611. Urology Clerkship
Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 34 credits. SUR 608.
Demonstration of clinical manifestations of genito-urinary disease, investigative methods and techniques of diagnosis and management, familiarity with urologic emergencies and performance of basic urologic skills.

613. Orthopedic Clerkship
Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 34 credits. SUR 608.
Diagnostic and management information and skills, including emergencies, in common orthopedic problems.

614. Neurosurgery Clerkship
Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 34 credits. SUR 608.
A hospital-based experience to provide the student with familiarity with the field and understanding of the contribution of neurosurgery in medicine generally.

615. Ophthalmology Clerkship
Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 34 credits. SUR 608.
Development of skills and knowledge in ophthalmoscopy, neuro-ophthalmology, visual function, and management of problems such as glaucoma, the red eye, and trauma.

616. Thoracic Surgery Clerkship
Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 34 credits. SUR 608.
Problem-solving in thoracic medicine and surgery, also stressing pulmonary physiology, use of diagnostic tools and tests, and indications for surgical procedures.

618. Anesthesiology Clerkship
Fall, Winter, Spring, Summer. 4 to 16 credits. May reenroll for a maximum of 16 credits. SUR 608.
Introduces common anesthetic agents and provides opportunity for performing anesthetic procedures under faculty supervision.

619. General Surgery Elective Clerkship
Fall, Winter, Spring, Summer. 4 to 16 credits. May reenroll for a maximum of 16 credits. SUR 608.
Experiences in clinical general surgery.

620. Advanced Surgery Clerkship
Fall, Winter, Spring, Summer. 8 to 9 credits. May reenroll for a maximum of 16 credits. SUR 608, MED 608.
Focus on advanced clinical and surgical skills. Students have more responsibility for patient care and direct learning to specific topics in general or subspecialty surgery. Clerkship options vary by community.

621. Nutritional Care of Surgical Patients
Fall, Winter, Spring, Summer. 4 to 12 credits. SUR 608, MED 608, approval of instructor.
Clinical experience on the Nutrition Team in dealing with surgical and medical patients requiring therapeutic nutrition as a result of metabolic derangement and nutritional deficiencies. Major emphasis on nutritional assessment and formulation of plans of management through intravenous support.

801. Shock and Metabolism
Fall, 6(4-4) Master's student in surgery or approval of department.
Results of prolonged reduction in tissue perfusion on tissue metabolism, structure and function of the systemic, cellular and subcellular levels and pharmacologic interventions useful in volume resuscitation.

802. Clinical Surgical Anatomy
Spring, 6(4-4) Master's student in surgery or approval of department. Interdepartmental with the Department of Anatomy.
Review of surgical anatomy, the opportunity to observe dissection and lecture and dissection sessions, and the Clinical interpretation of anatomy and surgical approaches.

803. Enteral and Parenteral Nutrition
Winter, 4(2-4) Master's student in surgery, approval of department.
The identification of individuals requiring nutritional support, nutritional requirements in disease, delivery of total parenteral and enteral nutrition and special problems in nutrition (i.e., anorexia nervosa and obesity).

890. Seminars in Research
Fall, Winter, Spring, Summer. 1 credit. May reenroll for a maximum of 3 credits.
Master's student in surgery, approval of department.
Preparation and presentation of research data, philosophy and methods of research, thesis and other research reports, literature review, illustration of research data, practical assignments.

899. Master's Thesis Research
Fall, Winter, Spring, Summer. 1 to 15 credits. May reenroll for a maximum of 15 credits.
SUR 801, SUR 802, SUR 803, approval of department.

SYSTEMS SCIENCE
See Electrical Engineering and Systems Science.

TEACHER EDUCATION T E

College of Education

101. Exploring Teaching
Fall, Winter, Spring. 3(2-3)
Examination of the manifest and hidden curriculum in classrooms; the multiple purposes of schooling; individual reasons for choosing teaching; participant observation in a local classroom required.

200. Individual and the School
Fall, Winter, Spring, Summer. 5(5-0)
Not open to students with credit in T E 200A, T E 200B, T E 200C or T E 200D.
Major psychological factors in the school learning-teaching situation; concepts in human development related to problems in the school situation; teacher's role in motivation, conceptual learning, problem solving, and the development of emotional behavior, attitudes and performance.

205C. Curriculum for Academic Learning
Winter. 3(2-2) Open only to students in Academic Learning emphasis or approval of department.
Effects of curriculum on understanding of academic subjects, political and cultural influences on curriculum. Teacher's use of curriculum.

219A. Classroom Organization and Management of Diverse Pupils
Winter. 2(1-2) Open only to students in Multiple Perspectives emphasis or approval of department.
Knowledge and skills related to effective decision making for classroom management and organization including behavioral disruptions. Development of teacher leadership behaviors for developing classroom environments conducive to learning.
Descriptions — Teacher Education of Courses

250B. Social Organization of Diversity in School and Society
Winter. 2(1-2). Open only to students in Heterogeneous Classrooms emphasis or approval of department.

Social and cultural organization of learning and teaching; institutional context; reducing inequities and increasing learning in classrooms diverse in social class, race, ethnicity, and gender of students; observation of classrooms.

260A. Teacher Decision Making Laboratory
Fall, Winter, Spring. 1(0-2). May reenroll for a maximum of 3 credits. Open only to students in Multiple Perspectives emphasis or approval of department.

Developmental and systematically guided practice in reflective analysis-synthesis of the teaching-learning process. Integrates theory, principles, and skills from previous courses into applied field experiences.

270A. Professional Practice: Field Experience
Fall, Winter. 1 to 3 credits. May reenroll for a maximum of 6 credits. Open only to students in Multiple Perspectives emphasis or approval of department.

Field based practice in elementary, middle or high schools taken concurrently with related professional education courses. Focused observations, interviews, practice teaching skills specified by the professional education courses and site tasks.

270B. Field Practice: Teaching in Heterogeneous Classrooms
Fall, Winter, Spring. 1(0-2). May reenroll for a maximum of 3 credits. Open only to students in Heterogeneous Classrooms emphasis or approval of department.

Field course integrating knowledge and practice of classroom management, planning for instruction, interpreting research into practice, oral and written communication skills for the teacher in the heterogeneous classroom.

305. Curriculum Methods and Materials — Elementary Education
Fall, Winter, Spring. 3(1-7) T E 101; T E 102 or T E 200A or T E 200B or T E 200C or T E 200D. Not open to students with credit in T E 205A or T E 205C.

Bases, scope, and sequence of curriculum in reading, language arts, and social studies; adaptation of principles to methods and materials of teaching in the elementary and middle school.

305A. Generic Methods of Teaching
Winter, Spring. 3(1-2). Open only to students in Multiple Perspectives emphasis or approval of department.

Teaching strategies and instructional models for all subject matter and K-12 grade level designations. Teacher decision-making as it affects curriculum development and instructional planning is stressed.

306C. Interdisciplinary Elementary Curriculum
Fall. 3(2-3). Open only to students in Academic Learning emphasis or approval of department.

Consideration of open-ended social, scientific, or institutional problems that draw on the concepts and skills of the major curricular areas for their solution. Field experience is required.

307A. Integrated Elementary Methods I: Science, Social Studies, Language Arts, Mathematics
Spring. 3(1-2). Open only to students in Multiple Perspectives emphasis or approval of department.

Methods of teaching science, social studies, language arts, and mathematics through the use of unified themes. Participation in microteaching, whole class teaching and/or field trip may be required.

308A. Integrated Elementary Methods II: Social Studies, Science, Language Arts, Mathematics
Fall. 2(1-2). Open only to students in Multiple Perspectives emphasis or approval of department.

Specific methods of teaching elementary, middle and junior high school social studies in an integrated context with science, language arts, and mathematics through the use of unified themes.

310. Methods of Teaching Reading in the Elementary School
Fall, Winter, Spring. 3(3-0) T E 206 or T E 200A or T E 200B or T E 200C or T E 200D. Not open to students with credit in T E 310A, T E 310B, T E 310C or T E 310D.

Methods and materials of instruction of reading at elementary level. Analysis of learning and teaching problems, and study of concrete materials and classroom attack. Consideration of practical bearings of research and progressive theory on current practice.

310A. Teaching Reading in the Primary Grades
Fall. 3(0-2). Open only to students in Multiple Perspectives emphasis or approval of department.

Focuses on the principles of reading instruction, or the language of primary grade children, what to teach in primary grade reading, and the instructional decisions which must be made when teaching reading at this level.

310B. Teaching Reading and Listening
Fall. 3(3-0). Open only to students in Heterogeneous Classrooms emphasis or approval of department.

Interdependence of reading and listening examined. Implications of heterogeneous classrooms for instruction in listening and reading skills. Methodologies of reading and listening instruction surveyed for strengths and weaknesses.

310C. Methods of Teaching Reading and Writing
Spring. 3(0-0). Open only to students in Academic Learning emphasis or approval of department.

Methods of teaching reading and writing in elementary school.

310D. Methods of Developmental Reading
Fall. 3(3-0). Open only to students in Learning Community emphasis or approval of department.

The recognition, algorithm, and application levels of reading and higher-level reading are emphasized with secondary emphasis on listening, oral expression, children's literature, writing, higher-level reading, and content area reading.

311A. Teaching Reading in the Upper Elementary Grades
Winter. 3(3-0). Open only to students in Multiple Perspectives emphasis or approval of department.

Focuses on reading comprehension, on language of upper grade children, what to teach in upper grade reading, and the instructional decisions which must be made when teaching reading at this level.

311B. Teaching Reading and the Expressive Skills of Speaking and Writing
Winter. 3(2-0). Open only to students in Heterogeneous Classrooms emphasis or approval of department.

Methods of teaching reading, speaking, and writing skills to groups of children with wide heterogeneity of social and cultural backgrounds and intellectual capacities, including those with impairments.

311C. Practicum in Reading/Language Arts
Fall. 3(1-4). Open only to students in Academic Learning emphasis or approval of department.

Application of principles of classroom instruction and management in teaching reading and language arts.

311D. Methods of Critical Reading and Writing
Winter. 3(3-0). Open only to students in Learning Community emphasis or approval of department.

The recognition, algorithm, and application levels of writing and higher-level reading are emphasized with secondary emphasis on children's literature, listening, oral expression, developmental reading and content area reading.

312. Practicum in Developmental and Corrective Reading
Fall, Winter, Spring. 3(1-4) T E 310. Not open to students with credit in T E 312A or T E 312D.

Application of instructional principles introduced in T E 310 in an off-campus setting.

312A. Reading and Writing for the Exceptional Child
Spring. 3(0-0). Open only to students in Multiple Perspectives emphasis or approval of department.

Focus on disabled and gifted readers. Techniques for managing, organizing, and presenting reading instruction in combination with other aspects of the language arts.

312B. Integrating Reading and Language within Subject Matter
Spring. 3(0-0). Open only to students in Learning Community emphasis or approval of department.

Integration of reading and language throughout all subject matter at the application, open-ended, and situational levels.

313. Critical Reading and Children's Literature
Fall, Winter, Spring. 3(3-0) T E 206 or T E 200A or T E 200B or T E 200C or T E 200D. Not open to students with credit in T E 313B or T E 313D.

Development of strategies for helping children to develop critical reading skills through literary experience.
313B. Teaching Critical Reading of Children's Literature
Fall, Winter, Spring, 3(3-0). Open only to students in Elementary Grades emphasis or approval of department.
Methods of teaching print and media literature and critical reading to children, preschool to fourteenth years, with emphasis on children with diverse needs and interests.

313D. Teaching Oral Language and Children's Literature
Fall, 3(3-0) Open only to students in Learning Community emphasis or approval of department.
Literature for children, their responses to it and instructional techniques for developing listening and oral expression abilities and using literature in the elementary and junior high schools.

315. Teaching of Mathematics in Elementary Grades
Fall, Winter, Spring, Summmer, 3(3-0) T E 200 or T E 200A or T E 200B or T E 200C or T E 200D. MTH 291. Not open to students with credit in T E 315A, T E 315B, T E 315C or T E 315D.
Methods and techniques of presenting mathematics content meaningfully to elementary pupils will be illustrated.

315A. Methods of Teaching Elementary School Mathematics
Winter, 3(2-2) MTH 201. Open only to students in Multiple Perspectives emphasis or approval of department.
Content and methodology of teaching mathematics in elementary-middle (junior high) school with emphasis on mathematical competence, use of manipulatives, developing strategies and teacher decision making.

315B. Mathematics for Elementary Grades
Fall, 3(3-0) MTH 201. Open only to students in Heterogeneous Classroom emphasis or approval of department.
Methods of teaching mathematics in elementary grades. Emphasis will be on the diverse interests, needs, abilities, and anxieties of children learning elementary school mathematics.

315C. Mathematics for Elementary Grades
Winter, 3(3-4) MTH 201. Open only to students in Academic Learning emphasis or approval of department.
Methods of teaching mathematics in grades K-8. Emphasis will be on the content, teaching strategies, and assessment techniques necessary for teaching mathematics in elementary classrooms.

315D. Teaching School Mathematics
Spring, 3(2-2) MTH 201. Open only to students in Learning Community emphasis or approval of department.
Methods and techniques of teaching school mathematics based on a problem solving orientation and the concept of a community context for the learning environment.

316. Teaching of Social Studies in Elementary Grades
Fall, Winter, Spring, Summmer, 3(3-0) T E 200 or T E 200A or T E 200B or T E 200C or T E 200D; three terms of social science. Not open to students with credit in T E 316B, T E 316C or T E 316D.
To help students develop understanding of philosophies and aims of social studies movement in elementary schools, and ability to further such aims through familiarity with a variety of materials, knowledge of social studies subject matter, and competence in using a variety of methods.

316B. Social Studies Within a Diverse Classroom
Winter, 3(3-0) Open only to students in Heterogeneous Classroom emphasis or approval of department.
Teaching of social studies in the diverse classroom. Content and methodology will address gender, mental ability, ethnicity, culture, religion, race, social class, and physical characteristics. Teaching in field setting.

316C. Teaching Social Studies in Elementary Grades
Fall, 3(3-0) Open only to students in Academic Learning emphasis or approval of department.
Methods and materials for teaching social studies in grades K-8. Stresses use of social science content and methodology in dealing with socially significant issues and problems.

316D. Social Studies in a Learning Community
Winter, 3(3-0) Approval of department.
Social studies methods and materials for an emphasis on creating and maintaining a learning community and using citizenship as a social studies curriculum organizer.

317. Teaching of Language Arts in Elementary Grades
Fall, Winter, Spring, Summmer, 3(3-0) T E 200 or T E 200A or T E 200B or T E 200C or T E 200D. Not open to students with credit in T E 317C.
Course to acquaint prospective elementary teachers with content material and methods in language arts for grades below the seventh.

317C. Foundations for Reading and Writing: Methods for Teaching Oral Language
Winter, 3(3-0) Open only to students in Academic Learning emphasis or approval of department.
Methods of teaching listening and speaking in the elementary school. Emphasis on the development of oral skills and their relationship to learning to read and write.

318. Teaching Science in the Elementary and Middle School
Fall, Winter, Spring, Summmer, 3(3-2) T E 200 or T E 200A or T E 200B or T E 200C or T E 200D; three terms of natural science. Not open to students with credit in T E 318B, T E 318C or T E 318D.
Extends the science education background of prospective elementary and middle school teachers. Emphasis is placed upon methods and materials for teaching science at the elementary and middle school levels.

318B. Teaching of Science in the Elementary Grades
Fall, 3(3-0) Open only to students in Heterogeneous Classroom emphasis or approval of department.
Teaching of science, using strategies designed for promoting equity with diverse student groups. Students will be introduced to issues in science, learning, and curriculum.

318C. Teaching Science in Elementary Grades
Spring, 3(2-2) Open only to students in Academic Learning emphasis or approval of department.
Relate science subject matter and the nature of science to elementary and middle school science teaching. Emphasis is placed on methods and materials appropriate for the various grades levels.

318D. Science Methods for Learning Community
Fall, 3(3-0) Open only to students in Learning Community emphasis or approval of department.
Methods of teaching science in learning community classrooms. Activities include microteaching by selected whole class teaching, modeling of science teaching strategies, discussions and out-of-class assignments. Integration and development of classroom groups are emphasized.

320. School Music Instrumental Methods
Fall, 3(2-2) Instrumental music major; MUS 250.
Instrumental instruction program at elementary level.

321. School Music Vocal Methods
Fall, 3(2-2) Approval of the Department of Music; MUS 250.
Basic instructional program in primary and intermediate grades.

322. Methods of Teaching—Secondary Common Elements
Fall, Winter, Spring, 3(2-0) T E 200; taken prior to or concurrently with a subject area methods course. Not open to students with credit in T E 305A or T E 305A.
Instructional issues common to all subject areas. Selection of instructional techniques based on teacher values and belief systems, learner needs and characteristics, and sound education principles and policies.

323. Methods of Teaching—Secondary Subject Areas: Agriculture
Fall, Spring, 3 credits. T E 200 or T E 200A or T E 200C; T E 322 or T E 205C or T E 305A or concurrently.
Specifics of classroom instruction in agriculture. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and sound educational principles and policies.

324. Methods of Teaching—Secondary Subject Areas: Art
Fall, Spring, 3 credits. T E 200 or T E 200A or T E 200B or T E 305A or concurrently. STA 305, STA 320.
Specifics of classroom instruction in art. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and sound educational principles and policies.

326. Methods of Teaching—Secondary Subject Areas: English
Fall, Spring, 3 credits. T E 200 or T E 200A or T E 200C; T E 322 or T E 305A or concurrently. Not open to students with credit in T E 326C.
Specifics of classroom instruction in English. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and sound educational principles and policies.

328. Methods of Teaching—Secondary Subject Areas: Romance Languages
Fall, 3 credits. T E 200 or T E 200A or T E 200C; T E 322 or T E 205C or T E 305A or concurrently.
Specifics of classroom instruction in romance languages. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and sound educational principles and policies.
Descriptions — Teacher Education

Courses

329. Methods of Teaching—Secondary Subject Areas: Health
   Spring. 3 credits. T E 200 or T E 200A or T E 200C; T E 322 or T E 325C or T E 305A or concurrently. Not open to students with credit in T E 338C.
   Specifics of classroom instruction in health. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and sound educational principles and policies.

330. Methods of Teaching—Secondary Subject Areas: Physical Education
   Spring. 3 credits. T E 200 or T E 200A or T E 200C; T E 322 or T E 205C or T E 305A or concurrently; or approval of department.
   Specifics of classroom instruction in physical education. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and sound educational principles and policies.

331. Methods of Teaching—Secondary Subject Areas: Home Economics
   Fall. 3 credits. T E 200 or T E 200A or T E 200C; T E 322 or T E 205C or T E 305A or concurrently. Not open to students with credit in T E 334C.
   Specifics of classroom instruction in mathematics. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and sound educational principles and policies.

332. Methods of Teaching—Secondary Subject Areas: Mathematics
   Spring. 3 credits. T E 200 or T E 200A or T E 200C; T E 322 or T E 205C or T E 305A or concurrently. Not open to students with credit in T E 334C.
   Specifics of classroom instruction in mathematics. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and sound educational principles and policies.

333. Methods of Teaching—Secondary Subject Areas: Music—Instrumental
   Winter. 3 credits. T E 200 or T E 200A or T E 200C; T E 322 or T E 205C or T E 305A or concurrently. Not open to students with credit in T E 334C.
   Specifics of classroom instruction in music-instrumental. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and sound educational principles and policies.

334. Methods of Teaching—Secondary Subject Areas: Music—Vocal
   Winter. 3 credits. T E 200 or T E 200A or T E 200C; T E 322 or T E 205C or T E 305A or concurrently; MUS 250.
   Specifics of classroom instruction in music-vocal. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and sound educational principles and policies.

335. Methods of Teaching—Secondary Subject Areas: Science—Science
   Fall, Spring. 3(2-2) T E 200 or T E 200A or T E 200C; T E 322 or T E 205C or T E 305A or concurrently. Not open to students with credit in T E 337C.
   Classroom instruction in science. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and educational principles and policies.

336. Methods of Teaching—Secondary Subject Areas: Science—Agriculture Science
   Fall. 3(2-2) T E 200 or T E 200A or T E 200C; T E 322 or T E 205C or T E 305A or concurrently. Not open to students with credit in T E 337C.
   Classroom instruction in science. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and educational principles and policies.

337. Methods of Teaching—Secondary Subject Areas: Social Science and History
   Fall, Spring. 3 credits. T E 200 or T E 200A or T E 200C; T E 322 or T E 205C or T E 305A or concurrently; or approval of department.
   Specifics of classroom instruction in social science and history. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and educational principles and policies.

338. Methods of Teaching—Secondary Subject Areas: Social Science and History
   Fall. 3 credits. T E 200 or T E 200A or T E 200C; T E 322 or T E 205C or T E 305A or concurrently. Not open to students with credit in T E 338C.
   Specifics of classroom instruction in social science and history. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and educational principles and policies.

339. Methods of Teaching—Secondary Subject Areas: Communication
   Winter. 3 credits. T E 200 or T E 200A or T E 200C; T E 322 or T E 205C or T E 305A or concurrently; MUS 250.
   Specifics of classroom instruction in communication. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and sound educational principles and policies.

340. Methods of Teaching—Secondary Subject Areas: German and Russian
   Fall of odd-numbered years. 3 credits. T E 200 or T E 200A or T E 200C; T E 322 or T E 205C or T E 305A or concurrently; or approval of department.
   Specifics of classroom instruction in German and Russian. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and sound educational principles and policies.

341. Introduction to Driver and Traffic Education
   Fall, Spring. 4(3-2) Valid driver's license.
   Introduction to and an analysis of the driving task. Theory and practical application will be provided.

350D. School and Community
   Winter. 3(3-0) Open only to students in Learning Community emphasis or approval of department.
   Social foundations of education and schooling with emphasis on study of cultural transmission and group behavior in diverse cultural settings. Role and functions of schools as part of community structure.

355B. Evaluating Learning Environments
   Spring. 4(2-2) Open only to students in Heterogeneous Classrooms emphasis or approval of department.
   Evaluation of school responses to learning among diverse student populations. Dimensions of diversity addressed include culture, ethnicity, race, social class, religion, gender, mental ability, and handicapping conditions. Various learning environments considered.

360A. Teacher Decision Making Laboratory II
   Fall, Winter, Spring. 1(0-2) May reenroll for a maximum of 3 credits. Open only to students enrolled in Multiple Perspectives emphasis or approval of department.
   Continuation of developmental and systematically guided practice in reflective analysis-synthesis of the teaching-learning process as a major component in teacher decision making.

370A. Professional Practice: Directed Teaching
   Fall, Winter, Spring. 1 to 3 credits. May reenroll for a maximum of 6 credits. Open only to students enrolled in Multiple Perspectives emphasis or approval of department.
   A midlevel field-based experience in schools taken concurrently with related professional education courses. Students will have opportunities for extended planning, teaching and evaluation under supervision of school and university faculty.

370B. Directed Teaching
   Fall, Winter, Spring. 1 or 2 credits. May reenroll for a maximum of 3 credits. Open only to students enrolled in Heterogeneous Classrooms emphasis or approval of department.
   Provide students with the opportunity to reflect and analyze preceding course content relative to practical application in a field setting.

370D. Directing Teaching in Heterogeneous Classrooms
   Fall, Winter, Spring. 1 to 4 credits. May reenroll for a maximum of 10 credits. Open only to students enrolled in Multiple Perspectives emphasis or approval of department.
   Field course in which students teach an interdisciplinary curriculum. Students will have opportunities for extended planning, teaching and evaluation under supervision of school and university faculty.

401. Sociology of Education
   Winter. 4(4-0) SOC 241. Interdepartmental with and administered by the Department of Sociology.
   School as a social institution, school-community relations, social control of education, and structure of school society.

406C. Interdisciplinary Learning
   Winter, Spring, 3(1-6) Open only to students in Academic Learning emphasis or approval of department.
   Field course in which students teach an interdisciplinary curriculum in a public school classroom and investigate the nature and value of interdisciplinary learning in school and society.

409. Supervising High School Publications
   Spring, Summer. 3(3-0) Juniors, nonmajors. Interdepartmental with and administered by the School of Journalism.
   Staff organization, finance, law, function, and editorial policies of school newspaper and yearbook.

412. Reading in the Content Areas of the Secondary Level
   Fall, Winter, Spring. 5 credits. Approval of instructor.
   The process of reading and learning from text. Applications in subject areas including identification of reading processes in content area subjects, assessment, and instructional procedures. Field trips may be required.

431. Teacher Preparation in Motorcycle Safety
   Spring. 4(3-2) T E 347A, teaching certificate or College of Education major, motorcycle endorsement.
   Development of teacher competencies in developing, organizing, and teaching motorcycle safety education courses for novice drivers. Examination of existing curricula, teaching aids, and resources. Practice teaching of novice drivers.
432A. Laboratory Programs in Driver and Traffic Education  
Spring, Summer. 3(3-4) T E 347A.  
Examination of the aims, objectives and role of laboratory programs in driver and traffic education. Due to the laboratory experiences with new drivers will be provided.

432C. Organization and Administration of Driver and Traffic Education  
Fall, Summer of even-numbered years. 3(3-0) T E 347A.  
Organizational and administrative aspects of driver and traffic education as they relate to the total school and other specialized programs. Historical and philosophical aspects, evaluation, related professional organizations, and occupational opportunities.

432E. Personality Factors in Driver and Traffic Education  
Winter. Summer of odd-numbered years. 3(3-0) T E 347A. PSY 225.  
Study of behavior with emphasis on attitudes, motivation, and adjustment and their relationship to safe driving. Investigation of principles and methods appropriate in identifying, understanding, and modifying unsafe driving behavior.

432G. Fundamentals of Traffic Law  
Spring. 3(3-0) Interdepartmental with the School of Business. Nature, function and application of traffic law as it applies to the safe and efficient movement of people and goods in a broadly conceived traffic accident prevention program.

438A. Classroom Management in Business and Distributive Education  
Spring. 4(3-2) T E 200 or T E 200A or T E 200B or T E 200C. T E 322 or approval of department.  
Principles and practices of using materials and media; using community resources; providing directed occupational experiences; how-to-individualize instruction; evaluating student achievement.

438C. Microcomputer Applications in Business and Distributive Education  
Spring. 3(2-2) CEP 434, ACC 292, advanced typewriting, and/or approval of department.  
Methods of teaching information processing and its concepts, career paths, equipment, instructional systems and procedures; and evaluation.

442. Principles and Practices in Home Economics  
Spring. 3(3-0) T E 470.  
Analysis of the student teaching experience. Professional expectations, role of the teacher, and scope of home economics programs.

444. Museum as an Educational Tool  
Spring. 4(4-0) Juniors.  
The museum as an educational tool. Classroom preparation for the museum experience. Museum strategies including dioramas, collections, models, exhibits and reconstructions. Application of museum strategies to other educational settings.

446A. Teaching Science with Microcomputers  
Winter, Summer. 3(3-0) CEP 434.  
Interdepartmental with the Department of Counseling, Educational Psychology and Special Education.  
Survey and critique of software available for science instruction; students adapt generic and create original microcomputer routines and/or teaching strategies for use in science teaching.

446B. Teaching Social Studies with Microcomputers  
Winter, Summer. 3(3-0) CEP 434.  
Interdepartmental with the Department of Counseling, Educational Psychology and Special Education.  
Survey and critique of software available for social studies instruction; students adapt generic and create original microcomputer routines for use in social studies teaching.

450. School and Society  
Fall, Winter, Spring. 3(5-0) T E 300 or T E 200A or T E 200B or T E 200C or T E 200D. Not open to students with credit in T E 250B, T E 350D, T E 450A, T E 450B or T E 450C.  
Study of the structure, function and purposes of educational institutions. Course provides options for students in meeting professional needs recognized in directed teaching and desired before entering full professional practice.

459A. Structures, Functions and Purposes of Schools  
Fall. 3(2-0) Open only to students in Multiple Perspectives emphasis or approval of department.  
Examines the role, functions and structure of schooling as these impact teachers as decision makers, as continually developing professionals, and as members of the total school/community environment. Field trips may be required.

459B. Equity, Stereotypes, and Teaching  
Winter. 3(3-0) Open only to students in Heterogeneous Classrooms emphasis or approval of department.  
Conceptual and empirical analyses of equity issues affecting learning, including ways teachers can promote equity among students differing in social class, race, ethnicity, gender, and handicapping conditions.

450C. School and Society  
Winter. 3(3-0) Open only to students in Academic Learning emphasis or approval of department.  
Socioeconomic, cultural and philosophical foundations of educational systems as issues that impact the teaching and the learning environment of the school.

463. Economics of Education  
Winter. 3(3-0) EC 201 or EC 210 or approval of department. Interdepartmental with and administered by the Department of Economics.  

470. Student Teaching  
Fall, Winter, Spring. 15(5-25) T E 470A.  
Application must be made to the Student Teaching Office as follows: Fall—during the previous December; Winter—during the previous February; Spring—during the preceding May.  
Participation in activities of school and community. Teaching and related activities, observation, and seminar on the problems of teaching. Usually requires students to live in typical Michigan cities for an entire term.

470A. Student Teaching  
Fall, Winter, Spring. 2 to 15 credits.  
May reenroll for a maximum of 30 credits in T E 470, T E 470A, T E 470B, T E 470C, T E 470D to qualify for a different area of certification. Open only to students in Multiple Perspectives emphasis or approval of department.  
A culminating field experience. Assignment to specific schools for part- or full-time teaching responsibilities to demonstrate emphasis area goals and objectives. Students may have to reside outside of Lansing.

470B. Student Teaching  
Fall, Winter, Spring. 12(4-24) May reenroll for a maximum of 30 credits in T E 470, T E 470A, T E 470B, T E 470C, T E 470D to qualify for a different area of certification. Open only to students in Heterogeneous Classrooms emphasis or approval of department.  
Integration of theory and practice related to equitable teaching and learning within the context of heterogeneous classrooms. May require students to live away from campus for entire term.

470C. Student Teaching  
Fall, Winter, 15(5-27) May reenroll for a maximum of 30 credits in T E 470, T E 470A, T E 470B, T E 470C, T E 470D to qualify for a different area of certification. Open only to students enrolled in Learning Community emphasis or approval of department.  
Integrated field experience. Observations and guided classroom teaching under supervision of an experienced teacher and university field supervisor. Students may have to live outside of Lansing.

470D. Student Teaching  
Winter. 15(5-27) May reenroll for a maximum of 30 credits in T E 470, T E 470A, T E 470B, T E 470C, T E 470D to qualify for a different area of certification. Open only to students enrolled in Learning Community emphasis or approval of department.  
Participation in activities of school and community. Teaching and related activities, observation, and seminar on the problems of teaching. Usually requires students to live in typical Michigan cities for an entire term. A competency based course.

473. Student Teaching-Special Education 2nd Term  
School and community participation: Planning, conducting and evaluating instruction in special education; management techniques; observations and seminars; working with other special education professionals. An off-campus course in selected Michigan locations.

480D. Prospective in Learning Community  
(T E 482D.) Spring. 2(2-0) Open only to students in Learning Community emphasis or approval of department.  
Building on the practicum, students select issues or problems of teaching for further study. Research to synthesis and experience considered in addressing these issues in lectures, discussion, and group projects.
Descriptions — Teacher Education of Courses

482. Seminars in Teacher Education
Fall, Winter, Spring, Summer. 1 to 6 credits. May be repeated for a maximum of 8 credits. Approval of department. Seminars in the various fields of emphasis in teacher education.

483. Readings and Independent Study in Teacher Education
(480.) Fall, Winter, Spring, Summer. 1 to 8 credits. May be repeated for a maximum of 8 credits. Juniors; approval of department. Study on an individual basis in the various fields of emphasis in teacher education.

484. Field Experience in Teacher Education
(440.) Fall, Winter, Spring, Summer. 1 to 8 credits. May be repeated for a maximum of 12 credits. Approval of department. Supervised undergraduate practicums.

800. Crucial Issues in Education
Fall, Winter, Spring. 3(3-0) Approval of department. Problem analysis of timely issues in education analyzing their legal, historical, sociological, and philosophical dimensions. Attention centered on problems of continuing concern. Particular attention devoted to the role of the teaching profession in issues involving public policy.

801A. Seminars in Social and Philosophical Foundations of Education: Philosophy of Education
Fall, Winter, Spring. 3(3-0) Approval of department. Identification of underlying philosophical problems in education. Use of philosophical methodologies in resolving these problems. Development of a consistent personal philosophy of education.

801B. Seminars in Social and Philosophical Foundations of Education: Modern Philosophies of Education
Spring. 3(3-0) T E 801A. Critical analysis and evaluation of leading modern philosophies of education and their implications for practice, such as: existentialism, idealism, perennialism, and rationalism.

801C. Seminars in Social and Philosophical Foundations of Education: Social Criticism and Education
Fall. 3(3-0) T E 801A. Educational implications of critical analyses of contemporary society. Particular attention given to discrepancies between ideology and practice. Building school programs designed to cope with cultural inadequacies.

802A. Education in the U.S.A.
Fall. 3(3-4) Passed English Language Center examination or approval of department. Designed to provide first term foreign students in graduate programs with theoretical and experiential background in American education.

803A. Comparative and International Education
Spring. 3(3-0) Approval of department. Objectives, content, methodology, research problems of comparative and international education analyzed. Social and cultural forces affecting educational planning and institutional building studied. Agencies involved in international education identified.

803B. Comparative Foundations of Education: Education in Industrialized Societies
(EAC 803B.) Fall. 3(3-0) Approval of department. Interdepartmental with the Department of Sociology. Comparative study of the policies, practices and social context of educational systems in major industrialized countries, such as Canada, England, France, Germany, Japan, Soviet Union, Sweden.

803C. Historical and Comparative Foundations of Education: Education in the Non-Western World
(EAC 803C.) Winter. 3(3-0) Approval of department. Comparative study of educational systems and philosophies of Asian and African countries to gain insight into the American educational system. Visiting foreign educators.

804A. Historical and Comparative Foundations of Education: History of American Education
Winter. 3(3-0) Approval of department. Development of educational thought and practice in the United States. Importance of cultural influences. A critical examination of progress toward educational goals. Implications of historical background for present problems.

806. Organization of Classrooms for Diverse Learners: Problems, Policies and Effective Strategies
(830.) Winter. 3(3-0) Graduate students or approval of instructor. Instructional and organizational factors that contribute to equity in classrooms with diverse learners. Equal educational opportunity policies and their implementation.

809. Case Studies in Program Evaluation
Winter. 3(3-0) CEP 808. Interdepartmental with the Department of Counseling, Educational Psychology and Special Education. Analysis of previous conducted program evaluations to determine how evaluators must make about evaluation models, purposes, design, conduct, and reporting.

810A. Principles of Curriculum Improvement
Fall, Winter, Spring. 3(3-0) Experience in teaching; approval of department. Principles of curriculum improvement will be developed through the critical analysis of practices found in public schools.

810C. Curriculum Construction
Fall, Winter, Spring. 3(3-0) T E 810A. Approaches to curriculum construction: organization and function of personnel, initiating and evaluating curriculum change, curriculum research.

811A. Classroom Management and Organization
Fall. Summer. 3(3-0) Teaching experience or approval of department. The research base and conceptual framework for the preventive aspects of classroom management; planning of rules, procedures and classroom activities; skills and strategies for developing student self-control of behavior.

811B. Analysis of Classroom Discipline Problems
Spring. 3(3-0) Teaching experience or approval of department; T E 811A or T E 811C. Research base and conceptual framework for solving discipline problems in classrooms, based on analysis of teacher preferred leadership style, type of student discipline problem, and effects of teacher responses.

811C. Developing Effective Classroom Groups
Fall, Winter, Summer. 3(3-0) Classroom teaching experience or approval of department. Research findings and implications for developing classroom groups.

812A. Elementary School Curriculum
Fall, Winter, Summer. 3(3-0) Regular admission to graduate program and approval of department. Curriculum definition as related to purposes of the elementary school; foundations and rationale for curriculum study, revision, and improvement; procedures and structural aspects of curriculum planning; key components of new educational curricular designs.

812C. Seminar in Middle School Curriculum
Spring. 3(3-0) Contrasting patterns of programs for early adolescents; age range and characteristics of middle school pupils; problems and potential of the middle school.

812E. The Secondary School: Role, Function and Structure
Fall, Winter, Summer. 3(3-0) Teaching experience in secondary school classrooms. Examines the role, function, and structural aspects of various secondary schools. Emphasizes the relationships that do and should exist with other segments of the educational enterprise as well as with external agencies, organizations and institutions.

813A. Experiential Learning in Curriculum Development
Winter. 3(3-0) Graduate standing, approval of instructor. Philosophical, psychological, learning and instructional theory related to an experiential model in curriculum development.

813B. Application of Community Resources for Learning
Fall. Summer. 3(3-0) T E 812A or approval of instructor. Methods of obtaining, organizing and using community resources in instructional settings. Development of community-based instructional units.

814A. Elementary Education Trends and Current Research
Fall, Spring, Summer. 3(3-0) Completion of 27 credits of graduate course work on a regular program and approval of department. Advanced graduate students who are nearing completion of the M.A. program or on the doctoral program are given an opportunity to explore current research activities.

814C. The American Secondary School Student
Fall, Spring, Summer. 3(3-0) Teaching experience in secondary school classrooms. Focuses upon the issues and problems confronting the secondary school student as an adolescent and/or young adult. Attention is given to the relevance of school curriculums and staff competencies to meeting these needs of secondary students. Emphasis will be placed upon developing guidelines for needed change.
Descriptions — Teacher Education of Courses

826E. Individual Problems in Elementary and Middle School Science Education
Fall, Winter, Spring, Summer. 3(0-0) 1 to 3 credits. May enroll for a maximum of 6 credits. T.E. 826A or T. E. 836C; experience in teaching. Identification of one or more problems in elementary or middle school science to be studied independently. Problem analysis would typically include reading, action research and original composition.

826G. Environmental Education in the School
Spring, Summer. 3(0-0) Environmental issues and their implications for educational practices and policies. The role of the school in developing environmental consciousness.

828A. Teaching Elementary Mathematics
Fall, Summer. 3(0-0) Experience in teaching and approval of department. Advanced methods and materials used in teaching mathematics concepts in the elementary school.

828C. Teaching Elementary School Arithmetic
Winter. Summer of even-numbered years. 3(3-0) Experience in teaching and approval of department. Advanced methods and materials used in teaching concepts of the whole, integer, rational and real number systems including systems of numeration.

828E. Elementary Education: School Mathematics Instruction
Summer. 3(0-0) Experience in teaching and enrolled in mathematics education. Review of the literature—theoretical and research—on instruction in school mathematics including planning, group instruction, individual instruction, evaluation and instructional materials.

830A. Teaching Elementary School Social Studies
Fall, Winter, Summer. 3(3-0) Experience in teaching and approval of department. Methods and materials used in teaching social studies in kindergarten through the eighth grade.

830B. Social Studies for Gifted Students (E.A.C. 830B)
Fall, Spring. 3(3-0) Undergraduate social studies methods course. Approval of instructor. Designing social studies curricula for gifted students, grades K-12. Theory and research, curriculum development processes, state mandates, and exemplary lessons and programs will be stressed.

830C. Social Studies Curriculum K-12
Winter, Summer. 3(3-0) Teaching experience. Social studies curriculum planning, development and improvement. Emphasis on holistic K-12 view but each student will be encouraged to concentrate on a selected area or topic.

830G. Law Focused Education: Methods and Materials for the Social Studies
Winter. Summer. 3(3-0) Undergraduate course in Social Studies methods or approval of instructor. Techniques for infusing and teaching law related concepts within school social studies programs. Emphasis placed upon the identification and development of materials for use in the classroom.

830K. Seminar on Global Education
Fall, Spring, Summer. 3(3-0) Approval of instructor. Issues bearing upon the increasing global interdependence of people and nations; instructional materials and strategies designed to develop global perspectives in American elementary and secondary schools.

834G. Instruction in Business Marketing Subjects
Summer. 3(0-0) Experience in teaching. Improving instructional processes through research findings, readings, and experiences: Objectives, scope and sequence, diagnosis of learning difficulties, selecting learning activities; evaluating achievement, selecting materials, media, and equipment.

840C. Improving Instruction in Business Subjects
Summer of even-numbered years. 3(0-0) Experience in teaching, CEP 434 or CEP 504, or approval of department. Improving instructional processes through research findings, readings, and experiences: Objectives, scope and sequence, diagnosis of learning difficulties, selecting learning activities, evaluating achievement, selecting materials, media and equipment.

840M. Instruction in Business and Marketing Education: Information Processing
(EAC 640M) Fall, Winter, Spring, Summer. 3(2-2) Experience in teaching. Improving the instructional processes in information processing and its concepts, career paths, equipment, systems and procedures.

842A. Principles and Programs of Vocational Education and Practical Arts
Fall. Summer of even-numbered years. 3(3-0) Principles of vocational and technical education, comprehensive school program characteristics, program planning. Special emphasis is given to programs in agriculture, distributive, health, home economics, industrial, and office education. For vocational and practical arts teachers and local coordinators and directors of programs.

842E. Current Issues and Developments in Occupational Education
Winter. Summer of odd-numbered years. 3(3-0) Issues and problems in occupational education. Special emphasis on the emerging role of governmental and private agencies in human resource development. Designed for majors in fields other than vocational education.

844C. Occupational Analysis and Course Construction in Vocational Education
Winter. Summer of odd-numbered years. 3(3-0) Approval of department. Techniques of analyzing an occupation to determine the processes, instructional units and curricular arrangements.

844E. Instructional Materials in Vocational and Practical Arts Education
Fall. Summer of even-numbered years. 3(0-0) Approval of department. For teachers of agriculture, business, home economics, industrial arts and vocational-industrial education. Selection, preparation and use of distinctive materials that characterize shop and laboratory instruction.

844G. Developing Occupational Curricula in Two-Year Colleges
Fall. Summer of even-numbered years. 3(3-0) T.E. 842A, EAD 507E or approval of department. Occupational curriculum development and course construction. Developmental projects involving community college faculty, students and employers. For prospective teachers and administrative personnel in two-year colleges.
846A. Administration of Vocational Education Programs.
Spring, Summer. 3 credits.
Analysis of principles of administration to the administration of vocational and technical education programs in public and private institutions and federal, state and local educational agencies. Emphasizes competencies required in planning, managing, and evaluating vocational programs.

846C. Coordination in Occupational Training Programs
Spring, Summer. 3 credits.
Analysis of objectives and scope of distributive, office, trade, and industrial cooperative education programs, apprenticeship, and general education work experience. Emphasizes organization and administration, instructional procedures, coordination techniques, club activities, and evaluation of cooperative occupational education.

846A. Evaluation of Programs of Vocational and Practical Arts Education
Spring, Summer. 3 credits.
Evaluation of principles and practices in the specialized areas of agricultural, business, and industrial education.

846C. Current Research and Development in Vocational Education
Spring, Summer. 3 credits.
Current research and development concepts and practices.

850. Supervision of Student Teaching
Summer. 3 credits.
Designed to assist supervising teachers in guidance of student teachers. In addition to a general overview of the problems of student teaching, the following topics will be studied: trends in teacher education, orientation of student teachers to student teaching, responsibilities of the supervising teacher, relationships between supervising teachers and college personnel, conferences with student teachers, and evaluation of student teaching.

869. Perspectives in Curriculum and Teaching
Fall, Winter, Spring, Summer. 3 credits.
Topics in curriculum and teaching or approval of instructor. Teacher knowledge, beliefs, and practices bearing on educational problems. Research, observation, and instruction are used to stimulate teachers' professional growth about contextual features, goals, and participants in education.

870. Classroom Analysis
Fall, Winter, Spring, Summer. 3 credits.
Development of procedures and skills essential for analyzing and improving teaching performance. Students will establish programs of self-modification as per need. Offered only in an off-campus setting.

871. Instructional Development
Fall, Winter, Spring, Summer. 3 credits.
Designed to improve a teacher's effectiveness in classroom instruction through individualized projects. Offered only in an off-campus setting.

872. Classroom Synthesis
Fall, Winter, Spring, Summer. 3 credits.
Analysis of principles of classroom instruction and development of a program of classroom instruction. Offered only in an off-campus setting.

875. Seminar on Classroom Instruction in Reading Comprehension
Winter. 3 credits.
Research on classroom teaching and on reading comprehension. Offered only in an off-campus setting.

881. Workshops in Curriculum and Teaching
Fall, Winter, Summer. 1 to 6 credits.
Laboratory approach which provides opportunity for educators to examine common areas of interest in curriculum, teaching, and teacher education. Offered only in an off-campus setting.

882. Seminars in Curriculum and Teaching (MTC)
Fall, Winter, Spring, Summer. 1 to 9 credits.
Laboratory approach which provides opportunity for educators to examine common areas of interest in curriculum, teaching, and teacher education. Offered only in an off-campus setting.

883. Readings and Independent Study in Curriculum and Teaching
Fall, Winter, Spring, Summer. 1 to 6 credits.
May reenroll for a maximum of 15 credits if different topics are taken. Offered only in an off-campus setting.

884. Laboratory and Field Experiences in Curriculum and Teaching
Fall, Winter, Spring, Summer. 1 to 9 credits.
Laboratory approach which provides opportunity for educators to examine common areas of interest in curriculum, teaching, and teacher education. Offered only in an off-campus setting.

899. Master's Thesis Research
Fall, Winter, Spring, Summer. 2 to 12 credits.
May reenroll for a maximum of 12 credits. Offered only in an off-campus setting.

901. Educational Sociology: Seminar
Winter. 3 credits.
Research on sociological conditions in society and the organization and operation of educational systems. Offered only in an off-campus setting.

910A. Seminar: Curriculum Competencies and Careers
Fall, Winter, Spring. 3 credits.
Identification of competencies related to curriculum development. Analysis and development of student competencies. Exploration of careers in the curriculum field. Offered only in an off-campus setting.

910C. Seminar: Curriculum Issues
Spring, 3 credits.
In-depth exploration of the nature, history, and significance of several perennial issues such as curriculum balance and curriculum control. Offered only in an off-campus setting.

910E. Curriculum Research Seminar
Spring. 3 credits.
Identification of researchable variables in the curriculum of an educational institution or program. Design of descriptive, evaluative, and experimental studies within ongoing complex social systems.

910G. Seminar: Curriculum Innovation
Summer. 3 credits.
Current research and development concepts and practices in public and private education. Design of descriptive, evaluative, and experimental studies within ongoing complex social systems.

910K. Comparative Curriculum Studies
Winter. 3 credits.
Comparative study of global issues related to curriculum practices and designs.

910M. Seminar in Curriculum Theory
Water, Summer. 3 credits.
Examination of the historical, philosophical, and epistemological foundations of the study of curriculum. Examination of key concepts of curriculum, especially as they relate to ongoing debates about educational purpose and appropriate structure of learning experiences.

911. Conceptual Foundations of Teacher Education
Winter, Spring. 3 credits.
Phenomenon of teacher education: concepts central to the curriculum of teacher preparation (e.g., disciplinary knowledge, professional ethics, learning from experience).

913. Seminar in Research on Teaching
Winter. 3 credits.
Research on teaching. Critical survey of five approaches to research on teaching. Critical survey of five approaches to research on teaching. Students develop a framework for organizing the literature, methods, and issues in the field.

915. Readings and Research in Teacher Education and Professional Development
Spring. 3 credits.
Literature on research in practice in teacher education field experiences. Issues, problems and skills needed by educational leaders in pre-service and in-service teacher education.

916. Staff Development and the Realities of Teaching
Fall, 3 credits.
Sequence in Teacher Education or approval of instructor. Development of models for professional development. Emphasis on evaluation of the process and products of staff development. Offered only in an off-campus setting.

917. Cognitive Theories of Knowledge Acquision
Winter. 3 credits.
Cognitive research and theories about the growth of knowledge in academic disciplines and the acquisition of disciplinary knowledge by elementary and secondary school students.
Descriptions — Teacher Education

Courses

918. Teacher Assessment and Development
Fall. 3(3-0) Completion of 27 credits at graduate level.

919. Psychology and Pedagogy of Reading
Spring. 3(3-0) CEP 811, T E 820A, CEP 915, or approval of instructor. Interdepartmental with and administered by the Department of Counseling, Educational Psychology and Special Education.

920A. Research Methods for Studying Teaching Effects I
Fall. 3(3-0) Admission to doctoral program in education-related field.

920B. Research Methods for Studying Teaching Effects II
Winter. 3(3-0) T E 920A.

920C. Research Methods for Studying Teaching Effects III
Spring. 3(3-0) T E 920B.

921. Fieldwork Research in Educational Settings I
Fall. 4(4-0) Approval of instructor.

922. Fieldwork Research in Educational Settings II
Winter. 4(3-3) T E 921, approval of instructor.

923. Fieldwork Research in Educational Settings III
Spring. 4(4-0) T E 922, approval of instructor.

928. Conceptual Foundations of Educational Research
Fall. 3(3-0) Approval of instructor. Interdepartmental with the Department of Counseling, Educational Psychology and Special Education.

930. Educational Selection: Characteristics and Consequences of Student Assessment
Winter of odd-numbered years. 3(3-0) Doctoral student or approval of instructor.

931. Teaching: An American Argument
Spring of odd-numbered years. 3(3-0) Graduate student or approval of instructor.

932. Enduring Dilemmas of Educational Policy
Spring of even-numbered years. 3(3-0) T E 975, T E 976, T E 977 or approval of instructor.

937. Education and Economic Development
Fall. 3(3-0) Approval of instructor.

939. Policy and Legal Issues in Testing
Spring of even-numbered years. 3(3-0) CEP 431. Interdepartmental with the Department of Counseling, Educational Psychology and Special Education.

977. Seminar: Consequences of Educational Reform
Spring; every third Summer beginning 1983. 3(3-0) Admission to doctoral program in teacher education or approval of instructor.

983. Readings and Independent Study in Curriculum, Teaching, and Educational Policy
Fall, Winter, Spring, Summer. 1 to 9 credits. May reenroll for a maximum of 15 credits. Approval of department.

984. Laboratory and Field Experience in Curriculum, Teaching, and Educational Policy
Fall, Winter, Spring, Summer. 1 to 9 credits. May reenroll for a maximum of 15 credits. Approval of department.

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

TELECOMMUNICATION

College of Communication Arts and Sciences

210. Telecommunication Process and Effects
Fall, Winter, Spring, Summer. 4(4-0) Sophomore or approval of department.

220. History and Economics of Telecommunication
Fall, Winter, Spring, Summer. 4(3-2) Sophomores, EC 201, successful completion of MTH 105.