

# **INSTRUCTIONAL MEDIA**

## **Instructional Media with Pennsylvania STEM Letter of Endorsement Option**

The Master of Science in Education with a major in Instructional Media is a fully online program that is offered in collaboration with Discovery Education.

This 30-credit program prepares teachers to engage today's students in learning through the use of cutting-edge instructional media resources from video to Web 2.0 to virtual fieldtrips. It will train educators to become specialists who can effectively blend academic rigor and research with the latest technology in digital media, capitalizing on their "Net Gen" students' strengths. Participants in the program will have access to the #1 non-fiction media brand in the world, Discovery Education, which transforms K-12 and Higher-Ed classrooms with the highest-quality content that empowers educators to measure and improve student achievement. Applicants to this program should follow the admission guidelines outlined earlier in this section.

While a state approved teaching certificate is not required for admission to this program, it is strongly encouraged that students have experience in an educational environment. Experience using technology is also recommended.

### **Program Learning Outcomes:**

1. Students will apply leadership skills in the area of technology integration through participation in professional networks and membership in the global educational community.
2. Students will examine research-based, pedagogically proven instructional strategies that promote student-centered learning.
3. Students will design lesson plans and instructional activities that require the communication of knowledge and understanding through technology integration.
4. Students will develop safe learning spaces that promote digital and global citizenship.

The requirements for this 30 credit degree are:

### **Foundations and pedagogy courses (21 credits)**

EDIM 500 Foundations for Future-Ready Students (3 credits)  
EDIM 503 Differentiation Supported by Technology (3 credits)  
EDIM 508 Instructional Strategies for Using Digital Content (3 credits)  
ED 521 Using Technology for Assessment (3 credits)  
EDIM 510 Targeting Higher Order Thinking Skills with Online Tools (3 credits)  
EDIM 509 Practical Research Through Teacher Inquiry (3 credits)

### **Elective courses (choose 12 credits)**

\*EDIM 502 Project-based Learning (3 credits)  
\*EDIM 513 Inquiry-based Learning (3 credits)

EDIM 515 Mobile Devices for Teaching and Learning (3 credits)  
EDIM 516 Responsive Digital Leadership(3 credits)  
\*EDIM 517 Practices & Implementation of STEM Education (10 hrs. field experience for PDE STEM Endorsement)(3 credits)  
\*EDIM 518 Creating a STEM Culture Through Application(10 hrs. field experience for PDE STEM Endorsement;  
Prerequisites- EDIM 502, EDIM 513, EDIM 517)(3 credits)

\*Courses marked with an asterisk are required for the Pennsylvania Department of Education STEM Letter of Endorsement. Students seeking the STEM Endorsement must possess a PA Level I or Level II teaching certificate.

PA certification and endorsement candidates will be recommended for certification upon successful completion of the required certification coursework, fieldwork, and internship. Candidates must self-register and pass the certification test, if required. Some certifications require verification of experience. In those cases, the candidate will need to have input from their school district verifying that they have satisfactory met professional school experience required. Application for certification and Endorsement is made by the candidate through the PDE Teacher Information Management System (TIMS) found on the PDE portal.

## **EDIM. EDIM**

### **EDIM-500. FOUNDATIONS FOR FUTURE-READY STUDENTS**

**Credits: 3**

This course will introduce students to national technology standards for students and guide them through experiences that will allow them to create pedagogical connections between the standards and their own educational experiences. Topics will include digital literacy, creating learners, networked learning, using multimedia to communicate effectively, and fostering innovation in students.

### **EDIM-502. PROJECT BASED LEARNING**

**Credits: 3**

This course will demonstrate to educators the benefits of project-based learning in the instructional environment. Strategies to transform learning into a more active, student-driven experience using technology tools for collaboration and connection to the world outside the traditional classroom will be explored.

## Instructional Media

### **EDIM-503. DIFFERENTIATION SUPPORTED BY TECHNOLOGY**

**Credits: 3**

This course will provide educators with techniques for using technology to help create a stimulating, effective classroom for all students including English language learners, special education students and students with a variety of learning styles. Specific challenges and processes for managing a differentiated instructional setting with accommodations for alternative teaching, learning and assessment will be discussed and researched. Students will explore the use of various technological tools to differentiate assessment of students' understanding and learning by using various assessment strategies such as instructional rubrics, student reflections and portfolios. Using technology to manage ongoing assessment for diverse learners will be explored.

### **EDIM-508. INSTRUCTIONAL STRATEGIES FOR USING DIGITAL CONTENT**

**Credits: 3**

This course is designed to help educators effectively integrate digital resources within their core academic content. Through weekly activities and discussions, educators will learn practical ways to use digital content along with research-based instructional strategies to support students' learning outcomes.

As a culminating project, participants author and reflect upon an original instructional strategy that they present to their colleagues.

### **EDIM-509. PRACTICAL RESEARCH THROUGH TEACHER INQUIRY**

**Credits: 3**

In this course, students will identify a topic for which they will design, implement, and analyze a teacher inquiry research project. The culminating project will include a literature review, inquiry brief, written analysis and reflection.

### **EDIM-510. TARGETING HIGHER ORDER THINKING SKILLS WITH ONLINE TOOLS**

**Credits: 3**

This course will provide students with a broader understanding of the pedagogical models that support higher order thinking skills. Topics focus on the study of technologically-based pedagogies, investigation into emerging technologies, and the creation of assessments at each level of Bloom's Revised Taxonomy, with a concentration on the Analyzing, Evaluating, and Creating levels. Students will also create an online portfolio intended to be used by other educators to learn about this topic.

### **EDIM-513. INQUIRY BASED LEARNING**

**Credits: 3**

Inquiry-based instruction is a powerful way for students to learn through active engagement with their environment. Teachers who engage in this form of instruction orchestrate a learning environment that allows students to develop deep understanding and enriched knowledge about selected topics. Inquiry should be one of the methodologies that teachers employ in meeting the challenges of today's academic expectations. We live in an era of rapidly expanding knowledge, which highlights the need for students to be lifelong learners. Inquiry skills support students' abilities to question and methodically investigate a wide range of subject matter. This course will explore Inquiry as a teaching technique, utilizing technology to support the various stages of the process.

### **EDIM-515. MOBILE DEVICES FOR TEACHING AND LEARNING**

**Credits: 3**

This course will provide students with a greater understanding of how to foster creativity in the classroom and the use of smartphone and tablet apps for creating student assessments that showcase that creativity. In addition, the components of inventiveness – fluency, flexibility, elaboration, and originality —will be introduced, studied, and discussed.

### **EDIM-516. RESPONSIVE DIGITAL LEADERSHIP**

**Credits: 3**

This course will provide students with a greater understanding of leadership in a digital age by focusing on new trends and issues in education related to technology. Specifically, it will explore the need to build networks as part of sustaining digital literacy. In addition, students will develop skills and dispositions in engaging in conversations around change and innovation.

### **EDIM-517. PRACTICES AND IMPLEMENTATION OF STEM EDUCATION**

**Credits: 3**

This course examines the need for STEM education, framing the development of a personal, applicable definition in practice. Special emphasis on instructional practices, student outcomes (communication, creativity, collaboration and critical thinking) and connections to content standards will be made. Students will create and evaluate STEM activities, lessons and assessments as they develop an understanding of STEM implementation.

### **EDIM-518. CREATING A STEM CULTURE THROUGH APPLICATION**

**Credits: 3**

This course establishes the importance of developing a STEM culture through the design, application and evaluation of relevant, student-centered units embedded with community and career connections. A transdisciplinary approach to integrating STEM practices will be explored.