



## GRADUATE CERTIFICATE IN **Instructional Design and Technology**

### Certificate Description

**This certificate provides experienced educators who possess a bachelor's degree the ability to enhance specialized knowledge of Instructional Design and Technology.**

**Foundations and Models of Instructional Design—EDU 621**—This course provides a foundation for the practice and evaluation of instructional design as well as an in-depth elaboration of standard instructional design models and associated methodologies. Course includes strategies for development of objectives, taxonomy classification schemes, content analysis procedures, and instructional strategy selection, as well as adaptation and adoption of available resources.

**Outcomes:**

- Describe instructional design as a discipline and distinguish it from curriculum design
- Using the ADDIE or HPT model develop a design document.
- Describe the needs analysis process and distinguish an instructional need from an organizational/business need
- Define and develop cognitive learning objectives using Bloom's Taxonomy and discuss instructional intervention strategies; match instructional activities and content to the appropriate cognitive level of Bloom's Taxonomy
- Identify, describe, compare, and contrast instructional design models.
- Describe formative and summative evaluation and discuss the purpose of criterion referenced assessments.

**Instructional Media and Learning Environments—EDU 631**—This course introduces students to foundational concepts and skills for personal and professional use of technology, including productivity software. This course explores instructional technology including definition and components of design and development. The use of technology in the classroom as well as distance learning is covered.

**Outcomes:**

- Evaluate instructional media in the context of the learning process.
- Create the instructional media selection process.
- Compare and contrast the attributes of synchronous and asynchronous instructional media.
- Evaluate the uses of instructional media in the delivery of content for traditional classroom and distance learning applications
- Develop an instructional media plan for a selected learning environment (K-12, higher education, or corporate/government training).



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**Designing for Computer Mediated Learning—EDU 641**—The course examines the use of computer-mediated learning environments in classroom, lab and distributed learning contexts. Students will work on specific projects related to their field of practice, creating computer-based instructional materials reflecting problem definition, learner analysis, objectives specification, criterion tests, construction, strategies selection, formative validation, and evaluation. Attention is given to ethical and legal issues regarding the appropriate use of copyrighted material.

**Outcomes:**

- Conduct a needs analysis and performance gap analysis to identify a knowledge gap.
- Based on the needs analysis, develop a training intervention strategy to bridge the knowledge gap
- Based upon the training intervention solution, develop an instructional design document that integrates the use of a computer-mediated learning module.
- Based upon the instructional design document, develop an e-learning storyboard supporting the use of a computer-mediated learning module.
- Evaluate synchronous and asynchronous instructional media that can be used to deliver a training intervention solution.

**Online Learning: Design and Development—EDU 651**—This course explores the organization, development, and delivery of distance learning programs. Additionally, this course explores course logistics, technology applications, and student management systems. Students will engage in discourse with instructors, peers, and other experts while creating Internet resources to be used in their own educational settings. By the end of the course, students will have an electronic portfolio of their work and be prepared to assume leadership roles within their specific contexts related to technology.

**Outcomes:**

- Evaluate the impact the Internet has on the design of an online instructional module or online course.
- Assess the potential uses of Web 2.0 collaborative tools in an online learning environment.
- Assess the utility and efficacy of social media used in an online learning environment.
- Utilizing a commercial instructional authoring system, develop an online learning module that will be used to deliver a training intervention solution.
- Explain the opportunities and challenges involved in the selection, development, design, and delivery of a distance learning solution
- Evaluate the use of Learning Management Systems (LMS) and/or Learning Content Management Systems used to support the education/training/learning function in a K-12, higher education, or corporate/government training organization.