications for advanced nursing practice which result from alterations of normal physiologic functioning in cellular, tissue, and organ systems are examined. Emphasis is placed on the relationship between pathophysiology, decision making, and standards of advanced nursing practice.

6520 Pharmacology for Advanced Nursing Practice (3) Prerequisite: Nurs 6518 or equivalent or consent of instructor. This course centers on clinical pharmacotherapeutics used for primary health care management. Emphasis is placed on the clinical use of drugs in the management of specific illnesses.

## 6524 Health Assessment for Advanced Nursing Practice (3)

Prerequisite: Nurs 6518 (may be taken concurrently). Designed to provide a systematic approach to the advanced assessment of physiological, psychological, sociocultural, developmental and spiritual assessment of individuals across the lifespan. This course builds on basic health assessment knowledge and skills, emphasizing advanced assessment skills, laboratory work interpretation, validation, documentation and analysis of assessment findings.

## 6526 Advanced Health Assessment for Pediatric Nursing Practice (3)

Comprehensive assessment of children through adolescence, including those with significant health and/or developmental deviations, using advanced diagnostic reasoning processes. Emphasis on health history, cultural diversity, differentiations, interpretation, and documentation of findings.

## 6529 Advanced Pharmacology for Pediatric Nursing Practice (3)

Prerequisites: Admission to Master of Science in Nursing or permission of the instructor.
The major focus of this course is the pharmacotherapeutic use of medications for primary health care management of children from birth to eighteen years of age by advanced practice nurses.

6739 Adult Primary Care I: Diagnosis $\boldsymbol{\&}$ Management in Advanced Nursing Practice (5)
Prerequisites: Nurs 6105, 6106, 6108, 6140, 6111, 6112, $6518,6524,6520 ; 6509 \& 6114$ may be taken concurrently. Clinical course designed to provide a theoretical and practical base for advanced practice nursing students to diagnose and manage health problems of adults. Emphasis is placed on clinical assessment and decision-making in the provision of direct patient care within a defined scope of practice. The student is expected to clinically apply the concepts and theories discussed in class in the advanced nursing care of adults who are experiencing problems related to the upper and lower respiratory system, cardiovascular system, gastrointestinal system, skin and infectious diseases. Clinical experiences are designed to enhance assessment and technical skills needed in diagnosing common health problems.

## 6740 Adult Primary Care II: Diagnosis \& Management in Advanced Nursing Practice (5)

Prerequisites: Nurs 6739. Clinical course designed to provide a theoretical and practical base for advanced practice nursing students to diagnose and manage health problems of adults. Emphasis is placed on clinical assessment and decision-making in the provision of direct patient care within a defined scope of practice. The student is expected to clinically apply the concepts and theories discussed in class in the advanced nursing care of adults who are experiencing problems related to the musculoskeletal, neurological, endocrine/metabolic, genitourinary, reproductive systems, the eye, and mental health. Clinical experiences are designed to enhance assessment and technical skills needed in diagnosing common health problems.

## 6741 Family Health I: Diagnosis \& Management in Advanced Nursing Practice (5)

Prerequisites: Nurs 6106, 6108, 6140, 6111, 6112, 6518, $6524,6520,6114$ may be taken concurrently. Clinical course designed to provide students with the opportunity to gain the concepts and skills essential to advanced practice
nursing care of families experiencing acute and chronic health problems, with particular focus on women's and children's health issues. Emphasis is given to those health needs most commonly encountered by the Family Nurse Practitioner. A research- and theory-based approach to nursing interventions is used. Core concepts include family adaptation to acute and chronic conditions, health promotion, clinical decision-making and ethical decisionmaking.

## 6742 Family Health II: Diagnosis and Management in Advanced Nursing Practice (5)

Prerequisites: Nurs 6741. Clinical course designed to provide students with the opportunity to gain the concepts and skills essential to advanced practice nursing care of families experiencing acute and chronic health problems, with particular focus on adult clients. Emphasis is given to those health problems most commonly encountered by the Family Nurse Practitioner. A research- and theory-based approach to nursing interventions is used. Core concepts include family adaptation to acute and chronic conditions, health promotion, clinical decision-making, and ethical decision-making.

## 6743 Child Health I: Diagnosis \& Management in

 Advanced Nursing Practice (5)Prerequisites: Nurs 6106, 6108, 6140, 6111, 6112,6518, $6524,6520, \& 6114$ may be taken concurrently. Clinical course designed to provide students the opportunity to apply skills from advanced physical assessment, pathophysiology, pharmacology, and theory to advanced nursing care of the child and family. Emphasis is placed on child and family developmental issues for advanced practice pediatric nurses. Normal cognitive, motor, socia//emotional and language development and usual developmental challenges of each age group are addressed. Implications of the developmental stage of the child and family, level of developmental skill and developmental problems for the maintenance of health and management of illness by the advanced practice nurse are discussed. Core content includes information related to APN management of cultural and ethnic variations of growth and development problems; health maintenance; common pediatric behavioral problems; and recognition of circumstances that require interdisciplinary collaboration and referral. Clinical practice opportunities are arranged in collaboration with the instructor and planned in a variety of pediatric settings.

## 6744 Child Health II: Diagnosis \& Management in Advanced Nursing Practice (5)

Prerequisite: Nurs 6743. Clinical course designed to provide students the opportunity to apply skills from advanced physical assessment, pathophysiology, pharmacology, and theory to advanced nursing care of the child and family. Emphasis is placed on using models and theories that guide advanced practice care for clients with common pediatric problems. Implications of the developmental stage of the child and family, level of
developmental skills and developmental problems for the maintenance of health and management of illness by the APN nurse are discussed. The SOAP format is used and includes pertinent history, physical examination, laboratory findings and differential diagnosis relevant to the individual client. Focus is on development of a plan of care that encompasses the various treatment modalities used in managing common pediatric health problem; including specific pharmaceutical and symptomatic treatment. Clinical practice opportunities are arranged in collaboration with the instructor and planned in a variety of pediatric settings.

6746 Women's Health I: Diagnosis \& Managemeat in Advanced Nursing Practice (5)
Prerequisites: Nurs 6106, 6108, 6140, 6111, 6112, 6518, $6524,6520 \& 6114$ may be taken concurrently. Clinical course designed to provide students the opportunity to apply knowledge and skills from advanced physical assessment, pathophysiology, pharmacology, and theory to advanced nursing care of women and families throu,ghout the childbearing continuum. Emphasis is placed on using models and theories that guide advanced nursing prectice and research-based care. Focus is on educating the advanced practice nurse to collaborate with women and their families to promote health and prevent disease. Within this context, the focus is on assessing, diagnosing, and planning care for women and families experiencing an uncomplicated childbearing continuum, as well as arute and/or chronic health care problems during preconception, pregnancy and the postpartum period, within a health promotion framework. The format includes pertinent history, physical examination, laboratory findings and differential diagnoses relevant to the individual client. Core concepts include adaptation of women through developmental stages, health risk assessment, health promotion, disease prevention, health education, prinary care of women throughout the childbearing continuum, reproductive options, ethical decision-making, and $\xi$ rief and loss.

## 6747 Women's Health II: Diagnosis \& Management in Advanced Nursing Practice (5)

Prerequisite: Nurs 6746. Clinical course designed to provide students the opportunity to apply knowledge and skills to advanced practice nursing care of women and families throughout the lifespan. Emphasis is placed on using models and theories that guide advanced nursing practice and research-based care. Focus is on educating the advanced practice nurse to collaborate with women and their families to promote health and prevent disease. Within this context, the focus is on assessing, diagnosing, and planning care for women, as well as women experiencing common health problems within a hea th promotion framework. The format includes pertinent history, physical examination, laboratory findings and differential diagnoses relevant to the individual client. Core concepts include adaptation of women through developmental stages, health risk assessment, health
promotion, disease prevention, health education, primary care of well women, ethical decision-making, and grief and loss. Focus is on the development of a plan of care that encompasses the various treatment modalities used in managing common women's health problems including specific pharmacological and non-pharmacological therapies.

6870 Special Topics in Advanced Practice Nursing (1-3) Prerequisite: Consent of Instructor. Explore special topics for the advanced practice nurse in the areas of research, theory, education and administration. No more than three hours shall be applied toward the degree. This course is for graduate MSN or Ph.D. levels.

## 6875 Special Study in Graduate Nursing (1-3)

Prerequisites: Admission to the MSN program and/or consent of the instructor. In-depth study of selected topics in nursing under the guidance of a specific instructor. No more than three hours may be applied to the master's program of study.

## 6877 Thesis/Directed Research Seminar (1)

Prerequisites: Nurs 6112 and permission of thesis/directed research chair. Presentation and discussion of selected research problems in nursing.

6878 Directed Research (1-6)
Prerequisites: Nursing 6112 and permission of faculty research adviser. Individual participation in the investigation of a research problem of relevance to nursing under the direction of a faculty research adviser.

## 6879 Research Thesis (1-6)

Prerequisites: Nurs 6112 and permission of faculty. Individual investigation of a research problem of relevance to nursing. Student works under the direction of a faculty committee to prepare and orally defend a thesis.

6948 Evidenced-Based Clinical Nursing Practice (5) Prerequisite: Nurs 6112. This course provides the student with advanced education and clinical experience in the nursing care of a chosen specialty population. It requires the completion of population-specific modules and 250 clock hours of clinical practice in the specialty nursing area.

6950 Advanced Clinical Practice for Nursing Education (3)

Prerequisite: Nurs 6321 . This is a clinical course providing experiences in the nurse educator role. Students will spend 375 clock hours with a preceptor in the various roles of a nurse educator.

## 6952 Synthesis Practicum (3)

Prerequisites: All required courses in Nurse Educator or Nursing Leadership of Health Systems option or consent of instructor. Serves as opportunity to operationalize role of nurse educator or nurse leader in selected academic
and/or clinical settings. Includes frequent clinical seminars.

6954 Advanced Practice Nursing: Internship I (2) Prerequisite: All required courses in the Advanced Practice Nurse option or consent of instructor. Provides opportunity to initiate the Advanced Practice Nurse role with selected populations. Students participate in precepted experiences with clinical nurse specialists, certified nurse practitioners, and/or primary care physicians for a minimum of 225 hours. Frequent clinical seminars included.

6955 Advanced Practice Nursing: Internship II (2) Prerequisite: 6954. Continuation of precepted clinical experiences with selected populations initiated in Nursing 6954. Students satisfy a minimum of 225 precepted hours with clinical nurse specialists, certified nurse practitioners, and/or primary care physicians and participate in frequent clinical seminars.

## 7480 Guided Nursing Research Seminar (1-6)

Prerequisites: Consent of instructor. Provides opportunity to work in collaboration with faculty and peers in a focused research topic relevant to nursing.

7481 Development of Nursing Science and Theory (3) Prerequisites: Consent of instructor. This course focuses on the discipline of nursing, including the evolution of the state-of-the-art theory development in nursing. The course includes the aims of nursing science, the nature of scientific theories, theory analysis, a discussion of relationships among theory, research, and practice. Students engage in constructive dialogue as they begin to conceptualize nursing phenomena in their area of interest, and develop and evaluate the validity of a conceptual model.

## 7482 Health Promotion and Protection (3)

Prerequisites: Consent of instructor. This seminar focuses on the theoretical basis for health promotion and protection addressing modes of nursing that are supportive and educative. The populations of interest include individuals and families across the lifespan with the goal to promote and maintain health and to reduce risks for illness or injury.

## 7483 Health Restoration and Support (3)

Prerequisites: Consent of instructor. This seminar focuses on theoretical basis for health restoration and support addressing human responses to acute, critical and chronic health conditions. Populations of interest include individuals and families at risk for health crises such as cancer, HIV/AIDS, frail elderly, chronic illness, physical and cognitive impairment, and pain.

## 7484 Health Care Systems (3)

Prerequisites: Consent of instructor. This seminar focuses on theoretical basis of health care systems. Students examine nursing and healthcare delivery models and the
political and historical development of models such as primary care, primary nursing, case management, managed care, informatics, and decision support systems.

## 7485 Quantitative Design and Methods in Nursing Research (3)

Prerequisites: Admission to the doctoral program in Nurs 6112 , and consent of instructor. This course focuses on quantitative research methods appropriate for nursing including experimental and non-experimental methods such as quasi-experimental, longitudinal, correlational, and descriptive design. Advantage and disadvantages of these designs will be addressed. Research questions and sources of errors related to each of these designs will be discussed.

## 7488 Qualitative Methods in Nursing Research (3)

Prerequisites: Consent of instructor. Examines the relationship between theoretical and philosophical perspectives and selection of appropriate methodologies in research design. Critically explores issues related to innovations in traditional qualitative designs and emerging technologies, rigor and validity and role of interpretive research in nursing science.

## 7490 Advanced Quantitative Design, Methods, and

 Analysis of Nursing Data (3)Prerequisites: Nurs 7485 . This course focuses on issues in sampling and design, and implementation of interventions in nursing research. Content includes design and analysis issues affecting internal and external validity. Strategies and data manipulation related to univariate and basic multivariate analysis with computers are discussed.

## 7491Advanced Nursing Theory Development and Validation (3)

Prerequisites: Nurs 7481 or consent of instructor. This course focuses on a systematic study of contemporary nursing science, on knowledge development, and on the application of major theory construction and validation strategies to specific nursing phenomena of interest. Students create and critically examine theoretical frameworks and models, with emphasis placed on constructing and testing theoretical statements.

## 7492 Advanced Quantitative Measurement and Analysis of Nursing Data (3)

 Prerequisites: Nurs 7490. This course focuses on measurement techniques and their applications in nursing research. Content includes examination of measurement and techniques for assessing validity, reliability, and structure of data collection instruments; instrument construction and procedures for critical evaluation of instruments; application of advanced statistical principles; application of strategies for data manipulation and analysis; and discussion of measurement limitations and data analysis solutions.
## 7493 Psychometrics (3)

Prerequisites: Nurs 7490 and doctoral level statistics. course and/or consent of instructor. Focuses on application of psychometric theories and practices related to instrumentation in nursing research. Basic methodologies and techniques for constructing, testing, and evaluating instruments will be discussed and applied. Content will focus on theoretical foundations of measurement, item construction, instrument design, item analysis, validity and reliability assessment. Criteria for evaluating existing instruments will also be discussed.

## 7498 Doctoral Seminar (1-12)

Prerequisites: Consent of instructor. Presentation ard discussion of pertinent methodological and clinical issues related to doctoral research.

## 7499 Dissertation Research (1-12)

Prerequisites: All required course work; successful completion of written comprehensive examination. Investigation of an advanced nature culmination in successful defense of dissertation. Continuous registration is required.

## College of Optometry

This section contains an abbreviated version of the College of Optometry Bulletin. Some information is omitted.

For the most complete and accurate information regarding the Optometry program at UM-St Louis, please go to our web site: http://umsl.edu/divisions/optometry/index.html. The College of Optometry Bulletin can be found at http://www.umsl.edu/divisions/optometry/pdf\'s/2006Opt ometryBulletin.pdf.

## Administration and Faculty

Larry J. Davis, Dean, Associate Professor* O.D., Indiana University; Residency, Contact Lenses, University of Missouri-St. Louis
Gerald A. Franzel, Associate Dean for the Division of Continuing Education, Clinical Associate Professor, O.D., University of Houston

Ralph P. Garzia, Assistant Dean for Clinical Programs; Associate Professor*
O.D., Residency, Pediatric Optometry,

Pennsylvania College of Optometry
Jerry L. Christensen, Professor*
O.D., Ph.D., The Ohio State University

Vinita A. Henry, Director, Residency Programs, Co-Chief
Contact Lens Service and Program Coordinator for
Residency, Contact Lenses; Clinical Professor
O.D., Residency, Contact Lenses,

University of Missouri-St. Louis
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Carol K. Peck, Professor*
Ph.D., Postdoctoral Fellow, University of California-Los Angeles
William G. Bachman, Associate Professor*
M.S., University of Alabama-Birmingham, O.D.,Southem College of Optometry

Carl J. Bassi, Director of Research and Graduate Studies, Associate Professor*
Ph.D., Vanderbilt University, Postdoctoral Fellow, University of Southern California, Doheny Eye Institute
Edward S. Bennett, Director of Student Services; Co-Chief, Contact Lens Service; Associate Professor* M.S.Ed., O.D., Indiana University-Bloomington Vasudevan Lakshminarayanan, Associate Professor* M.Sc., University of Madras, India, Ph.D., University of California-Berkeley William F. Long, Associate Professor*, Coordinator for Informatics Ph.D., Michigan State University, O.D., Indiana University W. Howard McAlister, Associate Professor*
M.A., Webster College, M.P.H., University of Illinois at the Health Sciences Center - Chicago, O.D., The Ohio State University

Leonard L. Naeger, Clinical Associate Professor ** Ph.D., University of Florida; Residency, Hospital-Based Pharmacy, VA Medical Center, St. Louis**
Jeffrey L. Weaver, Clinical Associate Professor**
M.S., The Ohio State University, M.B.A., Drury College; O.D., Pennsylvania College of Optometry; Residency, Family Practice,The Ohio State University
Timothy A. Wingert, Associate Professor*, Chief of Thirdyear Primary Care Service
O.D., Illinois College of Optometry

Kathleen Boland, Clinical Assistant Professor
O.D., University of Missouri-St. Louis

Lee J. Browning, Clinical Assistant Professor**
O.D., University of Missouri-St. Louis

Residency, Northeastern State University, Talequah, OK
Brian Brunig, Clinical Assistant Professor**
O.D., University of Missouri-St. Louis

John Crane, Clinical Assistant Professor
O.D., University of Missouri-St. Louis

James A. DeClue, Clinical Assistant Professor O.D., Illinois College of Optometry**

Julie Ott DeKinder, Clinical Assistant Professor
O.D., Northeastern State University; Residency, Comea
and Contact Lens, University of Missouri-St. Louis
Aaron S. Franzel, Clinical Assistant Professor, Chief
Pediatric/Binocular Vision Service
O.D., University of Missouri-St. Louis

Christine Garhart, Clinical Assistant Professor
D.V.M., Ph.D., University of Missouri-Columbia

Case Western Reserve University
Richard G'sell, Clinical Assistant Professor
O.D., University of Missouri-St. Louis**

Alexander J. Harris, Clinical Assistant Professor, Director of Externship Programs and Minority Affairs Advisor
M.A., Washington University, O.D., University of

Missouri-St. Louis
Beth A. Henderson, Clinical Assistant Professor
O.D., The Ohio State University**

Edward Jarka, Center Coordinator, Clinical Assistant
Professor
O.D., Illinois College of Optometry

Vivian Kloke, Clinical Assistant Professor
O.D., University of Missouri-St. Louis**

John A. McGreal, Jr., Clinical Assistant Professor
O.D., Pennsylvania College of Optometry**

Linda Marks, Clinical Assistant Professor
O.D., Ferris State University: Residency, Pediatric Binocular

Vision, University of Missouri-St. Louis
Eric Polk, Clinical Assistant Professor**
O.D., University of Missouri-St. Louis

Mary Beth Rhomberg, Clinical Assistant Professor
O.D., University of Missouri-St. Louis**

Ron Richardson, Clinical Assistant Professor
O.D., Illinois College of Optometry**

Erin Searfoss, Clinical Assistant Professor
O.D., University of Missouri-St. Louis

Stephen Viola, Clinical Assistant Professor
Ph.D., Indiana State University**

Gary Vogel, Clinical Assistant Professor O.D., Ohio State University**

Erwin Wong, Assistant Professor
O.D., Southern California College of Optometry;

Ph.D., University of Houston
Deborah Iadevito, Specialist
M.Ed., University of Missouri-St. Louis

Maureen McCarthy, Specialist
M.Ed., University of Missouri-St. Louis
*members of Graduate Faculty
**part-time

## Off-Campus Adjunet Faculty

Joseph H. Maino, Adjunct Professor
O.D., Illinois College of Optometry; Residency, Rehabilitative Optometry, VA Medical Center, Kansas City
Debbie L. Hettler, Adjunct Associate Professor
O.D., The Ohio State University
M.P.H., University of Illinois

Sean Mulqueeny, Adjunct Associate Professor
O.D., University of Missouri-St. Louis

Stuart Richer, Adjunct Associate Professor
O.D., University of California

Levent Akduman, Adjunct Assistant Professor
M.D., Hace Hepe, University of Turkey

Ronald Bateman, Adjunct Assistant Professor O.D., Indiana University-Bloomington
P. Douglas Becherer, Adjunct Assistant Professor
O.D., Southern College of Optometry

Donald Beyers, Adjunct Assistant Professor O.D., Southern College of Optometry Robert Brusatti, Adjunct Assistant Professor O.D., University of Missouri-St. Louis

James Bureman, Adjunct Assistant Professor
O.D., Mlinois College of Optometry

Carmen Castellano, Adjunct Assistant Professor
O.D. Illinois College of Optometry

Walter Choate, Adjunct Assistant Professor
O.D., Southern College of Optometry

Diane Curry, Adjunct Assistant Professor
O.D., University of Missouri-St. Louis

Cheryl Davidson, Adjunct Assistant Professor
O.D., University of Missouri-St. Louis

Michelle Dent, Adjunct Assistant Professor
O.D., V.A. Wichita, Kansas

Gail B. Doell, Adjunct Assistant Professor O.D., University of Missouri-St. Louis

Sarah Dougherty, Adjunct Assistant Professor
O.D., Indiana University School of Optometry

John Galanis, Adjunct Assistant Professor
M.D., St. Louis University

John M. Garber, Adjunct Assistant Professor O.D., Southern College of Optometry

Sarah Gerdes, Adjunct Assistant Professor
O.D., Ohio State University
N. Rex Ghormley, Adjunct Assistant Professor
O.D., Southern California College of Optometry

Steven J. Grondalski, Adjunct Assistant Professor O.D., Pennsylvania College of Optometry

Timothy Harkins, Adjunct Assistant Professor O.D., Southern California College of Optometry Steven Hill, Adjunct Assistant Professor
O.D., Illinois College of Optometry

James Hoekel, Adjunct Assistant Professor
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Timothy Hug, Adjunct Assistant Professor O.D., University of Houston

Jeffrey Kempf, Adjunct Assistant Professor
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Robert A. Koetting, Adjunct Assistant Professor
O.D., Southern College of Optometry

Linda Lucas, Adjunct Assistant Professor
O.D., Indiana University School of Optometry

Julie Miavez, Adjunct Assistant Professor
Ohio State University College of Optometry
Daniel Osborn, Adjunct Assistant Professor
M.D., Indiana University School of Medicine

David Pierce, Adjunct Assistant Professor
O.D., Southern College of Optometry

Patrick Pirotte, Adjunct Assistant Professor
O.D., Southern California College of Optometry

Thomas I. Porter, Adjunct Assistant Professor
O.D., Southern College of Optometry

Paul Resler, Adjunct Assistant Professor
O.D., Illinois College of Optometry

Byron A. Santos, Adjunct Assistant Professor
M.D., University of San Carlos

Frederick Satkowiak, Adjunct Assistant Professor
O.D., Indiana University

Carol Scott, Adjunct Assistant Professor
O.D., Southern College of Optometry

Don Simpson, Adjunct Assistant Professor
O.D., Indiana University

Craig Sorce, Adjunct Assistant Professor
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Joe Sullivan, Adjunct Assistant Professor
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Scott Tomasino, Adjunct Assistant Professor
O.D., Illinois College of Optometry

Christine Tran, Adjunct Assistant Professor
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Paul Whitten, Adjunct Assistant Professor
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Melissa Wisniewski, Adjunct Assistant Professor O.D., Pennsylvania College of Optometry

Jack Yager, Adjunct Assistant Professor
O.D., Ohio State University

Dwayne Young, Adjunct Assistant Professor
O.D., Indiana University

Debbie Zanella, Adjunct Assistant Professor
O.D., University of Missouri-St. Louis

## General Information

The UM-St. Louis College of Optometry enrolled its first class in 1980, graduating 32 students in May 1984. The college is located on the South Campus complex of the University of Missouri-St. Louis at 7800 Natural Bridge Road. A five-story building houses the college's classrooms, laboratories, research facilities, administrative offices, library, and the Center for Eye Care campus facility (the University Eye Center).

A student who satisfactorily completes all four years of the professional curriculum will be eligible to receive the doctor of optometry degree. The training and clinical experience optometry students receive at UM-St. Louis in the diagnosis, treatment, and management of ocular disease is excellent and qualifies UM-St. Louis graduates to practice optometry in any state in the nation.

The College of Optometry is a member of the Association of Schools and Colleges of Optometry and is accredited by the Accreditation Council on Optometry Education (ACOE).

## Center for Eye Care

The Center for Eye Care provides a patient care learning environment for third-year and fourth-year optometric students and residents. The Center for Eye Care includes four locations: the University Eye Center on the UM-St. Louis south campus, the Optometric Center in the Central West End of St. Louis, the East St. Louis Eye Center, and the Harvester Eye Center in St. Charles, MO. These and other affiliated health centers in the St. Louis area provide an instructional setting where student interns are exposed to a wide variety of patients under the direct supervision of fulltime or part-time clinical faculty. Equally important is that these Centers provide exemplary, comprehensive and state-of-the-art optometric care to their patients.

The Centers provide a full range of optometric services to patients including primary eye care, contact lens, pediatric/binocular vision, low vision, and eye health management.

Situated in Missouri's largest metropolitan area, the college enjoys the city's strong community and professional support. The urban setting offers many opportunities for outreach programs, expanding the scope of optometric education and making available highly diverse programs of clinical training. Another asset of the College is the location of the national headquarters of the American Optometric Association and the College of Optometrists in Vision Development, approximately twelve miles from the campus.

The curriculum leading to the doctor of optometry degree is a four-year, full-time program of study. The first year of the professional curriculum emphasizes optical and biomedical sciences and introduces students to optics of the visual system. The second year covers vision science and training in eye examination techniques. The third year emphasizes patient care and introduces the student to various specialty areas within optometry, such as contact lenses, pediatric and geriatric vision care, binocular vision and vision training, and low vision rehabilitation. The second and third years also include course work and clinical training in ocular disease and pharmacology. The fourth year provides additional patient care experiences and includes rotations through the externship program, giving the student added experience in the treatment of eye diseases, as well as valuable experience in other optometric clinical specialties.

## Fourth-Year Externship Program

In addition to the patient care experiences available through the University Eye Center, Optometric Center, the East St. Louis Center, and the Harvester Eye Center, the College of Optometry also has a diverse Externship Program. Students must receive approval from the faculty and the Director of Externships for assignments to each Externship site. This program allows fourth-year students to spend a portion of their final year of training in a variety of patient care environments (i.e., military bases, Veterans Administration Hospitals, Indian Health Services Hospitals, various specialty practices and private practices).

These eight (8) week Externships are selected and scheduled according to the individual student's interest, needs and future practice intentions. In this program, students leave the academic environment and begin working with selected practicing optometrists while continuing to be monitored by the Centers through weekly reports of all patient experiences and activities. The externship rotations are set up to give students exposure in the following areas;
Pediatric/Binocular Vision Patient Care
Contact Lens Patient
Low Vision Patient
General (Primary Optometric) Patient Care
Ophthalmic Lasers
Ocular Disease
Geriatric Patient Care
Ophthalmic Surgical Patient Care
Ophthalmic Sports Patient Care
Pathology and Treatment Patient Care
Optometric Rehabilitation Patient Care
Externships Rotations are located at a variety of domestic and international sites.

## Student Organizations \& Activities

All optometry students enrolled in the University of Missouri-St. Louis College of Optometry are eligible for membership in the various student optometric associations, including AOSA affiliated with the American Optometric Association and MOSA which is affiliated with the Missouri

Optometric Association. Through these organizations, and many others, students become involved in local and national optometric activities. The organizations provide an environment for the cultivation of professional leadership skills, and members have organized and participated in a variety of community service activities, including community health screenings and vision care to residents of nursing homes, convalescent hospitals, and mental institutions. Furthermore, optometry students have formed local chapters of SVOSH (Student Volunteer Optometric Services to Humanity), an international organization of optometrists providing free vision care to people in impoverished nations, and the NOSA (National Optometric Student Association), which strives to recruit minority students into optometry and encourages retention of minority students.

In addition to the many activities through the College of Optometry, optometry students are able to take advantage of all the activities provided by the university to the entire university community. These include intramural sports, movies and cultural activities, a modern, fully-equipped gymnasium, and access to many social and cultural opportunities in St. Louis at reduced cost.

## "3+4" Scholars Programs

The University of Missouri offers highly qualified students the opportunity to complete undergraduate studies and the doctor of optometry degree within seven years total, rather than the typical eight years. Students can qualify for this program while still in high school, after taking the ACT or SAT exam. Exceptional academic performance is required. This program offers professional and academic advisement by the College of Optometry faculty and staff throughout the undergraduate experience, as well as offering early exposure to clinically related activities and participation in Optometry student association activities.

Entry into the $3+4$ program allows the student to apply to the College of Optometry, usually during the junior year in college, while completing pre-requisite courses both for their degree and for consideration for admission into the College of Optometry. Those students accepted into the College of Optometry for the fall following their junior year will be granted their undergraduate degree following successful completion of their first year in optometry school. Students may pursue their undergraduate degree in biology or physics, and through either the College of Arts and Sciences or through the Pierre Laclede Honors College. A similar program may be available for chemistry majors.

Students should work with their undergraduate advisors as well as the academic advisor in optometry, to insure that all pre-requisite courses are taken prior to taking the Optometry Admission Test (OAT), which is required prior to being offered an interview for consideration for admission to the College of Optometry.

## College of Optometry

Admission Requirements
Semester:
English - $2+$
Biology (including laboratory)* - 3
Physics (including laboratory) - 2
Chemistry**
General (including laboratory) - 2 Organic (including laboratory) - 1
Mathematics***
Calculus - 1 Statistics - 1
Psychology - 2
Liberal Arts - $2+$
Quarter:
English - $3+$
Biology (including laboratory)* - 4
Physics (including laboratory) - 3
Chemistry**
General (including laboratory) - 3
Organic (including laboratory) - 2
Mathematics ***
Calculus - 1
Statistics-1
Psychology - 2
Liberal Arts - $\mathbf{2}^{+}$
*One semester (or one quarter) of Microbiology is a requirement. One semester of Anatomy or Physiology is recommended.
+Courses may be taken and accepted for prerequisite course work AP (Advanced Placement) without a grade if the student receives a 320 or higher on the Reading Comprehensive section of the OAT exam (see below, Admission Test and has a GPA of 3.0.
**One semester of Biochemistry is recommended.
***Trigonometry as a prerequisite course for Calculus must be completed either in high school (official high school transcripts required as proof) or college.

All courses used to satisfy the admission requirements must have been taken at a fully accredited institution. Specific prerequisite courses must be taken for a letter grade; they cannot be taken as an audit or on a pass/fail or satisfactory/unsatisfactory basis. Applicants must have completed 90 semester or 135 quarter hours (the equivalent of three years of college education) before the start of classes. The applicant cannot apply more than 60 seme ster hours or 90 quarter hours which were earned at a two-rear institution toward the credit-hour requirement. Applicints holding a bachelor's degree will be given preference over applicants with similar academic credentials who do not have a degree. Applicants to the college come from a varier; of undergraduate backgrounds, such as biological sciences, chemistry, psychology, education, and business.

## Admission Test

Students should work with their undergraduate advisors as well as their academic advisor in optometry, to insure that all pre-requisite courses are taken prior to taking the Optometry Admission Test (OAT), which is required prior to being offered an interview for consideration for admission to the College of Optometry.
All applicants are required to take the Optometry Admission Test (OAT). The OAT is now offered through computer sites. As the computerized version may be scheduled at any time, please plan to take the OAT by June of the year you plan to apply in order to be considered for early admission. Official test scores are acceptable for up to three years from the testing date.

Applicants are encouraged to take the examination by June of the year of application to the College of Optometry. If applicants wish to enhance their scores, the exam may be repeated. For an OAT application packet and additional information, contact:

Optometry Admission Testing Program
211 East Chicago Ave.
Suite 1846
Chicago, IL 60611
(312) 440-2693
http://www.opted.org

## Application Procedures

The Admissions Committee begins to process applications on August 1 for the class entering the following year. An applicant's file will be considered complete and ready for consideration by the Admission Committee when the following material has been received:

1. Application.
2. $\$ 50.00$ non-refundable application fee payable to the University of Missouri St. Louis.
3. Official high school and college transcripts, followed by updated transcripts as they become available.
4. Official Optometry Admission Test (OAT) results.
5. A composite evaluation prepared by the preprofessional advisory committee at the educational institution the applicant is attending. Those applicants not currently attending college or who are at an institution that does not offer a committee evaluation will be required to submit four letters of recommendation.

Official transcripts must be mailed from every college attended, regardless of whether or not credit was earned. Letters of recommendation must be mailed directly to the college by the originator. It is the applicant's responsibility to ensure all application materials are received in the office of Student Services by February 15 to be considered for admission to the class entering in August of the same year. Facsimile (faxed) application material will be not accepted or
acknowledged. Application material received after February 15 will not be evaluated for the class entering in August of the same year. To be considered for merit scholarships, there is an early enrollment deadline. All materials must be received by December 15 in order to be considered for the early application deadline. Applications received after that time will still be considered for admission but not additional awards.
All correspondence, inquiries and application material should be addressed to:

> UM-St. Louis College of Optometry
> Office of Student Services
> 317 Marillac Hall
> One University Blvd.
> St. Louis, MO $63121-4400$

Applications may also be submitted online by accessing an application at http://optometry.umsl.edu. Click on "applying to the college."

## Students From Other Countries

In addition to the standard application procedures, applicants living outside the United States and its possessions must take the Test of English as a Foreign Language (TOEFL) and receive a minimum score of 500 . Write to:

Test of English as a Foreign Language (TOEFL)
Educational Testing Service
Princeton, NJ 08530
To complete their credential file, applicants are required to furnish original and official transcripts from each school and college attended both in this country and abroad. The Educational Credentials Evaluators, Inc. or the World Education Services must evaluate all foreign school and college transcripts and their evaluation submitted as part of the application requirement. For information contact:

Educational Credentials Evaluators, Inc.
Post Office Box 514070
Milwaukee, WI 53203
(414) 289-3400

Fax: (414) 289-3411
E-mail: eval@ece.org
Web site: http://www.ece.org
World Education Services
P.O. Box 745

Old Chelsea Station
New York, N.Y. 10113-0745
(212) 966-6311

Fax: (212) 966-6395
Web site: http://www.wes.org
The University of Missouri-St. Louis maintains an Office of International Student Services to assist applicants who have been offered admission. All new international students are required to attend a formal orientation program before matriculation. For more information, contact:

University of Missouri-St. Louis<br>Office of International Student Services<br>One University Blvd.<br>St. Louis, MO 63121-4499<br>(314) 516-5229

## Selection Procedures

Applications are reviewed beginning in August with interviews scheduled and initiated starting in October. The college uses a 'rolling admissions' process that allows qualified applicants to be admitted on an ongoing basis until the class is filled. Therefore, applicants are encouraged to apply as early as possible to ensure full consideration for admission.

The Admissions Committee has the responsibility to review and evaluate all applicants and select the best qualified candidates. The committee considers: an applicant's overall grade point average, the grade point achieved in the sciences, any grade trends over the years in college, and the scores on the OAT. Concurrently, candidates are evaluated on less quantitative measures such as extracurricular activities and interests, related or unrelated work experience, written narrative, and letters of recommendation.

Those applicants whom the committee feels to be most competitive will be invited for an on-campus interview. The on-campus interview facilitates an assessment of the applicant's communication skills, interests, motivation, and personal characteristics. In addition, the on-campus interview allows the applicant to tour the facilities, meet with currently enrolled students, present questions regarding financial aid and housing, and learn more about the University of Missouri-St. Louis and the College of Optometry. From this group of interviewed applicants, the entering class of approximately 44 students will be selected.

The policies of the University of Missouri-St. Louis and the College of Optometry comply with the provisions under those laws that forbid discrimination on the basis of race, color, religion, sex, sexual orientation, national origin, age, disability or status as a Vietnam era veteran.

## Admission Process

Notices of acceptance may be received as late as June of the year in which the students enter the program. If acceptance to the class is conditional, the terms of the condition must be completed prior to matriculation. Applicants who have indicated that degree requirements will be completed prior to matriculation, and who have been selected for admission, may receive a conditional offer of acceptance contingent upon completion of the degree.

Students offered admission have 15 days from the date on the offer of admission letter to make a required $\$ 200$ acceptance deposit. The $\$ 200$ deposit will be credited toward tuition when the student matriculates. The deposit is
considered a non-refundable administration fee should the student not matriculate.

A certain number of applicants are placed on an alternate list. If an applicant who has been offered admission declines the offer, their position will be allocated to the next individ aal on the alternate list.

Notification of denial is sent by mail. If an applicant is interested in reapplying, they should notify the College of Optometry's Office of Student Services.

## Financial Aid

The University of Missouri-St. Louis maintains an Offi:e of Student Financial Aid to assist students with the cost of their education.

Financial assistance is available in the form of grants, loans, scholarships, and work-study. Funds for these programs, are available from federal, private, state, and institutional resources. To apply for financial aid, students must conplete a Free Application for Federal Student Aid (FAFSA). Preference will be given to those students who have completed the FAFSA by April 1. Preference means that the Student Financial Aid Office will begin awarding FWS (Federal College Work-Study), Federal SEOG (Federal Supplemental Educational Opportunity Grant) and Federal Perkins Loan funds. A completed financial aid application means that the Financial Aid Office has received an official Student Aid Report from the Federal Processing Center.

The Student Financial Aid Office maintains a Web site at www.umsl.edu/services/finaid, where students will finc: useful information along with the ability to contact the office electronically via e-mail. Also included is a scholarshif directory that is updated biweekly

To be considered for all university scholarships offered through the Financial Aid Office, a student must be accepted for admission. A scholarship application must be completed to apply for scholarships awarded through Student Finsncial Aid. All incoming students should complete the Incom ng Freshman Scholarship Application. Continuing students should complete the Continuing Student Scholarship Application.

Many state optometric associations and their auxiliarie:; offer scholarships and grants. Application is generally made directly to the state association or auxiliary and selection is generally made on the basis of state residence and othe: criteria. Information may be obtained by writing to the various state optometric associations and/or auxiliaries

The College of Optometry will provide additional information about scholarships and the college' Handbjok of Loans, Scholarships, Grants, and Awards to applicants during the interview process.

Fees
Detailed information regarding current fees and residency regulations is furnished in the Schedule of Courses, a newspaper schedule distributed before each semester registration, available at the Registrar's Office in the Millennium Student Center. Students should be aware that fees shown are current as this publication goes to press, but fee changes may occur while this Bulletin is still in use.

The university reserves the right to change fees and other charges at any time without advance notice.

## Education Fees

All students enrolled in the University must pay educational fees based on either the schedule for Missouri residents or the schedule for non-residents. All optometry students will be required to pay the non-resident educational fee if they do not meet the University of Missouri residency requirements at the time of enrollment.

|  | Resident | Non-resident |
| :--- | ---: | ---: |
| Summer 2006* | $\$ 4,200.80$ | $\$ 8,214.40$ |
| Fall 2006 | $8,401.50$ | $16,428.70$ |
| Winter 2007 | $8,401.50$ | $16,428.70$ |

The Educational Fees plateau is 16.0 credit hours. Any student enrolled for less than 16.0 credit hours will be charged per credit hour at $\$ 581.14$. Nonresidents pay a non resident fee of $\$ 1,082.84$ per credit hour
${ }^{*}$ A Summer Session is required between the third and fourth professional year.

## Other Required Fees

All students are required to pay the following fees each semester: Information Technology Fee is $\$ 11.30$ per credit hour (no maximum); Student Facility, Activity, and Health Fee $\$ 37.74$ for the first credit hour during the summer and $\$ 44.74$ for the first credit hour during the Fall and Winter/Spring semester. Additional credit hours (up to the prescribed maximums are assessed at the rate of an additional $+\$ 32.74$ per credit hour (maximum 6 credit hours for Summer and 12 credit hours for the Fall and Winter/Spring.)

## Parking Fee

All vehicles parked on carmpus require a parking permit. It is the responsibility of the student to be aware of the parking policies and procedures while using the lots at the University of Missouri St. Louis. The College of Optometry cannot be responsible for violations from students who do not purchase parking permits or adhere to the campus policies and procedures.

The Parking fee $\$ 18.00$ per credit hour for all semesters. All fourth year students who are away on externship rotation must pay a minimum of $\$ 18.00$ per semester for parking.

## Student Health Insurance (optional)

An Accident and Sickness Insurance plan is available to students and their dependents. Information concerning premiums and coverage is available upon request from University Health Services or visit their website at www.umsl.edu/services/health or call (314) 516-5671. For students registered at UM-St. Louis College of Optometry, health insurance is available through the American Optometric Student Association. Visit the website at http://www.studentinsurance.net/Public/ClientBrochures/200 4-1849 1.pdf

## *Nonresident Students

Optometry students who do not meet the residency requirements must pay the nonresident educational fee according to the schedule above. A definition of "residency" is outlined in Tuition and Residency Rules, available in the cashier's office. (314-516-5151) Students are responsible for registering under the proper residence and paying the proper educational fees.

Currently, three nonresident positions are allocated by state reciprocal agreements for residents of Kansas. Individuals who are admitted under these agreements will pay reduced educational fees. For additional information, contact:
Kansas Board of Regents
Kansas Optometry Service Scholarship
1000 S.W. Jackson St., Suite 520
Topeka, KS 66612-1368
(785) 296-3518.

The College of Optometry currently has a State contract agree for residents of Nebraska. This contract permits the College of Optometry to admit one eligible Nebraska resident in each entering class to receive the award. For detailed information about the contract and to be certified as a bona fide Nebraska resident, contact:

Dr. Donald Burns
University of Nebraska
3835 Holdrege
Lincoln, NE 68583
(402) 472-7115

## Four-Year Professional Degree (O.D.) Curriculum

## First Year

|  | Credit |
| :--- | :---: | :---: | :---: |
| Fall Semester | Hours |$\quad$ Lecture Lab


| 8120 Ocular Optics <br> 8140 Physical Optics <br> and Photometry | 4 | 3 | 2 |
| :--- | :--- | :--- | :--- |
| 8160 Anatomy and <br> Physiology of the Eye | 3 | 2 | 2 |
| 8180 Clinical <br> Optometry I | 4 | 3 | 2 |
| Second Year | 2 | 1 | 2 |
| Fall Semester <br> 8220 Ophthalmic |  |  |  |
| Optics <br> 8230 Practice <br> Management II | 4 | 3 | 2 |
| 8240 Ocular Motility <br> 8250 Monocular | 4 | 1 | 2 |
| Sensory Processes <br> 8260 General <br> Pharmacology <br> 8280 Clinical <br> Optomerry II | 5 | 4 | 2 |
| Winter Semester | 3 | 3 | - |
| 8320 Ophthalmic <br> Dispensing <br> 8340 Binocular Vision and <br> Space Perception | 4 | 3 | 3 |


| Third Year |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Credit |  |  |
| Fall Semester | Hours Lecture |  | Lab |
| 8390 Clinical Medicine | 2 | 2 | - |
| 8500 General Clinic I | 6 | - | 12 |
| 8520 Contact Lenses I | 3 | 2 | 2 |
| 8540 Binocular Vision |  |  |  |
| Anomalies | 4 | 3 | 2 |
| 8550 Low Vision | 3 | 2 | 2 |
| 8570 Ocular Disease II | 4 | 3 | 2 |
| Winter Semester |  |  |  |
| 8600 General Clinic II | 6 | - | 12 |
| 8610 Environmental Visio |  | 2 | 2 |
| 8620 Contact Lenses II | 3 | 3 | - |
| 8630 Practice |  |  |  |
| Management III | 3 | 3 | - |
| 8640 Pediatric Optometry |  | 3 | 3 |
| 8650 Geriatric Optometry | 2 | 2 | - |
| 8660 Contact Lens |  |  |  |
| Specialty Clinic | 1 | - | 2 |
| 8670 Ocular Assessment | 1 | 1 | - |
| 8680 Ophthalmic Lasers | 1 | 1 | - |



| Ophthalmic Laser Treatment | 7 | - | 14 |
| :--- | :--- | :--- | :--- |
| 8817 External Rotation in |  |  |  |
| Rehabilitative Patient Care | 7 | - | 14 |
| 8820 External Rotation in |  |  |  |
| Low Vision Patient Care | 7 | - | 14 |

## Category 6 Elective

8830 External Rotation
in General Patient Care 7 - 14
8840 External Supplementary
Rotation in General Patient Care 7 - 14
8850 Supplementary Rotation
in General Patient Care 7 - 14

## Required Courses

8870 Practice Management IV 2221
8880 Clinical Seminar 11 -

## Elective Courses in the College of Optometry

8400 Directed Readings
8410 Directed Research
8420 Ocular Photography
8440 Clinical Applications of Current
Topics in Visual Science
8470 Case Studies in Ocular Diseases
8910 Topics in Geriatric Optometry
8970 Geriatric Patient Care Delivery
Graduate Physiologic Optics Courses Approved for Elective Credit*
6400 Sensory Processes and Perception
6401 Visual Optics
6402 Ocular Anatomy and Physiology
6403 Psychophysical Methods and Experimental Design
6404 Sensory Neuroscience
6405 Neuroanatomy
6406 Geometric Optics
6451 Corneal Physiology
6452 Growth and Development of the Visual System
6453 Advanced Physiology of Other Sensory Systems
6454 Binocular Vision
6455 Visual Information Processing
6456 Oculomotor Systems
6457 Comparative and Evolutionary Aspects of Vision
6458 Noninvasive Assessment of the Visual System
6459 Introduction to Computer Programming for Vision

## Research

6470 Individual Studies in Physiological Optics
6490 Graduate Research in Physiological Optics
6497 Interdisciplinary Geriatric Care
6499 Current Topics in Optometry and Vision
Science

## Grades

All courses taken for credit in the professional program must be passed with a "C-" or better in order for a student to qualify for graduation. The College of Optometry does not recognize a "D" grade for courses taken for degree credit; and for a student enrolled in a patient care course. Therefore,
any grade lower than a "C-"will be recorded as an " F " and have " 0 " grade points. Furthermore, in order to qualify for graduation, a student must be in good academic standing and the cumulative professional GPA must be 2.5 or higher. Beginning in May 2003, students must submit evidence to the Office of Student Services that they have taken the 3 part NBEO examinations prior to graduation. Such evidence may include a copy of the score report received from NBEO.

To assure graduating at the end of a specific semester, all work for that semester and any delayed grades from previous semesters must be completed with the grades sent to the Office of Student Services no later than the official date for submission of final semester grades.

## Time limitations

All of the required courses during the first 6 semesters of first course enrollment and all required courses for the O.D. degree must be completed within 6 years after the first course enrollment.

## Graduate Studies

## Vision Science (Physiological Optics)

Vision science is a multidisciplinary area concerned with the study of normal and anomalous vision. The goal of this program is to train the next generation of researchers in clinical and basic vision science, to conduct research, and to educate faculty for schools and colleges of optometry. Students will be required to integrate basic skills in vision science with focal studies in an area of research emphasis.

This program will emphasize research aimed at new treatments and cures for vision disorders, as well as research in basic mechanisms of visual functions. The College of Optometry offers both an M.S. degree and a Ph.D. degree. Students may apply to the Graduate School for admission to either the M.S. or the Ph.D. program.

## Admission Requirements

Students must have the appropriate background for graduate training in physiological optics and appropriate undergraduate courses for their anticipated research emphasis. Applicants must have a bachelor's degree from an accredited college or university within the United States or from an equivalent institution outside the United States. To be admitted as regular graduate students, applicants must have a grade point average of at least 3.0 in their overall undergraduate work, in their undergraduate major, and in any post baccalaureate academic work. Students must arrange for transcripts to be submitted from all postsecondary academic work and to have at least three letters of recommendation sent by faculty members at previously attended colleges and universities. Students must also submit GRE scores (verbal, quantitative, and analytic). Applicants to the M.S. program must have combined scores on the verbal and quantitative sections of at least 1000 ; applicants to the Ph .D. program must have combined scores of at least 1100 . In addition, students from countries where English is not a primary
language must submit TOEFL scores of 550 or better. All materials and scores must be submitted by March 1 if an applicant wishes to be considered for financial assistance for the fall semester.
Early applications are encouraged.

## Master of Science in Physiological Optics

## Degree Requirements

The M.S. degree requires 30 semester hours of course work, including the core courses. At least 25 of these hours will normally be taken from courses offered by the College of Optometry, with no more than 10 of these in Physiological Optics 6490, Graduate Research in Physiological Optics. Each M.S. student will be required to teach at least two semesters in areas determined by the Graduate Committee in Physiological Optics.

The core courses for this program are:
Physiological Optics 6400, Sensory Processes and Perception
Physiological Optics 6401, Visual Optics
Physiological Optics 6402, Ocular Anatomy and Physiology
Physiological Optics 6403, Psychophysical Methods and Experimental Design
Physiological Optics 6404, Sensory Neuroscience
Special Topics, Individual Studies, and Advanced Topics courses in Physiological Optics are also offered.

Each M.S. student must also complete a thesis based on research conducted during the program. The thesis must be approved by a committee of at least three members of the graduate faculty, at least two of whom must be from the graduate faculty in physiological optics.

## Ph.D. in Physiological Optics

## Degree Requirements

The doctoral degree requires 60 semester hours of course work, including the core courses. Each Ph.D. student will also be required to demonstrate proficiency in a foreign language, computer language, advanced statistical methods, or another acceptable tool skill. The tool skill and level of proficiency must be selected in advance in consultation with the Graduate Committee in Physiological Optics. Students will be required to teach at least two semesters in areas determined by the Graduate Committee in Physiological Optics.

Written qualifying examinations will be offered each semester. Students must declare their intent to take the examinations at least one month prior to the beginning of that semester or summer session. Full-time students must attempt qualifying examinations before beginning their third year of study. Students must declare their intent to take the examinations at least one month prior to the beginning of that semester or summer session.

The preparation of the dissertation will be supervised by a dissertation committee which will be appointed by the Graduate Dean upon the recommendation of the Director of Graduate Programs in the College of Optometry. Inpu: from the student's advisor will be solicited by the Director Frior to finalization of the recommendation by vote of the Grajuate Faculty. An oral examination of the written dissertation proposal will be conducted by the Committee. A public oral defense of the completed written dissertation is also required.

The core courses for this program are:
Physiological Optics 6400, Sensory Processes and Perception
Physiological Optics 6401, Visual Optics
Physiological Optics 6402, Ocular Anatomy and Physiology Physiological Optics 6403, Psychophysical Methods and Experimental Design
Physiological Optics 6404, Sensory Neuroscience Special Topics, Individual Studies, and Advanced Topics courses in Physiological Optics are also offered.

## Continuing Education

The College of Optometry offers continuing education programs for optometrists throughout the Midwest reçion as well as nationwide. Courses on management of ocular diseases, ocular anomalies, and visual skills are held cn a frequent basis. In addition to College of Optometry fazulty, optometric specialists, medical educators, and researciers have input into course development as well as particiration in course presentations.
All CE courses offered by the school are accepted by hose states requiring continuing education credit for relicersure.

Continuing Education course information may be obtz.ined by contacting:

## University of Missouri-St. Louis College of Optometry Office of Continuing Education <br> One University Blvd.

St. Louis, MO 63121-4499
(314) 516-5615

## Career Outlook

## Doctor of Optometry Degree

Doctors of optometry are independent primary health zare providers who examine diagnose, treat and manage diseases and disorders of the visual system, the eye and associzted structures as well as diagnose related systemic conditions. Optometrists examine the internal and external structure of the eyes to diagnose eye diseases like glaucoma, cataracts and retinal disorders; systemic diseases like hypertension and diabetes; and vision conditions like nearsightedness, farsightedness, astigmatism and presbyopia. Optometrists also do testing to determine the patient's ability to focus and coordinate the eyes, and to judge depth and see colors accurately. They prescribe eyeglasses and contact lenses,
low vision aids, vision therapy and medicines to treat eye diseases.

As primary eye care providers, optometrists are an integral part of the health care team and an entry point into the health care system. They are skilled in the co-management of care that affects the eye health and vision of their patients and an excellent source of referral to other health care professionals.

The optometrist has completed pre-professional undergraduate education in a college or university and four years of professional education at a college of optometry, leading to the doctor of optometry (O.D.) degree. Some optometrists complete a residency.

The scope of optometry practice requires an understanding of the development of vision from infancy through adulthood, and the therapeutic and rehabilitative methods required to care for the problems of vision from infancy through the declining years.

Optometry is the largest eye care profession and one of the largest independent health care professions in the United States. Currently, some 30,000 doctors of optometry practice in America. They are widely distributed across the nation, practicing in more than 7,100 different municipalities. In more than 4,300 of these communities, they are the only primary care provider. As such, doctors of optometry provide the major portion of primary eye care services in the United States.

Studies have indicated that a ratio of one practicing doctor of optometry to every 7,000 people (a ratio of 14.3 practicing doctors of optometry per 100,000 population) is a reasonable average for the United States. Despite recent growth in the profession, few states meet this criteria.

As our society becomes more technically oriented, vision requirements become more exacting. The number of persons needing professional help for reading and other near-point visual tasks, including both older citizens and school children, is steadily growing. Increased demands for vision care result not only from population growth but also from increased understanding of how good vision relates to industrial production, student achievement, adjustments to aging, and other areas crucial to modern society. The patients whom the practicing doctors of optometry treats may have varied and challenging needs. On any given day, an optometrist might be involved in restoring vision to a partially sighted patient; fitting glasses for a child whose vision problem is affecting academic achievement; treating an eye infection with antibiotics; improving the function of a patient's eyes through vision training; helping an elderly patient in a nursing home cope with changing vision through critical eye health education; and performing comprehensive eye examinations for those who need glasses or contact lenses to correct astigmatism, nearsightedness, and numerous other vision problems.

The practice of optometry offers independence, flexibility, and diversity. Doctors of optometry have a wide range of modes of practice. They may choose to practice in the inner cities, suburbs, and rural areas. Opportunities exist for solo practice, associateship, optometric or multidisciplinary group practice, government or military service, clinical or hospital practice, teaching, and research.

Optometry is a rewarding career, both economically and personally. Based on data from the Bureau of Labor Statistics and surveys by professional associations, optometry is one of the top 10 income-earning professions in the country.

## Graduate Degrees

The master of science program provides research-oriented training beyond that offered in the professional program in optometry. Many optometry schools require that applicants for faculty positions hold an M.S. or Ph.D. degree as well as an O.D. degree. Additional employment possibilities for individuals with M.S. degrees are found in industry and in public and private research foundations.

The Ph.D. program prepares students as research professionals in vision science. Employment opportunities are available in college or university teaching and research, in research institutes, and in industry. Within academic optometry, individuals with both O.D. and Ph.D. degrees are in high demand as faculty members.

## Course Descriptions

The following 8000-level courses are taken in the Doctor of Optometry (O.D.) program.

## 8010 Anatomy, Physiology and Disease Process I (5)

First in a two-semester course sequence that will detail the general anatomy of the human body along with the histology (microanatomy), physiology and disease processes of major organ systems. Course content will be presented in a modular format. Areas of discussion will include cardiovascular, respiratory, endocrine, digestive, reproductive, integumentary, and peripheral and autonomic nervous systems. The laboratories will emphasize and augment important concepts introduced in the classroom environment.

## 8020 Geometric Optics (4)

Prerequisite: Consent of instructor. The principles of geometric optics as applied to refracting and reflecting surfaces, thin lenses, thick lenses, and lens systems. The optics of various ophthalmic instruments and techniques will be examined.

## 8030 Practice Management I (2)

An introduction to the profession of optometry, including a consideration of the characteristics of a profession, the history of optometry, the profession's legal limitations, and major optometric organizations. The ethical basis of the
practice of optometry will be explored, including a consideration of the theories and principles of normative ethics, biomedical ethics and the responsibilities of the health care practitioner, professional codes of ethics and ethical issues that arise in the practice of optometry. Ethical case studies will be extensively used. This is an interactive course, requiring active participation on the part of the student.

## 8040 Neuroanatomy (4)

Detailed gross and microscopic anatomy of the human central nervous system with a special emphasis on the cranial nerves, nuclei, and the visual system.

## 8060 Biochemistry (3)

Basic concepts of general and cellular biochemistry. Study of nomenclature structure, and reactions of organic molecules. Some emphasis on visual system - tears, intraocular fluids, lens, and photochemistry.

8110 Anatomy, Physiology and Disease Process II (5) Prerequisite: Opt 8010. Continuation of Opt 8010 Anatomy, Physiology and Disease Processes I.
(Four hours lecture, two hours laboratory/week.)

## 8120 Ocular Optics (4)

Prerequisite: Opt 8020. The eye as an image forming mechanism, the schematic eyes, the optical role of the pupil, the retinal image and its evaluation. Nature, classification, and etiology of ametropia. Experimental models of refractive errors. Entoptic phenomena. Mechanism and optical aspects of accommodation.

## 8140 Physical Optics and Photometry (3)

Prerequisite: Optometry 8020 or consent of instructor. Basic photometric concepts, measurements of light levels, applications in ergonomics, visual and photographic optics. Physical optics including diffraction, interference, polarization, birefringence, and lasers.

## 8160 Anatomy and Physiology of the Eye (4)

Prerequisite: Opt 8040 and Opt 8010 or consent of instructor. Vegetative anatomy and physiology of the eye, optic nerve, orbit, and adnexa will be discussed. This includes discussion of embryology and the dynamics of ocular fluids/3 hours lecture, lhour laboratory.

## 8180 Clinical Optometry I (2)

Selected tests for ocular assessment including case history, visual acuity, and ophthalmoscopy.

## 8220 Ophthalmic Optics (4)

Prerequisite: Opt 8140 , and 8120 . Ophthalmic materials, physical characteristics of lenses and frames, paraxial optics of ophthalmic lenses, ophthalmic prisms, lens specifications, special lenses, multifocal lenses, unique designs, aniseikonic lenses, abberation theory and its application to lens design, lenses for low vision, protective eyewear, selecting and dispensing eyewear, management of a dispensary.

## 8230 Practice Management II (2)

Prerequisite: Opt 8030. Principles of human interpersoxal relationships. The enhancement of listening and verbal skills will be provided. Emphasis will be preparing the studeat to understand and manage the many human interpersonal relationships necessary in the practice of optometry.

## 8240 Ocular Motility (4)

Prerequisite: Opt 8040 or consent of instructor. The anatomy, physiology, neurology, measurement, characteristics, and control of the intra and extraocular system.

8250 Monocular Sensory Processes (5)
Prerequisite: Opt 8160 or consent of instructor. Monocalar sensory mechanisms of vision, photoreception, visual neurophysiology, spatial and temporal effects, visual a:uity and resolution, adaptation, brightness discrimination, and color vision. Topics include a consideration of both the psychophysical aspects and neurophysiological bases cf these mechanisms.

## 8260 General Pharmacology (3)

Prerequisite: Opt 8110. General principles of drug actions on the organ systems, central and peripheral nervous systems, methods of administration, pharmacological actions, side effects, and drug interactions. Regulatory agencies, lav/s, and drug abuse.

## 8280 Clinical Optometry II (5)

Prerequisite: Opt 8180. Continuation of clinical optometry. Patient care in the areas of refraction, binocular integration, perimetry, and bimicroscopy.

## 8290 Physiological Optics Lab II (1)

Prerequisite: Opt 8130. Experiments designed to accormpany Opt 8240 and Opt 8250.

## 8320 Ophthalmic Dispensing (1)

Prerequisite: Opt 8220. Clinical experience in verification and dispensing of ophthalmic materials.

## 8340 Binocular Vision and Space Perception (4)

Prerequisite: Opt 8240, 8280, and 8250 or consent of instructor. Binocular vision and space perception. Visual direction, theory of correspondence, fusion, rivalry, oc ilar dominance, and stereopsis. Developmental aspects and neurophysiological mechanisms.

## 8350 Epidemiology (2)

A review of descriptive statistics, probability sampling, correlation, and prediction. The essentials of epidemio ogical study procedures and a discussion of the epidemiology of vision disorders.

## 8360 Ocular Pharmacology (3)

Prerequisite: Opt 8260. Pharmacology principles, methods of administration, doses, contraindications, and adverse effects of drugs used for the diagnosis and treatment of abnormalities of the eye, adnexa and visual
system. Ocular manifestations of systemic medications.

## 8370 Ocular Disease I (4)

The etiology, epidemiology, symptoms, signs, and course sequelae of ocular disease and anomalies. Disease and anomalies of lids, orbit, conjunctiva, comea, sclera, iris, ciliary body, lens, vitreous, retina, choroid, and optic nerve.

## 8380 Clinical Optometry III (5)

Prerequisite: Opt 8280. Correlation and analysis of optometric data. Emphasis on diagnosis, prognosis, and therapy of visual problems.

## 8390 Clinical Medicine (2)

Prerequisite: Opt 8290 and 8260. Diagnostic principles and medical management. Comprehensive health history, physical examination and neurological screening with particular association to ocular health conditions. Clinical chemistry and interpretation of clinical laboratory tests, criteria for referral to other providers and emergency office procedures. Comanagement practice with other primary care physicians will be emphasized.

## 8400 Directed Readings (1)

Credit is given for independent literature review of a specific topic in any area of basic or clinical vision science. Readings are to be supervised by a two person faculty committee and at least one member of this committee must be selected from among the full-time regular faculty. Credit is awarded upon approval of a written paper regarding the selected topic. This elective may be repeated once.

## 8410 Directed Research (3)

Credit is given for independent research. Projects may be laboratory, library, or clinically based research in any area of vision science. All projects must be undertaken under the supervision of a three member faculty committee. This elective may be repeated once.

## 8420 Ocular Photography (2)

Prerequisite: Consent of instructor. Optical principles and clinical techniques in photographing the internal and external eye and its adnexa. Includes laboratory exercises on use of the most common types of clinical cameras.

## 8440 Clinical Applications of Current Topics in Visual Science (2)

(elective) Prerequisite: Consent of instructor. A seminar on the use of new discoveries in visual science in clinical optometry. Students will participate in selecting the topics, which will change from year to year, with the guidance of the instructor. The course will also include laboratory demonstrations of seminar topics.

## 8470 Case Studies in Ocular Disease (1)

Prerequisites: 8370, Ocular Disease I and 8570, Ocular Disease II. This course will focus on discussion of current clinical topics in eye disease as they relate to student
experiences in the clinic. Ocular diagnosis and management will be reviewed as well as advanced diagnostic techniques.

## 8500 General Clinic I (6)

Prerequisite: Opt 8380 and successful completion of all first and second year course work. The clinical examination and care of general clinic patients, along with the fitting and dispensing of lenses and frames.

## 8520 Contact Lenses I (3)

Prerequisite: Opt 8380. Historical development of the contact lens and its use. Basic lens terminology, specifications, physiochemical characteristics, optics, fabrication, and verification. Preliminary patient evaluation, indications and contraindications for contact lenses. Basic fitting philosophies for all lens types. Lens care and patient education. Patient and practice management considerations.

## 8540 Binocular Vision Anomalies (4)

Prerequisite: Opt 8310 and 8340 or consent of instructor. The etiology, epidemiology, symptoms, signs, and course sequelae of the obstacles to binocular vision - sensory, integrative, and motor. The detection, diagnosis, prognosis, and orthoptic treatment of such anomalies. Clinical care of aniseikonias.

## 8550 Low Vision (3)

The etiology, epidemiology, symptoms, signs, and course sequelae of low vision problems. Methods of testing, prognosis, selection of therapy, design of environmental and optical aids, problems of rehabilitation. Agencies, laws, public and social assistance for the partially sighted and blind.

## 8560 Public Health (2)

A review of local, state, and federal organizations involved in health care, comprehensive health planning, new trends in health care delivery, and the assessment of the quality of health care delivery. The relationship of vision care to these topics is emphasized.

## 8570 Ocular Disease II (4)

Prerequisite: Opt 8370. The etiology, epidemiology, systems, signs, course sequelae and management of posterior segment ocular disease and the anomalies and ocular manifestations of systemic diseases. Disease, abnormalities and management of neurological conditions which affect the lids, pupils, extraocular muscles, optic nerve and visual system.

## 8600 General Clinic II (6)

Prerequisite: Opt 8500 and successful completion of all Fall semester third year course work. Same as General Clinic I.

## 8610 Environmental Vision (2)

This course considers the relationship of the eye and vision to all aspects of one's environment including home, work, recreation, and transportation. Emphasis will be placed on protecting the eye from injury and maximizing vision performance.

## 8620 Contact Lenses II (3)

Prerequisite: Opt 8520. Advanced contact lens fitting, theories, and clinical methods for astigmatic, presbyopic, keratoconic, and aphakic designs. Special considerations include the use of corneal topography, orthokeratology, disposable lenses, lenses for extended wear and lenses for color deficiencies.

## 8630 Practice Management III (3)

Prerequisite: Opt 8030 and Opt 8230. The development and management of an optometric practice from a patient and community service point of view - office design, office routine, patient care administration, personnel management, and recall systems. The establishment, development, and management of an optometric practice from a business point of view. Legal developments, governmental relationships, legislation and the legislative process, malpractice, professional ethics, taxes, fee structures, insurance, and accounting methods.

## 8640 Pediatric Optometry (3)

Prerequisite: Opt 8380 . Special examination and management considerations of the pediatric patient. Psychological, physiological, social, and demographic aspects of early visual development. Discussion of the optometric considerations of children with learning and reading disabilities.

## 8650 Geriatric Optometry (2)

Same as Gerontology 6458. Special examination and management considerations of the geriatric patient will be discussed. Psychological, physiological, social, and demographic aspects of aging, as well as ocular changes associated with the aging process will be taught.

## 8660 Contact Lens Specialty Clinic (1)

Prerequisite: Opt 8520 and successful completion of all Fall semester third year course work. The clinical examination and care of patients in the optometric specialty area of contact lenses.

## 8670 Ocular Assessment (1)

Prerequisite: Enrollment in General Clinic I or II. Discussion of the diagnosis and management of common clinic patient encounters via Socratic teaching techniques. Interns are encouraged to present actual cases which have been particularly challenging for them.

## 8680 Ophthalmic Lasers (1)

Principles and applications of lasers for ophthalmic use. Emphasis will be placed on demonstration where possible. Topics will include the principles, physics and safety concerns of ophthalmic lasers. Lasers used in retinal imaging, and in the care of glaucoma, cataract, refractive conditions, and cosmetic conditions will be discussed and demonstrated. Comanagement of patients requiring ophthalmic laser treatment will also be covered.

8690 Pediatric/Binocular Vision Specialty Clinic (1)
Prerequisite: Opt 8540 and successful completion of all Fall semester third year course work. The clinical examination and care of patients in the optometric specialty areas 0 : binocular vision and pediatric vision.

## 8700 UM-St. Louis Pediatric/Binocular Vision Patitnt Care (3)

Prerequisite: Successful completion of all first, second and third year course work. Comprehensive clinical care of ${ }^{\circ}$ patients in pediatric/binocular vision clinic at the University of Missouri-St. Louis University Eye Center. This course fulfills one of the clinic courses required for graduation. This course must be taken in conjunction with 8710 Opt and Opt 8720.

## 8710 UM-St. Louis Contact Lens Patient Care (3)

Prerequisite: Successful completion of all first, second and third year course work. Comprehensive clinical care in the contact lens clinic at the University of Missouri-St. Lo is University Eye Center. This course fulfills one of the clinic courses required for graduation. This course must be tiken in conjunction with Opt 8700 and Opt 8720.

8720 UMSL Eye Health Management Patient Care (1) Prerequisite: Successful completion of all first, second and third year course work. Comprehensive clinical care in the eye health management clinic with ophthalmologists a: the University of Missouri-St. Louis University Eye Center. This course fulfills one of the clinic courses required for graduation. This course must be taken in conjunction vith Opt 8700 and Opt 8710.

## 8730 Optometric Center Patient Care (6)

Prerequisite: Successful completion of all first, second. and third year course work. Comprehensive clinical care of' patients at the University of Missouri-St. Louis Optometric Center. This course fulfills one of the clinic courses required for graduation. This course must be taken in conjunction with Opt 8740.

## 8740 Optometric Center Eye Health Management Fatient Care (1) <br> Prerequisite: Successful completion of all first, second. and third year course work. Comprehensive clinical care of patients in the eye health management clinic with ophthalmologists at the University of Missouri-St. Louis Optometric Center. This course fulfills one of the clinic: courses required for graduation. This course must be taken in conjunction with Opt 8730.

## 8750 East St. Louis Center Patient Care (6)

Prerequisite: Successful completion of all first, second, and third year course work. Comprehensive clinical care of patients at the East St. Louis Eye Center. This course fulfills one of the clinic courses required for graduation. This course must be taken in conjunction with Opt. 8850.

8760 Harvester Eye Center Patient Care (7)
Prerequisite: Successful completion of all first, second, and third year course work. Comprehensive clinical care of patients at the Harvester Eye Center. This course fulfills one of the clinic courses required for graduation.

8770 Community Service Rotation in Patient Care (7) Prerequisite: Successful completion of all first, second, and third year course work. Comprehensive clinical care of patients at St. Louis area community health centers. This course fulfills one of the clinic courses required for graduation.

8780 External Rotation in Institutional Patient Care (7) Prerequisite: Successful completion of all first, second, and third year course work. Comprehensive clinical care of primary care patients at external sites approved by the College of Optometry's Externship Council. This course fulfills one of the clinic courses required for graduation.

## 8790 External Rotation in Ocular Disease Patient Care

 (7)Prerequisite: Successful completion of all first, second, and third year course work. Comprehensive clinical care of patients with ocular disease at external sites approved by the College of Optometry's Externship Council. This course fulfills one of the clinic courses required for graduation.

8800 External Rotation in Pediatric/Binocular Vision Patient Care (7)
Prerequisite: Successful completion of all first, second, and third year course work. Comprehensive clinical care of pediatric/ binocular vision patients at an external site approved by the College of Optometry's Externship Council. This course fulfills one of the clinic courses required for graduation.

8810 External Rotation in Contact Lens Patient Care (7) Prerequisite: Successful completion of all first, second, and third year course work. Comprehensive clinical care of contact lens patients at an external site approved by the College of Optometry's Externship Council. This course fulfills one of the clinic courses required for graduation.

## 8811 External Rotation in Ophthalmic Surgical Patient Care (7)

Prerequisites: Successful completion of all second \& third year coursework. Comprehensive clinical care of Ophthalmic Surgical Patients at an external site approved by the College of Optometry's Externship Council. This course fulfills one of the clinic courses required for graduation.

8812 External Rotation in Geriatric Patient Care (7) Prerequisites: Successful completion of all second \& third year coursework. Comprehensive clinical care of Geriatric Patients at an external site approved by the College of Optometry's Externship Council. This course fulfills one of the clinic courses required for graduation.

8813 External Rotation in Ophthalmic Sports Vision (7) Prerequisites: Successful completion of al second \& third year coursework. Comprehensive clinical care of Sports Vision Patients at an external site approved by the College of Optometry's Externship Council. This course fulfills one of the clinic courses required for graduation.

## 8814 External Rotation in Primary Care (7)

Prerequisites: Successful completion of all second \& third year coursework. Comprehensive clinical care of Primary Care Patients at an external site approved by the College of Optometry's Externship Council. This course fulfills one of the clinic courses required for graduation.

## 8815 External Rotation in Pathology and Treatment (7)

 Prerequisites: Successful completion of all second \& third year coursework. Comprehensive clinical care in pathology and treatment of patients at an external site approved by the College of Optometry's Externship Council. This course fulfills one of the clinic courses required for graduation.
## 8816 External Rotation in Ophthalmic Laser Treatment

 (7)Prerequisites: Successful completion of all second \& third year coursework. Comprehensive clinical care in ophthalmic laser treatment of patients at an external site approved by the College of Optometry's Externship Council. This course fulfills one of the clinic courses required for graduation.

8817 External Rotation in Rehabilitative Patient Care (7) Prerequisites: Successful completion of all second \& third year coursework. Comprehensive clinical care in Rehabilitative Patient Care at an external site approved by the College of Optometry's Externship Council. This course fulfills one of the clinic courses required for graduation.

8820 External Rotation in Low Vision Patient Care (7) Prerequisite: Successful completion of all first, second, and third year course work. Comprehensive clinical care of low vision patients at an external site approved by the College of Optometry's Externship Council. This course fulfills one of the clinic courses required for graduation.

8830 External Rotation in General Patient Care (7) Prerequisite: Successful completion of all first, second, and third year course work. Comprehensive clinical care of a general population of optometric patients at external sites approved by the College of Optometry's Externship Council. This course fulfills one of the clinic courses required for graduation.

## 8840 External Supplementary Rotation in General Patient Care (7)

Prerequisite: Successful completion of all first, second, and third year course work. Comprehensive clinical care of general population of optometric patients at an external site approved by the College of Optometry's Externship Council.

8850 Supplementary Rotation in General Patient Care (7) Prerequisite: Successful completion of all first, second, and third year course work. Comprehensive clinical care of general population of optometric patients at the UM-St. Louis University Eye Center, UM-St. Louis Optometric Center, or the UM-St. Louis East St. Louis Eye Center.

## 8860 East St. Louis Eye Health Management Patient Care (1)

Prerequisites: Successful completion of all first, second, and third year course work. Comprehensive clinical care of patients in the eye health management clinic with ophthalmologists at the East St. Louis Eye Center. This course fulfills one of the clinical courses required for graduation. This course must be taken in conjunction with Opt 8750.

## 8870 Practice Management IV (2)

Prerequisite: Successful completion of all first, second, and third year course work. Further in-depth discussion in practice management.

## 8880 Clinic Seminar (1)

Prerequisite: Successful completion of all first, second, and third year course work. Presentation and discussion of interesting clinical patients. Additional clinical testing techniques and concepts. Further discussion of patient data analysis - the process of determining diagnosis, prognosis, and therapy. Further discussions in the optometric specialties.

## 8910 Topics in Geriatric Optometry (3)

Prerequisite: Opt 8650. This course will address concerns and options in providing optometric care to a geriatric population. New techniques, research, and public policy changes will be discussed to assist students in assembling a global perspective on delivering health care to a specific population.

## 8970 Geriatric Patient Care Delivery (3-6)

Prerequisite: Consent of Geriatric Residency Instructors. Direct optometric patient care to a population that is largely geriatric. Emphasis will be on integrating specialty care available for these patients to provide comprehensive vision care. Two hours of direct patient care per week are required per hour of credit. In addition, the student will attend weekly supervisory meetings. May be repeated with consent of instructor for a total of 18 credits. Patient care will become more independent of direct supervision and the type of patients seen will be more varied with each repeat.

The following 6000 -level courses may be taken in the master of science or doctor of philosophy programs in Physiological Optics.

## 6400 Sensory Processes and Perception (3)

Prerequisite: Consent of instructor required for graduate students not in Physiological Optics. Current views on the encoding of various aspects of the visual stimulus (intensity, space, time, and wavelength) that give rise to the perceptions
of brightness, contour, motion, and color will be considsred in this course. The psychophysical tools available to examine visual encoding will be emphasized. Other topics will include binocular vision and depth perception, information processing approaches to visual pattern recognition, andl the similarities and interactions of the visual system with the other sensory modalities.

## 6401 Visual Optics (3)

Prerequisite: Opt 6406, Opt 8020, or consent of instructor. This course deals with the optical properties of the eye. Included are a review of general optics including physical optics, paraxial and non-paraxial geometric optics, image quality, radiometry and photometry, and optical instrumentation. Topics in visual optics will include schematic eyes, measurement of the parameters of the $\epsilon \mathrm{ye}$, accommodation, retinal image size, refractive errors, visual axes, spectral absorption by the ocular media, and the optical performance of the eye.

## 6402 Ocular Anatomy and Physiology (3)

Prerequisite: Consent of instructor required for graduate: students not in Physiological Optics. The structures anc fluids of the eye and orbit, their interactions and functions are considered in this course. Specific topics include th: eyelids, tearfilm, conjunctiva, cornea, iris, ciliary body, vasculature, aqueous humor, vitreous body, and the retina.

## 6403 Psychophysical Methods and Experimental Design

 (3)Prerequisite: Consent of instructor required for graduate: students not in Physiological Optics. Advanced methodology for the design and analysis of experiments in a variety of areas of visual science are considered in this course. Bcth basic and applied topics will be considered. Special emohasis will be placed on psychophysical methodology, signal detection analysis, and scaling techniques.

## 6404 Sensory Neuroscience (3)

Prerequisite: Opt 6405 , Opt 8040, or consent of instruc or. This course will deal with the neural organization of th? sensory systems with an emphasis on vision. It will inc ude a review of general neurophysiology and neuroanatomy is they relate to the processing of environmental stimuli into neural information, as well as experimental approaches utilized in neurobiology. Topics to be covered include neural transduction and sensory coding by receptors and neurons, constraints on perception defined by the functional organization of the nervous system, sensory development and plasticity as related to neural development, and evc lution of sensory systems.

## 6405 Neuroanatomy (5)

Prerequisite: Graduate standing. Detailed gross and microscopic anatomy of the human central nervous sys em with a special emphasis on the cranial nerves, nuclei, and the visual system. Students may not receive credit for both Opt 6405 and Opt 8040.

## 6455 Visual Information Processing (2)

Prerequisite: Completion of core or consent of instractor. This course covers a variety of topics related to the computer modeling of visual problems, such as the detection of surfaces and three-dimensionality, the perception of color, and the encoding of motion. Computer models will be evaluated in terms of their efficiency, veridicality, and relation to biology.

## 6456 Oculomotor Systems (2)

Prerequisite: Completion of core or consent of instructor. The intra-and extraocular muscle systems illustrate the role of visual and other sensory information in feedback control systems. Topics include the control of eye movements, accommodation and pupil size, and their synkinetic relationship in the near triad. The anatomy, physiology, and pharmacology of the muscles, kinematics, methods of measuring eye movements, neurophysiology of eye movements, and perceptual phenomena are also discussed.

6470 Individual Studies in Physiological Optics (2) Prerequisite: Consent of instructor. This course designation can be used to cover a variety of topics in visual science. In general, very specific topics of limited interest will be presented as individual studies. Individual studies and advanced topics enable the student's course of study to be sharply tuned to his or her major area of interest.

6490 Graduate Research in Physiological Optics (1-15)
Prerequisite: Consent of instructor. Research in an area selected by the student in consultation with faculty members. May be taken to a maximum of 10 hours for the M.S. and 15 hours for the Ph.D.

## 6497 Interdisciplinary Geriatric Care (2)

(Same as Gerontology 6497). Prerequisite: Consent of instructor. Interdisciplinary approaches that address the medical and social needs of the elderly will be examined. Information about geriatric care and social issues affecting the well-being of older adults will be provided. Clinical, theoretical, and educational perspectives will be presented.

6499 Current Topics in Optometry and Vision Science (1) Prerequisite: Consent of instructor. This seminar course examines and analyzes current publications in eye care and vision research. May be taken as an optometry elective to a maximum of 3 hours.

# UM-St. Louis/Washington University Joint Undergraduate Engineering Program 

Administration

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## General Information

The Joint Undergraduate Engineering Program of UM1-St. Louis and Washington University was approved in 1993 by the University of Missouri and the Coordinating Eoard for Higher Education. The program is designed to offer course work beyond the pre-engineering courses at UM-St. Louis and the area community colleges. Pre-engineering and general education courses are offered at UM-St. iouis, and upper-level engineering courses are offered in th: evenings and on Saturdays on the Washington University campus: this schedule permits students to co-op during the day at local engineering firms. Students will be admi ted to the upper-division program only after they have completed an acceptable pre-engineering program. They can eurn a bachelor of science in civil engineering (B.S.C.E.), a bachelor of science in electrical engineering (B.S.E.E.), or a bachelor of science in mechanical engineering (B.S.M.E.).

The B.S.C.E., the B.S.E.E., and the B.S.M.E. are accredited by the Engineering Accreditation Commis sion of the Accreditation Board for Engineering and Technology (ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 - telephone: (410) 347-7700.

## Program Goal

The goal of the UMSL/WU Joint program is consistent with the mission of UM-St. Louis, which is to provice a high-quality education to enhance the occupational and professional careers of citizens in the entire region, including the minorities and economically disadvantaged population and to provide a well-trained, sophisticated work force for the St. Louis region. The partnership is an appropriate way for Washington University to share its campus, resources, and personnel with the citizens 0 :: Missouri.

## Degree Program Educational Objectives

## B.S. in Civil Engineering

The mission of the Civil Engineering Program is to provide the students with a high quality civil enginerring education. So these students will have the ability to practice civil engineering in the areas of structural, transportation, environmental engineering and construction. We also make the students aware of the
critical issues pertaining to the civil engineering profession and its impact on society. Graduates of the program will have:

- an ability to apply knowledge of basic scientific, mathematical and engineering principles to solve civil engineering problems in its four subdisciplines,
- an ability to design and conduct experiments as well as to analyze data,
- an ability to conceive and complete a comprehensive design project in one of the subdisciplines using design standards in the context of realistic constraints,
- a sound understanding of the issues pertaining to professional practice and societal implications thereof,
- the ability to contribute as team members and leaders in the workplace, as well as in the community,
- an ability to communicate effectively through oral, written, visual, and graphic media,
- an ability to function in multi-disciplinary engineering teams in the design of a major project,
- an understanding of the need for life-long learning, professional, and ethical responsibility,
- an awareness of regional and global opportunities and challenges, contemporary issues and professionalism through exposure to practicing civil engineers and,
- an ability to relate academic learning to practical experience so that they enhance each other.


## B.S. in Electrical Engineering

The mission of the Electrical Engineering program is to prepare graduates for a professional career in (a) traditional electrical engineering position or (b) other positions that require quantitative problem-solving skills and a working knowledge of modern electrical engineering. Graduates will be knowledgeable of and proficient in electrical circuits, computer systems, digital and linear electronics, electromagnetic engineering, signal analysis and electrical laboratory methods. Graduates will have:

- An ability to design and analyze advanced and complex systems in at least two of the following areas of specialization:
Solid-state devices and circuits, Electrical power systems, Control components and systems, Communication and information systems and signals,
Computer architecture, hardware, and software, Electromagnetic engineering techniques;

This ability will include the integration of thoroughly mastered mathematics and science in solving engineering problems.

- A proficiency with experimental instrumentation and techniques spanning areas of electrical and electronic circuits, electrical energy systems, and digital or electronic or communication or control systems. This proficiency will include the ability to design and conduct experiments, as well as ability to analyze and interpret data.
- A proficiency in engineering design of a system, component, or process to meet desired needs.
- An ability to communicate, both orally and in writing, with special emphasis on technical writing.
- An ability to interact effectively with other people by providing experience in working with other students in teams as both a team leader and a team member.
- An understanding and appreciation of one's professional and ethical responsibility and historical and contemporary global and societal issues.
- A recognition of the need for and an ability to engage in life-long learning.


## B.S. in Mechanical Engineering

Mechanical engineers are concerned with the technologies of manufacturing, energy conversion, machine design, instrumentation and control of physical processes and the environment. The mission of this undergraduate program is to prepare students for professional practice with a solid, scientifically- grounded foundation in all four major stems of mechanical engineering: mechanisms and mechanical design, dynamics and control, fluid mechanics, and thermal science and materials science. The following objectives or goals are key focal points in the mechanical engineering program. Graduates will:

- apply fundamental scientific and engineering concepts involving dynamics and systems, material science, mechanics and solids and the thermal-fluid sciences in order to identify, formulate and solve a variety of mechanical engineering problems that would occur in industrial practice,
- design, modify, conduct, and analyze experiments in the areas of thermal-fluid sciences, solid mechanics, and dynamical systems such as would be appropriate for engineering applications,
- directly perform system, process and component selection in order to satisfy specific engineeringrelated needs through the application of mechanical design philosophy in engineering practice,
- communicate in oral and written presentations using graphic and/or visual media appropriate for an engineering business environment,
- operate productively in individual or multidisciplinary, team-oriented projects,
- be exposed to modern developments, products and tools as they relate to engineering practice in the workplace today,
- be exposed to practicing engineers and their jobs and be taught the importance of high ethical and professional standards,
- obtain the broad-based education necessary to understand the impact of engineering solutions in their global and societal contexts,
- recognize the need for, and obtain tools necessary to engage in, life-long learning to stay current in the industrial setting,
- be afforded opportunities to participate in cooperative education, internships, research experiences or international exchange programs in order to gain experience beyond the classroom.


## Admission

Admission to candidacy for these degrees is granted jointly by the University of Missouri-St. Louis and Washington University.

Normally admission is granted to persons who have completed the pre-engineering program with a minimum grade point average of 2.75 over all mathematics, chemistry, physics, and introductory engineering courses (statics and dynamics). Students with less than a 2.75 grade point average, but at least a C in all their science and math courses, may be admitted on a probationary basis. These students must pass a mathematics workshop with a grade of $B$ or better, and then pass JEMT 3170
(Engineering Mathematics) and JEE 2300 (Introduction to Electrical Networks) with a C-or better, in order to continue in the program.

Mechanical and Electrical Engineering majors must also complete JEE 2300, Introduction to Electrical Networks with a minimum grade of C -.
Civil engineering majors must complete either JEE 2300, Introduction to Electrical Networks, or JCHE 4430, Environmental Engineering Chemistry, with a minimum grade of C -.
A minimum grade of C - is necessary to meet the prerequisite requirement for any course.

## Degree Requirements

## Bachelor of Science in Civil Engineering Bachelor of Science in Electrical Engineering Bachelor of Science in Mechanical Engineering

A program of 137 semester hours is required for the Bachelor of Science in Civil Engineering, a program of 127 semester hours is required for the Bachelor of Science in Electrical Engineering, and a program of 139 semester
hours is required for the Bachelor of Science in Mechanical Engineering, as shown below:

All majors must complete the University General Education requirements, the Pre-Engineering Requirements and the Core Engineering Requiremer ts. Except with special permission of the program faculy, to be eligible to take the other upper-level engineering courses (those with course numbers starting with the letter "J":

All students must first complete JEMT 3170, Engincering Mathematics, with a minimum grade of C -.
Mechanical and Electrical Engineering majors must also complete JEE 2300, Introduction to Electrical Networks with a minimum grade of C -
Civil engineering majors must complete either JEE $<300$, Introduction to Electrical Networks, or JCHE 4430, Environmental Engineering Chemistry, with a mininum grade of C -.

A minimum grade of C - is necessary to meet the prerequisite requirement for any course.

## Pre-Engineering Requirements

Mathematics 1800, Analytic Geometry/Calculus I
Mathematics 1900, Analytic Geometry/Calculus II
Mathematics 2000, Analytic Geometry/Calculus III
Mathematics 2020, Differential Equations
Chemistry 1111, Introductory Chemistry I
Chemistry 1121, Introductory Chemistry II
Physics 2111, Physics: Mechanics and Heat
Physics 2112, Physics: Electricity, Magnetism and Cptics
Engineering 2310, Statics
Engineering 2320, Dynamics
English 1100, Composition

## Humanities and Social Sciences Electives

The student's choice of humanities and social sciences electives must meet both the UM-St. Louis General Education Requirements and the Humanities and Social Sciences Requirements of the Joint Undergraduate Engineering Program. Check with your adviser for details. In particular:

- Three courses in the humanities and 3 courses in social sciences must be taken
- One of the social sciences must be a course in American history or government or in Missi)uri history or government
- One of the humanities or social science courses must be at the junior level or above
- The cultural diversity requirement must be fulfilled.
- Some courses that fulfill the humanities $[\mathrm{H}]$ or social sciences [SS] breath of study requirernent do not count as Humanities and Social Sciences Electives; an example would be a statistics
course taught in economics or psychology. See the Office of the Joint Undergraduate Engineering Program for a listing of courses that do not count as Humanities or Social Sciences Electives in this program, or check with your advisor.


## Engineering Core Requirements

JCS 1002, Introduction to Computing Skills: MATLAB Skills
JCS 1260, Introduction to Computer Programming
JEMT 3170, Engineering Mathematics
JEC 3100, Engineering Communications
JME 3200, Thermodynamics
JME 4310/JEE 4410, Control Systems I*
JEE 2300, Introduction to Electrical Networks* OR
JCHE 4430, Environmental Engineering Chemistry
JEE 2330, Electrical and Electronic Circuits Laboratory *
*Required for electrical and mechanical engineering majors only.

Civil Engineering Major Requirements
JCE 1451, Engineering Graphics
JCE 2160, Surveying
JCE 3410, Structural Analysis
JCE 3420, Structural Design
JCE 3520, Environmental Engineering Science
JCE 3760, Open Channel Hydraulics
JCE 4190, Soil Mechanics
JCE 4200, Soil Exploration and Testing
JCE 4740, Economic Decisions in Engineering
JCE 4750, Introduction to Urban Planning
JCE 4760, Site Planning and Engineering OR
JCE 4820, Design of Water Quality Control Facilities
JCE 4840, Probabilistic Methods in Civil Engineering
Design
JCE 4990, Senior Civil Engineering Seminar
JCE 4720, Legal Aspects of Construction OR
JEP 4610, Introduction to Environmental Law and Policy
JME 2410, Mechanics of Deformable Bodies
JME 3360, Material Science
JCE 3360, Civil Engineering Materials Lab
JME 3700, Fluid Mechanics
JME 3721, Fluid Mechanics Laboratory
Civil Engineering Electives

## Electrical Engineering Major Requirements

JEMT 3260, Probability and Statistics for Engineering
JEE 2320, Introduction to Electronic Circuits
JEE 2600, Introduction to Digital Logic and Computer Design
JEE 3300, Engineering Electromagnetic Principles
JEE 3320, Power, Energy, and Polyphase Circuits
JEE 3510, Signals and Systems
JEE 4350, Electrical Energy Laboratory
JEE 4650, Digital Systems Laboratory
JEE 4980, Electrical Engineering Design Projects
Electrical Engineering Electives 3000-4990

Mechanical Engineering Major Requirements
JEMT 3260, Probability and Statistics for Engineering
JME 1413, Introduction to Engineering Design: CAD
JME 1414, Introduction to Engineering Design: Project
JME 2410, Mechanics of Deformable Bodies
JME 3210, Energetics for Mechanical Engineers
JME 3221, Mechanical Design and Machine Elements
JME 3250, Materials Science
JME 3700, Fluid Mechanics
JME 3710, Principles of Heat Transfer
JME 3721, Fluid Mechanics Laboratory
JME 3722, Heat Transfer Laboratory
JME 4040, Mechanical Engineering Design Project
JME 4041, Current Topics in Mechanical Engineering Design
JME 4170, Dynamic Response of Physical Systems
JME 4180, Dynamic Response Laboratory
Mechanical Engineering Electives

## Graduation Requirements

In addition to the requirements of the University of Missouri-St. Louis that apply to all candidates for undergraduate degrees, the student must earn a minimum campus grade point average of 2.0 and a minimum grade point average of 2.0 for all engineering courses attempted at the University of Missouri-St. Louis.

## Minor in Environmental Engineering Science

A program of 18 semester hours is required to earn the minor in environmental engineering science. The minor is designed to provide formal recognition to recipients of bachelor's degrees in civil, electrical, or mechanical engineering that they have acquired the education necessary for entry-level careers as environmental professionals. They will also have a solid foundation to undertake graduate-level education in environmental engineering science.

Enrollment in all courses in the minor in environmental engineering science is limited to students who have been admitted to candidacy for the bachelor of science in civil engineering, the bachelor of science in electrical engineering, or the bachelor of science in mechanical engineering in the UM-St. Louis/ Washington University Joint Undergraduate Engineering Program. The minor may be awarded only to students who earn the bachelor of science in civil engineering, the bachelor of science in electrical engineering, or the bachelor of science in mechanical engineering in the UM-St. Louis/ Washington University Joint Undergraduate Engineering Program.

JCHE 4430, Environmental Engineering Chemistry
JCE 3520, Environmental Engineering Science (EE, ME majors) OR
JCE 4080, Environmental Engineering Laboratory Water/Soil OR
JCE 4090, Environmental Engineering Laboratory - Air JCE 4750, Introduction to Urban Planning (CE majors)

JCE 4820, Design of Water Quality Control Facilities
JEP 4370, Environmental Risk Assessment
JEP 4610, Introduction to Environmental Law and Policy
continue their education by pursuing graduate degrees on a part-time basis. Typical areas of graduate study inclute all advanced technical and scientific fields and management.

## Engineering Design and Engineering Science Requirements

The number of semester hours assigned to each engineering course in the Joint Undergraduate Engineering Program is further divided into hours of engineering design, engineering science, and basic science content. Engineering topics is the sum of engineering science hours and engineering design hours. The following table shows the design hours and engineering science hours for courses in the engineering programs.

Each engineering student must complete a curriculum that contains at least 48 hours of engineering topics semester hours, including all courses: pre-engineering requirements, engineering core requirements, major requirements, and electives. Civil, electrical, and mechanical engineering majors should consult with their advisers to select electives at the 3000 and 4000 level that include sufficient engineering design and engineering science content to produce the required totals. Transfer courses from other institutions do not necessarily have the same engineering science and engineering design content as their equivalents in the UM-St. Louis/Washington University Joint Undergraduate Engineering Program. Students who include transfer courses in their curricula should consult with their advisers to be sure that these requirements are met.

## Fees

Students register on the UM-St. Louis campus and pay UM-St. Louis fees plus an engineering fee for both preengineering and engineering courses. Limits on enrollments are determined by the availability of resources.

## Career Outlook

Engineering is one of the few careers in which the bachelor's degree is a professional degree. Students earning a bachelor of science degree in one of the engineering disciplines are well qualified for entry-level engineering positions in a variety of businesses, industries, consulting firms, and government agencies. As society becomes increasingly dependent on technology, the outlook for all engineering disciplines becomes increasingly bright. Engineering careers typically rank at, or very near, the top of virtually any published rating of promising jobs for the $21^{5 t}$ Century. Besides tackling challenging technical problems, roughly two-thirds of all engineers will have some level of management responsibility within ten years of receiving their bachelor's degrees. Many practicing engineers will eventually

UM-St. Louis/Washington University Joint Undergraduate Engineering Program

| Course Number | Semester Hours | Engineering Design | Engineering Science | Course Number | Semester Hours | Engineering Design | Engineering Science |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Engr 1010 | 1.0 | 0.0 | 0.0 | JEE 4350 | 3.0 | 1.5 | 1.5 |
| Engr 2310 | 3.0 | 0.0 | 3.0 | JEE 4710 | 3.0 | 1.2 | 1.8 |
| Engr 2320 | 3.0 | 0.0 | 3.0 | JEE 4670 | 3.0 | 1.0 | 2.0 |
| JCE 1451 | 3.0 | 1.0 | 2.0 | JEE 4410 | 3.0 | 1.0 | 2.0 |
| JCE 2160 | 3.0 | 0.0 | 3.0 | JEE 4420 | 3.0 | 1.0 | 2.0 |
| JCE 3360 | 1.0 | 0.0 | 1.0 | JEE 4820 | 3.0 | 1.0 | 2.0 |
| JCE 3410 | 3.0 | 0.5 | 2.5 | JEE 4650 | 3.0 | 2.2 | 0.8 |
| JCE 3420 | 3.0 | 2.5 | 0.5 | JEE 4020 | 3.0 | 1.5 | 1.5 |
| JCE 3520 | 3.0 | 1.0 | 2.0 | JEE 4600 | 3.0 | 1.3 | 1.7 |
| JCE 3740 | 3.0 | 0.0 | 3.0 | JEE 4640 | 3.0 | 1.0 | 2.0 |
| JCE 3760 | 3.0 | 0.5 | 2.5 | JEE 4380 | 3.0 | 1.0 | 2.0 |
| JCE 4000 | 1.0-6.0 | Vañes | Varies | JEE 4980 | 3.0 | 3.0 | 0.0 |
| JCE 4080 | 3.0 | 0.0 | 2.0 | JEMT 3170 | 4.0 | 0.0 | 0.0 |
| JCE 4090 | 3.0 | 0.0 | 0.0 | JEMT 3260 | 3.0 | 0.0 | 0.0 |
| JCE 4100 | 3.0 | 3.0 | 0.0 | JEP 3810 | 3.0 | 1.5 | 1.5 |
| JCE 4190 | 3.0 | 1.0 | 2.0 | JEP 4370 | 3.0 | 0.8 | 2.2 |
| 3CE 4200 | 1.0 | 0.0 | 1.0 | JEP 4610 | 3.0 | 0.0 | 0.0 |
| JCE 4390 | 3.0 | 1.0 | 2.0 | JEE 4640 | 3.0 | 1.0 | 2.0 |
| JCE 4600 | 3.0 | 3.0 | 0.0 | JME 1414 | 2.0 | 1.5 | 0.5 |
| JCE 4630 | 3.0 | 3.0 |  | JME 1415 | 2.0 | 0.0 | 2.0 |
| JCE 4640 | 3.0 | 1.5 | 1.5 | JME 2410 | 3.0 | 0.5 | 2.5 |
| JCE 4690 | 3.0 | 3.0 | 0.0 | JME 3200 | 3.0 | 0.0 | 3.0 |
| JCE 4720 | 3.0 | 0.0 | 0.0 | JME 3210 | 3.0 | 0.0 | 3.0 |
| JCE 4730 | 3.0 | 1.0 | 2.0 | JME 3221 | 4.0 | 4.0 | 0.0 |
| JCE 4740 | 3.0 | 0.8 | 2.2 | JME 3250 | 4.0 | 0.0 | 4.0 |
| JCE 4750 | 3.0 | 1.5 | 1.5 | JME 3360 | 3.0 | 0.0 | 3.0 |
| JCE 4760 | 3.0 | 3.0 | 0.0 | JME 3611 | 3.0 | 0.0 | 3.0 |
| JCE 4770 | 3.0 | 0.0 | 0.0 | JME 3700 | 3.0 | 0.0 | 3.0 |
| JCE 1780 | 3.0 | 1.0 | 2.0 | JME 3710 | 3.0 | 0.0 | 3.0 |
| JCE 4820 | 3.0 | 3.0 | 0.0 | JME 3721 | 1.0 | 0.0 | 1.0 |
| JCE 4840 | 3.0 | 1.5 | 1.5 | JME 3722 | 1.0 | 0.0 | 1.0 |
| JCE 4860 | 3.0 | 3.0 | 0.0 | JME 4000 | 1.0-6.0 | Varies | Varies |
| JCE 4940 | 3.0 | 0.0 | 3.0 | JME 4160 | 3.0 | 0.5 | 2.5 |
| JCE 4990 | 1.0 | 0.0 | 0.0 | JME 4170 | 4.0 | 1.0 | 3.0 |
| JCHE 4430 | 3.0 | 0.0 | 2.0 | JME 4190 | 3.0 | 0.0 | 0.0 |
| JCS 1260 | 3.0 | 1.0 | 2.0 | JME 4240 | 3.0 | 0.5 | 2.5 |
| JEC 3100 | 3.0 | 0.0 | 0.0 | JME 4250 | 3.0 | 2.0 | 1.0 |
| JEE 2330 | 3.0 | 1.0 | 2.0 | JME 4290 | 3.0 | 1.0 | 2.0 |
| JEE 2600 | 3.0 | 1.5 | 1.5 | JME 4310 | 3.0 | 1.0 | 2.0 |
| JEE 2300 | 3.0 | 0.8 | 2.2 | JME 4500 | 3.0 | 1.0 | 2.0 |
| JEE 2320 | 3.0 | 0.8 | 2.2 | JME 4530 | 3.0 | 3.0 | 0.0 |
| JEE 3300 | 3.0 | 1.0 | 2.0 | JME 4720 | 3.0 | 0.0 | 3.0 |
| JEE 3320 | 3.0 | 1.3 | 1.7 | JME 4740 | 3.0 | 1.5 | 1.5 |
| JEE 3620 | 3.0 | 1.0 | 2.0 | JME 4760 | 3.0 | 0.5 | 2.5 |
| JEE 3510 | 3.0 | 1.0 | 2.0 | JME 4780 | 3.0 | 1.5 | 1.5 |
| JEE 3340 | 3.0 | 1.0 | 2.0 | JME 4810 | 3.0 | 0.5 | 2.5 |
| JEE 3360 | 3.0 | 1.0 | 2.0 | JME 4820 | 3.0 | 0.5 | 2.5 |
| JEE 3370 | 3.0 | 1.0 | 2.0 | JME 4040 | 4.0 | 4.0 | 0.0 |
| JEE 4300 | 3.0 | 1.0 | 2.0 | JME 4041 | 1.0 | 1.0 | 0.0 |
| JEE 4340 | 3.0 | 1.0 | 2.0 |  |  |  |  |

## For Further Information

For information about enrolling in this program, please contact the UM-St. Louis/Washington University Joint Undergraduate Engineering Program at (314) 516-6800, or the Washington University School of Engineering and Applied Science at (314) 935-6100.

## Course Descriptions

Prerequisites may be waived by consent of the joint program faculty.

## Engineering

## 1010 Introduction to Engineering (1)

Course consists of a series of lectures on engineering, fields of study within engineering, the engineering profession, types of work activities, and professional registration. Introduction to team building and the teamwork approach to projects and problem-solving common in an engineering curriculum and in the engineering profession. Guest lecturers will participate.

## 2310 Statics (3)

Prerequisites: Math 1900 and Physics 2111. Statics of particles and rigid bodies. Equivalent systems of forces. Distributed forces: centroids. Applications to trusses, frames, machines, beams, and cables. Friction. Moments of inertia. Principle of virtual work and applications.

## 2320 Dynamics (3)

Prerequisite: Engineering 2310 . Review of vector algebra and calculus. Kinematics of a particle. Newton's laws and the kinetics of a particle. Work and energy. Impulse and momentum. Kinematics of rigid bodies. General theorems for systems of particles. Kinetics of rigid bodies. The inertia tensor.

All courses listed below require admission to candidacy for a degree in the UM-St. Louis/ Washington University Joint Undergraduate Engineering Program. Prerequisites may be waived by consent of the Joint Program faculty. Audits are not permitted.

## Chemical Engineering

JCHE 4430 Environmental Engineering Chemistry (3)
Prerequisite: Chemistry 1121. Introduction to the engineering aspects of air, water, soil, and geosphere chemistry. Toxicology and hazardous wastes. Pollution sources, dynamics, and ultimate fates. Sampling, control strategies, and regulations.

## Civil Engineering

## JCE 1451 Engineering Graphics (3)

Prerequisite: Junior standing. Techniques in graphic communication and problem solving and design utilizing
freehand sketches and computer graphics. Principles of orthographic projection, pictorial drawing, sectional views, dimensioning and tolerancing. Computer drawing and modeling: layout techniques, editing commands, dra wing management, and plotting. Design project: individu:l or small group assignments, the design process, preliminary drawings. This course is required for civil engineering majors.

## JCE 2160 Surveying (3)

Horizontal and vertical control surveys, including traverses, triangulation, trilateration, and leveling; b.sic adjustments of observations; geodetic data; coordinzte systems. Basic route surveying, including horizontal and vertical curves.

## JCE 2620 Introduction to Environmental Engineering

 (3)Prerequisites: Math 2000 and Chemistry 1121. The objective of this course is to introduce students to the field of environmental engineering. The course will emp asize basic principles of mass and energy conservation which govern physical, chemical and biological processes. Applications include the estimation of contaminent concentrations and the design of environmental controls.

## JCE 3360 Civil Engineering Materials Lab (1)

Testing procedures, testing machines, use of laborat ory equipment, analysis of data, and presentation of restlts. Laboratory tests on static tension, compression, benting, and torsion of metal specimens. Tests on wood. Determination of compressive and tensile strengths of concrete. Design of concrete mixes and verification of strength. Experiments in advanced topics in mechanics of materials.

## JCE 3410 Structural Analysis (3)

Prerequisite: JME 2410. A review of the calculation of reactions, shear, and bending moment. Definition, construction and use of influence lines. Deflections for statically determinate structures using the virtual werk method. Analysis of statically indeterminate trusses using the method of consistent deformations. Analysis of continuous beams and planar frames using the consistent deformation, slope-deflection and moment distribution methods. The influence of span on strength, stability, and economy of structures. An introduction to structural analysis software.

## JCE 3420 Structural Design (3)

Prerequisites: JME 3250 and JCE 3410. Fundamentals of structural design in steel, reinforced concrete, and ti:nber. Familiarization with the sources of various design codes and practice in interpreting them. Computer graphic; applications.

JCE 3520 Environmental Engineering Science (3) Prerequisite: JME 3700 (may be taken concurrently, or permission of instructor. Application of the basic
principles of chemistry, microbiology, and fluid mechanics to the analysis of environmental problems, especially those involving control of water and land contamination.
Properties of municipal and industrial waste water, solid waste, and hazardous waste. Estimation of assimilative capacity and other characteristics of receiving waters. Introduction to unit processes and unit operations used in the treatment of municipal and industrial waste water. Design of professes and facilities used for treating drinking water, waste water, and sludge disposal. Waste minimization and recycling in both industrial and municipal settings.

## JCE 3740 Hydraulics and Hydrology (3)

Prerequisite: JME 3700 (may be taken concurrently). The concepts and theory of hydraulics and hydrology are discussed through lectures and practical engineering applications. Open channel flow, hydrograph analysis, watershed hydrology, frequency concepts, hydraulic design, and sedimentation are addressed.

## JCE 3760 Hydraulic Engineering (3)

Prerequisite: JME 3700 . The principles of open channel flow will be discussed and illustrated with practical examples. Methods for channel design, storm sewer, culvert and bridge analysis will be presented using the concepts of gradually-varied, steady flow. A design project using computerized analysis and design is used to implement concepts in a large practical application.

## JCE 4000 Independent Study (1-6)

Prerequisites: Junior standing and consent of faculty adviser. Independent investigation of a civil engineering topic of special interest to a student performed under the direction of a faculty member.

## JCE 4080 Environmental Engineering Laboratory Water/Soil (3)

Prerequisite: JCHE 4430. Laboratory experiments to illustrate the application of engineering fundamentals to environmental systems. Characterization and control of water/soil pollutants. Introduction to relevant analytical instrumentation and laboratory techniques. Laboratory work supported with theoretical analysis and modeling as appropriate.

## JCE 4090 Environmental Engineering Laboratory -

 Air (3)Prerequisite: JCHE 4430. Laboratory Experiments to illustrate the application of engineering fundamentals to environmental systerms. Characterization and control of air pollutants. Introduction to relevant analytical instrumentation and laboratory techniques. Laboratory work supported with theoretical analysis and modeling as appropriate.

JCE 4100 Design of Timber Structures (3)
Prerequisites: JCE 3410 and JCE 3420. Study of basic physical and mechanical properties of wood and design
considerations. Design and behavior of wood beams, columns, beam-columns, connectors, and fasteners. Introduction to plywood and glued laminates members. Analysis and design of structural diaphragms and shear walls.

## JCE 4160 Introduction to Elasticity (3)

Prerequisites: JCE 141 . Introduction to elasticity: indicial notation, stress and strain, material laws. Plane stress and plane strain problems and illustrations. Torsion of prismatic bars. Energy principles: virtual work, potential energy and complementary energy theorems, reciprocal theorems Introduction to plates and shells.

## JCE 4190 Soil Mechanics (3)

Prerequisites: JME 2410 and JME 3700. Basic geology as it relates to index and classification properties of soil. Exploration, sampling, and testing techniques. Soil compaction and stabilization. Capillary, shrinkage, swelling, and frost action in soils. Effective stress, permeability, seepage, and flow nets. Consolidation and consolidation settlements. Stresses in soil. Time rate of consolidation. Mohr's circle, stress path, and failure theories. Shearing strength of sand and clays.

JCE 4200 Soil Exploration and Testing (1)
Prerequisite: JCE 4190 (may be taken concurrently). Soil exploration; in-situ testing, laboratory testing of soil; processing of test data using a microcomputer; statistical analysis of test data; use of test results in the decisionmaking process.

## JCE 4220 Pre-Stressed Concrete Design (3)

Prerequisites: Senior status. Analysis and design of prestressed concrete members. Direct design of composite and noncomposite members for flexure. Design of continuous beams. Flexural strength, shear strength, and design of anchorage zone.

## JCE 4230 Construction Cost Engineering (3)

The students will examine cost engineering principles. Fundamentals will be reviewed and applied to problems of cost estimating, cost control, business planning and management science, profitability analysis, project management, and planning and scheduling. The course will conclude with the $31 / 2$ hour Interim Cost Consultant certification exam administered by the Association for the Advancement of Cost Engineers International. The Interim Level Certification Program allows recent graduates who have at least 4 years experience, in cost management to actively pursue the cost engineering principles certificate. The four years of experience may consist of appropriate college-level academic training (engineering, construction management, architecture, finance, quantity surveying, or other AACE training.

JCE 4250 Professional Engineering Services (3)
Prerequisites: Senior standing. An introduction to the use and integration of professional services for Project Design
and Delivery Systems in construction projects will be presented. The relationship between owner and the professional service personnel, architects, engineers, contractors and construction managers will be explored in detail. The role, techniques, procedures, management principles, and professional responsibilities will be presented and discussed. Real projects will be presented to illustrate the various project delivery systems used in design and construction. These points will be illustrated through a semester long team project.

## JCE 4370 Matrix Structural Analysis (3)

Prerequisites: JCE 3410. This course will cover analysis of framed structures, planar and 3-D, using beam--column elements and shear walls and floors. Flexibility and stiffness analyses are performed by generating the matrices and carrying through the analyses step by step with a matrix manipulator program. A commercially available program is used to check at least one problem.

JCE 4390 Computational Structural Mechanics (3) This course is an introduction to analysis and design of structures using finite elements. The topics covered include: elementary theory of elasticity, plate theories and buckling of plate structures, finite element formulation of 2-D elasticity and plate problems. Hands on use of commercial finite element software is emphasized throughout. A major design project is included.

## JCE 4440 Geographical Information Systems in Transportation (3)

Prerequisites: Junior standing. A practical, hands-on approach to spatial database design and spatial data analysis with Geographical Information Systems (GIS) as applied to planning and engineering. Course objectives are to examine how digital earth resources data are collected, stored, analyzed, and displayed. The emphasis will be on transportation problems, although additional applications will be discussed.

## JCE 4580 Structural Stability (3)

Prerequisites: Senior standing. This course will cover the following topics: classification of instability phenomena; imperfection sensitivity; illustration with mechanical models; systems with finite degrees of freedom; postbuckling analysis using perturbation techniques; stability and nonlinear behavior of struts, plates, and cylindrical shells; nonconservation problems; and numerical methods.

## JCE 4600 Highway and Traffic Engineering (3)

Prerequisites: JCE 2160 and senior standing. Study of basic highway design and traffic circulation principles. Study of design elements of alignment, profile, crosssection, intersection types, interchange types, and controlled-access highways. Investigation of functional highway classification. Traffic volume, delay and accident studies. Analysis of highway capacity of unintermupted
flow, interrupted flow. Freeway, ramp, and weaving sections.

## JCE 4620 Transportation Planning (3)

Prerequisites: Senior standing. This course will cover the following topics: fundamentals of multimodal transportation planning; urban study components, including study design and organization, origin-destization analysis, traditional traffic model processes of trip generation, distribution and assignment; urban transportation entity analysis (shopping centers, terminals, etc.); state and regional study components, including state and national needs and capital improvement prograrrs, regional funding capabilities and related national transportation policy and legislative acts.

## JCE 4630 Design of Steel Structures (3)

Prerequisites: JCE 3410, JCE 3420. Behavior and de sign of steel frames by "allowable stress" and "maximum strength" based on deterministic and LRFD (Loadresistance factor design) methods. Design of beams, columns, beam-columns, plate girders, connections, multistory frames, and bridge girders. Torsional design of steel structures. Plastic analysis and design of steel structures. Miscellaneous topics in structural steel construction and design.

## JCE 4640 Foundations (3)

Prerequisites: JCE 3420, JCE 4190 and JCE 4200.
Principal problems in design and construction of foundations for bridges and buildings. Bearing capacity of deep and shallow foundations; pressure on retaining walls and slope stability; modern developments in piling, cofferdams, open caissons, pneumatic caissons.

## JCE 4650 Airport Planning and Construction (3)

 Prerequisites: Senior standing. Fundamentals of airfort planning location, construction, and legislative and fiscal implementation. Location principles with respect to the region and the site. Analysis of air travel demand models. Air control systems and navigation principles affecting airport design. Design of the site for runway, taxiway, and terminal location. Pavement and construction princilles with respect to design. Current federal policy and fisical programming for airport planning. Principles of integration with ground transport systems.JCE 4660 Advanced Design of Concrete Structures (3) Prerequisites: JME 3250, JCE 3410, JCE 3420. Flex rral behavior and design, strength and deformation of rectangular and nonrectangular sections, shear streng,th, beam-columns, long columns, slab systems, design of frames, and footings will be covered.

JCE 4690 Construction Management Project (3)
Prerequisites: JCE 4730 and JEP 3810. The course entails the study of principles and steps involved in the development of a project from design through bidding and construction with emphasis on preconstruction planring
and construction operations. The students will be required to submit a report on project budget, bidding strategy and construction schedule. Lecture topics will be supplemented by a resource pool of consultants on estimating, scheduling and contracting who will provide advice and guidance to the students.

## JCE 4720 Legal Aspects of Construction (3)

Prerequisite: Junior standing or permission of instructor. A survey of the legal problems of the construction manager. Including but not limited to, liability in the areas of contracts, agency, torts, assurance, bad judgment and oversight.

## JCE 4730 Construction Operations and Management

 (3)Prerequisite: Junior standing. The construction industry, its development, components, and organization. Contracting methods. Applications and limitations. Selection of equipment using production analysis and economics. Field engineering, including form design, shoring, embankment design. Purchasing and change orders. Safety and claims.

## JCE 4740 Economic Decisions in Engineering (3)

 Prerequisite: Junior standing. Principles of economics involved in engineering decisions. Decisions between alternatives based on the efficient allocation of resources. Topics include the time element in economics, analytical techniques for economy studies, and taxes.
## JCE 4741 Construction Project Planning Scheduling

 (3)The course will familiarize students with the basic foundation of the construction scheduling process. Included will be a detailed survey of scheduling techniques in an integrated construction planning, scheduling, and control systems. Students will gain an understanding of the critical path method theory, legal implications, and practice. Students will learn to use commercial project management and scheduling software and apply it to a variety of construction problems and projects. (This course will be a combination of two intense weekend meetings, a weekly Internet contact, and two meetings for course introduction and testing.)

JCE 4750 Introduction to Urban Planning (3)
Prerequisite: Senior standing. A focus on the fundamental factors and techniques that the civil engineer must consider: population, economic base, land use, urban design, regional analysis, fiscal analysis, zoning, and public facilities analysis. Synthesis of these techniques into a major student project, typically involving groups of three to six students. Each project is assigned by the instructor and usually involves a real-life situation or problem that requires original data collection. In-class presentation, discussion, and critique of each group project.

## JCE 4760 Site Planning and Engineering (3)

Prerequisite: Senior standing. A focus on the legal, engineering, and economic aspects of planning and design of facilities at a site-specific level. Concepts of legal and economic feasibility of site design are developed in conjunction with the study of civil engineering activities involved in dealing with urban design alternatives for residential, commercial, industrial, and recreational land uses. Case studies and review of current legislation affecting site planning and engineering are undertaken, culminating in a major design project.

## JCE 4770 Decision Analysis and Construction Applications (3)

Introduction and application of systems engineering and statistics toward solving construction and civil engineering problems. Included are the following topics: network and linear programming models, construction and evaluation of decision trees to clarify choice of actions under uncertainty, probability distributions, sample statistics, linear regression models, sampling plans for quality assurance. Personal computer usage emphasized for problem solving.

## JCE 4780 Knowledge-Based Expert Systems in Civil Engineering (3)

Prerequisite: JCS 1360 or equivalent. Topics relating to the development of expert systems discussed with emphasis on application in civil and structural engineering. Subjects include knowledge engineering, frame- and rule-based expert systems, use of expert shells and tools, prototyping, and reasoning with uncertainty. Case studies and computer exercises supplement lectures. Students are expected to develop a prototype expert system.

## JCE 4800 Computer Applications in Construction Management (3)

Prerequisite: JCE 4730. A comprehensive study of computer applications in construction management. Topics include: configuration of hardware/software requirements for the management of a typical project; application programs used in project date base management and project schedule/cost control systems; data management techniques and development of custom reports for use in project management and control.

## JCE 4810 Construction Technology (3)

A comprehensive study of the core construction methods and practices used on the jobsite today. Emphasizes the types of construction materials, technologies, and applications available to the contractor, their use and function on the project, and the importance and interrelationship of these factors to the success of the construction project delivery. (Saturday site visits required)

## JCE 4820 Design of Water Quality Control Facilities

 (3)Prerequisite: JCE 3520. Application of environmental engineering principles to design of water and wastewater treatment facilities. Critical review of process design issues associated with physical, chemical, and biological treatment processes. Definition of problems and objectives, evaluation of alternatives, and use of these concepts in process design. Design-oriented class/group project.

## JCE 4840 Probabilistic Methods in Civil Engineering Design (3)

Prerequisite: JCE 3420 (may be taken concurrently). Probability concepts. Analytical models of random phenomena. Functions of random variables. Estimating parameters from data. Empirical determination of distribution models. Regression and correlation analyses. Monte Carlo simulation. Detailed examples of the application of probabilistic methods to structural, transportation, hydrologic, and environmental system design.

## JCE 4850 Bridge Analysis and Design (3)

 Prerequisites: JCE 3420. Study of fundamental bridge design philosophy and theory of analysis using AASHTO Specifications. Strong emphasis on practical design aspects of steel, and concrete bridges and associated analytical approaches. Introduction to commercially available design software providing real world solutions to various design challenges. Seismic design and analysis are also included.
## JCE 4860 Design of Masonry Structures (3)

Prerequisite: JCE 3420 . History of masonry construction; masonry materials and components; loadings for masonry structures; fundamentals of working stress design; fundamentals of strength design; design of gravity load resisting elements; design of lateral load resisting elements; details, connections and joints; design of lowrise buildings; design of high-rise buildings; design for water penetration resistance; quality control/inspection.

JCE 4940 Public Transportation Technology (3) Prerequisites: JCE 4620. An in-depth study and analysis of conventional and emerging public transportation state-of-the-art systems. Brief review of conventional transportation systems, study of bus-rapid systems, demand responsive bus systems, personal rapid transit, dual-mode, guide-way and automated freeway systems, and high-speed rail TACV systems. Review of current Department of Transportation Administration-Urban Mass Transportation Administration New Systems Research and Demonstration Programs. Students will be responsible for a major project endeavor at conclusion of course.

## JCE 4950 Fundamentals of Engineering Review (1)

 Prerequisites: Senior Standing. The topics found in most engineer-in-training exams will be reviewed and illustratedusing examples. A discussion of the importance of licensing exams and the strategies for taking these esams will be discussed. The main topics for review include: engineering mathematics, basic chemistry, engineeriag mechanics, engineering economics, thermodynamics, electrical circuits, and material science.

## JCE 4990 Senior Civil Engineering Seminar

Prerequisite: Senior standing. Students will research assigned topics of importance to graduates entering the Civil Engineering profession and prepare oral presentations and a written report. Student presentations will be augmented by lectures from practicing professionals. Topics include professional registration, early career development, graduate study, effective presentations, construction quality, and case historie: of civil engineering projects.

## Computer Science

JCS 1002 Introduction to Computing Tools: MATLAB Skills (1)
This course is aimed at the acquisition of MATLAB skills through hands on familiarization and practice. Students practice the array, vector, and mesh grid representations, use programming and plotting, and apply these skills to solve numerical problems and generate reports. (JCS 1002 and CS 1250 can substitute for JCS 1360)

JCS 1260 Introduction to Computing Programming (3) Workshop course (lectures and supervised laborator: sessions) covering the fundamental organization and operating principles of digital computers and the systematic design and development of well-structured programs. After an intensive exposure to algorithmic principles and programming techniques and practice; using the JAVA language, students learn about a computer's internal structure through the use of a sinple Von Neumann machine simulator.

## Electrical Engineering

JEE 2300 Introduction to Electrical Networks (3) Prerequisites: Physics 2112 and Math 2020 (may be taken concurrently). Elements, sources, and interconnects. Ohm's and Kirchhoff's laws, superposition and Thevenin's theorem; the resistive circuit, transient analysis, sinusoidal analysis, and frequency response.

JEE 2320 Introduction to Electronic Circuits (3) Prerequisite: JEE 2300. Introduction to contemporary electronic devices and their circuit applications. Terrainal characteristics of active semiconductor devices. Incremental and D-C models of junction diodes, bipolar transistor (BJTs), and metal-oxide semiconductor field effect transistors (MOSFETs) are developed and use 1 to design single- and multi-stage amplifiers. Models of the BJT and MOSFET in cutoff and saturation regions a:e used to design digital circuits.

JEE 2330 Electrical and Electronic Circuits Laboratory (3)
Prerequisite: JEE 2300. Lectures and laboratory exercises related to sophomore topics in introductory networks and basic electronics.

## JEE 2600 Introduction to Digital Logic and Computer

 Design (3)Prerequisite: JCS 1260. Digital computers and digital information-processing system; Boolean algebra, principles and methodology of logical design; machine language programming; register transfer logic; microprocessor hardware, software, and interfacing; fundamentals of digital circuits and systems; computer organization and control; memory systems; arithmetic unit design. Occasional laboratory exercises.

JEE 3300 Engineering Electro Magnetic Principles (3)
Electromagnetic theory as applied to electrical engineering: vector calculus; electrostatics and magnetostatics; Maxwell's equations, including Poynting's theorem and boundary conditions; uniform plane-wave propagation; transmission lines - TEM modes, including treatment of general, lossless line, and pulse propagation; introduction to guided waves; introduction to radiation and scattering concepts.

JEE 3320 Power, Energy, and Polyphase Circuits (3) Prerequisite: JEE 2300. Fundamental concepts of power and energy; electrical measurements; physical and electrical arrangement of electrical power systems; polyphase circuit theory and calculations; principle elements of electrical systems such as transformers, rotating machines, control, and protective devices, their description and characteristics; elements of industrial power system design.

## JEE 3340 Network Analysis (3)

Prerequisite: JEE 3510. Theoretical and practical aspects of electrical networks. Loop and nodal analysis of multiport networks. Transfer functions, admittance and impedance functions, and matrices. Magnitude and phase relations. Butterworth, Chebyshev, and other useful network response functions. Network theorems. Computeraided design. Synthesis of passive (LC, RC, RLC) networks and of active ( RC ) networks.

## JEE 3360 Principles of Electronic Devices (3)

Prerequisite: Physics 2112 . Introduction to the solid-state physics of electronic materials and devices, including semiconductors, metals, insulators, diodes and transistors. Crystal growth technology and fundamental properties of crystals. Electronic properties and band structure of electronic materials, and electron transport in semiconductor materials. Fabrication of pn junction diodes, metal-semiconductor junctions, and transistors and integrated-circuit chips. Fundamental electrical properties of rectifying diodes and light-emitting diodes, bipolar transistors and field-effect transistors. Device physics of
diodes and transistors, large-signal electrical behavior and high -frequency properties.

JEE 3370 Electronic Devices and Circuits (3) Prerequisite: JEE 2320. Introduction to semiconductor electronic devices: transistors and diodes. Device electrical DC and high-frequency characteristics. Bipolar transistors, field-effect transistors, and MOS transistors for analog electronics applications. Transistor fabrication as discrete devices and as integrated-circuit chips. Large-signal analysis of transistor amplifiers: voltage gain, distortion, input resistance and output resistance. Analysis of multitransistor amplifiers: Darlington, Cascode, and coupled-pair configurations. Half-circuit concepts, differential-mode gain, common-mode gain, and differential-to-single-ended conversion. Transistor current sources, active loads, and power-amplifier stages. Applications to operational amplifiers and feedback circuits.

## JEE 3510 Signals and Systems (3)

Prerequisites: JEE 2300 and JEMT 3170. Elementary concepts of continuous-time and discrete-time signals and systems. Linear time-invariant (LTI) systems, impulse response, convolution, Fourier series, Fourier transforms, and frequency-domain analysis of LTI systems. Laplace transforms, Z-transforms, and rational function descriptions of LTI systems. Principles of sampling and modulation. Students participate weekly in recitation sections to develop oral communications skills using class materials.

JEE 3620 Computer Architecture (3)
Prerequisite: JEE 2600. Study of interaction and design philosophy of hardware and software for digital computer systems: Machine organization, data structures, I/O considerations. Comparison of minicomputer architectures.

## JEE 4000 Independent Study (1-3)

Prerequisites: Senior in good standing. Opportunities to acquire experience outside the classroom setting and to work closely with individual members of the faculty. A final report must be submitted to the department. Open as a semior elective only. Hours and credit to be arranged. Credit variable, maximum credit per semester 3 hours. Maximum program total credit 3 hours.

## JEE 4020 Computer-Aided Design of Electronic Systems (3)

Prerequisites: JEE 2320 and JEE 3510. Introduction to computer-aided Techniques in the solution of network and electronic design problems, including filters; analysis of linear and nonlinear circuits; methods for numerical integration, evaluation of the Fourier integral; numerical methods for solving differential equations, automated methods for design; sparse matrix techniques. Use of problem-oriented languages such as SPICE. Methods for the analysis and design of digital circuits and systems.

## JEE 4300 Engineering Electromagnetics Applications

 (3)Prerequisite: JEE 3300. Study of important applications of electromagnetic theory. Solution of electrostatic and magnetostatic problems involving Laplace and Poisson's equations subject to boundary conditions. Maxwell's equations, including boundary conditions for dielectrics and conductors, reflection and transmission characteristics with effects due to losses. Study of guided waves in rectangular and optical wave guides, including effects of dispersion. S-parameters and transmission networks, including S-matrix properties, relation to impedance, reflection coefficient, VSWR, and Smith chart. Study of antennas, including exposure to terminology and thinwire antennas.

JEE 4340 Solid State Power Circuits \& Applications (3) Prerequisites: JEE 2320, JEE 3510. Study of the strategies and applications of power control using solid-state semiconductor devices. Survey of generic power electronic converters. Applications to power supplies, motor drives, and consumer electronics, Introduction to power diodes, thyristors, and MOSFETs.

## JEE 4350 Electrical Energy Laboratory (3)

Prerequisite: JEE 2330. Experimental studies of principles important in modern electrical energy systems. Topics: power measurement, transformers, batteries, static frequency converters, thermoelectric cooling, solar cells, electrical lighting, induction, commutator, and brushless motors, synchronous machines.

## JEE 4380 Applied Optics (3)

Prerequisite: JEE 3300 . Topics relevant to the engineering and physics of conventional as well as experimental optical systems and applications explored. Items addressed include geometrical optics, Fourier optics such as diffraction and holography, polarization and optical birefringence such as liquid crystals, and nonlinear optical phenomena and devices.

## JEE 4410 Control Systems (3)

Prerequisites: JEMT 3170, JEE 2300 [same as JME 4310] Introduction to automatic control concepts. Block diagram representation of single and multiloop systems. Multiinput and multi-output systems. Control system components. Transient and steady-state performance; stability analysis; Routh, Nyquist, Bode, and root locus diagrams. Compensation using lead, lag and lead-lag networks. Synthesis by Bode plots and root-locus diagrams. Introduction to state-variable techniques, statetransition matrix, state-variable feedback.

## JEE 4420 Digital Control Systems (3)

Prerequisite: JME 4310. The control of physical systems with a digital computer, microprocessor, or specialpurpose digital hardware is becoming very common. Course continues JME 4310 to develop models and mathematical tools needed to analyze and design these
digital, feedback-control systems. Linear, discrete dynamic systems. The Z-transform. Discrete equivalents to continuous transfer functions. Sampled-data control systems. Digital control systems design using transfer and state-space methods Systems comprised of digital and continuous subsystems. Quantization effects. Systenı identification. Multivariable and optimum control.

## JEE 4600 Switching Theory (3)

Prerequisite: JEE 2600. Advanced topics in switching theory as employed in the analysis and design of various information- and material-processing systems. Combinational techniques; minimization, logic elencents, bilateral devices, multiple output networks, symmetrical and iterative functions, threshold logic, state identification and fault detection, hazards, and reliable design. Sequential techniques: synchronous circuits, state tajles, machine minimization, state assignment, asynchronous circuits, finite state machines.

## JEE 4630 Digital Integrated Circuit Design and Architecture (3)

Prerequisite: JEE 2320 and JEE 3620. Brief review of device characteristics important to digital circuit operation, followed by detailed evaluation of steady-state and transient behavior of logic circuits. Implications of and design techniques for very large-scale integrated circuits including architecture, timing, and interconnection. Students must complete detailed design and layout of a digital circuit. Major emphasis on MOS digital circuits with some comparisons to other technologies.

## JEE 4640 Digital Systems Engineering (3)

Prerequisite: JEE 2320. Design and characterization of digital circuits, reliable and predictable interconnection of digital devices, and information transfer over busses and other connections. Topics include: Review of MOSPET operation; CMOS logic gate electrical characteristic;; System and single-point noise margin and noise budjets; Figures of merit for noise-margin and poser-delay product, and tradeoff between noise margin and propagation telay; Transmission-line driving including reflection, termination, non-zero transition time; lumped and distributed capacitance loads, non-linear terminations, and applicable conditions for lumped approximations; Coupled transmission lines, forward and backward crosstalk, short line approximations, ground bounce, and simultaneous switching noise; Timing, clocking, and clock distribution for digital circuits; Prediction of metastability error rates and design for acceptable probability of failure. Examples and design exercises using systems and interconnectons selected from current Computer Engineering practice such as RAMBUS, PCI bus, GTL, LVDS, and others.

## JEE 4650 Digital Systems Laboratory (3)

Prerequisites: JEE 2600, JEE 2320
Procedure for reliable digital design, both combinational and sequential; understanding manufacturers' specifications; use of special test equipment;
characteristics of common SSI, MSI, and LSI devices; assembling, testing, and simulating design; construction procedures; maintaining signal integrity. Several singleperiod laboratory exercises, several design projects, and application of a microprocessor in digital design. Microprocessor programs are written in assembly language on a host computer and down loaded to the laboratory station for debugging. One lecture and one laboratory period a week.

## JEE 4670 Embedded Computer Systems (3)

Prerequisites: Senior standing.
Microcontrollers and digital signal processors are often utilized in applications such as communications systems, automotive control systems, biomedical instrumentation, consumer appliances, and industrial control systems. The purpose of this course is to examine a variety of issues regarding the real-time application of embedded microprocessor systems. Topics will include digital processing, the operation of sensors and transducers, signal representation, system design and software development. Classes will include lecture and laboratory sessions. Depending on student interest exemplary applications from the following list will be studied: automotive control, biomedical instrumentation. Communication systems, speech processing, data compression, and audio and acoustic processing.

JEE 4710 Communications Theory and Systems (3)
Prerequisites: JEE 3510 and JEMT 3260. Introduction to the concepts of transmission of information via communication channels. Amplitude and angle modulation for the transmission of continuous-time signals. Analog-to-digital conversion and pulse code modulation. Transmission of digital data. Introduction to random signals and noise and their effects on communication. Optimum detection systems in the presence of noise. Elementary information theory. Overview of various communication technologies such as radio, television, telephone networks, data communication, satellites, optical fiber, and cellular radio.

## JEE 4820 Digital Signal Processing (3)

Prerequisite: JEE 3510. Introduction to analysis and synthesis of discrete-time linear time-invariant (LTI) systems. Discrete-time convolution, discrete-time Fourier transform, Z-transform, rational function descriptions of discrete-time LTI systems. Sampling, analog-to-digital conversion and digital processing of analog signals. Techniques for the design of finite impulse response (FIR) and infinite impulse response (IIR) digital filters. Hardware implementation of digital filters and finiteregister effects. The discrete Fourier transform and the fast Fourier transform (FFT) algorithm.

## JEE 4880 Signals and Systems Laboratory -

Lecture/Lab (3)
Prerequisites: JEE 3510. A laboratory course designed to complement the traditional EE course offerings in signal
processing, communication theory, and automatic control. Signals and systems fundamentals: continuous-time and discrete-time linear time-invariant systems, impulse and step response, frequency response, $\mathrm{A} / \mathrm{D}$ and $\mathrm{D} / \mathrm{A}$ conversion. Digital signal processing: FIR and IIR digital filter design, implementation and application of the Fast Fourier Transform. Communication theory: baseband, digital communication, amplitude modulation, frequency modulation, bandpass digital communication. Automatic control: system modeling, feedback control systems, closed-loop transient and frequency response. Laboratory experiments involve analog and digital electronics, and mechanical systems. Computer workstations and modern computational software used extensively for system simulation, real-time signal processing, and discrete-time automatic control.

JEE 4980 Electrical Engineering Design Projects (3)
Prerequisite: Senior standing. Working in teams, students address design tasks assigned by faculty. Each student participates in one or more design projects in a semester. Projects are chosen to emphasize the design process, with the designer choosing one of several paths to a possible result. Collaboration with industry and all divisions of the university is encouraged.

## Engineering and Policy

## JEP 3810 Topics in Engineering Management (3)

Prerequisite: Junior standing. Techniques relating to managing engineering professionals and engineering activities are introduced and discussed. The engineer's transition into project and project team management. Role of engineering and technology in major corporations. Engineering managerial functions, including production and use of financial information in planning, scheduling, and assessing engineering projects. Motivation of individual and group behavior among technical professionals. Macroeconomic factors influencing technical decision-making and engineering project management. Additional topics will vary from year to year, but will typically include government relations, regulation, compensation, ethics, production, operations, the quality function, and technological innovation.

## JEP 4370 Environmental Risk Assessment (3)

 Prerequisite: JCE 4740 or JEMT 3260 . Definition of risk and uncertainty. Risk assessment concepts and their practical application. Principles of human health and ecological toxicology. Bioassays. Exposure characterization, modeling, and measurement. Qualitative and quantitative evaluation of human and animal studies. Dose-response models and parameter estimation. Lowdose extrapolation. Structure activity relationships. Estimating individual risk and aggregate risk. Risk assessment methods in regulatory decision making and standard setting. Application of risk assessment in hazardous waste site evaluation and remediation.
#### Abstract

JEP 4610 Introduction to Environmental Law and Policy (3) Prerequisite: Junior standing. Survey of the most prominent federal laws governing environmental compliance and pollution control. Examines laws applicable to environmental impact statements, air pollution, water pollution, and hazardous waste. Addresses policy concerning the relative merits of using technological capabilities as compared to health risks in setting environmental standards. Discusses the need for environmental regulation to protect societal resources.


## Engineering Communications

JEC 3100 Engineering Communications (3)
Prerequisites: English 1100 and junior standing. Persistent concerns of grammar and style. Analysis and discussion of clear sentence and paragraph structure and of organization in complete technical documents. Guidelines for effective layout and graphics. Examples and exercises stressing audience analysis, graphic aids, editing, and readability. Videotaped work in oral presentation of technical projects. Writing assignments include descriptions of mechanisms, process instructions, basic proposals, letters and memos, and a long formal report.

## Engineering Mathematics

## JEMT 3170 Engineering Mathematics (4)

Prerequisite: Math 2020. The Laplace transform and applications; series solutions of differential equations, Bessel's equation, Legendre's equation, special functions; matrices, eigenvalues, and eigenfunctions; vector analysis and applications; boundary value problems and spectral representation; Fourier series and Fourier integrals; solution of partial differential equations of mathematical physics.

## JEMT 3260 Probability and Statistics for Engineering

 (3)Prerequisite: Math 2000. Study of probability and statistics together with engineering applications. Probability and statistics: random variables, distribution functions, density functions, expectations, means, variances, combinatorial probability, geometric probability, normal random variables, joint distribution, independence, correlation, conditional probability, Bayes theorem, the law of large numbers, the central limit theorem. Applications: reliability, quality control, acceptance sampling, linear regression, design and analysis of experiments, estimation, hypothesis testing. Examples are taken from engineering applications. This course is required for electrical and mechanical engineering majors.

## Mechanical Engineering

## JME 1413 Introduction to Engineering Design: CAD

 (2)An introduction to engineering design in the context of mechanical engineering. Students learn the fundamentals of spatial reasoning and graphical representation. Freehand sketching, including pictorial and orthogra ohic views, are applied to the design process. Computer modeling techniques provide accuracy, analysis, and visualization tools necessary for the design of devices and machines. Topics in detailing design for production, including fasteners, dimensioning, tolerancing, and creation of part and assembly drawings are also inchuded.

## JME 1414 Introduction to Engineering Design: Froject

 (2)An introduction to engineering design in the context of mechanical engineering. Students first complete a series of experiments that introduce physical phenomena related to mechanical engineering. Understanding is achieved by designing and building simple devices and machines. The course proceeds to a design contest in which the stucients design and build from a kit of parts a more significant machine that competes in a contest held at the end o: the course. The course is open to all and is appropriate or anyone interested in mechanical devices, design, anc. the design process.

JME 2410 Mechanics of Deformable Bodies (3) Prerequisites: Math 1900 and Engineering 2310. No.mal and shear stresses and strains. Stress-strain diagrams. Hooke's law and elastic energy. Thermal stresses. Stesses in beams, columns, torsional members, and pressure vessels. Elastic deflection of beams and shafts. Statically indeterminate structures. Mohr's circle of stress. Stability concepts.

## JME 3200 Thermodynamics (3)

Prerequisites: Math 1900, Chemistry 1111 and Physics 2111. Classical thermodynamics, thermodynamic properties, work and heat, first and second laws. Entropy, irreversibility, availability. Application to engineering systems.

JME 3210 Energetics for Mechanical Engineers (3) Prerequisite: JME 3200 . Thermodynamic cycle anal ysis: vapor power, internal combustion, gas turbine, refrigeration. Maxwell relations and generalized property relationships for non ideal gases. Mixtures of ideal gases, psychrometrics, ideal solutions. Combustion processes, first and second law applications to reacting systems. Chemical equilibrium. Compressible flow in nozzles: and diffusers.

## JME 3221 Mechanical Design and Machine Elements

 (4)Prerequisites: JME 1414, JME 1415, JME 2410, JEMT
3170. Provides a thorough overview of the steps in the
engineering design process and introduces analytical/quantitative techniques applicable to each step. Topics include recognition of need, specification formulation, concept generation, concept selection, embodiment and detail design. Includes an introduction to several classes of machine elements such as bearings, gears, belts, brakes, and springs. Underlying analytical model of the machine elements are presented along with guidelines about designing and choosing such elements for practical applications. A case study from industry will emphasize how the steps of the design process were done as well as the rationale for choosing particular machine elements.

JME 3250 Materials Science for JME (4) Prerequisite: Chemistry 1111. Introduces the chemistry and physics of engineering materials. Emphasis on atomic and molecular interpretation of physical and chemical properties, the relationships between physical and chemical properties, and performance of an engineering material.

## JME 3360 Material Science for JCE (3)

Prerequisite: Chemistry 1111. Same as JME 3250 but without the laboratory. Introduces the chemistry and physics of engineering materials. Emphasis on atomic and molecular interpretation of physical and chemical properties, the relationships between physical and chemical properties, and performance of an engineering material.

## JME 3611 Materials Engineering (3)

Prerequisite: JME 3250. This course deals with the application of fundamental materials science principles in various engineering disciplines. Topics covered include design of new materials having unique property combinations, selection of materials for use in specific service environments, prediction of materials performance under service conditions, and development of processes to produce materials with improved properties. The structural as well as functional use of metals, polymers, ceramics, and composites will be discussed.

JME 3700 Fluid Mechanics (3)
Prerequisites: JEMT 3170 and Engineering 2320.
Fundamental concepts of fluids as continua. Viscosity. Flow field: velocity, vorticity, streamlines. Fluid statics: hydrostatic forces manometers. Conservation of mass and momentum. Incompressible inviscid flow. Dimensional analysis and similitude. Flow in pipes and ducts. Flow measurement. Boundary-layer concepts. Flow in open channels.

## JME 3710 Principles of Heat Transfer (3)

Prerequisites: JME 3200, JME 3700 and JEMT 3170. Introductory treatment of the principles of heat transfer by conduction, convection, or radiation. Mathematical analysis of steady and unsteady conduction along with numerical methods. Analytical and semiempirical methods
of forced and natural convection systems. heat exchangers: LMTD and e-NTU analysis. Boiling and condensation heat transfer. Radiation between blackbody and real surfaces. Radiation network analysis.

## JME 3721 Fluid Mechanics Laboratory (1)

 Prerequisite: JME 3700. Physical laboratory exercises focusing on fluid properties and flow phenomena covered in JME 3700. Calibration and use of a variety of equipment; acquisition, processing, and analysis of data by manual as well as automated methods.JME 3722 Heat Transfer Laboratory (1) Prerequisites: JME 3721 and JME 3710. Physical laboratory exercises, including some numerical simulations and computational exercises, focusing on heattransfer phenomena covered in JME 3710. Calibration and use of variety of laboratory instrumentation; acquisition, processing, and analysis of data by manual as well as automated methods; training in formal report writing.

## JME 4000 Independent Study (1-6)

Prerequisites: Junior standing and consent of the faculty adviser. Independent investigation of a mechanical engineering topic of special interest to a student performed under the direction of a faculty member.

JME 4040 Mechanical Engineering Design Project (5) Prerequisite: JME 2410, JME 3200, JME 3221, JME 4250, JME 3700, and JME 3710 Corequisites: JME 4170, JME 4180. Working individually, students initially perform a feasibility study for a mechanical design project. Projects consisted of an open-ended, original design or a creative redesign of a mechanical component or system requiring the application of those engineering science principles inherent to mechanical engineering. Feasibility is considered subject to economic, safety, legal, environmental, ethical, aesthetic, and other constraints in a competitive manufacturing environment. Feasible projects are then selected by teams of three to five students who perform the detailed design and optimization of the design concept developed in the feasibility study. The designs are carried out to detailed shop drawings and where possible a mockup or prototype is built. Periodic oral presentations and written reports give students practice in engineering and business communication. Guidance and consultation for the design projects are provided by the course and department faculty.

## JME 4041 Current Topics in Mechanical Engineering Design (1) <br> Prerequisites: Senior Standing. Case studies of

 engineering failures, class discussion and short written papers are used to illustrate and stress the importance of engineering teamwork, ethics, and professional standards within the mechanical engineering discipline. Working in teams, students develop and present a case study on a topic of their choice. Guest lecturers introduce contemporary topics such as product liability, environmental regulations,green design, appropriate technologies, and concurrent engineering.

## JME 4160 Advanced Strength and Introductory

 Elasticity (3)Prerequisite: JME 2410. Introduction to elasticity; indicial notation, stress and strain, material laws. Plane stress and strain problems and illustrations. Torsion of prismatic bars. Energy principles: virtual work, potential energy and complementary energy theorems, reciprocal theorems.

JME 4170 Dynamic Response of Physical Systems (2) Prerequisites: Engineering 2320 and JEMT 3170; JME 4170 and JME 4180 must be taken during the same semester. Free and forced vibration of mechanical systems with lumped inertia, springs, and dampers. Methods of Laplace transform, complex harmonic balance, and Fourier series. Electrical analogs. Introduction to Lagrange's equations of motion and matrix formulations. Transient response of continuous systems by partial differential equations, by Rayleigh methods, and by lumped parameters.

## JME 4180 Dynamic Response Laboratory (2)

Prerequisite: JME 4170 and JME 4180 must be taken during the same semester. Laboratory problems focusing on materials covered in JME 4170.

## JME 4190 Experimental Methods in Fluid Mechanics

 (3)Prerequisites: JME 3700, JME 3721 and consent of instructor. Experimental approach to problem solving and validation of theoretical/computational methods. Uncertainties in measurement. Review of fundamental equations of fluid dynamics, properties of gases and liquids, similarity laws. Boundary layers, transition turbulence, flow separation. Viscoelastic and multi-phase flows. Wind tunnels, water channels, simulation of phenomena in processing equipment. Pressure sensors, including optically-reactive surface paint. Measurement of velocity with pitot- and venturi-tubes, hot-wire anemometry, ultrasonic probes, laser-Doppler (LDV) and particle-image (PIV) instruments. Compressibility corrections. Measurement of skin friction by direct force sensors, Preston- and Stanton-tubes, diffusion analogies, liquid crystals. Flow visualization with laser light sheet; Schlieren, shadowgraph and interferometric methods. Future trends; flow control, impact of microelectronic sensors and actuators. Laboratory demonstrations using available instrumentation.

## JME 4240 Manufacturing Processes (3)

Prerequisite: Senior standing. Introduction to the processes used in making basic components for machines and structures. Emphasis is on the underlying scientific principles for such manufacturing processes as casting, forging, extrusion and machining.

JME $\mathbf{4 2 5 0}$ Materials Selection in Engineering Design (3)

Prerequisite: Senior standing. Analysis of the scientiac bases of material behavior in the light of research contributions of the last 20 years. Development of a rational approach to the selection of materials to mect a wide range of design requirements for conventional and advanced applications. Although emphasis will be placed on mechanical properties, other properties of interest in design will be discussed, e.g., acoustical, optical and thermal.

JME 4290 Flexible Manufacturing Automation (※) Prerequisite: Senior standing. Survey of the applicat on of robots in the automation of manufacturing industries. Use of robots to increase productivity, to improve quality or to improve safety. Special studies of applications of rothots in painting, welding, inspection and assembly.

## JME 4310 Control Systems I (3)

Prerequisite: JEMT 3170, JEE 2300 (same as JEE 4410). Introduction to automatic control concepts. Block diagram representation of single- and multi-loop systems. Multiinput and multi-output systems. Control system components. Transient and steady-state performance; stability analysis; Routh, Nyquist, Bode, and root locus diagrams. Compensation using lead, lag, and lead-lag networks. Synthesis by Bode plots and root-locus diagrams. Introduction to state-variable techniques, :itate transition matrix, state-variable feedback.

## JME 4440 Solar Energy (3)

Prerequisites: JME 3200, JME 3700, and JME 3710 This course will cover the following topics: extraterrestrial solar radiation; solar radiation on the earth's surface; weather bureau data; review of selected topics in heat transfer; methods of solar energy collection including flat panel and concentrating collectors; solar energy storage; transient and long-term solar system performance.

JME 4500 Computer-Integrated Manufacturing (3) Prerequisite: Senior standing. Analysis and design of computer-integrated systems for discrete parts and assemblies manufacturing. Process planning, contro, manufacturing decision support systems, microcomputers and networks. Programming of spatially oriented tasks, code generation, system integration. CIMLab assignments.

JME 4510 Computer Controlled Manufacturing (3)
Prerequisites: JCS 1260, JME 4320. Practical applications of mini- and microcomputer based systems for production control, numerical control and robotics. Processors, hardware interfacing, I/O configuration, D/A and A/D conversion. Real time process control. Flexible manufacturing. CIMLab assignments.

JME 4530 Facilities Design (3)
Prerequisite: Senior standing. The goal of the course is to provide the student with the information and analytical
tools necessary to take a product design into production and for the design of an efficient manufacturing facility that will make the production feasible. Quantitative methods in the design of manufacturing facilities. Space allocation, assembly line design, material-handling systems, utilities and environmental design for manufacturing facilities, Facility-location selection. Plantlayout development. Building, organization, communications and support system design. Materialhandling equipment, flow and packaging. Automated storage and retrieval systems design. Computer aided design of manufacturing facilities. Environmental requirements and design. Utilities design. In a major project, students will be required to analyze the design of a product and plan the manufacturing facility for its production.

## JME 4720 Fluid Mechanics II (3)

Prerequisites: JME 3200 and JME 3700. Mechanics and thermodynamics of incompressible and compressible flows: varying-area adiabatic flow, standing normal and oblique shock waves, Prandtl-Meyer flow, Fanno flow, Rayleigh flow, turbulent flow in ducts and boundary layers.

JME 4740 Analysis and Design of Turbomachinery (3) Prerequisite: Senior standing. The principles of thermodynamics and fluid dynamics applied to the analysis, design and development of turbomachinery for compressible and incompressible flows. Momentum transfer in turbomachines. Design of axial and radial compressors and turbines, diffusers, heat exchangers, combustors, and pumps. Operating characteristics of components and performance of power plants.

JME 4760 The Engineering Properties of Materials (3) Prerequisite: Junior standing. A detailed look at themechanical, chemical, and surface properties of materials. Topics include elastic properties; plastic deformation; viscoelastic behavior; chemical resistance; corrosion resistance; and the electromagnetic properties of metal, plastic, ceramic, and composite systems.

JME 4780 Analysis and Design of Piston Engines (3)
Prerequisite: Senior standing. The principles of thermodynamics and fluid dynamics applied to the analysis, design and development of piston engines. Examination of design features and operating characteristics of diesel, spark-ignition, stratified-charge, and mixed-cycle engines. Study of the effects of combustion, fuel properties, turbocharging and other power-boosting schemes on the power, efficiency and emission characteristics of the engines.

## JME 4800 Building Environmental Systems

## Parameters (3)

Sustainable design of building lighting and HVAC systems considering performance, life-cycle cost and downstream environmental impact. Criteria, codes and standards for
comfort, air quality, noise/vibration and illumination. Life cycle and other investment methods to integrate energy consumption/conservation, utility rates, initial cost, system/component longevity, maintenance cost and building productivity. Direct and secondary contributions to acid rain, global warming and ozone depletion.

## JME 4810 Air-Conditioning Systems and Equipment I

 (3)Prerequisite: Senior standing. Survey of air conditioning systems. Moist air properties and conditioning processes. Adiabatic saturation. Psychrometric chart. Environmental indices. Indoor air quality. Heat balances in building structures. Solar radiation. Space heating and cooling loads.

## JME 4820 Air-Conditioning Systems and Equipment II

## (3)

Prerequisite: Senior standing. Fluid flow, pumps, and piping design. Room air distribution. Fans and building air distribution. Mass transfer and measurement of humidity. Direct control of heat and mass transfer. Heat exchangers. Refrigeration systems. Absorption refrigeration.

## UM-Rolla Engineering Education Center

The UM-Rolla Engineering Education Center, housed on the University of Missouri-St. Louis campus, is an engineering graduate program administered by UM-Rolla for nontraditional students in the St. Louis area. The program is conducted in the Evening, making it suitable for students who are employed full time. Graduate work leading to the Master of Science degree is available in aerospace, civil, computer, electrical manufacturing and mechanical engineering, engineering management, engineering mechanics, and information science and technology.

The center provides information to St. Louis area residents about UMR programs in Rolla. Advisers can assist area preengineering students with transfer to the Rolla campus and with entry into the Cooperative Training Program that exists between UMR and numerous U.S. industries. This co-op program allows engineering students to gain valuable industrial experience during their school years and to be partially or totally self-supporting.

The center also assists St . Louis area companies by offering noncredit short courses, in-house training courses and engineering consultation services in the technical areas of competence of UMR faculty. The center may be contacted at (314) 516-5431 or refer to the web site containing comprehensive information about these programs: www.umr.edu/-umreec.

## Programs at other Universities

## Reciprocal Programs

Unless otherwise stated, students interested in one of the following programs should contact the admissions office at the school where the program is offered.

## Nebraska

The University of Nebraska in Lincoln offers programs for a limited number of Missouri residents in architecture, community and regional planning, construction management, and actuarial science where students may pursue bachelor's degrees.

## Illinois

A cooperative agreement exists between Southern Illinois University-Edwardsville and UM-St. Louis which permits students of one institution to take courses at the other institution as a regular part of their academic program. For further information consult the registrar's office or the dean's office.

## Kansas

The following programs are offered to Missouri residents at various Kansas universities:

## Humanities

University of Kansas, Lawrence, with an M.A. in Oriental languages and literature, and a B.A. and M.A. in Slavic languages and literature (not Russian). A Ph.D. in Slavic languages and literature is also offered.

## Grain milling and technology

Kansas State University, Manhattan, with a B.S., M.S., or Ph.D. in bakery science and management, feed science and management, or milling science and management.

## Horticulture

Kansas State University, Manhattan, with a B.S. in horticulture therapy.

## Joint Programs in Law and Dentistry

The University of Missouri-St. Louis and the University of Missouri-Kansas City provide joint programs in law and dentistry for academically able students who are committed to public service. These special programs are designed to serve students seeking a career in public-service law or students who wish to practice dentistry in medically underserved communities.

UM-Kansas City will hold a reserved seat in its School of Law or in the School of Dentistry for qualified UM-St. Louis entering freshmen and make it available to them after they complete the required undergraduate studies at UM-St. Louis.

## Study Abroad Programs

The University of Missouri-St. Louis is committed to broadening students' understanding of different cultures and
preparing them for the global community in which we live. One of the most successful ways of achieving this "global mindset" is to study overseas for a summer, semester, or year program. Spending time abroad as a student is an enriching experience both academically and personally, providing students with the opportunity to study within a different culture.

The Center for International Studies provides UM-St. Louis students with opportunities to study at over 80 different universities in more than 30 countries around the globe. Through individual advising at the center's Study Abroad Office, students can find the program best suited to their personal, academic, and career goals. Internship possibilities are also available for qualified students.

## Fees and Financial Aid

The cost of the program depends on the services provided and the country and city of study. For most programs, participants continue to pay UM-St. Louis fees plus airfare, room and board, and spending money. Students are usually housed in dormitories or are assisted in finding apartments. In most cases, students are able to apply financial aid to a study abroad program. Study abroad scholarships are available for qualified applicants through the Center for International Studies.

## Application

Generally, applications are due in mid-February for summer and fall semesters, and the end of September for winter semester. Some programs require application two semesters prior to participation. Students should plan to spend at least one or two months researching a program before applying.

Participant selection is based on academic achievement, faculty recommendations, approval of the proposed course of study via the department/divisional advisory process, and familiarity with or willingness to learn the foreign language of instruction. Most programs are designed for undergraduate students in their junior or senior years of study; however, a limited number of programs for freshmen, sophomores, and graduate students are available.

## ROTC

Students interested in Reserve Officer Training Corps programs may enroll in either the Army ROTC program at UM-St. Louis or the Air Force ROTC program sponsored at UM-St. Louis through Saint Louis University. These programs provide undergraduate and graduate students with the opportunity to combine academic study with a military officer training program.

For further information concerning the Army ROTC program, contact the Military Science Department, telephone $516-4872$ or check out our Web site at http://www.umsl.edu/~umslrotc/index.htm. For information on the Air Force ROTC program, contact the Aerospace Science Department at Saint Louis University, telephone 977-8227

## Army ROTC

The purpose of the Military Science Department is to develop young men and women into junior commissioned officers for positions of responsibility in the Army Reserve, Army National Guard, or Active Army.

## Benefits

Army ROTC offers UM-St. Louis students:

1) A challenging, important, well-paid job at graduation in one of the many professional fields that the modern Army has to offer. Army officers serve in such fields as intelligence, military police, communications, engineering, transportation management, finance, combat arms, hospital administration, nursing, and research and development. Starting salary with allowances of an active duty second lieutenant is approximately $\$ 27,000$. Within four years he/she should be promoted to captain with a salary and allowances of nearly $\$ 48,000$. Reserve officers attend one weekend per month and an annual two-week training camp.
2) College financing. All advance course and Army ROTC scholarship students receive $\$ 250-400$ month stipend. Only scholarship students receive $\$ 450$ for books and supplies. Also, advance course students may join the Reserves as an office trainee and receive pay while in college.
3) Full-time enrolled students may compete for the Army ROTC scholarship. The scholarship pays for tuition, fees, and books.
4) Option of two careers. Upon graduation and commissioning as officers in the U.S. Army, students may fulfill their obligation by serving on active duty or reserve duty. Reserve officers spend one weekend a month being
a soldier. Officers who serve on active duty receive $\equiv 0$ days paid vacation every year, free medical and dental care, travel, and the opportunity to pursue advanced degrees with educational assistance from the Army on a fully funded or partially funded basis.

## The Program

College students who complete the ROTC program earm commissions as second lieutenants in the U.S. Army. The ROTC program may be completed in several different ways as outlined below.

1) Four-Year Program. The military science program is traditionally offered as a four-year program. It is best to start as a freshman, but special arrangements can be raade for those who start as sophomores. The first two years of military science are voluntary without service obligation, and are designed to give students a perspective on their leadership ability and what the Army can offer them. The student who decides to continue in ROTC and pursue a commission signs an agreement with the Department of the Army to accept a commission upon completion 0 : the last two years of military science. In return the Army agrees to provide a subsistence allowance (up to $\$ 4,000$ ) and to provide all necessary uniforms and military science books.
2) Two-Year Program. The two-year program is desizned to provide greater flexibility in meeting the needs of students desiring commissions in the U.S. Army. LNi-St. Louis students who did not participate in the four-year program and junior college transfer students are eligible for enrollment. Basic prerequisites for entering the two-year program are:
A) The students must be in good academic standing (minimum 2.0 GPA) and pass an Army medical examination.
B) The student must have two academic years of studly remaining (undergraduate, graduate, or combination). The student will attend a six-week summer camp to catch up with the students in the four-year program. Attendance at the basic camp does not obligate the student in any way and is only intended to give the student a look at Ammy life and opportunities. The student will be paid approximately $\$ 750$ for attendance at basic camp.

## Veterans

Veterans of any of the armed forces may qualify for advanced placement and should contact the Military Science Department for details.

## Scholarships

The Army ROTC currently has scholarships in effect, which pay toward tuition, fees, and books, and provile $\$ 200$ /month for the academic year.

These scholarships cover either four, three, or two years. UM-St. Louis freshmen and sophomores should apply in January for the two- and three-year scholarships. Scholarship students may incur a four-year active duty obligation; however, they may request reserve duty to serve with the Army National Guard or Reserve.

## Qualifications

All students who desire to enter the Army Reserve Officer Training Corps must be U.S. citizens, in good physical condition, and have high moral character. Students must be at least 17 years old to enroll and not over 30 when they receive their commission. Additional qualifications to be admitted into the advanced course include an academic average of $C$ or better and passing an Army medical examination.

## Academics

UM-St. Louis Army Reserve Officers Training Corps academics consist of two parts:

1) Earning a degree in the student's chosen academic subject.
2) Completing 22 credit hours (four-year program) or 12 credit hours (two-year program) of the military science curriculum. The courses in military science are college-level academic courses which receive full academic credit toward the student's elective degree requirements in the College of Business Administration and the College of Education. The curriculum consists of classroom instruction and a leadership laboratory in which students receive leadership experience.

## Leadership Laboratory

Leadership laboratory is required of all students enrolled in military science courses. Classes are two hours every Thursday afternoon from 4 p.m. to 6 p.m., unless otherwise designated. In addition, students attend one field training exercise each semester. Leadership laboratory develops individual military skills and leadership ability through participation in drill and ceremonies, survival training, mountaineering, field-training exercises, and exposure to progressively greater responsibilities within the Cadet Corps organization.

## Graduate Study

The Army realizes the importance of a graduate degree for its personnel. There are several programs available to assist ROTC graduates in obtaining an advanced degree. The Army sends selected second lieutenants immediately to graduate school (with full pay and allowances) to pursue advanced degrees in engineering and the physical sciences. Other officers may postpone active duty for two years to continue graduate study. Students who are accepted into medical school may take up to four years to complete their studies. There are numerous opportunities for an officer to complete a master's degree in service and receive financial assistance from the Army.

## Special Training

Selected volunteers may attend one of several special schools during the summer: the Airborne Course at Fort Benning, GA; Air Assault School at Fort Campbell, KY; or the Northern Warfare School in Alaska. Successful course completion earns the coveted badge (such as the jump wings or air assault wings) associated with each school. Special cadet troop leadership training is available on a limited basis. Students participating in the program live and work with an active Army unit during part of one summer.

## Cadet Activities

Army ROTC students may participate in many extracurricular activities during the year. Social activities include the Army Military Ball, a fall canoe trip down the Meramec River, picnics, and informal parties. Army ROTC students also support various campus and community service activities. Interested students also participate in the Drill Team, Color Guard, and Ranger Challenge Team.

## Course Descriptions

## Military Science

## 1101 Introduction to ROTC (2)

Make your first new peer group at college one committed to performing well and enjoying the experience. Increase self-confidence through team study and activities in basic drill, physical fitness, rappelling, leadership reaction course, first aid, making presentations and basic marksmanship. Learn fundamental concepts of leadership in a profession in both classroom and outdoor laboratory environments.

## 1102 Introduction to Leadership (3)

Learn/apply principles of effective leading. Reinforce self-confidence through participation in physically and mentally challenging exercises with upper division ROTC students. Develop communication skills to improve individual performance and group interaction. Relate organizational ethical values to the effectiveness of a leader.

## 1201 Self/Team Development (3)

Learn/apply ethics-based leadership skills that develop individual abilities and contribute to the building of effective teams of people. Develop skills in oral presentations, writing concisely, planning of events, coordination of group efforts, advanced first aid, land navigation and basic military tactics. Learn fundamentals of ROTC's Leadership Development Program.

## 1202 Individual/Team Military Tactics (3)

Introduction to individual and team aspects of military tactics in small unit operations. Includes use of radio communications, making safety assessments, movement techniques, planning for team safety/security and methods
of pre-execution checks. Practical exercises with upper division ROTC students. Learn techniques for training others as an aspect of continued leadership development.

## 1301 Leading Small Organizations I (3)

Series of practical opportunities to lead small groups, receive personal assessments and encouragement, and lead again in situations of increasing complexity. Uses small unit defensive tactics and opportunities to plan and conduct training for lower division students both to develop such skills and as vehicles for practicing leading.

## 1302 Leading Small Organizations II (3)

Continues methodology of MS 1301. Analyze tasks; prepare written or oral guidance for team members to accomplish tasks. Delegate tasks and supervise. Plan for and adapt to the unexpected in organizations under stress. Examine and apply lessons from leadership case studies.
Examine importance of ethical decision making in setting a positive climate that enhances team performance.

## 1401 Leadership and Management (3)

Prerequisite: Military Science 1302.
Leadership and Management, begins with a series of lessons enabling the students to make informed career decisions as they prepare for accession into the United States Army. The lessons concentrate on Army operations, training management, communications, counseling, leadership skills, and they support the final transition from cadet to lieutenant.

## 1402 Officership/Transition to Lieutenant (3)

 Prerequisite: Military Science 1401.Transition to Lieutenant completes the evolution from cadet to lieutenant by focusing on three areas: first, students are given a basic foundation in military law; second, students build on previous courses to successfully negotiate case studies and practical exercises; third, students will complete a Senior Leadership Project whereby students integrate, apply, and demonstrate their knowledge of military operations.

## Air Force ROTC

The objective of the Air Force Reserve Officer Training Corps is to qualify students for appointment as active duty second lieutenants in the United States Air Force. However, any student may enroll in the freshman/ sophomore-level aerospace studies courses, and students may also enroll in the junior/senior-level courses with permission of the professor of aerospace studies.

UM-St. Louis offers the two- and four-year AFROTC programs through an agreement with Saint Louis University. The four-year program is tailored for students with three or more years of undergraduate studies remaining. Students with junior standing or above may apply for entry into the two-year program. Entry into the two-year program is competitive and is based on
standardized test scores, academic major, grade-point average, physical examination, personal interview wi:h the professor of aerospace studies, and successful completion of a summer field training session at an Air Force base. Applicants must be full-time students and must remain in good academic standing.

## Reserve Officer Training Corps

The AFROTC Program is divided into the general military course (GMC), the freshman/sophomore level curricilum; and the professional officer course (POC), the junior/ senior level curriculum. The GMC covers two main themes; the Air Force today and the Air Force way. The courses of the POC emphasize the professional development of the future Air Force officer. The curriculum covers Air Force leadership and managenent and preparation for active duty. Field trips to Air For:e bases supplement classroom instruction and familiarize the cadet with Air Force operations and organization.

## To be commissioned, AFROTC students/cadets must:

1) Pass a medical exam at a military medical facility.
2) Obtain a favorable evaluation on an Armed Forces personal history security investigation.
3) Flying applicants must complete commissioning requirements before age $26-1 / 2$, and nonflying applicants must complete commissioning requirements by age 30 . However, the age limit for nonflying applicants may be extended to age 35 for outstanding individuals.
4) Be of good character (as determined by a favorabl: record with law enforcement authorities).
5) Successfully complete all AFROTC course requirements.
6) Complete at least a baccalaureate degree.

Air Force ROTC textbooks are loaned to all AFROT students without charge. Students in the POC will receive a monthly subsistence allowance of $\$ 150$ per month "or a maximum of 20 months, an Air Force uniform, in ex cess of $\$ 700$ for the summer field training course, and a travel allowance to and from the training location.

In addition to the AFROTC courses offered for academic credit, the Aerospace Studies Department sponsors the Arnold Air Society and Angel Flight. Arnold Air Society is a national honorary service organization, and membership is open to anyone interested in bringing to the local community a better understanding of the Air Force mission and its leaders.

AFROTC field training is offered during the summei months at selected bases throughout the United States, usually between a student's sophomore and junior years. Students in the four-year program participate in four weeks of field training. Major areas of study include junior officer training, aircrew/aircraft orientation, career orientation, survival training, base functions and Air Force environment, and physical training. Students applying for
entry into the two-year program must successfully complete six weeks of field training prior to enrollment in the professional officer course. The major areas of study included in the six-week field training program are essentially the same as those conducted at four-week field training, plus the academic curriculum of the general military course including leadership laboratory. POC cadets are eligible for a $\$ 1,000$ per semester federal AFROTC scholarship.

Leadership Laboratory is taken once per week throughout the student's enrollment in AFROTC. Instruction is conducted within the framework of an organized cadet corps with a progression of experiences designed to develop each student's leadership potential. Leadership laboratory involves a study of Air Force customs and courtesies, drill and ceremonies, career opportunities in the Air Force, and the life and work of an Air Force junior officer. It also includes field trips to Air Force installations throughout the United States.

Other training volunteers may attend various special cadet training programs such as light aircraft training, parachute jump training, and advance cadet training. Students participating in the latter work with an Air Force unit during part of the summer.

The Air Force offers four-, three-, and two-year scholarships to qualified students. These scholarships pay tuition, certain fees, and textbook cost. Scholarship recipients receive $\$ 150$ per month subsistence allowance. For further information on the Air Force ROTC program at UM-St. Louis, call (314) 977-8227, or at Southern Illinois University at Edwardsville (SIUE), call (618) 692-3180.

## Aerospace Studies

The Aerospace studies program is divided into two parts: the general military course, the freshman/sophomore level curriculum, and the professional officer course, the junior/senior level curriculum. The GMC covers two main themes: the Air Force today and the Air Force way. The courses of the POC emphasize the professional development of the future Air Force officer. The curriculum covers Air Force leadership and management and preparation for active duty. Field trips to Air Force bases supplement classroom instructions and familiarize the cadet with Air Force operations and organizations.

Leadership laboratory is taken two hours per week throughout the student's enrollment in the AFROTC. Instruction is conducted within the framework of an organized cadet corps with a progression of experiences designed to develop each student's leadership potential. The first two years of the leadership laboratory includes a study of Air Force customs and courtesies, drill and ceremonies, issuing military commands, instructing, directing and evaluating the preceding skills, studying the environment of an Air Force officer and learning about
areas of opportunity available to commissioned officers. The last two years of lab consist of activities classified as advanced leadership experiences. They involve planning and controlling military activities of the cadet corps, preparation and presentation of briefings and other oral and written communications, and providing interviews, guidance, and information which will increase the understanding, motivation, and performance of other cadets.

AFROTC cadets must also successfully complete supplemental courses to enhance their utility and performance as commissioned officers. These include university courses in English composition and mathematical reasoning. Specific courses are designated by the professor of aerospace studies.

Cadets in the four-year program participate in four weeks of field training. Cadets in the two- or three- year programs (exception for prior AF service) must attend the six-week FT session, which is identical to the four-week program plus 90 hours of GMC curriculum. Field training is offered during the summer months at selected bases throughout the United States, usually between a student's sophomore and junior years. Major areas of study include Air Force orientation, officer training, aircrew/aircraft orientation, survival training, base functions, and physical training.

Students applying for entry into the two- or three- year program must successfully complete six weeks of field training prior to enrollment in the professional officer course. The major areas of study included in the six-week field training program are essentially the same as those conducted at four-week field training, plus the academic curriculum of the general military course including leadership laboratory. No direct academic credit is awarded for field training.

Federal scholarships are available for AFROTC cadets-any academic major may apply. Applications are to be submitted by detachment personnel to Headquarters Reserve Officers Training Corps, Maxwell Air Force Base, AL.

Participation in AFROTC is not required to take aerospace courses.

## Lower Division (General Military)

Aerospace studies courses (AS-1001 through AS-1002) are basic courses designed to acquaint students with the United States Air Force and the opportunities available as an officer. Grades earned in these courses will be computed in the student's overall grade point average, but credit hours for these courses will not be included in the total hours for graduation.

## Course Descriptions

## AS-1001/1002 The Air Force Today (2)

A survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and an introduction to communication skills. Leadership Laboratory is mandatory for AFROTC cadets, and it complements this course by providing students with followership experiences. Classroom activity, two hours per week; Leadership Laboratory two hours per week, each semester.

AS-2001/2002 The Air Force Way (2)
Survey course designed to facilitate the transition from Air Force ROTC cadet to Air Force ROTC candidate. Featured topics include: Air Force heritage, Air Force leaders, Quality Air Force, an introduction to ethics and values, introduction to leadership, group leadership problems, and continuing application of communication skills. Leadership Laboratory is mandatory for Air Force ROTC cadets, and it complements this course by providing cadets with their first opportunity for applied leadership experiences discussed in class. Classroom activity, two hours per week; Leadership Laboratory two hours per week, each semester.

## Upper Division(Professional Officer) Courses

Aerospace Studies courses AS-3001 through AS-4002 are advanced courses designed to improve communication and management skills required of Air Force officers. Credit hours of these courses may be included in the hours needed for graduation at the discretion of individual departmental chairpersons.

## AS-3001/3002 Air Force Leadership and Management

 (3)The study of leadership and quality management fundamentals, professional knowledge, Air Force doctrine, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory leadership laboratory complements this course by providing advanced leadership experiences in officer type activities, giving students the opportunity to apply leadership and management principles of this course. Classroom activity, three hours per week; Leadership Laboratory two hours per week, each semester.

AS-4001/4002 Preparation For Active Duty (3)
Examines the national security process, regional studies, advanced leadership ethics, Air Force doctrine. Special topics of interest focus on the military as a profession,
officership, military justice, civilian control of the military, preparation for active duty, and current issues affect ng military professionalism. Within this structure, continued emphasis is given to refining communication skills. An additional Leadership Laboratory complements this zourse by providing advanced leadership experiences, givirg students the opportunity to apply leadership and management principles of this course. Classroom acivity, three hours per week; Leadership Laboratory two hours per week, each semester.

## Field Training

Field Training provides leadership and officership training in a military environment, which demands conformi:y to high physical and moral standards. Within this struc:ured environment, cadets are screened for officer potentiel as measured against field training standards. Motivation and professional development is achieved through various programs such as flight orientation, marksmanship, and survival training. Students in the four-year program participate in four weeks of field training. Field trairing is offered during the summer months at selected bases throughout the United States, usually between a stucent's sophomore and junior years. Major areas of study include: Air Force Orientation, Officer Training, aircrew/aircraft orientation, survival training, base functions and physical training.

## Video Instructional Program

The video instructional program offers an alternative for the student who is far from campus, whose physical disability, work schedule, or other responsibilities make it difficult for him/her to attend traditional classes. Video lessons for various courses are available for viewing on cable television stations as well as in UM-St. Louis libraries.

## St. Louis Area Cable Stations

Continental Cable, and United Video in St. Louis County; AT\&T Cable in the city will air courses over the Higher Education Channel (HEC). (Charter, Continental, United Video \& AT\&T Cable).

## Course Listings

The following courses from the UM-St. Louis curriculum are offered:

## Anthropology

## 1019 Archaeology [SS]

This telecourse uses dramatic onsite filming to enable students to explore how archaeologists reconstruct ancient societies and explain how they evolved. Students will understand how archaeology and anthropology interact, with emphasis on how people have behaved in the past.

## 1025 World Cultures [CD, SS, V]

This telecourse is an ethnographic survey of the major culture areas of the world. It is an introductory cultural anthropology course that studies the structure and process of culture.

## 1095 Brief Overview of the Four Fields of Anthropology

 (1)Through the use of videos, readings, and the online course management system, this course provides a brief overview of the four traditional fields of anthropology: biological, archaeological, cultural, and linguistic anthropology. This course is designed for video instruction and offers minimal direct interaction with the instructor.

## 2124 Cultures of Africa [CD]

This telecourse offers a basic ethnographic survey of African cultures, with attention to social groupings, tribalism, religion, language, social change, the ecological relationship between humans and nature.

## Biology

1012 General Biology (For Non-Science Majors) [MS]
This telecourse provides a firm foundation in the fundamental principles of biology.

## Communication

## 2232 Effective Communication in the Organization: Tool for Leadership (3)

Prerequisites: Junior standing or consent of instructor. Telecourse designed to equip students with communication skills applicable to the organizational context. The course will present effective strategies for the articulation of ideas, with particular emphasis on the development of leadership skills.

## History

## 1031 Topics in European Civilization: Emergence of Western Europe to 1715 [SS]

This telecourse offers lectures and discussions on the development of Western European society and tradition from approximately 800 to 1715 .

1032 Topics in European Civilization: 1715 to the Present [SS]
This telecourse offers lectures and discussions on the development of Western European society and tradition from 1715 to the present. History 1031 or History 1032 may be taken separately.

## Media Studies

## 1070 Introduction to Cinema

This telecourse examines the history, rhetoric, and aesthetics of film. The content is designed to bring Hollywood filmmaking into clear focus as an art form, as an economic force, and as a system of representation and communication. Film theory and criticism will be studied, as well as major genres, authors, and artists. Introduction to Cinema explores how Hollywood films work technically, artistically, and culturally. The course also probes the deeper meaning of American movies--the hidden messages of genres, the social and psychological effects of Hollywood film style, and the mutual influence of society and popular culture on filmmaking.

## Philosophy

## 1090 Philosophy and Other Disciplines [H,V]

Prerequisites: Video course offering. General introduction to philosophy examines its connections to works of art and related areas. Course does not satisfy any requirements for philosophy major or minor.

1091 Significant Figures in Philosophy [H,V]
Video course introduces philosophy through a survey of the ideas of some of the important figures in the history of the discipline. Course cannot be used to satisfy any requirements for philosophy major or minor.

## Psychology

1003 General Psychology [SS]
This telecourse is an introductory college level course that covers the fundamental principles and major concepts of psychology. The content is designed to provide a broad introductory survey of the general principles of human behavior.

## 1268 Human Growth and Behavior [SS]

Prerequisites: Psych 1003. This telecourse uses special readings, reports, and/or field research as well as video and audio courses to explore the stages of life as an introduction to developmental psychology.

## 2245 Abnormal Psychology

Prerequisite: Psych 1003, General Psychology. This telecourse introduces the major theoretical models for explaining and treating disorders - psychodynamic, behavioral, cognitive and biological. Ten of the 13 programs feature specific disorders, including anxiety disorders, personality disorders, the schizophrenias, sexual disorders, substance abuse, and the disorders of childhood. The first program concerns assessment, while the last two provide information on treatment and prevention. This approach serves the introductory abnormal psychology student, while allowing individual faculty latitude to underscore the approach to which they subscribe.

## 2280 The Psychology of Death and Dying

Same as Gerontology 4280. Prerequisite: Psych 1003. This telecourse will address the psychological aspects of death and dying for both adults and children. The psychological reactions of terminally ill patients and their families will also be examined, and therapeutic interventions will be discussed.

## Sociology

1010 Introduction to Sociology [V, SS]
This telecourse is an introductory college level course designed to give students an in-depth look at sociological approaches to human behavior, including types of social organizations, patterns of social interaction, and social influences on individual conduct.

## Appendix

The University of Missouri-St. Louis Honor Statement
The University of Missouri-St. Louis encourages students to pursue excellence within a respectful and collegial environment and to assume responsibility for the consequences of personal actions. For that reason the University requires students to reject any type of dishonest behavior.

Honesty precludes seeking, providing, or receiving any form of unauthorized assistance in taking tests or in the submission of an assignment. It also requires giving credit through appropriate documentation and citation to the author(s) of materials used in written or oral assignments.

The full Student Standard of Conduct is found at http://www.umsystem.edu:80/ums/departments/gc/rules/pr ograms $/ 200 / 010$ shtml. By registering for a class at UM-St. Louis, students agree to follow this standard of integrity.

## Code of Student Conduct

200.010 Standard of Conduct Amended March 20, 1981; August 3, 1990; May 19, 1994; May 24, 2001 A student enrolling in the university assumes an obligation to behave in a manner compatible with the university's function as an educational institution.

## A. JURISDICTION OF THE UNIVERSITY OF

 MISSOURI generally shall be limited to conduct which occurs on the University of Missouri premises or at university-sponsored or university-supervised functions. However, nothing restrains the administration of the University of Missouri from taking appropriate action, including, but not limited to, the imposition of sanctions under Section 200.020(C), against students for conduct on or off university premises in order to protect the physical safety of students, faculty, staff and visitors.B. CONDUCT for which students are subject to sanctions falls into the following categories:

1. Academic dishonesty, such as cheating, plagiarism or sabotage. The Board of Curators recognizes that academic honesty is essential for the intellectual life of the university. Faculty members have a special obligation to expect high standards of academic honesty in all student work. Students have a special obligation to adhere to such standards. In all cases of academic dishonesty, the instructor shall make an academic judgment about the student's grade on that work and in that course. The instructor shall report the alleged academic dishonesty to the Primary Administrative Officer.
a. The term cheating includes but is not limited to (I) use of any unauthorized assistance in taking quizzes, tests, or examinations; (ii) dependence upon the aid of sources
beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; (iii) acquisition or possession without permission of tests, or other academic material belonging to a member of the university faculty or staff; or (iv) knowingly providing any unauthorized assistance to another student on quizzes, tests, or examinations.
b. The term plagiarism includes, but is not limited to: (I) use by paraphrase or direct quotation of the published or unpublished work of another person without fully and properly crediting the author with footnotes, citations or bibliographical reference; (ii) unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials; or (iii) unacknowledged use of original work/material that has been produced through collaboration with others without release in writing from collaborators.
c. The term sabotage includes, but is not limited to, the unauthorized interference with, modification of, or destruction of the work or intellectual property of another member of the university community.
2. Forgery, alteration, or misuse of university documents, records or identification, or knowingly furnishing false information to the university.
3. Obstruction or disruption of teaching, research, administration, conduct proceedings, or other university activities, including its public service functions on or off campus.
4. Physical abuse or other conduct which threatens or endangers the health or safety of any person.
5. Attempted or actual theft of, damage to, or possession without permission of property of the university or of a member of the university community or of a campus visitor.
6. Unauthorized possession, duplication or use of keys to any university facilities or unauthorized entry to or use of university facilities.
7. Violation of university policies, rules or regulations or of campus regulations including, but not limited to, those governing residence in university-provided housing, or the use of university facilities, or the time, place and manner of public expression.
8. Manufacture, use, possession, sale or distribution of alcoholic beverages or any controlled substance without proper prescription or required license or as expressly permitted by law or university regulations.
9. Disruptive or disorderly conduct or lewd, indecent, or obscene conduct or expression.
10. Failure to comply with directions of university officials acting in the performance of their duties.
11. Illegal or unauthorized possession of firearms, explosives, other weapons, or dangerous chemicals.
12. Actual or attempted theft or other abuse of computer time, including but not limited to:
a. Unauthorized entry into a file to use, read, or change the contents, or for any other purpose.
b. Unauthorized transfer of a file.
c. Unauthorized use of another individual's identification and password.
d. Use of computing facilities to interfere with the work of another student, faculty member or university official. e. Use of computing facilities to interfere with normal operation of the university computing system.
f. Knowingly causing a computer virus to become installed in a computer system or file.

## Student Disciplinary Matters

Rules of Procedures in Student Disciplinary Matters Adopted November 8, 1968, Amended March 20, 1981; December 8, 1989; and May 18, 1994; May 24, 2001

## RULES OF PROCEDURES IN STUDENT CONDUCT MATTERS

Bd. Min. 11-8-68, Amended Bd. Min. 3-20-81; Bd. Min. 12-8-89, Amended 5-19-94; Bd. Min. 5-24-01.

### 200.020 RULES OF PROCEDURES IN STUDENT CONDUCT MATTERS

A. PREAMBLE. The following rules of procedure in student conduct matters are hereby adopted in order to insure insofar as possible and practicable (a) that the requirements of procedural due process in student conduct proceedings will be fulfilled by the University, (b) that the immediate effectiveness of Section 10.030, which is Article V of the Bylaws of the Board of Curators relating to student conduct and sanctions may be secured for all students in the University of Missouri, and (c) that procedures shall be definite and determinable within the University of Missouri.
B. DEFINITIONS. As used in these rules, the following definitions shall apply:

1. Primary Administrative Officers. As used in these procedures, the Chief Student Affairs Administrator on each campus is the Primary Administrative Officer except in cases of academic dishonesty, where the Chief Academic Administrator is the Primary Administrative Officer. Each Primary Administrative Officer may appoint designee(s) who are responsible for the administration of these conduct procedures, provided all such appointments must be in writing, filed with the Chancellor of the campus, and the office of General Counsel. The Primary Administrator's Office will certify in writing that the given
designee has been trained in the administration of student conduct matters.
2. Student Panel. A panel of students appointed by the Chancellor, from which shall be selected by the Chair, upon the request of a student charged before the Stucent Conduct Committee, not more than three students to serve with the Student Conduct Committee.
3. Student. A person having once been admitted to the University who has not completed a course of study and who intends to or does continue a course of study in or through one of the campuses of the University. For the purpose of these rules, student status continues whether or not the University's academic programs are in sessio:2.
4. Student Conduct Committee. As used in these procedures, "Student Conduct Committee," hereinafter referred to as the Committee, is that body on each campus which is authorized to conduct hearings and to make dispositions under these procedures or a Hearing Parel of such body as herein defined.

## C. SANCTIONS.

1. The following sanctions may be imposed upon an; student found to have violated the Student Conduct Code; more than one of the sanctions may be imposed for any single violation:
a. Warning. A notice in writing to the student that the student is violating or has violated institutional regulations. b. Probation. A written reprimand for violation of specified regulations. Probation is for a designated period of time and includes the probability of more severe sanction; if the student is found to be violating any institutional regulation(s) during the probationary period.
c. Loss of Privileges. Denial of specified privileges for a designated period of time.
d. Restitution. Compensation for loss, damage, or in ury to the University or University property. This may take the form of appropriate service and/or monetary or material replacement.
e. Discretionary Sanctions. Work assignments, servive to the University, or other related discretionary assignnents. f. Residence Hall Suspension. Separation of the srudent from the residence halls for a definite period of time after which the student is eligible to return. Conditions fo: readmission may be specified.
g. Residence Hall Expulsion. Permanent separation of the student from the residence halls.
h. University Dismissal. An involuntary separation of the student from the institution for misconduct apart from academic requirements. It does not imply or state a minimum separation time.
i. University Suspension. Separation of the student f:om the University for a definite period of time, after wh ch the student is eligible to return. Conditions for readmiss on may be specified.
j. University Expulsion. Permanent separation of the student from the University.
2. Temporary Suspension. The Chancellor or Designee may at any time temporarily suspend or deny readmission to a student from the University pending formal procedures when the Chancellor or Designee finds and believes from available information that the presence of a student on campus would seriously disrupt the University or constitute a danger to the health, safety, or welfare of members of the University community. The appropriate procedure to determine the future status of the student will be initiated within seven calendar days.
D. RECORDS RETENTION. Student conduct records shall be maintained for five years after University action is completed.

## E. POLICY AND PROCEDURES.

## 1. Preliminary Procedures.

The Primary Administrative Officer/Designee(s) shall investigate any reported student misconduct before initiating formal conduct procedures and give the student the opportunity to present a personal version of the incident or occurrence. The Primary Administrative Officer/Designee(s) may discuss with any student such alleged misconduct and the student shall attend such consultation as requested by the Primary Administrative Officer/Designee(s). The Primary Administrative Officer/Designee(s), in making an investigation and disposition, may utilize student courts and boards and/or divisional deans to make recommendations.

## 2. Informal Dispositions.

The Primary Administrative Officer/Designee(s) shall have the authority to make a determination and to impose appropriate sanctions and shall fix a reasonable time within which the student shall accept or reject a proposed informal disposition. A failure of the student either to accept or reject within the time fixed may be deemed by the University to be an acceptance of the determination, provided the student has received written notice of the proposed determination and the result of the student's failure to formally reject and, in such event, the proposed disposition shall become final upon expiration of such time. If the student rejects informal disposition it must be in writing and shall be forwarded to the Committee. The Primary Administrative Officer/Designee(s) may refer cases to the Committee without first offering informal disposition.

## 3. Formal Procedure and Disposition.

## a. Student Conduct Committee:

(1) The Committee shall be appointed by the Chancellor and shall have the authority to impose appropriate sanctions upon any student or students appearing before it.
(2) The Committee, when appropriate or convenient, may be divided by the Chair of the Committee into Hearing

Panels, each panel to be composed of at least five Committee members, which may include a maximum of two students, present at the hearing, including a designated chair. A Hearing Panel has the authority of the whole Committee in those cases assigned to it. The Chair of the Committee or of a Hearing Panel shall count as one member of the Committee or Hearing Panel and have the same rights as other members.
(3) Each Chancellor shall appoint a panel of students, to be known as the Student Panel. Upon written request of a student charged before the Committee, made at least seventy-two (72) hours prior to the hearing, the Chair of the Committee or Hearing Panel shall appoint from the Student Panel not more than three students to sit with the Committee or two students to sit with the Hearing Panel (as stated in
4.a.(2) for that particular case. When students from the Student Panel serve at the request of a student charged, they shall have the same rights as other members of the Committee or Hearing Panel.
b. General Statement of Procedures. A student charged with a breach of the Student Conduct Code is entitled to a written notice and a formal hearing unless the matter is disposed of under the rules for informal disposition. Student conduct proceedings are not to be construed as judicial trials and need not wait for legal action before proceeding; but care shall be taken to comply as fully as possible with the spirit and intent of the procedural safeguards set forth herein. The Office of the General Counsel shall be legal adviser to the Committee and the Primary Administrative Officer/Designee(s).
c. Notice. The Primary Administrative Officer/Designee(s) shall initiate student conduct proceedings by arranging with the Chair to call a meeting of the Committee and by giving written notice by certified mail or personal delivery to the student charged with misconduct. The notice shall set forth the date, time, and place of the alleged violation and the date, time, and place of the hearing before the Committee. Notice by certified mail may be addressed to the last address currently on record with the University. Failure by the student to have a current correct local address on record with the University shall not be construed to invalidate such notice. The notice shall be given at least seven (7) consecutive days prior to the hearing, unless a shorter time be fixed by the Chair for good cause. Any request for continuance shall be made in writing to the Chair, who shall have the authority to continue the hearing if the request is timely and made for good cause. The Chair shall notify the Primary Administrative Officer/Designee(s) and the student of the new date for the hearing. If the student fails to appear at the scheduled time, the Committee may hear and determine the matter.

## 4. Right to Petition for Review:

(other than University expulsion, University dismissal, or University suspension).
a. In all cases where the sanction imposed by the Committee is other than University expulsion, University
dismissal, or University suspension, the Primary Administrative Officer/Designee(s) or the student may petition the Chancellor or Designee in writing for a review of the decision within five (5) calendar days after written notification. A copy of the Petition for Review must also be served upon the nonappealing party within such time. The Petition for Review shall state the grounds or reasons for review, and the nonappealing party may answer the petition within five (5) calendar days.
b. The Chancellor or Designee may grant or refuse the right of review. In all cases where the Petition for Review is refused, the action of the Committee shall be final. If the Chancellor or Designee reviews the decision, the action of the Chancellor shall be final unless it is to remand the matter for further proceedings.

## 5. Right of Appeal

(University expulsion, University dismissal, or University suspension only).
a. When a student is expelled, dismissed, or suspended from the University by the Committee, the Primary Administrative Officer/Designee(s), or the student may appeal such decision to the Chancellor or Designee by filing written notice of appeal with the Chancellor within ten (10) calendar days after notification of the decision of the Committee. A copy of the Notice of Appeal will contemporaneously be given by the student to the Primary Administrative Officer/Designee(s) or by the Primary Administrative Officer/Designee(s) to the student. The appealing party may file a written memorandum for consideration by the Chancellor with the Notice of Appeal, and the Chancellor may request a reply to such memorandum by the appropriate party.
b. The Chancellor or Designee shall review the record of the case and the appeal documents and may affirm, reverse, or remand the case for further proceedings and shall notify each party in writing of the decision on the appeal. The action of the Chancellor shall be final unless it is to remand the matter for further proceedings.

## 6. Status During Appeal.

In cases of suspension, dismissal, or expulsion where a Notice of Appeal is filed within the required time, a student may petition the Chancellor in writing for permission to attend classes pending final determination of appeal. The Chancellor may permit a student to continue in school under such conditions as may be designated pending completion of appellate procedures, provided such continuance will not seriously disrupt the University or constitute a danger to the health, safety, or welfare of members of the University community. In such event, however, any final sanctions imposed shall be effective from the date of the action of the Committee.

## 7. Student Honor System.

Forums under the student honor systems established for investigating facts, holding hearings, and recommending and imposing sanctions are authorized when the student honor code or other regulations containing well defined
jurisdictional statements and satisfying the requirements of Section 10.030, which is Article V of the Bylaws of the Board of Curators, have been reduced to writing and have been approved by the Chancellor and the Board of Curators and notice thereof in writing has been furnished to students subject thereto. Though the student honor system has jurisdiction, together with procedures set forth therein, instead of the Primary Administrative Officer/Designee(s), the standard of conduct called fir in any such student honor system shall be deemed to contain at a minimum the same standards set forth in Section 200.010, entitled Standards of Conduct. Procedures shall satisfy the requirements of the Board of Curators' Bylaws, Section 10.030, which is Article V, and shall contain procedures herein before stated insofar as appropriats and adaptable to the particular situation and shall be approved by the Chancellor and the General Counsel. Students subject to student honor systems shall have the rights of appeal as set forth in Section 200.020 E. 6 and 7.

## F. HEARING PROCEDURES.

1. Conduct of Hearing. The Chair shall preside at the hearing, call the hearing to order, call the roll of the Committee in attendance, ascertain the presence or absence of the student charged with misconduct, real the notice of hearing and charges and verify the receipt of notices of charges by the student, report any continuances requested or granted, establish the presence of any adviser or counselor of the student, and call to the attention of the student charged and the adviser any special or extraordinary procedures to be employed during the hearing and permit the student to make suggestions regarding or objections to any procedures for the Conduct Committee to consider.
a. Opening Statements.
(1) The Primary Administrative Officer/Designee(s) shall make opening remarks outlining the general nature of the case and testify to any facts the investigation has rev ealed.
(2) The student may make a statement to the Comm ttee about the charge at this time or at the conclusion of he University's presentation.
b. University Evidence.
(1) University witnesses are to be called and identified or written reports of evidence introduced as appropriat:.
(2) The Committee may question witnesses at any time.
(3) The student or, with permission of the Committee, the adviser or counselor may question witnesses or exarnine evidence at the conclusion of the University's presentation. c. Student Evidence.
(1) If the student has not elected to make a statement earlier under a.(2) above, the student shall have the opportunity to make a statement to the Committee about the charge.
(2) The student may present evidence through witnesses or in the form of written memoranda.
(3) The Committee may question the student or witnesses at any time. The Primary Administrative
Officer/Designee(s) may question the student or witnesses.
d. Rebuttal Evidence. The Committee may permit the University or the student to offer a rebuttal of the other's presentation.
e. Rights of Student Conduct Committee. The Committee shall have the right to:
(1) Hear together cases involving more than one student which arise out of the same transaction or occurrence, but in that event shall make separate findings and determinations for each student;
(2) Permit a stipulation of facts by the Primary Administrative Officer/Designee(s) and the student involved;
(3) Permit the incorporation in the record by reference of any documentation, produced and desired in the record by the University or the student charged;
(4) Question witnesses or challenge other evidence introduced by either the University or the student at any time;
(5) Hear from the Primary Administrative

Officer/Designee(s) about dispositions made in similar cases and any dispositions offered to the student appearing before the Committee;
(6) Call additional witnesses or to require additional investigation;
(7) Dismiss any action at any time or permit informal disposition as otherwise provided;
(8) Permit or require at any time amendment of the Notice of Hearing to include new or additional matters which may come to the attention of the Committee before final determination of the case; provided, however, that in such event the Committee shall grant to the student or Primary Administrative Officer/Designee(s) such time as the Committee may determine reasonable under the circumstances to answer or explain such additional matters;
(9) Dismiss any person from the hearing who interferes with or obstructs the hearing or fails to abide by the rulings of the Chair of the Committee;
(10) Suspend summarily students from the University who, during the hearing, obstruct or interfere with the course of the hearing or fail to abide by the ruling of the Chair of the Committee on any procedural question or request of the Chair for order.
2. Rights of Students Upon Hearing. A student appearing before a Committee shall have the right to:
a. Be present at the hearing;
b. Have an adviser or counselor and to consult with such adviser or counselor during the hearing;
c. Have students from the Student Panel sit with the Committee or Hearing Panel;
d. Hear or examine evidence presented to the Committee;
e. Question witnesses present and testifying;
f. Present evidence by witnesses or affidavit;
g. Make any statement to the Committee in mitigation or explanation of the conduct in question;
h. Be informed in writing of the findings of the Committee and any sanctions it imposes; and
i. Request review or appeal to the Chancellor as herein provided.
3. Determination by the Student Conduct Committee. The Committee shall then make its findings and determinations in executive session out of the presence of the Primary Administrative Officer/Designee(s) and the student charged. Separate findings are to be made:
a. As to the conduct of the student, and
b. On the sanctions, if any, to be imposed. No sanctions shall be imposed on the student unless a majority of the Committee present is reasonably convinced by the evidence that the student has committed the violation charged.
4. Official Report of Findings and Determinations. The Committee shall promptly consider the case on the merits and make its findings and determination and transmit them to the Primary Administrative Officer/Designee(s) and the student charged forthwith.
5. Other Procedural Questions. Procedural questions which arise during the hearing not covered by these general rules shall be determined by the Chair, whose ruling shall be final unless the Chair shall present the question to the Committee at the request of a member of the Committee, in which event the ruling of the Committee by majority vote shall be final.
6. General Rules of Decorum. The following general rules of decorum shall be adhered to:
a. All requests to address the Committee shall be addressed to the Chair.
b. The Chair will rule on all requests and points of order and may consult with Committee's legal adviser prior to any ruling. The Chair's ruling shall be final and all participants shall abide thereby, unless the Chair shall present the question to the Committee at the request of a member of the Committee, in which event the ruling of the Committee by majority vote shall be final.
c. Rules of common courtesy and decency shall be observed at all times.
d. An adviser or counselor may be permitted to address the Committee at the discretion of the Committee. An adviser or counselor may request clarification of a procedural matter or object on the basis of procedure at any time by addressing the Chair after recognition.
7. Record of Hearing. A taped or stenographic record of the hearing shall be maintained. The notice, exhibits, hearing record, and the findings and determination of the Committee shall become the "Record of the Case" and shall be filed in the Office of the Primary Administrative Officer/Designee(s) and for the purpose of review or appeal be accessible at reasonable times and places to both the University and the student.

## 8. Crimes of Violence and Non-Forcible Sex Offenses.

In cases of alleged crimes of violence and non-forcible sex offences:
a. The alleged victim is entitled to have an advisor or counselor present during his or her participation in the hearing.
b. The alleged victim and the accused shall be informed of the outcome of any campus disciplinary proceeding brought alleging a crime of violence or non-forcible sexual assault.

## Financial Aid Appeals

The University of Missouri-St. Louis has an established financial aid appeals procedure. An aid applicant can raise questions or appeal the offer, or lack of an offer, of financial aid if not satisfied. The general provisions for appeals procedures are as follows:

1) An aid applicant who is not satisfied with the fact that no aid was offered, or was not pleased with the type and/or amount of aid that was offered, may make a written appeal to the Student Financial Aid Appeals Committee reconsideration of the aid request and/or ask for a personal hearing.
2) If on review of all the facts of the case, including any new information which the applicant may provide, the Committee can a) approve an exception to university policy; b) deny the request; c) approve a modified version of the request.
3) If the Appeals Committee cannot provide a satisfactory solution, he/she may refer the written appeal with all pertinent information to the Director of Financial Aid. Where academic progress is an issue, the student may ask an academic adviser or counselor to write or speak in the student's behalf. If a satisfactory solution is worked out, the case is closed.
4) If step three did not solve the problem, it is referred to the campus Faculty-Senate Committee on Student Aid. In ordinary practice it is rare for a case to be appealed beyond this step.
5) If, however, the applicant is still not satisfied after review by committee, the case is to be referred to the Chancellor.
6) The next appeal is the President.

The final university appeal would be for the President to refer a case to the Board of Curators.

## Grade Appeal

On each campus of the University of Missouri it is the Chancellor who is ultimately responsible to the President and the Board of Curators for all campus programs,
policies, and activities. On the University of Missouri-St. Louis campus the Chancellor has delegated responsibility for overseeing the grade appeal process to the Vice Chancellor for Academic Affairs. The Vice Chancellor is therefore responsible for assuring that grade appeals are handled in a fair and timely manner. More specificaly, that officer is responsible for seeing that the procedures outlined below are appropriately followed.

## Informal Procedures

At any time after the awarding of a grade, for a cour:e or an assignment in a course, a student may discuss the grade with her or his instructor and request that the instruc:or review the grade. If the instructor does review the gade he or she is, of course, free to change the grade or nct as is appropriate.

## Formal Procedures

The following procedures apply if the above informs.l procedure does not resolve a dispute concerning a grade to the student's satisfaction and if the process is initiated within thirty working days of the start of the first regular semester (fall or winter) following the semester for which the grade was given, or thirty days after the assignm?nt of the grade (whichever is later).

1. If the student has not already done so, he or she discusses the contended grade fully with the course instructor. The student should prepare for this meeting by taking all relevant written work (test, reports, etc.) with $\mathrm{him} / \mathrm{her}$. If the issue is not resolved, and the student wishes to pursue the appeal, she or he should consult the administrative officer of the department or discipline housing the course in question. (This officer will ncrmally be someone below the level of the Dean.) The administrative officer will discuss the appeal with the course instructor, and will inform the student of the :esult of this discussion. (That result may be the instructors agreement to change the grade, her or his refusal to :hange the grade, or her or his agreement to discuss the cast further with the student.) The administrative officer may require that the student put the appeal in written form before the administrative officer discusses it with the instructor.
2. If the matter remains unresolved, the student may, within 10 working days of being notified of the result of the discussion between the administrative officer and the instructor, or within 10 working days of her or his $k$ c.st discussion with the instructor, submit a detailed written statement of the complaint to the administrative offizer. The administrative officer will refer it to a faculty committee composed of at least three faculty members in the department or unit offering the course or if such are not available, in closely allied fields. This committee will investigate the matter, meeting, as it may deem necessary, with the student, the instructor, and possibly others. Following its inquiries and deliberations, but prior ts making its final recommendations, the faculty comrvittee will submit a copy of its findings to the course instrictor.

If the course instructor elects to comment on the findings to the committee, this must be done in writing within 7 working days. After further consideration, but within 30 working days after receiving the student's statement, the faculty committee will submit its findings with its recommendations and reasons for those recommendations directly to the course instructor, with a copy to the administrative officer.
3. If the faculty committee recommends that the grade be changed, the administrative officer will ask the instructor to implement the recommendation. If the instructor declines, the administrative officer will change the grade, notifying the instructor and the student of this action. Only the administrative officer, upon the written recommendation the faculty committee, will effect a change in grade over the objection of the instructor who assigned the original grade. ${ }^{1}$
4. If the faculty committee recommends that the grade not be changed, the administrative officer will notify the student of this action. The student may then appeal to the dean of the school or college within which the course in question is housed, who will determine whether the above procedures have been properly observed. If the Dean determines that the procedures have not been appropriately followed, and that their not being followed may have substantively affected the outcome, the case will be returned to the faculty unit for review by the same, or, if the Dean so determines, by a different committee.
5. If the Dean denies the procedural appeal the student may ask the Vice Chancellor for Academic Affairs, acting as the Chancellor's designee, to conduct a procedural review. The Vice Chancellor is not obligated to conduct such a review and will normally do so only where there is compelling evidence of procedural irregularities. If the Vice Chancellor finds the procedures have not been appropriately followed, and that their not being followed may have substantively affected the outcome, the case will be returned to a lower level for rereview. As the Vice Chancellor is acting as the designee of the Chancellor, there is no appeal beyond this level.

## Student Organization Policy

## Policy on Student Organizations

The University recognizes that the acquisition of knowledge is not confined to the formality of the classroom and that much can be gained through the activities of student organizations. To assure maximum freedom for students and to assure that organizational

[^5]activities are orderly, responsible, and appropriate to the mission of the university, certain principles and procedures are established through which organizations gain university recognition.

## I Procedures for Recognition

A. To obtain recognition or to register, an organization shall submit to the Vice Chancellor for Student Affairs, through the Office of Student Life, a recognition or registration form which shall include:

1) The name of the organization.
2) A statement of the general purpose of the organization and the means for accomplishing it. The statement should demonstrate that the organization's purpose is to broaden the scope of general learning, extend knowledge of specialized areas, or to serve the professional, cultural, social or recreational interests of the university community, consistent with the educational goals of the university. The statement must not conflict with policies governing recognized organizations as listed below.
3) The names of at least three officers and ten responsible representatives, including student numbers, addresses and telephone numbers; these persons must be students registered at the university of Missouri-St. Louis.
4) A statement of any affiliation with any other organization not registered with the university, and a copy of the organization's constitution.
5) Organizations seeking recognition must include a copy of their constitution and/or by-laws, the name of a UM-St. Louis faculty or staff member (. 75 FTE) who agrees to serve as an advisor, and the name of a student member of the organization who will serve as the organization's representative on the Student Government Association. 6) Upon submission of the recognition or registration form, the organization shall be granted temporary privileges until the request for recognition is acted upon by the Senate Student Affairs Committee or the request to register is approved by the Director of Student Life.
B. To maintain recognition or registration, an organization must update their recognition form or re-register with the Office of Student Activities no later than two weeks following the beginning of the fall semester.

## II Privileges of Recognized Organizations

1) Use of campus facilities and services for organizational activities as provided in the university regulations.
2) Use of the university name in connection with publicity, but only for identification purposes, and in no way to imply support of the university for any position of the organization.
3) Participation in university-sponsored events.
4) Application for supplemental financial assistance.
5) Participation as a voting member of Student Government Association. Organizations who register may not apply for supplemental assistance and may not be voting members of Student Government Association.

## III Policies Governing Recognized or Registered Organizations

1) Organizations shall comply with the Rules and Regulations of the University of Missouri and the St. Louis campus.
2) Organizations' membership policy shall not discriminate for reasons of color, creed, national origin or gender. Any organization may petition to the Vice Chancellor for Student Affairs for exemption from the requirement as it applies to gender. Academic and professional organizations which have discriminatory membership policy based on gender shall not be recognized.
3) Organizations' membership shall not be subject to approval by anyone other than the local campus membership.
4) Organizations are expected to maintain fiscal responsibility.
5) Recognized and registered organizations are required to seek the advice of faculty and other members of the community.
6) Recognized organizations are required to participate in the Student Governance process.

## IV Procedure for Review of Grievances

A. Any member of the university community may bring charges against a recognized organization for breach of the above policies or procedures.
B. Such charges, except those pertaining to discrimination, are brought initially to the Vice Chancellor for Student Affairs, who may:

1) Dismiss the charges, in which case an appeal may be made to the Senate Student Affairs Committee.
2) Settle the charges in a way acceptable to both parties or,
3) Refer the charges to the Senate Student Affairs Committee.
C. Penalties may range from withdrawals of one or more privileges to withdrawal of recognition or registration. Assessment of penalties shall also provide for the conditions leading to reinstatement of such privileges for recognition.
D. Either party to the charges may appeal the decision of the Senate Student Affairs Committee to the Chancellor.

## Policy on Hazing

Hazing, defined by the Fraternity Executive Association and accepted by the University of Missouri-St. Louis, is any intentional action taken or situation created, whether on or off university premises, that produces mental or physical discomfort, embarrassment, harassment, or ridicule. This includes but is not limited to: paddling in any form, creation of excessive fatigue, physical or psychological shocks, wearing apparel publicly which is conspicuous and not normally in good taste, engaging in public stunts and buffoonery, morally degrading or
humiliating games and activities, involuntary labor, or any activity not consistent with the University of Missouri Board of Curators Standard of Student Conduct. The University of Missouri-St. Louis does not condone 0 : tolerate hazing of any type by an organization, or by an individual against another individual.
The Office of Student Activities will investigate any incident in which a charge of hazing has been made. University recognition may be temporarily withdrawn pending hearings and due process procedures.

Should it be determined that a student organization or any of its members is guilty of hazing as previously defined, sanctions may include but are not limited to;
A. Automatic and indefinite suspension of campus recognition or registration with an accompanying lors of all campus privileges (i.e. use of facilities, student services, etc.);
B. Disciplinary action against those members involved in the incident(s) including suspension or expulsion from the university.

Implementation: Each organizational president (or equivalent officer) is required to read and sign the university's Policy on Hazing at the first regular meeting at which he or she presides. This policy, signed by the incoming president (or equivalent officer), must accompany any notification of a change in officers submitted to the Office of Student Activities. Failure to do so will result in the automatic imposition of inactive status on the organization with an accompanying loss of all university privileges until such time as the signed policy is submitted.

## Equal Opportunity Policies of the University of Missouri-St. Louis

The University of Missouri-St. Louis is an affirmative action/equal opportunity employer committed to excellence through diversity. Therefore, the university enthusiastically complies with and vigorously enforses each Federal and State Executive Order, law and regulation, University of Missouri Rules and Regulations and University of Missouri-St. Louis directive that prohibits discrimination against employees, students, and others based upon their race, color, religion, sex, se:ual orientation, national origin, age, disability, or status as Vietnam era veteran.

The above compliance is established upon, but not limited to, the following employment and education related equal opportunity laws: Civil Rights Act of 1964, Title VII, as amended, Executive Order 11246; Equal Employment Opportunity Equal Pay Act of 1963, as amended Age Discrimination in Employment of 1967, as amended; Vietnam Era Veterans Readjustment Assistance Act of 1974, as amended; Executive Order 11141; Rehabiitation

Act of 1973, Sections 503 and 504, as amended; Civil Rights Act of 1964, Title VI, and as amended; Educational Amendments of 1972, Title IX; and, Americans with Disabilities Act of 1990

The Board of Curators of the University of Missouri has adopted the appropriate equal opportunity policies and procedures in compliance with the above laws and procedures. The Chancellor is responsible for the implementation of equal opportunity at UM-St. Louis. Assisting the Chancellor and each Vice Chancellor is the Office of Equal Opportunity (OEO). All equal opportunity functions for the campus are centralized in the OEO.

The following equal opportunity policies have been established by the University of Missouri Board of Curators to govern the academic and administrative functions of the University:

### 320.010 EQUAL EMPLOYMENT OPPORTUNITY PROGRAM <br> 330.060 SEXUAL HARASSMENT <br> 240.040 POLICY RELATED TO STUDENTS WITH DISABILITIES <br> 330.070 AFFIRMATIVE ACTION ON COMMITTEE APPOINTMENTS 330.080 MAINTAINING A POSITIVE WORK AND LEARNING ENVIRONMENT

320.010 Equal Employment Opportunity Program

Equal opportunity is and shall be provided for all employees and applicants for employment on the basis of their demonstrated ability and competence without discrimination on the basis of their race, color, religion, sex, sexual orientation, national origin, age, disability, or status as a Vietnam era veteran.

Equal opportunity is and shall be also provided for all students and applicants for admission in compliance with existing legislation.

## University of Missouri-St. Louis Equal Opportunity Statement

The University of Missouri-St. Louis is committed to equal employment and educational opportunities without regard to conditions of race, color, sex, sexual orientation, religion, national origin, age, disability, or status as a Vietnam veteran.

Each administrative unit of the university employing personnel, admitting students, or entering into contracts is charged with implementation of the university's commitments, and maintenance of records to demonstrate good faith efforts, in admission and training, recruiting and hiring, compensating and promoting, layoff and dismissal, granting of tenure, contracting and purchasing, and access to facilities and programs.

As an employer and as an institution accountable to taxpayers and the general public, the university must have administrative and management practices that are designed for the best use of talent for operational effectiveness and efficiency.
(1) Recruitment and employment of personnel a. Recruitment of professors and academic personnel in research and continuing education/extension is primarily the responsibility of deans, directors, chairpersons, and department heads.
b. Recruitment of administrative, service, and support staff, except for top-ranking administrative personnel, is primarily the responsibility of the personnel office of each campus, and the director of Human Resources for the University of Missouri-St. Louis administration. Selection is the responsibility of the administrative head of the employing unit.
c. Administrative efforts are made to recruit and employ minorities, women, persons with disabilities, and members of protected age groups.
d. The university maintains relationships with governmental agencies, community groups, and other organizations which may be of assistance in furthering recruitment and employment of minority groups, persons with disabilities, and women into departments and units which have imbalances. Personnel sources are advised of the university's commitment to equal opportunity and affirmative action.
e. Imbalances exist when available talent among specified minorities, women, persons with disabilities, or protected age group members is proportionately underrepresented in a particular personnel category in the university.

Under representation is determined by an analysis of the appropriate employment market which is generally national or regional for major administrators, professors, and academic personnel in research and continuing education/extension. The appropriate employment market is generally the state or local community for most administrative positions and for service and support staff.
f. Advertisement and notices of employment opportunities indicate a filing date for consideration.
g. Notice of employment and training opportunities are made to existing personnel.
h. Employment applications meet federal and state requirements relating to equal opportunity.

1. The Office of Equal Opportunity maintains records to demonstrate efforts and results of efforts to achieve equity and to act affirmatively and reasonably to correct imbalances.

## (2) Salaries, wages, and benefits

a. University compensation and benefit programs are administered without regard to race, color, sex, sexual orientation, religion, national origin, age, disability, or status as a Vietnam era veteran.
b. The salary range for academic positions is determined in advance of recruitment on the basis of prevailing national levels and departmental scales for the educational attainment, experience, and specialty desired.

## (3) Facilities, activities, and working conditions

 a. University facilities are maintained on an equitable and nondiscriminatory basis.b. Physical facilities have been adapted within the limits of the financial resources available to insure access to the university by the persons with disabilities.
c. Opportunities for involvement in university activities are provided on an equitable or nondiscriminatory basis.

## (4) Promotion and training

a. Promotions, contract renewals, the granting of tenure, and reductions in force of academic personnel are handled in accordance with established university procedures and qualification criteria for all persons and free of discrimination.
b. University policy requires that promotions, demotions, layoffs, recalls from layoffs, transfers, and temporary hires for service and support personnel are determined without regard to conditions of race, color, sex, sexual orientation, religion, national origin, age, disabilities or status as a Vietnam era veteran.
c. Participation in training and educational programs sponsored by the university, including apprenticeships, is open to all employees within eligible job classifications. d. The university offers developmental programs for professional and personal growth to enhance promotion potential.

## (5) Student admission and retention

a. The university gives students equal access to its academic programs without regard to conditions of race, color, sex, sexual orientation, religion, national origin, age, or disability. Furthermore, the university seeks to recruit, enroll, retain, and graduate minority group members and women in those fields in which they are underrepresented. b. The University of Missouri has a unique responsibility for graduate and professional public higher education in the state of Missouri. Therefore, academic departments offering doctoral and/or advanced professional programs in disciplines and professions in which there is a deficiency of minorities and women have adopted methods to encourage enrollment, retention, and graduation of minority group members and women.
c. Affirmative action is taken to offer graduate teaching and research assistantships to minorities and women. d. Business, government, industry, and labor are solicited to assist and provide support to minorities and women through financial aid and by providing work experiences as they pursue academic objectives.
e. Personnel representatives of prospective employers using university services and facilities to interview and recruit students must be equal opportunity employers, and must give all qualified students equal opportunity for
interviews, without regard to conditions of race, colo:, sex, religion, national origin, age, disability, or veteran sti.tus.

## (6) Appeal and grievance procedures

a. Grievance procedures are available for the process ng of complaints and grievances of alleged discrimination based on conditions of race, color, sex, sexual orientation, religion, national origin, age, disability, or veteran status. b. A student grievant has access to the student grievance procedures through the Office of Student Affairs, the school or college, the campus, and central administration. c. The Office of Equal Opportunity provides advice $\therefore$ nd information to individuals on the grievance procedur 2 s and conducts investigations of alleged discrimination.

## (7) Records and reports

a. The administrative head of each university unit must be prepared to demonstrate that equal opportunity is practiced and that affirmative action is taken in the recruitmen: and employment of full-time and part-time personnel, admission and retention of students, provision of fac lities and programs, and purchasing and contracting. b. Each responsible administrative unit of the univer;ity must be prepared to show that procedures followed and selections made are in compliance with policies on equal employment and affirmative action. Admissions applications are retained for one year and employment applications are retained for two years.
University business involving contracts and bids for various services are retained in compliance with University of Missouri record management policies.
c. Those responsible for recruiting, admitting, and retaining students "undergraduate, graduate and professional" maintain files and records documenting efforts to provide equal opportunity and act affirmat vely to attract and retain minority group members, wome 3 , older persons, and persons with disabilities. d. Campus administrative officers maintain records demonstrating efforts to provide equal opportunity and show affirmative action in the availability and use 0 : university facilities, including recreational facilities. e. Those responsible for personnel recruitment and employment, including graduate teaching and research assistants, have records that reflect their adherence to equal opportunity and affirmative action practices.
f. Academic or administrative units receiving complaints or grievances based on allegations of discrimination report those cases to the Office of Equal Opportunity.
(8) Equal Opportunity Advisory Council (EO Council)
a. The EO Council is appointed by the Chancellor.
b. EO Council membership includes a reasonable cross section of personnel, including a representation of women, minorities, and persons with disabilities.
c. The EO Council advises the Director of Equal Opportunity on matters relating to affirmative action and
d. Administrative officers (chancellor, vice chancellors, deans, directors, department chairpersons, and all other
supervisory personnel) are responsible for implementation of equal opportunity and affirmative action policies and practices within their areas of jurisdiction, and the effectiveness of implementation will be an element in the evaluation of the performance of each officer.

## (9) Dissemination

a. Equal opportunity and affirmative action policies and programs are disseminated throughout the university and discussed at appropriate school, college, departmental, management, and supervisory meetings. The subjects covered include the recruitment, admission, and retention of students and recruitment, employment, training, promotion, and transfer of employees.
b. University faculty, staff, and students are kept informed of equal opportunity programs and affirmative action goals through campus publications and communications, the Personnel Policy Manual, the Faculty Handbook, divisional and departmental meetings, staff orientation programs, and posters.
c. Copies of the Equal Employment and Affirmative Action policies are available to a cross section of community organizations, news media, area colleges, secondary schools and recruiting sources.
d. Copies of the Affirmative Action Policy will be made available on request to employees, applicable governmental agencies, and contractors or subcontractors.
e. University invitations to bid, purchase orders, and specifications to architects and engineers contain the university's equal opportunity policy.
f. University correspondence, employment notices and advertising, academic information, and other public notices contain the university's equal opportunity phrase.

### 330.060 Sexual Harassment

This University of Missouri policy aims for an increased awareness regarding sexual harassment by making available information, education and guidance on the subject for the university community.
A. Policy Statement--It is the policy of the University of Missouri, in accord with providing a positive discrimination -free environment, that sexual harassment in the work place or the educational environment is unacceptable conduct. Sexual harassment is subject to discipline, up to and including separation from the institution.
B. Definition--Sexual harassment is defined for this policy as either:
(I) Unwelcome sexual advances or requests for sexual activity by a university employee in a position of power or authority to a university employee or a member of the student body, or
(II) Other unwelcome verbal or physical conduct of a sexual nature by a university employee or a member of the student body to a university employee or a member of the student body, when:
a. Submission to or rejection of such conduct is used explicitly or implicitly as a condition for academic or employment decisions; or
b. The purpose or effect of such conduct is to interfere unreasonably with the work or academic performance of the person being harassed; or
c. The purpose or effect of such conduct to a reasonable person is, to create an intimidating, hostile, or offensive environment.
C. Non-Retaliation--This policy also prohibits retaliation against any person who brings an accusation of discrimination or sexual harassment or who assists with the investigation or resolution of sexual harassment. Notwithstanding this provision, the university may discipline an employee or student who has been determined to have brought an accusation of sexual harassment in bad faith.
D. Redress Procedures--Members of the university community who believe they have been sexually harassed may seek redress, using the following options:

1. Pursue appropriate informal resolution procedures as defined by the individual campuses. These procedures are available from the campus Affirmative Action/Equal Opportunity Officer.
2. Initiate a complaint or grievance within the period of time prescribed by the applicable grievance procedure. Faculty are referred to Section 370.010, "Academic Grievance Procedures"; staff to Section 380.010, '"Grievance Procedure for Administrative, Service and Support Staff"; and students to Section 390.010, "Discrimination Grievance Procedure for Students."

Pursuing a complaint or informal resolution procedure does not compromise one's rights to initiate a grievance or seek redress under state or federal laws.
E. Discipline--Upon receiving an accusation of sexual harassment against a member of the faculty, staff, or student body, the university will investigate and, if substantiated, will initiate the appropriate disciplinary procedures. There is a five-year limitation period from the date of occurrence for filling a charge that may lead to discipline.

An individual who makes an accusation of sexual harassment will be informed:

1. At the close of the investigation, whether or not disciplinary procedures will be initiated; and
2. At the end of any disciplinary procedures, of the discipline imposed, if any.
240.040 Policy Related to Students with Disabilities Executive Order No. 21, 11-1-84; Amended 2-25-97.

## A. EQUALITY OF ACCESS

The University of Missouri (UM) strives to assure that no qualified person with a disability ${ }^{1}$ shall, solely by reason of the disability, be denied access to, participation in, or the benefits of any program or activity operated by UM. Each such qualified person shall receive reasonable accommodations to provide equally effective access to educational opportunities, programs, and activities in the most integrated setting appropriate unless provision of such reasonable accommodation would constitute an undue hardship on the university or would substantially alter essential elements of the academic program or course of study or would otherwise compromise academic standards. This policy shall apply to all programs, services, and activities of the university, including but not limited to recruitment, admissions, registration, financial aid, academic programs, advising, counseling, student health, housing and employment.

## B. FEDERAL AND STATE LAWS

This policy is intended to be consistent with Section 504 of the Rehabilitation Act of 1973, which states that no recipient of federal financial assistance may discriminate against qualified individuals with disabilities solely by reason of disability. This policy is also intended to be consistent with the Americans with Disabilities Act of 1990 and the Missouri Human Rights Act.

## C. FACILITIES

Each program or activity, when viewed in its entirety, shall be accessible to otherwise qualified and eligible students with disabilities. Facilities, or parts of facilities, constructed or renovated for UM use will be designed and built so that they are accessible to and usable by persons with disabilities, in accordance with the ADA
Accessibility Guidelines or other accessibility standards properly adopted by the campus. Accessible on-campus housing and food service will be provided at the same cost and with the same program options to qualified students with disabilities as are afforded to non-disabled students. When any UM classes, programs or activities are held in private facilities, thorough efforts shall be made to obtain facilities which are accessible.

## D. COORDINATION OF PROGRAMS AND SERVICES FOR STUDENTS WITH DISABILITIES

1. Campus disability support service (DSS) offices or other designated campus units are responsible for coordination of programs, services, and classroom accommodations for qualified applicants for admission and qualified enrolled students with disabilities. Such coordination relates solely to disability issues. Determinations as to whether a student is otherwise qualified often will be based on the academic requirements developed by the faculty. Specific services available to qualified students with disabilities will be provided by the university in conformity with the requirements of federal and state law.
2. Determinations as to whether requested services and requested accommodations are required will be made initially by the Coordinator of DSS. Accommodatior of the disability will be determined by the coordinator and faculty member, and if either disagrees with the prescripted accommodation, such disagreement shall be described in writing promptly and submitted to the Chancellor or his/her designee for resolution in a prompt manner.
3. Initial determinations and any disagreements submitted to the Chancellor or his or her designee will take into consideration all relevant factors including, but not linited to, the following:
a. current documentation of the specific disability and of the need for the requested services or accommodations; b. the essential elements of the academic program or course of study being pursued; c. the fact that the law does not require a university w substantially alter essential elements of its academic program or course of study or to otherwise compromise its academic standards.
4. All students seeking disability-related services and/or accommodations must disclose the presence of a spesific disability to DSS. Before receiving requested services and/or accommodations, the student will be required to provide the DSS office with current medical or other diagnostic documentation of a disability from a qual fied physician or other qualified diagnostician, as well as current documentation of the need for accommodations. In cases where existing documentation is incomplete or outdated, students may be required to provide additional documentation at the student's expense.
5. It is the student's responsibility to self-identify, to provide current and adequate documentation of his/her disability, and to request classroom accommodation:, through the DSS office. The appropriate documentation must be provided in a timely manner to ensure full resolution of accommodations prior to the student's entrance into the program or course of study. Documentation review and accommodations planning by DSS, including consultation with faculty and/or other campus entities that may be affected in providing accommodations, will be done on an individualized case-by-case basis.
6. Reasonable classroom accommodations will be provided to otherwise qualified and eligible students with disabilities who have self-identified and who have provided satisfactory documentation in support of their timely request for such accommodations, in compliance with federal and state mandates. These accommodacions shall not affect the substance of the educational programs or compromise educational standards.
7. In addition to providing accommodations needed to ensure nondiscrimination in access to educational
opportunities by otherwise qualified students with disabilities, the university is responsible for ensuring that no qualified disabled student is denied the benefits of or excluded from participation in a university program because of the absence of auxiliary aids, services, and/or other reasonable accommodations. Auxiliary aids, services, and/or other accommodations include but are not limited to interpreters (sign or oral), readers, scribes, adaptive equipment, and other appropriate services or equipment necessary for course or program accessibility.
8. While funding for accommodations to ensure equally effective access is provided by the university, funding for auxiliary aids, accommodations, and/or services in some instances may be shared with state vocational rehabilitation agencies. The law does not require and the university does not provide prescription devices or other devices/services of a personal nature (e.g. personal attendants) for students with disabilities.

## E. ESTABLISHMENT OF CAMPUS POLICIES

Chancellors are directed to establish campus policies and/or procedures consistent with this order. These should cover, at a minimum, treatment of disability- related information and appropriate regard for confidentiality, responsibilities of students in applying for services through DSS, time lines to assure that students make accommodation requests in a timely manner, guidelines to assure that disability documentation is reasonably current, a description of the process of individualized assessment of each student's disability documentation and accommodation request(s), the role of faculty in determining the essential elements of the academic program or course of study and the academic standards involved in the accommodations planning and review process within the context of academic program requirements, and processing of complaints and grievances including a procedure for appeal when faculty and/or academic administrators or administrators in other involved campus entities do not agree with the DSS on the requirements of this policy.

## 1. From the U.S. Justice Department's ADA Title II

 Technical Assistance Manual, Section II-2.8000: Qualified individual with a disability. In order to be an individual protected by Title II, the individual must be a "qualified" individual with a disability. To be qualified, the individual with a disability must meet the essential eligibility requirements for receipt of services or participation in a public entity's programs, activities, or services with or without: 1) Reasonable modifications to a public entity's rules, policies, or practices; 2) Removal of architectural, communication, or transportation barriers; or 3) Provision of auxiliary aids and services. The "essential eligibility requirements" for participation in many activities of public entities may be minimal. For example, most public entities provide information about their programs, activities, and services upon request. In such situations, the only "eligibility requirement" for receipt of such informationwould be the request for it. However, under other circumstances, the "essential eligibility requirements" imposed by a public entity may be quite stringent. ILLUSTRATION: The medical school at a public university may require those admitted to its program to have successfully completed specified undergraduate science courses.

## PROVISIONS FOR SERVICES TO STUDENTS WITH DISABILITIES AND REASONABLE ACCOMMODATIONS

## POLICY AND PROCEDURES

## POLICY

The University of Missouri is committed to equal educational opportunities for qualified students without regard to disabling condition. The University, therefore, will take necessary action to ensure that no otherwise qualified student with a disability is denied access to any particular course or educational program. Such action includes an assessment of the student's abilities and an evaluation of the particular course or program.

## IMPLEMENTATION PROCEDURES

It is the student's responsibility to self-identify, to provide current and adequate documentation of his/her disability and to request classroom accommodation, through the disability services office. A request for services will initiate an assessment of needs, including a documentation review and accommodations planning by DSS, involving consultation with faculty and/or other campus entities that may be affected in providing accommodations, and will be done on an individualized case-by-case basis. Initial determinations as to whether requested services and/or accommodations are required will be made by the coordinator of disability services based on results of the assessment of needs. If either the faculty member of the disability coordinator disagrees with the prescripted accommodation, such disagreement shall be described in writing promptly and submitted to the Chancellor or his or her designee for resolution in a prompt manner.

The University will make reasonable modifications to its academic requirements, if necessary, to comply with legal requirements ensuring that such academic requirements do not discriminate or have the effect of discriminating on the basis of a students known and adequately documented disability; unless the requested modification would require alteration of essential elements of the program or essential elements of directly related licensing requirements or would result in undue financial or administrative burdens. The divisional dean's office, in cooperation with the disabilities service coordinator and the department through which the requirement is fulfilled, will determine the appropriate modification of substitution. Any qualified student with a disability who believes that
accommodations and/or auxiliary aid(s) will be necessary for participation in any course, course activity, or degree program must indicate a need for services to the designated disability services office at least six weeks prior to the beginning of the semester or degree program.
The disability services coordinator will oversee an assessment of the student's request for services and/or accommodations. If an unfavorable determination is made, the student may appeal the decision through the UM Discrimination Grievance Procedure for Students.

## AIDS Policy Statement

Current knowledge indicates college and university students or employees with AIDS, ARC, or a positive antibody blood test do not pose a health risk to either students or employees in a usual academic or residential setting. The policy of University of Missouri is to permit students and employees with AIDS to continue to engage in as many of their normal pursuits as their condition allows. Managers should be sensitive to the medical problem and ensure that such employees are treated consistent with the treatment of other employees. Students will be allowed to continue their enrollment and activities (including continued residency in student housing) as long as they continue to meet academic standards and medical evidence indicates their conditions are not a threat to themselves or others. Every effort will be made to maintain confidentiality at all times.

The university also has a legitimate interest in the welfare of all students, employees, and visitors to the campus. Every reasonable precaution will be taken to minimize the risk that an employee's or student's condition will present a health and/or safety hazard to others.

The university will not discriminate against individuals with HIV infection, AIDS or ARC, but this protection does not include individuals with secondary infections or diseases that would constitute a direct threat to the health or safety of others who may because of the disease or infection be unable to perform duties of their employment. In such cases, the appropriate university personnel or student policy will determine what changes, if any, will be made in the student's or employee's academic or work program.

In the event of public inquiry concerning AIDS on campus, the Chancellor or the Chancellor's designee will provide appropriate information on behalf of the university. Existing policies regarding confidentiality of employee and student records will be followed.

Consistent with its concern for students and employees with AIDS, the university offers a range of resources through the AIDS Task Force on each campus and through other campus services.
a. Student, employee, and management education and information;
b. Referral to agencies and organizations that offer supportive services for life-threatening illnesses;
c. Consultation to assist employees in effectively managing health, leave, and other benefits. The AIDS Task Force on each campus will continue to meet periodically to review and update policy and to make recommendations as new medical facts become available. Each Task Force will continue to encourage prograns to educate all members of the campus community abour the reality of AIDS.

To address specialized needs, each campus is authorized to adopt and implement special policies related to AID; which are consistent with this policy statement.

### 330.070 Affirmative Action on Committee Appointments

Executive Guideline No. 13, October 13, 1977.

## A. Affirmative Action

As part of the implementation of the Affirmative Action Plan of the University of Missouri, any person appointing any committee for the University or any campus, in selecting the membership, shall give due considerar on to the inclusion in such membership of women and minorities unless membership thereon is ex-officio.

### 330.080 Maintaining a Positive Work and Learning Environment

1. The University of Missouri is committed to providing a positive work and learning environment where all individuals are treated fairly and with respect, regardless of their status. Intimidation and harassment have no place in a university community. To honor the dignity and inherent worth of every individual student, employee, or applicant for employment or admission is a goal to which every member of the university community should aspire and to which officials of the university should direct attention and resources.
2. With respect to students, it is the university's spe cial responsibility to provide a positive climate in which students can learn. Chancellors are expected to provide educational programs and otherwise direct resources to creative and serious measures designed to improve interpersonal relationships, to help develop healthy attitudes toward different kinds of people, and to foster a climate in which students are treated as individuals rather than as members of a particular category of people.
3. With respect to employees, the strength we have as a university is directly related to maintaining a positive work environment throughout the institution. The university should provide a positive recruiting and work environment focused on the duties and skills of the work to be performed. It is the expectation of the university that all employees and potential employees will be treated on the
basis of their contribution or potential contribution without regard to personal characteristics not related to competence, demonstrated ability, performance, or the advancement of the legitimate interests of the university. The General Officers are expected to provide training programs for supervisors to assist in achieving this objective.
4. With respect to violations of the policy, faculty, staff and students may utilize their respective grievance procedures approved by the Board of Curators. The approved grievance procedures are as follows: Grievance procedure in Section 370.010 for faculty; grievance procedure in Section 380.010 for staff; and grievance procedure in Section 390.010 for students, and each such procedure shall be deemed as amended to include grievances filed under this policy. This policy shall not be interpreted in such a manner as to violate the legal rights of religious organizations, or military organizations associated with the Armed Forces of the United States of America.

## Other Procedures or Regulations

## Discrimination Grievance Procedure for Students

 390.010December 17, 1982, January 25, 1990, and October 16, 2003

## A. GENERAL

1. It is the policy of the University of Missouri to provide equal opportunity for all enrolled students and applicants for admission to the university on the basis of merit without discrimination on the basis of their race, color, religion, sex, national origin, age, or disability, or Vietnam era veteran status. Sexual harassment shall be considered discrimination because of sex. This policy shall not be interpreted in such a way as to violate the legal rights of religious organizations or military organizations associated with the Armed Forces of the United States of America.
2. To insure compliance with this policy, all University of Missouri prospective or enrolled students shall have available to them this student discrimination grievance procedure for resolving complaints and/or grievances regarding alleged discrimination.
3. This grievance procedure neither supersedes nor takes precedence over established university procedures of due process for any and all matters related to Academic Dishonesty, Grade Appeals, Traffic Appeals, Disciplinary Appeals, or other specific campus procedures which are authorized by the Board of Curators and deal with faculty/staff responsibilities.
4. These proceedings may be terminated at any time by the mutual agreement of the parties involved.

NOTE: A grievance concerning specific incidents filed under this discrimination grievance procedure shall not be processed on behalf of any student who elects to utilize another university grievance procedure. In addition, the filing of a grievance under these procedures precludes the subsequent use of other university grievance or appeals procedures for the same incident.

## B. DEFINITIONS

1. A complaint is an informal claim of discriminatory treatment. A complaint may, but need not, constitute a grievance. Complaints shall be processed through the informal procedure herein set forth.
2. A grievance is the written allegation of discrimination which is related to:
a. Recruitment and admission to the institution.
b. Admission to and treatment while enrolled in an education program.
c. Employment as a student employee on campus.
d. Other matters of significance relating to campus living or student life, including, but not limited to:
Assignment of roommates in resident halls; Actions of fraternities and sororities; Membership in and/or admission to clubs/organizations; Student Health Services; Financial aid awards.
3. A student is any person who has applied for admission or readmission, or who is currently enrolled, or who was a student of the university of Missouri at the time of the alleged discrimination.
4. Persons with disabilities--For the purpose of this student discrimination grievance procedure, a "person with a disability" has been substituted for "handicapped individual" (Section 504, Rehabilitation Act of 1973) and shall be defined as " any person who
a. Has a physical or mental impairment which substantially limits one or more of such person's major life activities, b. Has a record of such impairment, or c. Is regarded as having such an impairment

For purpose of this definition, $A$ "major life activity" means any mental or physical function or activity which, if impaired, creates a substantial barrier to employment and/or education.

Any reference in this document to written materials or to written or oral presentations within the student discrimination grievance procedure may be adjusted to accommodate persons with disabilities for whom the stated materials or required presentations would not be appropriate. Cost of such accommodation will be borne by the university, with no charge to the individual.
5. Appropriate Administrative Officer--The primary administrative officer on the staff of the Chancellor (in the area of Student Affairs/Services, Administrative Services,

Development, and Academic Affairs) having administrative responsibility for the unit in which the discrimination is alleged to have occurred.
6. Grievance Consultant--At any step the Director of Equal Opportunity or of Affirmative Action may be asked to serve as a consultant by any of the parties involved in this grievance procedure.

## C. COMPLAINTS

1. Policies and Procedures--A student with a complaint will be provided with copies of appropriate policies and procedures pertaining to student complaints and grievances, and the Chief Student Personnel Administrator or his/her designee and the Officer for Equal Opportunity or for Affirmative Action shall be available to assist the student in understanding the opportunities afforded through such policies and procedures. The student may choose to have an adviser participate in any stage of the grievance procedure, subject to the restrictions of the hearing procedures set forth in Section 390.010 F .
2. Joint Complaint--If more than one student is aggrieved by the same action, these students may, by mutual written agreement among themselves, file with the Chief Student Personnel Administrator a complaint and pursue their complaints jointly under this grievance procedure. If the number of students in such a case is so large as to make it impracticable for them to be heard individually in a joint proceeding, they may, by mutual agreement, elect one or more of their number to act on behalf of them all.
3. Students may informally discuss a complaint with the relevant supervising administrator. Every reasonable effort should be made to resolve the matter informally at this administrative level. If a satisfactory resolution is not reached, the student may pursue the matter through each level of administrative jurisdiction up to and including the Appropriate Administrative Officer, or file a grievance within the time specified in D.1.b.

## 4. Complaints Involving Recruitment

a. Undergraduate applicants must first present complaints about recruitment to the Director of Admissions. If a satisfactory resolution is not reached, the applicant may appeal the matter to the immediate supervising officer of the Director of Admissions.
b. Applicants for graduate study may request a meeting with the academic department head and the dean of the college, or their designees, who are actually involved in the recruitment effort to discuss the matter informally. If a satisfactory resolution is not reached, the applicant may appeal to the Dean of the Graduate School and finally to the Appropriate Administrative Officer.

## 5. Complaints Involving Admissions (Undergraduate or Professional)

a. Undergraduate and professional student applicants shall present complaints to the Director of Admissions or to the dean of the school or college, depending upon where the application was originally filed.
b. This university official shall compare the person's academic qualifications against the official university admissions criteria and review the denial. If the denisil is sustained, the applicant may appeal this decision to the official=s immediate supervisor or to the appropriate admissions committee.
6. Complaints Involving Admissions (Graduate)-Applicants to the Graduate School may ask for a metting with the academic department head of the program to which the applicant was seeking admission. This official shall explain the reasons for the denial of recommendation for admission. If a satisfactory resolution is not reached, the applicant may then appeal to the Dean of the Graduate School or to the appropriate admissi ons committee. If the denial is upheld, the applicant may appeal the decision to the appropriate administrative officer.
7. Complaints Involving Admissions to or Treatmen: in an educational Program or in the Granting of Assistantships An undergraduate or graduate student enrolled at the institution who has a discrimination complaint involving admission to or treatment in an educational program or in the granting of assistantships may request a conference with the appropriate department head and with the dean of the school or college (or the dean's designee) to discuss the matter informally. If a satisfactory resolution is not reached, the student may present a grievance pursuant to Section 390.010 F .
8. Complaints Involving Nonacademic Matters Related to Campus Living and Student Life--A currently enrol ed student who has a university-related complaint concerning discrimination in nonacademic matters including but not limited to assignment of roommates, actions of fraternities and sororities, membership in and/or admissions to clubs/organizations, student health services and financial aid awards may request a conference with the appropriate administrative supervisor, department head and/or cirector to discuss the matter informally. If a satisfactory resolution is not reached, the student may present a grievance pursuant to Section 390.010 D.
9. Complaints Involving Student Employment on Campus . A student enrolled at the university who alleges tha: discrimination occurred either in applying for work or while working as a student employee at a university job may request a conference with the supervisor, depa:ment head or director of the employing unit to discuss the: matter informally. If a satisfactory resolution is not reache 1 , the student may present a grievance pursuant to Section 390.010 D.
10. Complaints Involving Financial Aid (Undergraduate, Graduate, Professional):
a. Undergraduate, graduate, and professional student aid applicants shall present complaints to the Director of Student Financial Aid where the application was originally filed or the award originally made.
b. This university official shall compare the person's financial and academic qualifications against the official university financial aid criteria and review the award, amount, or denial of the aid. If the original judgment is sustained, the applicant may appeal this decision to the official's immediate supervisor or to the appropriate financial aid committee.

## D. INITIATING A GRIEVANCE

1. Policies and Procedures-- student with a grievance will be provided copies of appropriate policies and procedures pertaining to student complaints and grievances, and the Chief of Student Personnel Administrator or designee and the Office for Equal Opportunity or for Affirmative Action shall be available to assist the student in understanding the opportunities afforded through such policies and procedures. The student may choose to have an adviser participate in any stage of the grievance procedure, subject to the restrictions of the hearing procedures set forth in Section 390.010 F.
a. Joint Grievance--If more than one student is aggrieved by the same action, these students may, by mutual written agreement among themselves, file with the Chief Student Personnel Administrator a grievance and pursue their grievances jointly under this grievance procedure. If the number of students in such a case is so large as to make it impractical for them to be heard individually in a joint proceeding, they may, by mutual agreement, elect one or more of their number to act on behalf of all of them. b. Regardless of their nature, all discrimination grievances are to be filed with the Chief Student Personnel Administrator. A grievance must have been filed by a student within one-hundred-eighty (180) calendar days of the date of the alleged discriminatory act.

## 2. Filing a Grievance

a. All grievances must be presented in writing and contain the following information:

1) A clear concise statement of the grievance which includes the name of the person(s) against whom the grievance is made, the date(s) of the alleged discrimination and a statement describing the specific supporting evidence;
2) A brief summary of the prior attempts to resolve the matter which includes the names of persons with whom the matter was discussed and the results of those previous discussions;
3) A specific statement of the remedial action or relief sought.
b. Within seven (7) working days, the original grievance form with an explanation will be returned to the student if, in the judgment of the Chief Student Personnel

Administrator, the statements are vague or do not meet the above requirement. The student may make the necessary corrections and resubmit the grievance within seven (7) days.
3. Any grievance not filed within the time limits specified in Section 390.010 D.1.B shall be deemed waived by the grievant. The Chief Student Personnel Administrator may extend the time limits only if adequate cause for an extension of the time limits can be shown by the student.
4. For informational purposes, copies of the grievance shall be forwarded to the Appropriate Administrative Officer and the Director of Equal Employment and/or Affirmative Action.
5. Within fifteen (15) working days of receipt of a grievance that satisfies the requirement of Section 390.010 D.1.b, the Appropriate Administrative Officer with the consent of the parties involved may establish an informal hearing with the aggrieved student, the responding faculty/staff/organization, the respondent's supervisor and the Appropriate Administrative Officer's designee. The Appropriate Administrative Officer shall not involve himself/herself in this meeting. If this informal means of resolving the grievance fails, a grievance committee will be impaneled as called for in Section 390.010 E.1.

## E. FORMATION OF GRIEVANCE COMMITTEE

1. It is the Appropriate Administrative Officer's responsibility to initiate the selection of the grievance committee within fifteen (15) working days after the request for the formation of a grievance committee or after the completion of the informal hearing provided for in Section 390.010 F. 5 without satisfaction to the grievant.
2. A grievance hearing panel shall be established by October 1 of each year from which a grievance committee should be constituted. The panel shall consist of ten (10) faculty, ten (10) staff and ten (10) students. Selection of the panel will be made by the Chief Student Personnel Administrator from recommendations by the appropriate faculty, staff and student associations. Selection of membership will consider sex, race, disability, academic rank, student classification and employee classification. Membership on the hearing panel shall be for two years. A member's term shall expire on September 30 of the second year unless he/she is serving at that time on hearing committee still in the process of reviewing an unresolved grievance. In such case, the member's term shall expire as soon as the committee has submitted a written report of its findings and recommendations to the Appropriate Administrative Officer.
3. A hearing committee shall be composed of five (5) members. The grievant shall select two (2) members from the grievance hearing panel provided by the Chief Student Personnel Administrator. The responding faculty/staff organization shall select two (2) members from the
grievance hearing panel. Both parties should have their selections made within 15 working days of the receipt of the request. The four committee members shall then select an additional member from the grievance hearing panel to serve as chair. Neither members of the immediate departmental unit nor student members of pertinent student organizations involved in the grievance shall be eligible to serve on the committee.
4. Any person selected to a grievance committee will be expected to serve on such committee and to be present at all sessions. If a member is absent from a single session, he/she will be required to review all tapes or transcribed proceedings of that session prior to the next meeting of the committee. Should a member be absent from two sessions or should a member request to be excused from service for reasons of illness, necessary absence from the campus or other hardship, then that member shall be replaced in the same manner used in the original selection (see Section 390.010 E .3 ). If a member is unable or ineligible to serve for whatever reason, the replacement shall review all tapes or written transcripts and all submitted evidence prior to service on the committee. Five members of the hearing committee, duly selected as in Sections 390.010 E. 3 and E. 4 must attend the opening and closing session of the hearing.

## F. HEARING PROCEDURES FOR FORMAL GRIEVANCES

1. It shall be the responsibility of the Appropriate Administrative Officer to coordinate the procedures contained herein, to make provisions for hearing rooms, to coordinate secretarial and recording services and to otherwise serve the grievance committee as needed.
2. At the first organizational meeting of the grievance committee, the committee shall elect a chairperson from among the members to preside over subsequent meetings. Then the chairperson shall schedule a hearing at the earliest convenient time when all affected parties can be present.

## 3. A quorum consists of a minimum of four members of

 the committee except as provided by Section 390.010 E.4.4. The grievance committee shall invite the grievant and the responding person to all hearings. Attendance at the hearings shall be limited to persons who have an official connection with the case as determined by the chairperson. The grievant and the responding person may choose to be accompanied by an adviser. Others whose participation in the hearing is considered essential in order to assist the committee in establishing the facts of the case shall appear before the committee only long enough to give testimony and to answer questions of committee members.
5. It is within the duties and responsibilities of all members of a grievance committee to commit themselves to observe
procedures consistent with faimess to all parties concerned. For example, it is a matter of principle that members of the grievance committee will not discuss a case with anyone outside of the hearing process and that their finding will not be influenced by anything other than the evidence presented to them in meetings in which all affected parties are present.
6. The grievance committee shall set forth the rules of procedure for the hearing within the guidelines set foth herein. The chairperson may, for good cause and with the concurrence of a majority of the entire committee, authorize deviation from the suggested format, in which case the principal parties shall be notified.
a. The grievant shall be heard first in all phases of a grievance hearing and shall be primarily responsible for the presentation of his/her position.
b. The adviser of the grievant or respondent may advise that person and may briefly explain his or her position but shall not be permitted to testify or to cross-examine. c. A reasonable time limit should be established for opening and closing statements and shall be announced prior to the hearing.
d. Length of hearing sessions may be established in advance; every effort should be made to conduct the hearing as expeditiously as possible, with equal fairress to both parties.
e. The interested parties shall provide the chairperso1 with the names of the adviser and potential witnesses at least forty-eight (48) hours prior to the hearing. It is the responsibility of the interested party, working with tie chairperson, to ensure the presence of these individuals in a timely manner.
f. After initial witnesses for both parties have been heard, such witnesses may be recalled for additional questi ming if requested by either party or the grievance commitce.
The committee may call new witnesses whose testinnony it deems relevant or helpful.
g. In order to promote the truthful, unfettered excha:ge of information and ideas, all testimony pertaining to the grievance hearing shall be held in confidence.
h. Only evidence relevant to the grievance may be introduced. Questions regarding the admissibility of evidence shall be decided by the chairperson.
7. At any point in the proceedings prior to the time at which the committee reaches its final decision, the grievant may withdraw any portion or all of the grievance with the consent of a majority of the committee members and of the respondent. In all cases of withdrawal at the consent of the committee and of the respondent, the grievant shall not have the privilege of reopening the same grievance at any time in the future. In the event that the student refuses to participate further in the committee hearing, the committee may choose to continue the case or to move to closure with an appropriate closing statement as per Section 39C. 010 F.9.
8. A confidential tape recording of the grievance hearing shall be made and will be accessible to the parties involved, the committee, the Appropriate Administrative Officer, the Chancellor, the President, members of the Board of Curators and authorized representatives on a need-to-know basis. Either party to the grievance may request that the committee provide a written transcript of testimony. The cost of preparation of such a transcript is to be paid by the party making such request unless Section 390.010 B. 4 is applicable. After the report of the grievance committee has been prepared, the tapes and relevant materials will be sealed and filed in the Appropriate Administrative Office. Unless extraordinary circumstances apply, these materials will be destroyed at the end of five years.
9. At the conclusion of the grievance hearing, the members of the grievance committee shall meet in closed session to deliberate upon their findings. A majority vote of the entire committee shall be required on all decisions. The grievance committee shall make a written report on findings and recommendations to the Appropriate Administrative Officer of the university, with copies to the grievant(s) and the responding person(s). The written report will contain:
a. A statement of the purpose of the hearing,
b. Issues considered,
c. A summary of the testimony and other evidence presented,
d. Findings of fact as developed at the hearing, and
e. Recommendations for final disposition of the case.
10. The Appropriate Administrative Officer will make his/her decision. This decision and the actions that have been taken shall be presented to both parties in writing. If the administrative officer does not accept the recommendations of the grievance committee, a written statement of the reasons for so ruling must be given to both parties and to the chairperson of the committee.
11. If requested by the grievant or the responding party, normally within seven (7) calendar days of the notification of the decision, the decision of the Appropriate
12. Grievances shall receive prompt attention. The hearing and the report of the grievance shall normally be completed within sixty ( 60 ) calendar days of the formation of the grievance committee, and a final decision shall be made by the appropriate administrative officer normally within ten (10) calendar days thereafter. In any case in which these time schedules should prove to be inadequate the committee shall present, in writing an amended time schedule to all parties involved.

Administrative Officer may be subject to a review of the records by the Chancellor. Any review and decision by the Chancellor shall be made normally within thirty (30) calendar days. The decision of the Chancellor can be appealed to the President, who shall have thirty (30)
calendar days in which to make a decision, which shall be final.

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[^0]:    Math
    1800, Analytic Geometry and Calculus I
    1900, Analytic Geometry and Calculus II
    2000, Analytic Geometry and Calculus III
    2020, Introduction to Differential Equations Chemistry
    1111, Introductory Chemistry I
    1121, Introductory Chemistry II

[^1]:    I. Business \& Research Foundation Requirement: 27 credit hours ( 9 courses)
    Students are required to take:
    IS 5800, Management Information Systems
    LOM 5300, Statistical Analysis for Management
    Decisions
    BA 5900, Law, Ethics, and Business
    ACCT 5400, Financial and Managerial Accounting
    FIN 6500, Financial Management

[^2]:    1) Required Core requirements ( 9 hours)

    Students are required to complete the following courses within the first 15 hours of study.
    Tch Ed 6010, Examining History, Community, and Social Justice in Education (3 hours)

[^3]:    4035 Integrated Approaches to Public Relations, Advertising, and Promotion (3)
    Prerequisite: Comm 3336 and Comm 3358.
    Overview of how publicity, advertising and other promotional activities can be integrated into a single cohesive communication initiative or program.

[^4]:    3620 Junior-Senior High School Instrumental Literature Laboratory (1)
    Prerequisite: Music 2311 \& 2312. Analysis and evaluation of selected instructional and concert materials for junior and senior high school performance groups.

[^5]:    ${ }^{1}$ Under current campus policy, transcript notation of $>\mathrm{DL}=$ automatically becomes an $F$ after one regular semester. These changes, which the Registrar is mandated to make, are not considered grade changes and are consistent with this Grade Appeal Policy. Students may appeal these changes provided the appeal is initiated within 30 working days of the notification of the change.

