

615. Ophthalmology Clerkship
Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 34 credits. H M 602.

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. H M 602.

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. H M 602.

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. H M 602 and SUR 608.

Experiences in clinical general surgery.

SYSTEMS SCIENCE

See Electrical Engineering and Systems Science.

TEACHER EDUCATION T E

(Name change effective September 1, 1981. Formerly the Department of Elementary and Special Education, and the School of Teacher Education including the Division of Teacher Education and Professional Development.)

College of Education

101. Exploring Teaching
(ED 101A.) Fall, Winter, Spring. 3(1-4)

Emphasis on the nature of teaching in the elementary and secondary schools achieved through field experience. Concurrent lecture/participation sessions focus on techniques of classroom management and operation.

200. Individual and the School
(ED 200.) Fall, Winter, Spring, Summer. 5(3-2) 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 values, learning of skills, retention and transfer; and measurement of student abilities and achievement.

200A. Educational Psychology for Teacher Decision Making
(ED 200A.) Fall. 3(2-2) Open only to students in the Multiple Perspectives emphasis or approval of department.

Principles and theories of learning and development and the ways these ideas may be used to make teaching decisions.
Approved through Spring 1984.

200B. Educational Psychology of Individual Differences in Classrooms

(ED 200B.) Fall. 3(3-0) Open only to students in the Heterogeneous Classrooms emphasis or approval of department.

Range of diverse capabilities and characteristics found among school children and the implications of these differences for instruction.
Approved through Spring 1984.

200C. Learning of School Subjects
(ED 200C.) Fall. 3(2-2) Open only to students in the Academic Learning emphasis or approval of department.

Research and theories of knowledge and learning that justify the teaching of school subjects in elementary and secondary schools.
Approved through Spring 1984.

200D. Personal and Social Dimensions of Teaching
Fall. 3(3-0) Open only to students in the Learning Community emphasis or approval of department.

Theory and practice of the personal and social dimensions of teaching, including communication skills, interpersonal and group dynamics, and personal educational philosophy.
Approved through Spring 1984.

201B. Instructional Implications of Individual Differences
Spring. 2(2-0) T E 200B, T E 270B concurrently. Open only to students in the Heterogeneous Classrooms emphasis or approval of department.

Ways that instructional characteristics and teacher behavior interact with students' entering characteristics to influence student learning and behavior in the classroom.
Approved through Spring 1984.

201D. Student Learning and Development
Winter. 3(3-0) T E 200D. Open only to students in the Learning Community emphasis or approval of department.

Relevant theory and research relating to human learning and development in school-age children. Emphasis on affective teacher/student factors contributing to classroom learning community.
Approved through Spring 1984.

205A. Generic Methods of Teaching
Winter, Spring. 2(2-0) T E 200A; T E 260A, T E 270A concurrently. Open only to students in the Multiple Perspectives emphasis or approval of department.

Teaching strategies and instructional models that cut across subject matter and grade level designations are considered. Teacher decision-making as it affects curriculum development and instructional planning is stressed.
Approved through Spring 1984.

205C. Curriculum for Academic Learning
Winter, Spring. 3(3-0) T E 200C. Open only to students in the Academic Learning emphasis or approval of department.

Effects of curriculum on understanding of academic subjects. Political and cultural influences on curriculum. Teachers' use of curriculum.
Approved through Spring 1984.

219A. Classroom Organization and Management of Diverse Pupils
Fall, Winter. 2(1-2) T E 101, approval of department; T E 260A, T E 270A concurrently.

Knowledge and skills related to educational decision making for classroom management and organization. Development of effective teacher leadership behaviors resulting in classroom environments conducive to learning.
Approved through Spring 1984.

250B. Social Organization of Diversity in School and Society
(ED 450B.) Winter. 3(3-0) T E 270B concurrently. Open only to students in the Heterogeneous Classrooms emphasis or approval of department.

Nature of social diversity in schools and society. Conceptual framework for examining social as well as individual learning determinants.
Approved through Spring 1984.

260A. Teacher Decision Making Laboratory I
Fall, Winter, Spring. 1(0-2) May reenroll for a maximum of 3 credits. T E 200A or concurrently, 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.
Approved through Spring 1984.

270A. Professional Practice: Field Experience
Fall, Winter, Spring. 2(0-6) May reenroll for a maximum of 4 credits. T E 200A or concurrently, approval of department.

A field based experience in elementary and middle schools taken concurrently with professional education courses. Focused observations, interviews, practice teaching skills specified by the professional education courses and by aide tasks.
Approved through Spring 1984.

270B. Field Practice: Teaching in Heterogeneous Classrooms
Fall, Winter, Spring. 1(0-2) May reenroll for a maximum of 3 credits. T E 200B or concurrently, 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.
Approved through Spring 1984.

305. Curriculum Methods and Materials-Elementary Education
(ED 321A.) Fall, Winter, Spring, Summer. 3(1-7) T E 101; T E 200 or T E 200A or T E 200B or T E 200C or T E 200D. Must be taken concurrently with one or more courses in Methods of Instruction. 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.

306C. Interdisciplinary Elementary Curriculum
Fall, Spring. 3(2-2) T E 205C.

Teams of students from various majors will work toward the solutions of problems which are multidisciplinary in nature. Field experience required.
Approved through Spring 1984.

Descriptions – Teacher Education

of

Courses

307A. *Integrated Elementary Methods I: Science, Social Studies, Language Arts, Mathematics*

Fall, Winter. 2(1-2) T E 310A, T E 315A.

Methods of teaching elementary, middle and junior high school science integrated with social studies, language arts, and mathematics through the use of unified themes. Participation in microteaching and/or field trip may be required. Approved through Spring 1984.

308A. *Integrated Elementary Methods II: Science, Social Studies, Language Arts, Mathematics*

Fall, Spring. 2(1-2) T E 307A.

Methods of teaching elementary, middle and junior high school social studies integrated with science, language arts, and mathematics through the use of unified themes. Approved through Spring 1984.

310. *Methods of Teaching Reading in the Elementary School*

(ED 325A.) Fall, Winter, Spring, Summer. 3(3-0) T E 200 or T E 200A or T E 200B or T E 200C or T E 200D; T E 305 concurrently. 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, Spring. 3(3-0) T E 205A, T E 370A concurrently. Open only to students in the Multiple Perspectives emphasis or approval of department.

Focuses on 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. Approved through Spring 1984.

310B. *Teaching Reading and Listening*

Fall. 3(3-0) T E 313B. Open only to students in the Heterogeneous Classrooms emphasis or approval of department.

Interdependence of reading and listening. Implications of heterogeneous classrooms for instruction in listening and reading skills. Methodologies of reading and listening instruction surveyed for strengths and weaknesses. Approved through Spring 1984.

310C. *Methods for Teaching Reading and Writing*

Fall, Winter. 3(3-0) T E 313, T E 317C. Open only to students in the Academic Learning emphasis or approval of department.

Methods of teaching reading and writing in elementary school. Approved through Spring 1984.

310D. *Methods of Developmental Reading*

Winter. 3(3-0) Open only to students in the Learning Community emphasis or approval of department.

The recognition, algorithm, and application levels of developmental reading are emphasized with secondary emphasis on listening, oral expression, children's literature, writing, higher-level reading, and content area reading. Approved through Spring 1984.

311A. *Teaching Reading in the Upper Elementary Grades*

Fall, Winter. 3(3-0) T E 310A, T E 370A concurrently. Open only to students in the Multiple Perspectives emphasis or approval of department.

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.

Approved through Spring 1984.

311B. *Teaching Reading and the Expressive Skills of Speaking and Writing*

Winter. 3(3-0) T E 310B. Open only to students in the 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.

Approved through Spring 1984.

311C. *Practicum in Reading/Language Arts*

Winter, Spring. 3(1-4) T E 310C, T E 313. Open only to students in the Academic Learning emphasis or approval of department.

Students will spend a minimum of two hours per week in an elementary classroom participating in reading instruction, and one hour per week in a college seminar.

Approved through Spring 1984.

311D. *Methods of Higher Level Reading and Writing*

Spring. 3(3-0) Open only to students in the 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. Approved through Spring 1984.

312. *Practicum in Developmental and Corrective Reading*

(ED 475.) 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*

Winter, Spring. 3(3-0) T E 311A, T E 370A concurrently. Open only to students in the Multiple Perspectives emphasis or approval of department.

Focus on remedial and gifted readers. Techniques for managing, organizing, and presenting reading and writing.

Approved through Spring 1984.

312D. *Integrating Reading and Language within Subject Matter*

Fall. 3(3-0) Open only to students in the Learning Community emphasis or approval of department.

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

Approved through Spring 1984.

313. *Critical Reading and Children's Literature*

(ED 325C.) Fall, Winter, Spring, Summer. 3(3-0) T E 200 or T E 200A or T E 200B or T E 200C or T E 200D; T E 305 concurrently. 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 and Children's Literature*

Spring. 3(3-0) T E 201B. Open only to students in the Heterogeneous Classrooms emphasis or approval of department.

Methods of teaching print and media literature and critical reading to children through the age of fourteen years, with emphasis on children with diverse needs and interests.

Approved through Spring 1984.

313D. *Teaching Oral Language and Children's Literature*

Fall. 3(3-0) T E 101. Open only to students in the 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. Approved through Spring 1984.

315. *Teaching of Mathematics in Elementary Grades*

(ED 325E.) Fall, Winter, Spring, Summer. 3(3-0) T E 200 or T E 200A or T E 200B or T E 200C or T E 200D; T E 305 concurrently. MTH 201. Not open to students with credit in T E 315A, T E 315B, T E 315C or T E 315D.

Presents methods and materials for teaching mathematics in the elementary school. Methods and techniques of presenting mathematics content meaningfully to elementary pupils will be illustrated.

315A. *Methods of Teaching Elementary School Mathematics*

Fall, Spring. 2(1-2) T E 205A, MTH 201. Open only to students in the Multiple Perspectives emphasis or approval of department.

Content and methodology of teaching mathematics in elementary, middle and junior high schools with emphasis on mathematics competency, use of manipulatives, developing strategies and teacher decision making. Approved through Spring 1984.

315B. *Teaching Mathematics in Elementary Grades*

Fall. 3(3-0) T E 201B; MTH 201 concurrently. Open only to students in the Heterogeneous Classrooms emphasis or approval of department.

Methods of teaching mathematics in grades K-8. Emphasis will be on the diverse interests, needs, abilities, attitudes, and anxieties of children learning elementary school mathematics. Approved through Spring 1984.

315C. *Teaching Mathematics in Elementary Grades*

Fall, Spring. 3(3-0) T E 205C, MTH 201. Open only to students in the 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. Approved through Spring 1984.

- 315D. Teaching School Mathematics**
Fall. 3(2-2) MTH 201. Open only to students in the 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.
Approved through Spring 1984.
- 316. Teaching of Social Studies in Elementary Grades**
(ED 325D.) Fall, Winter, Spring, Summer. 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; T E 305 concurrently. Not open to students with credit in T E 316B, T E 316C or T E 316D.
To help students develop understanding of philosophy 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) T E 201B. Open only to students in the Heterogeneous Classrooms emphasis or approval of department.
Teaching of social studies in the diverse classroom. Content and methodology will address gender, mental ability, ethnicity, culture; religious, racial, social class, and physical characteristics. Teaching in field setting.
Approved through Spring 1984.
- 316C. Teaching Social Studies in Elementary Grades**
Winter, Spring. 3(3-0) T E 205C. Open only to students in the 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.
Approved through Spring 1984.
- 316D. Social Studies in a Learning Community**
Fall. 3(3-0) T E 101. Open only to students in the Learning Community emphasis or approval of department.
Social studies methods and materials with an emphasis on creating and maintaining a learning community and using citizenship as a social studies curriculum organizer.
Approved through Spring 1984.
- 317. Teaching of Language Arts in Elementary Grades**
(ED 325B.) Fall, Winter, Spring, Summer. 3(3-0) T E 200 or T E 200A or T E 200B or T E 200C or T E 200D; T E 305 concurrently. 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 Competencies**
Winter, Spring. 3(3-0) T E 205C or concurrently. Open only to students in the Academic Learning emphasis or approval of department.
Methods of teaching listening and speaking in the elementary school. Development of oral skills and their relationship to learning to read and write.
Approved through Spring 1984.
- 318. Teaching Science in the Elementary and Middle School**
(ED 325F.) Fall, Winter, Spring, Summer. 3(2-2) T E 200 or T E 200A or T E 200B or T E 200C or T E 200D; three terms of natural science; T E 305 concurrently. 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, Winter. 3(3-0) T E 201B. Open only to students in the 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.
Approved through Spring 1984.
- 318C. Teaching Science in Elementary Grades**
Fall, Spring. 3(2-2) T E 205C. Open only to students in the Academic Learning emphasis or approval of department.
Relate science subject matter and the nature of science to elementary, middle and junior high school science teaching. Emphasis is placed on methods and materials appropriate for the various grade levels.
Approved through Spring 1984.
- 318D. Science Methods for Learning Community**
Spring. 3(3-0) T E 201D. Open only to students in the Learning Community emphasis or approval of department.
Methods of teaching science in learning community classrooms. Activities include microteaching, modeling of science teaching strategies, discussions and out-of-class assignments. Integration and development of classroom groups are emphasized.
Approved through Spring 1984.
- 320. School Music Instrumental Methods**
(ED 325G.) Fall. 3(2-2) Instrumental music major; MUS 250.
Instrumental instruction program at elementary level.
- 321. School Music Vocal Methods**
(ED 325H.) Fall. 4(3-2) Approval of the Department of Music; MUS 250.
Basic instructional program in primary and intermediate grades.
- 322. Methods of Teaching-Secondary Common Elements**
(ED 327.) Fall, Winter, Spring, Summer. 2(2-0) T E 200 or T E 200A or T E 200B or T E 200C or T E 200D; taken prior to or concurrently with a subject area methods course. Not open to students with credit in T E 205C.
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**
(ED 327A.) Fall, Spring. 3 credits. T E 200 or T E 200A or T E 200B or T E 200C; T E 322 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**
(ED 327B.) Fall, Winter, Spring. 3 credits. T E 200 or T E 200A or T E 200B or T E 200C; STA 303, STA 320, T E 322 or concurrently.
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**
(ED 327D.) Fall, Winter, Spring, Summer. 3 credits. T E 200 or T E 200A or T E 200B or T E 200C or T E 200D; T E 322 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.
- 326C. Methods of Teaching Secondary English**
Fall, Spring. 3(3-0) T E 205C. Open only to students in the Academic Learning emphasis or approval of department.
Techniques for teaching English literature, language and composition in the schools; curriculum and course design, the writing of goals and objectives, the techniques for assessment.
Approved through Spring 1984.
- 328. Methods of Teaching-Secondary Subject Areas: Romance Languages**
(ED 327E.) Fall. 3 credits. T E 200 or T E 200A or T E 200B or T E 200C; T E 322 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.
- 329. Methods of Teaching-Secondary Subject Areas: Health**
(ED 327F.) Spring. 3 credits. T E 200 or T E 200A or T E 200B or T E 200C; T E 322 or concurrently.
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**
(ED 327G.) Fall, Winter, Spring. 3 credits. T E 200 or T E 200A or T E 200B or T E 200C; T E 322 or concurrently.
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.

Descriptions - Teacher Education

of

Courses

- 331. Methods of Teaching—Secondary Subject Areas: Home Economics**
(ED 327K.) Fall. 3 credits. T E 200 or T E 200A or T E 200B or T E 200C; T E 322 or concurrently.

Specifics of classroom instruction in home economics. 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: Natural Resources, Environmental Education and Earth Science**
(ED 327L.) Spring. 3(3-0) T E 200 or T E 200A or T E 200B or T E 200C for Education majors; others, approval of department, T E 322 or concurrently.

Specifics of classroom instruction in natural resources, environmental education and earth science. 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: Mathematics**
(ED 327N.) Spring. 3 credits. T E 200 or T E 200A or T E 200B or T E 200C or T E 200D; T E 322 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.

- 334C. Methods of Teaching Secondary Mathematics**
Spring. 3(3-0) T E 205C. Open only to students in the Academic Learning emphasis or approval of department.

Strategies for planning, teaching and evaluating mathematics instruction; emphasis on the role of motivation in mathematics learning and the resources available for teachers. Tutoring and classroom experience required.
Approved through Spring 1984.

- 335. Methods of Teaching—Secondary Subject Areas: Music-Instrumental**
(ED 327P.) Winter. 3 credits. T E 200 or T E 200A or T E 200B or T E 200C; T E 322 or concurrently; MUS 250.

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.

- 336. Methods of Teaching—Secondary Subject Areas: Music-Voice.**
(ED 327R.) Winter. 3 credits. T E 200 or T E 200A or T E 200B or T E 200C; T E 322 or concurrently; MUS 250.

Specifics of classroom instruction in music-voice. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and sound educational principles and policies.

- 337. Methods of Teaching—Secondary Subject Areas: Science**
(ED 327S.) Fall, Winter. 3(2-2) T E 200 or T E 200A or T E 200B or T E 200C or T E 200D; T E 322 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.

- 337C. Methods of Teaching Secondary School Science**
Fall, Spring. 3(2-2) T E 205C. Open only to students in the Academic Learning emphasis or approval of department.

Relate science subject matter and the nature of science at the secondary school level. Emphasis is placed on methods and materials appropriate for the various levels.
Approved through Spring 1984.

- 338. Methods of Teaching—Secondary Subject Areas: Social Science and History**
(ED 327T.) Fall, Spring. 3 credits. T E 200 or T E 200A or T E 200B or T E 200C or T E 200D; T E 322 or concurrently. Not open to students with credit in T E 338C.

Specifics of classroom instruction in social sciences and history. Selection of instructional techniques based on recognized course objectives, needs and characteristics of learners, and educational principles and policies.

- 338C. Methods of Teaching Secondary Social Science and History**
Fall, Spring. 3(3-0) T E 205C. Open only to students in the Academic Learning emphasis or approval of department.

Classroom instruction in the following subject matter areas: history, geography, government, sociology, economics, psychology, and integrated social studies. Includes objectives, value issues, and evaluation instruments.
Approved through Spring 1984.

- 339. Methods of Teaching—Secondary Subject Areas: Communication**
(ED 327U.) Spring. 3 credits. T E 200 or T E 200A or T E 200B or T E 200C; T E 322 or concurrently.

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**
(ED 327V.) Fall of odd-numbered years. 3 credits. T E 200 or T E 200A or T E 200B or T E 200C; T E 322 or concurrently.

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.

- 350D. School and Community**
Spring. 3(3-0) T E 201D. Open only to students in the 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. The role and functions of schools as part of community structure.
Approved through Spring 1984.

- 355B. Evaluating Learning Environments**
Spring. 3(3-0) T E 201B.

Evaluation of 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.
Approved through Spring 1984.

- 360A. Teacher Decision Making Laboratory II**
Fall, Winter, Spring. 1(0-2) May reenroll for a maximum of 4 credits. T E 260A, 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.
Approved through Spring 1984.

- 370A. Professional Practice: Directed Teaching**
Fall, Winter, Spring. 2(0-6) May reenroll for a maximum of 6 credits. T E 270A, approval of department.

A midlevel field-based experience in schools taken concurrently with professional education courses. Students will have opportunities for extended planning, teaching and evaluation under supervision of school and university faculty.
Approved through Spring 1984.

- 370B. Student Teaching**
Fall, Winter, Spring. 1 or 2 credits. May reenroll for a maximum of 3 credits. T E 270B, approval of department.

Provide students with the opportunity to reflect and analyze preceding course content relative to practical application in a field setting.
Approved through Spring 1984.

- 370D. Field Experience in Learning Community**
Fall, Winter, Spring. 2(1-3) May reenroll for a maximum of 8 credits. Approval of department.

Field experience and discussion, opportunities to observe in school and community settings, practice skills in microteaching, communication, and curricular integration. Students document own professional development and plan teaching internships.
Approved through Spring 1984.

- 406C. Interdisciplinary Learning**
Winter, Spring. 3(1-6) T E 470C.

Field course in which students teach an interdisciplinary course in a public school classroom and investigate the nature and value of interdisciplinary learning in school and society.
Approved through Spring 1984.

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

- 412. Reading in the Content Areas of the Secondary Level**
(ED 495.) Fall, Winter, Spring. 5 credits. Approval of instructor.

The process of reading and learning from text. Applications in subject areas including identification of reading-reasoning processes in content area subjects, assessment, and instructional procedures. Field trips may be required.

- 430. Readings and Independent Study in Teacher Education**
Fall, Winter, Spring, Summer. 1 to 8 credits. May reenroll for a maximum of 8 credits. Juniors; approval of department. Study on an individual basis in the various fields of emphasis in teacher education.

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

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

443. Science Instruction in Selected Areas for Elementary and Middle School Teachers
(ED 470.) Summer. 3(3-0) May reenroll for a maximum of 6 credits. TE 318.
Extends instructional techniques and knowledge of teaching materials in various science-related curricula for elementary and middle school children. Limited to examination of selected topics during any one term.

444. Museum as an Educational Tool
(ED 481.) 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.

450. School and Society
(ED 450.) Fall, Winter, Spring, Summer. 5(3-2) TE 200 or TE 200A or TE 200B or TE 200C or TE 200D. Not open to students with credit in TE 250B, TE 350D, TE 450A, TE 450B or TE 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.

450A. Structures, Functions and Purposes of Schools
Winter, Spring. 3(2-2) TE 370A or concurrently. Open only to students in the Multiple Perspective 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.
Approved through Spring 1984.

450B. Equity, Stereotypes, and Teaching
Winter. 3(3-0) TE 201B, TE 250B.
Open only to students in the Heterogeneous Classrooms emphasis or approval of department.
Educational equity and teaching practices are mediated by systems of classification. History, law, personal experience shape these systems. Teacher responses to student diversity are analyzed in relation to equity goals.
Approved through Spring 1984.

450C. School and Society
Winter, Spring. 3(3-0) TE 470C. Open only to students in the Academic Learning emphasis or approval of department.
Socioeconomic, cultural and philosophical foundations of education studied as issues that impact the teaching and the learning environment of the school.
Approved through Spring 1984.

470. Student Teaching
(ED 436A.) Fall, Winter, Spring. 15(5-25) May reenroll for a maximum of 30 credits in TE 470, TE 470A, TE 470B, TE 470C, TE 470D to qualify for different area of certification. 2.00 cumulative grade-point average; TE 322 for Secondary Education majors; ASC 477 for Audiology and Speech Sciences majors; approval of department. Applications must be made to the Student Teaching Office as follows: Fall – during previous October; Winter – during the previous February; Spring – during the previous 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. 12(4-24) May reenroll for a maximum of 30 credits in TE 470, TE 470A, TE 470B, TE 470C, TE 470D to qualify for different area of certification. Approval of department.
A culminating two-term field experience. Assignment to specific schools for part- or full-time teaching responsibilities to demonstrate multiple perspectives emphasis area goals and objectives. Students may have to live outside of Lansing.
Approved through Spring 1984.

470B. Student Teaching
Fall, Winter, Spring. 12(4-24) May reenroll for a maximum of 30 credits in TE 470, TE 470A, TE 470B, TE 470C, TE 470D to qualify for different area of certification. TE 370B, approval of department.
Integration of theory and practice related to equitable teaching and learning within the context of heterogeneous classrooms. Students may have to live outside of Lansing.
Approved through Spring 1984.

470C. Student Teaching
Fall, Winter, Spring. 15(6-27) May reenroll for a maximum of 30 credits in TE 470, TE 470A, TE 470B, TE 470C, TE 470D to qualify for different area of certification. For Elementary Education majors: TE 306C, TE 311C, TE 315C, TE 316C, TE 318C. For Secondary Education majors: TE 326C or TE 334C or TE 337C or TE 338C. Approval of department.
Integrated field experience for the academic learning emphasis area. Observations and guided classroom teaching under supervision of an experienced teacher and university field supervisors. Students may have to live outside of Lansing.
Approved through Spring 1984.

470D. Student Teaching
Winter. 12(3-27) May reenroll for a maximum of 30 credits in TE 470, TE 470A, TE 470B, TE 470C, TE 470D to qualify for different area of certification. TE 312D, TE 315D, TE 316D, TE 318D, TE 350D, TE 370D, approval of department.
Students teach in public or private school classrooms to develop and demonstrate proficiency in skills of teaching. Teaching is augmented by small group discussion with peers, classroom teachers, and faculty. Students may have to live outside of Lansing.
Approved through Spring 1984.

471. Student Teaching
(ED 436B.) Fall, Winter, Spring. 5(3-6) 2.00 cumulative grade-point average; TE 322 for Secondary Education majors; ASC 477 for Audiology and Speech Sciences majors; approval of department. Application must be made to the Student Teaching Office as follows: Fall – during the previous October; Winter – during the previous February; Spring – during the previous 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. A competency based course.

472. Student Teaching
(ED 436C.) Fall, Winter, Spring. 10(3-20) TE 471. Application must be made to the Student Teaching Office as follows: Fall – during the previous October; Winter – during the previous February; Spring – during the previous 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. A competency based course.

473. Student Teaching-Special Education 2nd Term
(ED 436S.) Fall, Winter, Spring. 15(5-25) TE 470.
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.

475. Teaching Internship
(ED 446.) Fall, Winter, Spring. 5 to 15 credits. May reenroll for a maximum of 22 credits. TE 305.
Internship teaching experience under the guidance and supervision of intern consultants and other MSU faculty. Involves a variety of activities, including full-time teaching experience in a selected school.

476. Elementary Pre-Intern Seminar
(ED 485.) Winter, Spring. 4(4-0) Approval of department. Completion of Phase I of Internship Teaching.
Selected professional and clinical educational problems are studied in a field setting as an integrated part of the pre-intern twenty-week block of courses.

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

482D. Proseminar in Learning Community
Spring. 4(4-0) TE 470D.
Building on the practicum, students select issues or problems of teaching for further study. Research is synthesized and experience reconsidered in addressing these issues in lectures, discussion, and group projects.
Approved through Spring 1984.

**Descriptions - Teacher Education
of
Courses**

801. Classroom Analysis
(ED 838A.) Fall, Winter, Spring. 3(3-0)
Admission to M.A. in Classroom Teaching Program (MACT).

Development of procedures and skills essential for analyzing and improving teaching performance. Students will establish programs of self-modification where needed. Offered only in an off-campus setting.

802. Instructional Development
(ED 838B.) Fall, Winter, Spring, Summer. 2 to 4 credits. May reenroll for a maximum of 12 credits. TE 801.

Designed to improve a teacher's effectiveness in classroom instruction through individualized projects. Offered only in an off-campus setting.

803. Classroom Synthesis
(ED 838C.) Fall, Winter, Spring, Summer. 3(3-0) TE 802; 36 credits applicable toward the MACT program.

Designed to refine one's personal educational philosophy, and establish long and short-term goals for improvement of teaching effectiveness. Offered only in an off-campus setting.

805. Seminar in Urban Teaching
(ED 805.) Spring, Summer. 3(3-0) Approval of department.

Exploration of literature related to problems, programs, and techniques of effective teaching in urban schools. Importance of student and teacher characteristics and program organization and goals will be assessed as they relate to quality education.

813. Experiential Teaching and Community/Resources
(ED 858A.) Winter, Summer. 3(3-0) Graduate standing, approval of instructor.

Presentation of Community as a concept basic to an experiential teaching model. Philosophical, psychological, learning and instructional theory related to an experiential model.

814. Application of Community Resources for Learning
(ED 858B.) Fall, Summer. 3(3-0) TE 813 or approval of instructor.

Methods of obtaining, organizing and using community resources in instructional settings. Development of community-based instructional units.

818. Supervision of Student Teaching
(ED 837A.) Summer. 3(3-0) Approval of department.

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.

881. Workshops in Teacher Education
Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 6 credits. Approval of department.

Laboratory approach which provides opportunities for experienced educational personnel to concentrate their study of common problems in teacher education.

882. Seminars in Teacher Education
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 in teacher education.

883. Readings and Independent Study in Teacher Education
Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 15 credits. Approval of department.

Study on an individual or group basis in teacher education.

884. Laboratory and Field Experience in Teacher Education
Fall, Winter, Spring, Summer. 1 to 9 credits. May reenroll for a maximum of 15 credits. Approval of department.

Supervised graduate practicums, observations, internships, and externships in the various areas of teacher education.

899. Master's Thesis Research
Fall, Winter, Spring, Summer. 2 to 12 credits. May reenroll for a maximum of 12 credits. Approval of department.

915. Readings and Research in Teacher Education and Professional Development
(ED 970.) Spring. 3(3-0) Approval of department.

Literature on research on practice in teacher education field experiences. Issues, problems and skills needed by educational leaders in pre-service and inservice teacher education.

918. Teacher Assessment and Development
(ED 977.) Fall. 3(3-0) Completion of 27 credits at graduate level.

Concepts of teacher assessment, techniques and instruments for analysis of teaching, current assessment practices, and strategies for teacher development based on needs.

920. Field Research Methods in Education
(ED 961.) Spring. 3(3-0)

Methods of interview, participant observation or observation for carrying on educational research.

921. Fieldwork Research in Educational Settings I
(ED 976A.) Fall. 3(3-0) Approval of instructor.

Substantive and methodological issues in planning and conducting fieldwork research in educational settings. Knowledge and skills necessary to evaluate quality of fieldwork research. Critical review of examples of research reports.

922. Fieldwork Research in Educational Settings II
(ED 976B.) Winter. 3(3-0) TE 921 or approval of instructor.

Supervised fieldwork research in educational settings. Techniques of data collection and analysis. Research question formation, entry, evidence, and ethics.

923. Fieldwork Research in Educational Settings III
(ED 976C.) Spring. 3(3-0) TE 922.

Supervised analysis and reporting of fieldwork research data. Literature review, model construction, analysis of field notes and other data. Preparing narrative reports addressed to scientific audiences and to audiences of practitioners.

924. Seminar in Research on Teaching
(ED 913.) Spring. 3(3-0) Approval of instructor.

Critical survey of five approaches to research on teaching. Students develop a framework for organizing the literature, methods, and issues in the field.

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

Epistemology and ideology in educational research. Analysis of concepts of method, causation, objectivity and subjectivity in historical perspective.

982. Seminars in Teacher Education
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 in teacher education.

983. Readings and Independent Study in Teacher Education
Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 15 credits. Approval of department.

Study on an individual or group basis in teacher education.

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

Supervised graduate practicums, observations, internships, externships in various areas of teacher education.

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

TELECOMMUNICATION TC

College of Communication Arts and Sciences

210. Telecommunication Process and Effects
Fall, Winter, Spring. 3(3-0) Sophomores or approval of department.

Human communication processes and behavior as modified by telecommunication. Functions, audiences, and implications of electronic media on society.

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

Institutional and cultural development and underlying economic principles of the telecommunication field, including broadcast programs.