
either Education 794 or Education 798 or permission of the school) S, SU. Students will complete and present the results of their research projects. The student will present the completed work, near the conclusion of Education 795, to a group of his/her colleagues (typically students enrolled in the course), the course instructor, and interested members of the School of Education faculty.

796 Capstone (3) F, S. The capstone experience provides students the opportunity to demonstrate a culmination of the acquired knowledge in the program. The experience is offered with a field component to afford students the opportunity to work with P-12 students.

EDUCATION PROFESSIONAL DEVELOPMENT COURSES (EDPD)

525 Professional Development (3, 2, or 1) F, S, SU. Professional development in various strategies and techniques to enhance Grades K-12 classroom instruction for a variety of disciplines and content areas. Courses are scheduled at the request of local school districts, educational agencies, or consortia, subject to the approval of the school. Graduate institutional credit (institutional credit means that the hours earned and the grade points are included only in the semester totals, which reflect total hours and credits earned. Neither the grade points nor the hours earned are reflected in the cumulative totals, which reflect total hours and credits toward degrees) may be earned, but EDPD 525 cannot be applied toward the M.Ed. or M.A.T. programs at FMU. Undergraduate institutional credit (see parenthetical explanation above) may also be earned.

ENGLISH COURSES (ENG)

516 English: Applied Composition Theory (3) SU. Survey of theories of rhetoric and discourse appropriate for writing teachers. Includes workshop activities and practice making and evaluating assignments, and diagnosing writing problems. Includes modeling of appropriate pedagogy.

517 English: Advanced Approaches to British Literature (3) SU. Explores works of British literature with emphasis on works appropriate for high school teachers, including Empire and post-colonial perspectives. Includes discussion of various theoretical frameworks, age-appropriate secondary sources and the application of effective writing assignments. Includes modeling of appropriate pedagogy.

518 English: Advanced Approaches to American Literature (3) SU. Explores works of American literature with emphasis on works appropriate for high school teachers, including multicultural perspectives. Includes discussion on various theoretical frameworks, age-appropriate secondary sources and the application of effective writing assignments. Includes modeling of appropriate pedagogy.

519 English: Advanced Approaches to World Literature (3) SU. Explores wide variety of world and multicultural literature with emphasis on works appropriate for high school teachers. Includes discussion of various theoretical frameworks, age-appropriate secondary sources and the application of effective writing assignments. Includes modeling of appropriate pedagogy.

799 English: Capstone Practicum (3) (Prerequisite: 12 hours in specialty core; corequisite: Education 798) SU. This course is designed to integrate and extend the subject matter covered in the preceding four specialty area courses. A special focus will involve the identification of and completion of one or more projects involving the specialty and education core, and/or exploration of a related topic. The project(s) should be designed so they can be used in an appropriate professional setting.

MATHEMATICS COURSES (MATH)

516 Mathematics: Calculus for Teachers (3) (Prerequisite: Bachelor's degree plus eligibility for licensure in mathematics or science, or senior status as a mathematics major, or permission of school) F, S, SU. Full development of limits, derivatives, and integrals. Concentration is on concepts and applications.

518 Mathematics: Probability and Statistics for Teachers (3) (Prerequisite: Bachelor's degree plus eligibility for licensure in mathematics or science, or senior status as a mathematics major, or permission of school) SU. Survey of areas of probability theory to include selected topics from sample spaces; combinatorial theory; random variables and their distribution; conditional probability; joint and marginal distributions; expected values and variances; and the Central Limit Theorem. Survey of descriptive inferential statistics to include selected topics from the use of tables, graphs, and formulas; sampling techniques; estimation and confidence intervals; hypothesis testing; decision making; and correlation and regression.

SCIENCE COURSES (SCI)

515 Science: Physical Science (3) (Prerequisite: Eligibility for licensure in science and bachelor's degree or permission of school) SU. This course will examine the physical principles that govern natural phenomena. Topics may include mechanics, heat, electricity and magnetism, waves, and light. Applications of science and technology, critical thinking and problem-solving skills, and experimental design will be emphasized.

516 Science: Chemistry in the World (3) (Prerequisite: Eligibility for licensure in science and bachelor's degree or permission of school) SU. This course will examine the role of chemistry in the world. The nature, interactions, and transformations of matter and energy will be addressed. Applications of science and technology, critical thinking and problem-solving skills, and experimental design will be emphasized.

517 Science: Earth and Space Science (3) (Prerequisite: Eligibility for licensure in science and bachelor's degree or permission of school) SU. This course will examine the processes, interactions, and changes of earth and space systems. Applications of science and technology, critical thinking and problem-solving skills, and experimental design will be emphasized.

518 Science: Human Biology (3) (Prerequisite: Eligibility for licensure in science and bachelor's degree or permission of school) SU. This course will examine the processes of life: characteristics and functions of organ systems, and the impact of human activity on the environment. Applications of science and technology, critical thinking and problem-solving skills, and experimental design will be emphasized.

519 Science: Environmental Science (3) (Prerequisite: Eligibility for licensure in science and bachelor's degree or permission of school) SU. This course will examine natural resources, interactions of organisms with environment, interactions between organisms with each other and their environments; and genetic diversity and continuity. Applications of science and technology, critical thinking and problem-solving skills, and experimental design will be emphasized.

799 Science: Seminar Practicum Capstone (3) (Prerequisite: Twelve hours in specialty core; corequisite: Education 798) SU. This course is designed to integrate and extend the subject matter covered in the preceding four specialty area courses. A special focus will involve the identification and completion of one or more projects involving the specialty and education core, and/or exploration of a related topic. The project(s) should be designed so that they can be used in an appropriate professional setting.

SOCIAL STUDIES COURSES (SOST)

516 Social Studies: History and American Government (3) SU. A study of the historical development of American society including such topics as tradition and change, the changing American family, the changing ethnic composition of the United States, the growing role of government in American society, critical developments in education, rural and urban trends, and the role of religion in shaping American society.

517 Social Studies: American Economy and Politics (3) SU. An examination of the principles and operation of the American economics and political systems.