OFFICIAL SYLLABUS

DISCIPLINE:  EDUC
COURSE:  639

A. Catalog Entry

EDUC 639: Early Field Experience for Science Education (Grades 6 – 12)
Abbreviation:  EARLY FLD EXP SCI ED
Prerequisites:  None
Co-requisites:  EDUC 506 Teaching and Learning Science
Credit Hours:  (3) Three Hours Practicum with Seminar

Brief Description of Course:
This practicum experience is taken in conjunction with EDUC 506 and is intended for the pre-service teachers to contextualize teaching within the secondary (grades 6 – 12) adolescent culture.

B. Detailed Description of Course

The student will take this three credit course designed to allow candidates to begin to develop and apply their content, professional, and pedagogical knowledge, skills and professional dispositions in a variety of settings. Students will use everyday materials to explore and practice effective science pedagogy to develop and demonstrate proficiencies that support learning by all students. These practices will utilize the National Science Education Standards and the Virginia Department of Education standards in planning and instruction.

1. Schools and Learners
   a. Concept of teaching middle and secondary students
   b. Philosophy of teaching middle and secondary students
   c. Characteristics of learners in middle and secondary grades
   d. Understanding the culture of schools
   e. Communicate with families and school personnel

2. Planning for Instruction
   a. Developmentally appropriate long and short term unit design

3. Diverse Learners
   a. Cultural, ethnic and special needs
   b. Learning styles
   c. Designing appropriate instruction
   d. Delivering effective instruction

4. Classroom Management
   a. Models
   b. Implementation
   c. Ongoing Challenges

5. Technology
   a. Integrating into long and short term planning

6. Impact of Learning on Students
a. Alternative approaches to assessment
b. Using assessment for planning instruction and monitoring student progress

C. Detailed Description of Conduct of Course

EDUC 639 is a clinical experience that requires students to design, implement, and evaluate projects related to the roles for which they are preparing. Candidates will learn to contextualize teaching and draw effectively on representations from the students’ own experiences and cultures. Students will be working with their supervising teacher to develop lesson plans and to deliver instruction specific to their content area. They will develop plans for instruction that implement the theories and research studied in their methods class (EDUC 506).

D. Goals, objectives and assignments in this class address the following National and State Standards:

VGC – Virginia Department of Education General Content
VPS – Virginia Department of Education Professional Studies;
TSIP – Technology Standards for Instructional Personnel
NSTA – National Science Teachers Association
NCATE – National Council for Accreditation of Teacher Education:
   1 b - Pedagogical Content Knowledge
   1 c - Professional and Pedagogical Knowledge and Skills for Teacher Candidates
   1 d – Student Learning for Teacher Candidates
   1 g - Professional Dispositions

By successfully completing this course, teacher candidates will be able to:

1. Incorporate state and national standards in planning and instruction (NSTA 6 a and b, VGC 1a, 2.d3a, 2.d3c, VPS 2, TSIP V, NCATE 1b)
2. Apply theories of learning and integration to science instruction and incorporating technologies in learning. Candidates will learn to contextualize teaching and draw effectively on representations from the students’ own experiences and cultures. (VGC 1b, 2.d5b, 2.d5f, VPS 2, TSIP I, II, III, NCATE 1b, 1c)
3. Plan instruction and assessments based on research of how children learn to include differentiated instruction for learners at different stages of development, abilities and select appropriate objectives, activities and teaching materials for science instruction. (NSTA 5 a, b, and c, VGC 1a, 1f, VPS 2, TSIP I)
4. Demonstrate an understanding of the nature of science and their unifying concepts of science such as: scale and model, form and function, organization, interactions, change and conservation. (VGC 2.d1, 2.d2b, VPS 2, NSTA 8a, b and c, NCATE 1b)
5. Apply classroom [and behavior] management techniques and individual interventions, including techniques that promote the emotional well being, maintaining behavioral
conduct consistent with norms, standards and rules of the educational environment. These techniques will address diverse approaches based upon behavioral, cognitive, affective, social and ecological theory and practice. (VPS 3)

E. Assessment Measures

- NCATE Task: Supervising teachers and professors will evaluate students as they carry out their professional duties utilizing the Early Field Experience Evaluation form and the Disposition of Candidates form.
- Students will create lesson plans appropriate for their placement
- Students will develop a Classroom Management project
- Other types of activities appropriate to the specific content areas.

F. Other Course Information

N/A