

# **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. The student will demonstrate leadership skills as they apply the concepts of globalization and creativity to the design of effective technology integration in the classroom.
2. The student will develop skills to create authentic and differentiated learning experiences in the classroom through the implementation of technology and digital resources.
3. The student will demonstrate effective skills in digital media production, editing, and sharing that are consistent with appropriate utilization and fair use guidelines.
4. The student will demonstrate the ability to develop effective assessments for student work that incorporates digital media and various technology resources

The requirements for this 30 credit degree are:

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

EDIM 500 Foundations for Future-Ready Students (3 credits)  
EDIM 501 Cognition and Technology: Aligning Brain-based Research and Technology Integration (3 credits)  
EDIM 502 Project-based Learning (3 credits)\*  
EDIM 503 Differentiation Supported by Technology (3 credits)  
EDIM 504 Digital Storytelling (3 credits)  
EDIM 507 Globalization and Advocacy (3 credits)  
EDIM 508 Digital Media in the Classroom (3 credits)  
ED 521 Using Technology for Assessment (3 credits)

### **Elective courses (choose 9 credits)**

EDIM 510 Web 2.0 Impacting Learning Environments (3 credits)  
EDIM 511 Portable Video Production and Application (3 credits)  
EDIM 515 BYOD: Mobile Devices for Teaching and Learning - Previously titled BYOD: Mobile Learning in Education (3 credits)  
EDIM 516 Sustaining Digital Literacy (3 credits)

EDIM 517 Practices and Implementation of STEM Education (3 credits; 10 hours of field experience)\*

EDIM 518 Creating a STEM Culture Through Application (3 credits; 10 hours of field experience)\*

ED 5083 Common Core Standards in Practice (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-501. COGNITION & TECHNOLOGY: ALIGNING BRAIN BASED RESEARCH & TECHNOLOGY INTEGRATION**

**Credits: 3**

This course provides in-depth study of the processes required for students to process information, including perception, attention, memory, encoding, retrieval, problem solving, and the information processing requirements of reading and writing. How brain-based theory can be incorporated in the classroom using technology will be covered.

### **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-504. DIGITAL STORYTELLING**

**Credits:** 3

This course will demonstrate how audio, video, and interactive elements can complement and enhance classroom instruction. Students will understand the principles of digital storytelling and how this process can be used in the classroom. Students will develop storyboards and create rubrics for evaluating digital stories. Various software used for digital storytelling will also be explored.

### **EDIM-507. GLOBALIZATION AND ADVOCACY**

**Credits:** 3

This course examines the impact globalization and technologies have on education and the need for educators to adapt to the changing needs of a global society. In addition, the importance of advocacy and how it can affect change will be examined.

### **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. WEB 2.0: TARGETING HIGHER ORDER THINKING SKILLS WITH ONLINE TOOLS**

**Credits:** 3

Students learn the core concepts of Web 2.0 and how it is impacting learning environments. The course focuses on Web 2.0 technologies and how these tools are shaping education by allowing users to publish and interact in new and different ways. Topics include social networking technology and online collaborative tools such as blogs, wikis, etc.

### **EDIM-511. PORTABLE VIDEO PRODUCTION & APPLICATION**

**Credits:** 3

This course provides a comprehensive introduction to the use of portable video recording and editing devices. Students will learn camera techniques and terminology. Applications for classroom integration will also be explored.

### **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-514. INTERNET TOOLS FOR TEACHING**

**Credits:** 3

The course will explore an array of powerful tools and standards-based resources that will help educators move their students to proficiency and beyond. Tools that make the development of high quality lesson-plans, assignments, writing prompts, quizzes, and surveys easier for educators will be presented. Topics will also include the exploration of resources like classroom uses of the high-speed data transfer provided by Internet2 and the educational opportunities of virtual field trips.

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

**Credits:** 3

This course will highlight significant ways that mobile devices can help to enhance and extend classroom learning. It will also address the unique challenges that schools face when adopting students' own devices as learning tools. Research and practical K-12 examples will be provided to support and address the many nuances of using mobile devices in the classroom. Previously titled BYOD: Mobile Learning in Education.

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

**Credits:** 3

This course will provide students with a greater understanding 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.