# ASSESS, CURRIC, TEACHING (ACTE)

ACTE 561: 4 s.h.

### Student Teaching in the Secondary Classroom

Taken in sequence with EDSE 572: Inquiry into Inclusive Classroom Instruction, ACTE 561 will provide a field-based experience for ACTE students who are seeking teacher certification. As part of the ACTE program, students will serve as the instructor of record in schools and University supervisors will provide formal observations in compliance with PDE regulations.

ACTE 625: 3 s.h.

### **Technology and Assessment for Learning**

Technology and Assessment for Learning is designed for the practicing teacher to fully realize the role of assessment as a foundation for student learning and growth. The incorporation of assessment practices and technology in the classroom is grounded in practical classroom applications. This course intends to provide in-service teachers with a set of assessment and technological strategies and tools that can be used to provide different paths for student achievement and enhance student learning.

ACTE 630: 3 s.h.

# **Current Technology for Online Instruction**

Students will develop skills in using current and emerging instructional technology to support online learning environments. Instructional design and assessment as well as national standards are used as a basis for planning and evaluating student-centered distance education. The methodologies and technologies used in the course are updated each semester according to current trends, practices, and research in the field of instructional technology.

ACTE 631: 3 s.h.

# Social Foundatns of Online Ed

A consideration of K-12 distance education from a social foundations perspective including philosophy of education, study of the history and evolution of distance education, public policy implications, economic implications, and other current issues in distance education. Students will complete an online field experience in a K-12 online environment.

ACTE 632: 3 s.h.

### **Online Learning Environments**

Students will examine methods of engaging students in online learning environments and ways to effectively foster communication and interaction between students, content and instructor. Current research studies will be used to inform the creation of online learning environments that supports and assesses student learning. Students will complete an online field experience in a K- 12 online environment.

ACTE 633: 3 s.h.

## Learners in Online Classrooms

Fosters teachers' understanding and ability to respond to various characteristics that impact students' learning within the online environment. Course content examines individual differences across learning, development, cognitive abilities, reading proficiency and student readiness for online learning, while acknowledging the influences of prior educational experiences, home environment, and necessary special education accommodations. Emphasis is placed on adapting instruction by working with students and their families, other community stakeholders, and additional professionals who support student learning and achievement.

ACTE 634: 3 s.h.

### Legal and Ethical Issues in Online Education

With the wealth of online learning tools and resources available, teachers need an understanding of the legal issues that impact their use with learners in the k-12 setting. This course addresses current legislation pertaining to the use of copyrighted digital media in the classroom, best practice in the use of online tools and applications with children over and under 13 years of age, and current controversies and legal challenges related to children's online behaviors. While the content of the course is updated every semester the course goal remains the same: to investigate the legal issues pertaining to the use of digital media and online tools in the classroom by teachers and students.

ACTE 635: 3,6 s.h.

# Instructional and Curricular Design for Online, Blended and Customized Instruction

This course is designed as an integrative, project-based experience for students. The course applies instructional design methodology to the development of online, blended and customized courses that are engaging, effective and in alignment with standards and best practices as identified by learning research. Participants will enact a unit of instruction as either the lead teacher or as an intern co-teaching role. Participants are guided through the process of conducting needs assessments; defining course goals and objectives; and designing instructional lesson plans, activities and materials, and assessments. Consideration is given to various models of online delivery, content organization and presentation, and design principles.

ACTE 640: 3 s.h.

### Universal Design for Learning: Curricular Access for All Students

The challenge and opportunity of individual differences confront every teacher, administrator, and curriculum designer. To meet that challenge and to capitalize on that opportunity, educators are typically equipped with media and materials that are "one size fits all" and that have been designed primarily for a narrow and illusive group of learners. In this course, we will explore an alternative approach—universal design for learning (UDL)—that creates curricula, informs instructional methods, and upholds learning environments that are designed to achieve success for a much wider range of student abilities and disabilities. To do that, the UDL approach takes advantage of advances in two fields: (1) the cognitive neuroscience of learning and individual differences and (2) the universal design of educational technologies and multimedia. This course will explore recent advances in both of these fields as they relate to content area instruction through appropriate readings and through media construction exercises designed to prepare and support participants to optimize the challenge of individual differences through universal design for learning.

ACTE 641: 3 s.h.

### **Foundations of Multiculturl Ed**

This course lays the foundational framework about knowledge of multicultural education. It offers an in-depth examination of the history and evolution of multicultural education. Definitions of multicultural education are presented as these were shaped by events in history. Topics will include the theoretical and pedagogical content knowledge of multicultural education and their connections to learning about diversity in secondary classrooms. Models and dimensions of diversity will be analyzed as these relate to stages of identity development within a global context.

### ACTE 642: 3 s.h.

### **Teaching About Diversity**

This course builds on the topic of diversity by examining multicultural issues in contemporary society and how they impact the educational system, equity, inclusion, and cultural tolerance. It will help candidates understand the positive attributes of pluralism and how this knowledge can be used effectively in the classroom and within schools to educate all children.

# ACTE 643: 3 s.h. Disciplinary Thinking

Effective teaching requires more than disciplinary content knowledge and an understanding of ways of knowing in the discipline. It also requires understanding of pedagogical content-specific knowledge that is uniquely helpful in the work of teaching. Studies of teaching have elaborated on pedagogical content knowledge to apply knowledge to specific content-related inquiry as well as the broad and flexible knowledge of how students think about content upon which to base instructional decisions that arise in unanticipated ways. This suggests that the disciplines are more than just accumulated bodies of knowledge or epistemic frameworks, but rather unique sets of ideas about what it might mean to generate knowledge, often referred to as the syntactic structure of the discipline. This course will engage students in the inquiry necessary to access the syntactic structure of their discipline and demonstrate their new knowledge in multiple modalities.

#### ACTE 650: 3 s.h.

### **Science Teaching and Learning**

Teaching and learning are inseparable, in that learning is the goal of teaching. Someone has not taught unless someone else has learned. Science teaching requires attention to both the content of the course and the process of moving students from their initial state of knowledge and understanding to a more informed way of knowing. Students in this course will critically examine the latest research about science teachers and learners and use this information to assess their current instructional practices. The emphasis of the course will be on gaining the skills necessary to improve inquiry teaching in science classrooms.

### ACTE 651: 3 s.h.

### **Science Curriculum and Reform**

The purpose of the course is to develop a better understanding of school science curriculum. This course examines literature that provides the foundation for modern reform in science education. With the past in the background and current issues in the forefront, the course analyzes the implications of reform initiatives for classroom practice with a focus on student learning. In class discussions we examine how different assumptions and perceived goals of science education influence what is taught, how it is taught, and how it is assessed and interpreted.

### ACTE 655: 3 s.h.

# Integrative STEM Education

Integrative STEM (iSTEM) education is a standards-based metadiscipline integrating Science, Technology, Engineering, and Math. This course examines the goals and outcomes of integrative STEM teaching and learning. iSTEM instruction is grounded in inquiry methodologies by using project-basad learning strategies, technological tools, equipment, and procedures in innovative ways. The goal of iSTEM instruction is to prepare students to address societal needs and challenges in order to compete in the global workforce by improving college-readiness skills, and increasing the number of students who may consider a career in a STEM-related field.

### ACTE 660: 3 s.h.

### Teach & Learn Secondary Ed

This course introduces candidates to a variety of evidence-based pedagogies appropriate for secondary classroom environments. Candidates will critically examine the syntax of instructional models that can be applied across a variety of content areas for the 7-12 classroom. Candidates will demonstrate their understanding of various teaching models and assessment strategies through the development of lesson plans and units in their content area. In addition, candidates will become engaged in critical analysis and evaluation of these instructional plans in order to develop a self-reflective approach to praxis.

### ACTE 699: 6 s.h.

### Inquiry for Teaching/Learning

Design, execution and communication of applied research in emerging fields of online teaching or STEM education. Two types of applied research may be pursued: (1) basic research using experimental, descriptive or other traditional research methodologies, (2) documented study of innovative curricular development. In either approach, candidates must demonstrate use of emerging technologies, effective instructional design and use of assessment data for improving curricular design. Permission of instructor required to register.

ACTE 700: 1 s.h.

Seminar 1

Seminar 1

ACTE 701: 1 s.h.

Seminar 2

Seminar 2

ACTE 702: 1 s.h.

Seminar 3

Seminar 3