Counseling, Educational Psychology and Special Education; Educational Administration; Health Education, Counseling Psychology and Human Performance; and Teacher Education.
852B. Administration of Educational Institutions: Secondary School Administration
Fall, Winter, Spring, Summer. 3(3-0)
Twelve graduate credits in Education including EAD 851A, EAD 851B or approval of department.
Exploration of the nature and scope of responsibilities of areas in educational administration. Designed to serve as an initial application of administrative theory for those aspiring to one of the several areas.

852C. Administration of Educational Institutions: Instructional Supervision
Fall, Winter, Spring, Summer. 3(3-0)
Twelve graduate credits in Education including EAD 851A, EAD 851B or approval of department.
Exploration of the nature and scope of responsibilities of areas in educational administration. Designed to serve as an initial application of administrative theory for those aspiring to one of the several areas.

852D. Administration of Educational Institutions: Business Administration of Schools
Winter, Summer. 3(3-0) Twelve graduate credits in Education including EAD 851A, EAD 851B or approval of department.
Exploration of the nature and scope of responsibilities of areas in educational administration. Designed to serve as an initial application of administrative theory for those aspiring to one of the several areas.

852E. Administration of Educational Institutions: Middle School Administration
Winter, Summer. 3(3-0) Twelve graduate credits in Education including EAD 851A, EAD 851B or approval of department.
Exploration of the nature and scope of responsibilities of areas in educational administration. Designed to serve as an initial application of administrative theory for those aspiring to one of the several areas. Emphasis on basic characteristics of a middle school and how the administrator implements these characteristics. Research on middle school students studied.

852F. Administration of Educational Institutions: The Principal and Individualized Instruction
Summer. 3(3-0)
Exploration of the nature and scope of responsibilities of areas in educational administration. Designed to serve as an initial application of administrative theory for those aspiring to one of the several areas. Role of the principal in implementing administrative-instructional strategies in individualizing instruction including decision making, teaching strategies, home-school community relations, instructional programming, and differentiated staffing.

852G. Foundations of Educational Law
Winter, Summer. 3(3-0) Graduate student.
Fundamentals of educational law, oriented particularly towards the needs of teachers to understand legal issues of governance, teaching and student-related relationships.

853B. Procedures in Guidance: Counseling and Guidance in the Classroom
Fall, Winter. 3(3-0) Approval of department.
Examination of factors underlying counseling activities of teachers and administrators. Rules, principles, methods and techniques related to diagnosing, interviewing, consulting and referring counselors for special assistance are included.

855. Research in Educational Administration
Fall, Winter, Spring. 3(3-0) EAD 851A, EAD 851B, CEP 803.
The identification of an individual research problem and the application of principles and techniques of educational research in seeking a solution to the problem.

860. Adult Education: A General Survey
Fall, Spring, Summer. 3(3-0) Approval of department.
Overview of extent, forms, purposes, content, sponsors, methods and guiding theories of continuing education and its significance for individuals, institutions, communities and nations.

861. The Adult As Learner
Fall, Spring, Summer. 3(3-0) EAD 890 or approval of department.
Theories of adult development, learning and liberation. Personal and professional implications for continuing education programs.

862. Seminar: Continuing Education Leadership in Local Communities
Fall, Winter, Spring. 3(3-0) May enroll for a maximum of 6 credits. Majors or approval of department.
Formal and non-formal community education for adults. Administration, agency cooperation, accountability, ethical and political concerns, managing controversy, and balancing objective study with advocacy in programs of personal and community development.

864. Adult Education: Teaching Strategies
Winter. 3(3-0) EAD 860, EAD 881.
Strategies and techniques for effective teaching of adult learners. Strategies that can enhance learner participation in planning, implementing and evaluating instruction in seminars, workshops and classes.

865. Education for Older Adults
Fall, Summer. 3(3-0) Graduate student.
Capabilities, interests, limitations, and needs of older persons as learners. Common stereotypes and conditions under which older persons benefit from and contribute to adult education.

865A. Seminar in Adult Literacy
Winter. 3(3-0) Graduate student.

866B. Teaching Adult Basic Education
Fall. 3(3-0) Graduate student.
Strategies for teaching adults to read, write and compute. Adult basic education student characteristics; program characteristics; content, organization and policy issues.

867. Developing Interpersonal Skills in Working with Adults
Spring, Summer. 3(3-0) Graduate student.
Processes, procedures, and underlying theories inherent in the development of effective interpersonal skills in working with adults, either as individuals or in group situations.

868. Non-Formal Education for Rural Development
Fall. 3(3-0)
General principles relating non-formal education and rural development. Comparison of non-formal, extension, continuing education systems in African, Asian, American, European rural societies; impact on continuity and change in rural social systems.

869A. Career Education
Fall, Summer. 3(3-0)
Historical background, curricular implications and instructional strategies related to kindergartens through adult career education programs. Program content and organization for developing awareness, exploration, decision making and planning skills.

869B. Procedures in Guidance: Career Development Services
Winter, Summer. 3(3-0) Approval of department.
Analysis of group and individual methods providing information related to career planning, educational opportunities, and personal concerns. Utilization of information from placement agencies, follow-up studies, and community surveys in curriculum revision is stressed.

869C. Training in Industry
Winter, Summer. 3(3-0) Graduate student.
An analysis of education and training programs in business and industry. Training cycle, adult learners in the work place and competencies of trainers.

869D. Employment and Training
Winter, Summer. 3(3-0) Graduate student.
Employment and training programs in the public and private sectors. The agencies, policies, funding and collaboration to assist the employed and unemployed adult. The role of education and training professionals.

870A. U. S. Society and Higher Education
Fall, Spring. 3(3-0) Approval of department.
The U. S. society and its relationship to higher education with emphasis on the current status and future of post secondary education in the U.S.

870B. Historical and Comparative Foundations of Education: Higher Education in the United States
Winter, Summer. 3(3-0) Approval of department.
Development of higher education in the United States and its foreign antecedents. Survey of higher education today with special focus upon the influences of United States higher education in foreign countries.
870C. Political Issues in American Higher Education
Fall. 3(3-0) Graduate students in College and University Administration or approval of instructor.
Current political power and decision-making in higher education. Emphasis given to the role of the educator in the legislative process and techniques for improving governmental relations.

870D. Contemporary Issues in American Higher Education Administration
Winter. 3(3-0) Graduate students in College and University Administration or approval of instructor.
External and internal demands and stresses facing American higher education. How administrators should respond to critical issues and problems.

870E. Community College
Fall, Spring. 3(3-0) Approval of department.
Purpose, functions, and offerings of the community college.

870F. The American College Student
Fall, Winter, Summer. 3(3-0) Students in graduate degree programs or approval of department.
Analysis of research data, theory, hypotheses and strategies regarding the nature of the college student and learning environment.

870G. Student Affairs Administration in Higher Education
Fall. 3(3-0) Approval of instructor.
Overview of student personnel services in colleges and universities. Philosophy, organization, and administration of the personnel program at this level and of specific services provided. Opportunity to visit and study college personnel programs.

870H. Institutional Advancement
Spring. 3(3-0) Approval of department.
Administration of institutional advancement programs, marketing higher education, governmental relations, alumni administration, development, institutional relations, and executive management.

871A. Budgeting in Higher Education
(EAC 871A) Fall, Spring, Summer. 3(3-0) Approval of instructor.
Principles, practices, and problems related to budgeting in colleges and universities.

872A. Principles and Problems of Instruction in Higher Education
Fall, Winter, Spring, Summer. 3(3-0) Graduate students in College and University Administration or approval of instructor.
Instructional problems in the various areas of higher education with emphasis on common principles underlying each of them.

873A. Student Development and Student Services I
Fall. 3(3-0) Graduate students with Student Affairs Emphasis or approval of instructor.
History, development, philosophy, organization and administration of college student personnel as a profession. Emphasis upon the college student as an individual and a study of services, programs and staff skills needed to provide for growth, needs and development.

873B. Student Development and Student Services II
Winter. 3(3-0) Graduate students with Student Affairs Emphasis or approval of instructor.
Emphasis upon the student as a member of groups; peer and group influence and behavior; student organizations and group activities; services, strategies and staff skills for conducting such programs.

873C. Student Development and Student Services III
Spring. 3(3-0) Graduate students with Student Affairs Emphasis or approval of instructor.
Study of living and learning environments and related staff skills, facilities and programs which affect student behavior and development; examination of personal qualities, professional organizations and other factors associated with being a professional person.

874A. Dynamics of Life Transitions
(EAC 874A) Fall, Spring. 3(3-0) Graduate students or approval of instructor.
Students explore stages, psychosocial conflicts, and strategies for managing career related transitions with particular emphasis on implications for staff and student development in educational organizations.

874B. Transactive Process in Organizational Settings
(EAC 874B) Winter. 3(3-0) EAD 874A or approval of instructor.
Students identify and analyse personal, professional and organizational variables which affect transactions within organizations in educational settings.

874C. Designing Developmental Activities
(EAC 874C) Spring. 3(3-0) EAD 874B or approval of instructor.
Students will explore staff development activities and their adaptation to the needs of a variety of clientele. Alternative approaches to staff development programming.

876A. Practicum Experience in Student Affairs Administration
Fall, Winter, Spring. 2 to 3 credits. May enroll for a maximum of 8 credits. Graduate students with Student Affairs Emphasis only. Observation and participation in on and off-campus offices and agencies related to the student's major field of study.

878A. Independent Research in Higher Education
Fall, Winter, Spring, Summer. 2 to 6 credits. May enroll for a maximum of 8 credits. May enroll for a maximum of 8 credits. Approval of department.
Problems and practices in Higher Education Administration. Development of research prospectus, review of significant literature, conduct of research under supervision, and presentation of findings and conclusions.

881. Workshops in Educational Administration
Fall, Winter. 3(3-0) Approval of department.
Labatory approach which provides opportunities for experienced educational personnel to concentrate their study on common administrative and supervisory problems.

882. Seminars in Educational Administration (MTC)
Fall, Winter, Spring, Summer. 3(3-0) May enroll for a maximum of 15 credits. Approval of department.
Seminars in the various fields of emphasis in K-12 administration, college and university administration and adult and continuing education.

883. Readings and Independent Study in Educational Administration
Fall, Winter, Spring, Summer. 1 to 6 credits. May enroll for a maximum of 15 credits. Approval of department.
Study on an individual or group basis in the various fields of emphasis.

884. Laboratory and Field Experience in Educational Administration
Fall, Winter, Spring, Summer. 2 to 12 credits. May enroll for a maximum of 12 credits. Approval of department.

911. Evaluating School Effectiveness
(CEP 810) Winter. 3(3-0) CEP 808 or approval of instructor.
Approaches to evaluating school effectiveness. Recent research on school effectiveness. Alternative strategies for measuring student achievement and school characteristics.

916. Staff Development and the Realities of Teaching
Fall. 3(3-0) Doctoral Proseminar Sequence in Teacher Education or approval of instructor. Interdepartmental with and administered by the Department of Teacher Education.

950. Theory and Practice of Administration
Fall, Winter, Spring. 3(3-0) Approval of department.
Administrative process as exemplified in agencies such as schools, colleges, universities, government agencies, business enterprises, and voluntary organizations. Relation of administrative theory to the practice of administration and to scientific knowledge of human relations in a free society.

951A. Community Relations
Winter, Spring. Summer. 3(3-0) Approval of department.
Communications strategies and problems for administrator of educational institutions. Problem identification and analysis are stressed.

951B. Educational Finance
Fall. Summer. 3(3-0) Approval of department.
951C. Education Law  
Fall, Winter, Summer. 3(3-0) 
Approval of department. 
Designed to discover general legal principles and examine laws and legislating agencies that affect educators and educational institutions and appropriate means to influence law development.

951E. Educational Personnel Administration  
Fall, Spring, Summer. 3(3-0) Approval of department. 
Recruitment, selection, orientation, training, salary and fringe benefits, welfare, morale, negotiations, etc., to assist the administrator to function more effectively with personnel.

951F. Planning Change in Educational Organizations  
Winter, Summer. 3(3-0) Approval of instructor. 
Analysis of research, theory and practice of the change process in educational organizations. Plans for change concepts and methods are examined and tested by laboratory and field experiences.

951H. Field Research Methods in Education  
Spring, 3(3-0) 
Methods of interview, participant observation or observation for carrying on educational research.

951J. Conflict Management in Educational Administration  
Fall, Spring, 3(3-0) Approval of department. 
Theories, rationales, and strategies of conflict management. Managing conflict situations in educational environments.

952A. Internship in Educational Administration  
Fall, Winter, Spring. 3 credits. May reenroll for a maximum of 27 credits. Present or past position as an educational administrator. 
Discussion of participants' current administrative problems and solution strategies, faculty visits to participants' schools and speakers on issues in educational administration.

952B. Multidisciplinary Seminar in Educational Administration  
Fall, Winter, Spring. 3 credits. May reenroll for a maximum of 18 credits. 9 credits of EAD 952A. 
Discussion of generic problems and issues in administration identified and interpreted through selected readings and speakers from the several behavioral sciences.

960. Seminar: Continuing Education in Higher Education Institutions  
Winter. 3(3-0) May reenroll for a maximum of 6 credits. Majors or approval of department. 
Patterns, problems, and potential for continuing education in two and four year colleges, problems of governance, reward system, leadership roles, etc.

964. Adult Education: Program Planning  
Spring. 3(3-0) EAD 860, EAD 861. 
Educational program planning and development for organizations that serve adult populations. Alternative program planning strategies to accommodate adult learner needs, organizational resources and desired outcomes.

970A. The Law of Higher Education  
Fall, Spring. 3(3-0) Graduate students in College and University Administration; others, approval of instructor. 
Principles and cases of law applied to problems of governance, management, and instruction in post-secondary educational institutions. Emphasis upon personnel and student administration and equity issues.

970B. Higher Education Finance  
(EAC 970B.) Fall, Spring. 3(3-0) 
Admission to M.A. or Ph.D. programs in the College of Education. 
Structures, processes and problems related to the financing of higher education in the United States. Emphasis on alternatives for the future.

971A. The Department in Higher Education  
Winter. 3(3-0) Approval of instructor. 
The Department as an administrative structural element of the University. The duties and responsibilities of the chairperson as they relate to the management of the Department.

971B. Management Systems in Higher Education Administration  
Fall, Spring. 3(3-0) Graduate students in College and University Administration; others, approval of instructor. 
The application of National Center for Higher Education Management Systems tools to decision-making in higher education administration. Resource Requirement Prediction Model I,6, student flow and faculty activity analysis are major tools investigated.

971C. Evaluation of Higher Education  
Spring. 3(3-0) Graduate students in College and University Administration, EAD 872A or approval of instructor. 
Ways in which evaluation takes place in higher education; course examinations, grading, comprehensive examinations, teacher evaluation, institutional evaluation, student surveys, and regional and national studies of higher education problems.

971D. Community College Administration  
Winter. 3(3-0) Graduate students in College and University Administration. Others, approval of instructor. 
Functional areas of community college administration with emphasis upon instruction, finance and student services including the importance of local, state and federal influences.

973A. College Student Affairs Administration I  
Fall, 3(3-0) Doctoral students in Student Affairs Emphasis. Others, approval of instructor. 
Emphasis on planning, organization, financing, research, evaluation and administration for programs and services which exist principally to serve individual student needs counseling, orientation, placement, student services, etc.

973B. College Student Affairs Administration II  
Winter. 3(3-0) Doctoral students in Student Affairs Emphasis. Others, approval of instructor. 
Student organizations and activities: student union, on and off campus living environments. Emphasis on planning, organization, financing, research, evaluation and administration of these programs and services.

973C. College Student Affairs Administration III  
Spring. 3(3-0) Doctoral students in Student Affairs Emphasis. Others, approval of instructor. 
Analysis of student rights and responsibilities; academic freedom; regulation of student conduct; systems of governance and judicial process; legal basis for student personnel programs and administration.

976A. Doctoral Internship in College and University Administration  
Fall, Winter, Spring. Summer. 3(0-6) 
May reenroll for a maximum of 12 credits. Doctoral students in College and University Administration, approval of instructor. 
Students intern in on- and off-campus offices and agencies as observers of and participants in the administration of programs particular to their major field of study.

978A. Independent Research in Higher Education Administration  
Fall, Winter, Spring. 1 to 9 credits. May reenroll for a maximum of 6 credits. Doctoral students in College and University Administration, approval of instructor. 
Supervised and guided in-depth reading in literature and research specific to higher education administration which lead to the development of materials such as position papers, articles for publication, and grant and dissertation proposals.

982. Seminars in Administration and Curriculum  
Fall, Winter, Spring, Summer. 1 to 9 credits. May reenroll for a maximum of 15 credits. Approval of department. 
Seminars in the various fields of emphasis.

983. Readings and Independent Study in Educational Administration  
Fall, Winter, Spring. 1 to 6 credits. May reenroll for a maximum of 15 credits. Approval of department. 
Study on an individual or group basis in the various fields of emphasis.

984. Laboratory and Field Experience in Educational Administration  
Fall, Winter, Spring. 1 to 6 credits. May reenroll for a maximum of 15 credits. Approval of department. 
Supervised advanced graduate practicums, observation, internships, and externships in the various areas of emphasis.

999. Doctoral Dissertation Research  
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

ELECTRICAL ENGINEERING AND SYSTEMS SCIENCE

College of Engineering  
Electrical Engineering  

E E  

390. Electric Circuits I  
Fall, Winter. 4(4-0) MTH 113. 