INSTRUCTIONAL TECHNOLOGY (IX)

IX500: Foundations of Instructional Technology
This course focuses on the field of instructional technology, placing the field within the context of its history, current practices, and future directions. It provides the conceptual framework for other courses within the degree program.
Quarter Credit Hours: 5 | Prerequisite: None

IX510: Instructional Design
This course presents the philosophical and theoretical foundation of instructional design. Students explore instructional design process models commonly used by practitioners. They will apply the stages of a process model to create design documents in the education and training contexts. The model will address instructional analysis, assessing learning from instruction, media characteristics and selection, managing instruction, formative and summative evaluation, and the motivational design of instruction.
Quarter Credit Hours: 5 | Prerequisite: None

IX520: Needs Assessment and Evaluation in Education and Training
This course presents the knowledge and skills necessary to identify training and/or instructional problems and potential solutions. You will explore the advantages and disadvantages of multiple techniques for performing a needs assessment. You will develop skills and collect resources related to the selection and use of analysis methods. You will conduct a needs analysis and submit a report in an education or training context. You will also consider evaluation taxonomies and models, tools, and techniques, and develop an evaluation strategy for an instructional program.
Quarter Credit Hours: 5 | Prerequisite: None

IX535: Developing Instructional Materials
This course provides the knowledge and skills required to develop instructional materials for an instructor-led training scenario as approved by the instructor. This training scenario will provide the context and focus for the materials. Each student will create a series of print-based instructional materials for this scenario considering best practices and design and development guidelines.
Quarter Credit Hours: 5 | Prerequisite: None

IX536: Design and Development Tools
In this course, you will discuss trends and issues of eLearning content development and explore a variety of web-based design and development tools and methods. You will consider the technical and development requirements for eLearning delivered through multiple learning channels and investigate the application of social media tools within education. You will also design original content using web-based authoring tools and software applications.
Quarter Credit Hours: 5 | Prerequisite: None

IX540: Research Methods
This course presents an overview of the educational research process and the importance of research to education. The course lays the foundation for conducting research focusing on the characteristics and terminology of research, appropriate ethical considerations involved in the protection of human subjects, proper APA formatting of citations and references, plagiarism issues, and the steps in finding scholarly articles for a review of the literature.
Quarter Credit Hours: 5 | Prerequisite: None

IX542: Multimedia Development and Implementation
This course provides an introduction to the design, development, and evaluation of multimedia in different learning contexts. You will acquire fundamental knowledge and skills essential to the design and development of effective media projects. You will examine and critique multimedia-based learning experiences. The course explores tools to produce online instructional materials composed of audio, graphics, and video.
Quarter Credit Hours: 5 | Prerequisite: None

IX550: Project Management and Implementation in Education and Training
This course presents approaches to project management for education and training projects. You will explore concepts of project management and leadership, tools, procedures, and methodologies. You will focus on creating, monitoring, and reporting project plans from the proposal to the implementation stages. You will consider project constraints including time, cost, resource allocation, and scope. Concepts of change management are also explored and applied to implementation strategies used in education and training environments.
Quarter Credit Hours: 5 | Prerequisite: None

IX555: Design of Learning Environments
This course presents activities related to the design of a learning application. You will explore advantages and disadvantages of multiple learning environments and content delivery technologies. You will develop a plan for an individualized learning project that includes a template for design of a specific environment. Course topics include education and communication theory, course and content delivery methods, asynchronous and synchronous technologies, multimedia design, usability testing, and integration of multimedia objects within instructional programs and systems.
Quarter Credit Hours: 5 | Prerequisite: None