

# EXPLORATORY STUDIES (EXPS)

## Course Descriptions

### EXPS 220 Science in the Elem School 2 to 3 Credit Hours

This course is designed for people intending to become elementary school teachers and who have had little or no previous experience in science. The course utilizes a laboratory approach to the study of the concepts, processes, and value of elementary and middle school science.

### EXPS 250 Elem Ed Vis & Perf Arts 3 Credit Hours

This course will teach the elementary education student how to incorporate the various visual and performing arts into everyday elementary education curricula. The course will cover the fundamental and formal elements, the major periods, styles and philosophies, as well as the functions and processes of the visual and performing arts, and how to effectively employ those creative processes through collaboration, communication, cooperation and interaction in the elementary classroom.

#### Restriction(s):

Cannot enroll if Level is

### EXPS 298 Exploring Writing to Communicate, Learn, & Teach 3 Credit Hours

This course provides a theoretical foundation for using writing as teachers to communicate and learn for personal and professional purposes. Students will learn about writing development Birth to Grade 6. Emphasis will be placed on learning effective pedagogical content knowledge of writing including modeling, using mentor text (high-quality writing examples to emulate), conferencing with others about one's writing, and peer-and self-assessing writing to support all writers' development. Students will focus on developing their own writing skills using the writing process with three genres (narrative, informational/explanatory, and argument). Additional application of course knowledge will be demonstrated through academic service learning projects (when possible) designed to tutor writers (e.g., After-School Writing Clinic). Because students might carry out assignments and activities in schools, those enrolled must complete clearance forms before their field placements; refer to the Field Placement Office website. (F, W, YR).

**Prerequisite(s):** Infect Disease/Blood Borne Path with a score of 1 and Criminal Background Check with a score of 1 and Video Recording Consent with a score of 1

### EXPS 400 STEM Teaching and Learning 3 Credit Hours

The content of this course and the pedagogy employed will provide students with experiences in topics related to the integration of science, technology, engineering and mathematics (STEM). Students will experience examples of STEM activities and will explore how STEM disciplines impact society. (YR).

#### Restriction(s):

Cannot enroll if Class is Freshman or Sophomore

### EXPS 401 STEM2 Teach/Learn Internship 1 Credit Hour

This internship will provide students an opportunity to gain experience with K-8 students in a educational setting such as a K-8 classroom, an afterschool program, museums, etc. Requires a minimum of 45 clock hours spread over the semester at the placement site working with the students and the assigned instructor/supervisor on STEM2 activities. Students must submit the following clearances as prerequisites in order to register for this class (Blood Borne Pathogen test, Criminal Background Consent, Video Recording Consent). (YR).

**Prerequisite(s):** EXPS 220 and MATH 385 and Infect Disease/Blood Borne Path with a score of 1 and Criminal Background Check with a score of 1 and Video Recording Consent with a score of 1

**Corequisite(s):** EXPS 400

#### Restriction(s):

Can enroll if Class is Undergrad Certification only or Post-baccalaureate NCFD or Post-baccalaureate Cert only or Junior or Senior  
Can enroll if College is Education, Health, and Human Services

### EXPS 407 Inquiry-based Math and Science 3 Credit Hours

This inquiry-based laboratory course intends to support the learning of early childhood educators (birth to grade 2) in foundations of science and mathematics. The course integrates concepts and processes that arise in both disciplines, such as classification; units and measurements; shapes and structures and their properties; patterns; problem solving; representation; cause and effect; use of evidence (three credits). Elective for Children and Families Students. Students cannot receive credit for both EXPS 407 and 507. (YR).

#### Restriction(s):

Cannot enroll if Class is Freshman  
Can enroll if College is Education, Health, and Human Services  
Cannot enroll if Major is

### EXPS 410 Multicult in School and Soc 3 Credit Hours

Examines ways to address the needs of diverse student populations. Issues of race, ethnicity, class, gender, and language are explored. Historic and ongoing issues of equity, particularly in school settings, are considered. The focus is on providing an education of high quality to all students.

#### Restriction(s):

Cannot enroll if Class is Freshman

### EXPS 420 Science Capstone 3 Credit Hours

A capstone course for pre-service elementary teachers with a laboratory component designed to assist students in achieving deep understanding of a broad scientific concept and a discussion component designed to introduce and provide practice in classroom research. Students will use the classroom research to prove misconceptions about the scientific concept explored in the laboratory. Students must submit the following clearances as prerequisites in order to register for this class (Blood Borne Pathogen test, Criminal Background Consent, Video Recording Consent).

**Prerequisite(s):** NSCI 231 and NSCI 232 and NSCI 233 and EDD 485\* and Infect Disease/Blood Borne Path with a score of 1 and Criminal Background Check with a score of 1 and Video Recording Consent with a score of 1

#### Restriction(s):

Can enroll if Class is Undergrad Certification only or Post-baccalaureate Cert only or Junior or Senior  
Can enroll if Level is Undergraduate

**EXPS 493 Simulation and Gaming 1 to 3 Credit Hours**

This course focuses on simulation and gaming as approaches to learning which are fundamentally different from methods traditionally used in education, industry, business, and psychology. Students will have the opportunity to examine many different types of simulations and games and to participate in selected ones. They will also be able to design one to use in their own area of interest.

**Restriction(s):**

Can enroll if Class is Undergrad Certification only or Post-baccalaureate Cert only or Junior or Senior

\*An asterisk denotes that a course may be taken concurrently.

Frequency of Offering

The following abbreviations are used to denote the frequency of offering:

(F) fall term; (W) winter term; (S) summer term; (F, W) fall and winter terms; (YR) once a year; (AY) alternating years; (OC) offered occasionally