Course Descriptions for Instructional Design and Technology:

Instructional Design and Technology Core Courses:

**IT 700 FOUNDATIONS OF INSTRUCTIONAL TECHNOLOGY:** (3 credit hours)
This course is intended to provide students with a clear picture of the field of instructional design and technology, the trends and issues that have affected it in the past and present, and those trends and issues likely to affect it in the future.

**IT 710 WEB DESIGN:** (3 credit hours)
This course is an introductory level webpage design course. As you progress through the class, you will be introduced to the basic commands that will get you started in designing a webpage for instruction, training or corporate use. This course will provide you with theoretical and practical understanding of the various applications of website design and development. The course will help you to develop fundamental computer literacy skills using website application software, with an emphasis on acquiring problem solving and development through readings, discussions, and hands-on activities.

**IT 800 INSTRUCTIONAL DESIGN:** (3 credit hours)
This course presents a systematic method for the planning and development of instructional programs. In addition to examining the research supporting contemporary methods of instructional design, students will apply instructional design principles to the development of a text-based instructional program.

**IT 810 MULTIMEDIA DESIGN:** (3 credit hours)
This course presents a review of the systematic design of instruction as well as an overview of the use of multimedia instructional programs in education. The primary focus of the class is the application of instructional design principles to the development of a multimedia instructional program using a variety of presentation media.
IT 820 DESIGNING AND DEVELOPING WEB-BASED INSTRUCTION: (3 credit hours)
Students in this course will design and develop an instructional product in digital format for delivery via the World Wide Web. The course will include a review of the literature specifically related to web-based design theory. Various models of distance education systems are identified and contrasted with an emphasis on web-based instruction.

IT 830 CONTEMPORARY ISSUES IN DISTANCE EDUCATION: (3 credit hours)
This course is a web-based course to teach and inform teachers and other professionals about distance education and the special needs/concerns of delivering instruction via a distance. This course is less about the mechanics of the technology; rather it is more about the research and ideology behind current, effective distance education. Issues such as addressing learner needs, fostering an interactive learning environment, creating dialogue between near and far site students, and dealing with technological difficulties will be researched, discussed and debated.

IT 899 MASTERS PROJECT/THESIS IN IDT: (3 credit hours)
(Prerequisite, IT800 and consent of instructor or department chair.) This course is designed to facilitate the completion of the capstone project/thesis. Completion of the project/thesis will require the student to demonstrate/defend in an open forum the culminating Instructional Design project/thesis. The project/thesis will be conceptualized in consultation with the advisor, approved by the advisor, updated, and refined as the student completes class work during the course of study. The final project/thesis will form a coherent package integrating the student’s instructional design and technology experiences and research related to anticipated or ongoing professional responsibilities. Project/Non-thesis Track requires 3 hours of IT 899; Thesis Track requires 6 hours of IT 899.

IT 743 LEARNING THEORIES FOR INSTRUCTIONAL DESIGN: (3 credit hours)
*Recommended substitute for PY 805 and PY 722.*
This course prepares students to translate the theoretical basis of instructional design to the practice of designing and developing technology-based instruction/technology-rich instruction. It examines the application of foundational theories of instructional design (learning theories, and instructional theories) to the development of technology-based/technology-rich learning materials.

PY 805 PSYCHOLOGY OF THE ADULT LEARNER: (3 credit hours)
This course will provide a foundation in major theories of cognition and of learning (i.e., thinking, problem solving, and memory). Students will also examine real-world application research in adult instruction and training. Because class will consist of discussions, students must peruse required readings prior to posting. Students should be able to think critically about cognition and become effective practitioners who are able to apply theory and research to their masters'
discipline. Upon completion of this course, students will have an understanding of the basic psychological principles on adult learning and thinking processes.

**PY 722 THEORIES OF LEARNING**: (3 credit hours)
The major theories of learning are analyzed, compared, and evaluated in light of current research.

**IT 743 RESEARCH IN INSTRUCTIONAL DESIGN AND TECHNOLOGY**: (3 credit hours) - *Recommended substitute for ER 752 and PY 520.*
This course explores research in the field. Students become familiar with the field's literature and develop proposals related to their own personal, potential future IDT projects.

**ER 752 ANALYSIS OF RESEARCH**: (3 credit hours)
An appraisal of current and past research studies. Study of research designs, methods of collecting data, and techniques for analyzing results is emphasized to the extent that they relate to individual interests and needs. Designed to cover major areas of research for students that do not write a thesis.

**PY 520 STATISTICS I**: (3 credit hours)
This course introduces students to both descriptive and inferential statistics including mean, standard, deviation, variance, sum, squares, correlation, line, and, regression, sampling distributions, hypothesis testing, T-Test, and analysis of variance.

**Instructional Design & Technology Elective Courses**:

**IT 712 MOODLE LEARNING MANAGEMENT SYSTEM TRAINING**: (3 credit hours)
Moodle, an open source learning management system, is rapidly being deployed in K-12 schools, community colleges, universities and corporate training environments around the world. Through this course, participants will experience Moodle's features firsthand as a learner. Then, as a course creator, course participants will use Moodle to build their own course. Course discussion will include tool selection; effective course design; and facilitating a collaborative, constructive learning environment.
IT 713 DIGITAL GAME-BASED LEARNING: (3 credit hours)
The digital game revolution has spawned an entertainment industry that is bigger
than the movie and music industry. It is now starting to impact education in a
major way. In this course, after analyzing this evolving revolution, we will identify
how games teach and why they work. Case studies and examples of game-
based learning programs will be reviewed. The roles of teachers and trainers in
implementing digital game-based instruction will be addressed. Students will then
create a digital game-based instructional program.

IT 714 TEACHING AND LEARNING WITH MOBILE DEVICES: (3 credit hours)
This course provides a comprehensive look at the possibilities and potentials of
integrating mobile devices into teaching and learning. In this course, students
will research and evaluate the use of, as well as integrate, mobile devices into
teaching and learning. Students will identify challenges and opportunities
involved with teaching and learning with mobile devices, explore and evaluate
mobile applications and systems, as well as design mobile technology-enhanced
instruction.

IT 716 LESSON PLANS FROM THE INTERNET: (3 credit hours)
Lesson Plans from the Internet is designed to assist teachers in locating
resources from the Internet to assist in lesson planning and creation. Students
will critically evaluate characteristics of effective searching on the Internet using
current search engines; identify characteristic of effective, useful lesson plans;
evaluate characteristics of valid web resources; utilize appropriate Internet
resources in order to become a more effective planner. Students will also use
electronic resources to send and retrieve files and collaborate online with
colleagues at a distance.

IT 718 POWERFUL PRESENTATIONS IN POWERPOINT AND PREZI: (3 credit hours)
Take your presentations to the next level by creating captivating slides, animation
effects, and graphics with presentation software. Learn how to create custom
designed slides, format pictures and graphics, illustrate ideas with SmartArt,
display data with charts and graphs, develop sophisticated animation sequences,
use advanced drawing tools and create slides that encourage audience
interactivity. We will also investigate basic design principles, delivery techniques
and strategies from master presenters.

IT 719 TEACHING AND LEARNING WITH PHOTOSHOP: (3 credit hours)
Learn cool special effects using Adobe Photoshop Elements; jazz up your
instructional images for enhancing learning whether in the classroom or a
corporate setting. Do you know ineffective image use can actually depress
learning? Find out how to use proven instructional design strategies based on
current research and theory. Plan, design, and evaluate effective visuals for
maximizing learning potential and performance. Use graphics to support the
application of knowledge and skills through visual design, psychological
functions, surface features, instructional communication functions, and the communication environments. The course will include both theory and practical instructional design applications.

**IT720 DIGITAL STORYTELLING:** (3 credit hours)
Digital Storytelling takes the timeless art of storytelling to a new level by using easy to learn software to create and tell captivating stories. After learning the basic elements of powerful script writing and storyboarding, students will translate these into digital media that speak to the emotions. This powerful new way of communicating is a great way to reach out and share stories with a growing “YouTube” Generation.

**IT 723 VISUAL LITERACY:** (3 credit hours)
This course will aid students in the interpretation of visual messages and application of basic principles of visual literacy communication and problem solving, especially, but not limited to, the educational setting. There will be class discussions to reflect upon the theory of visual literacy and share responses to various activities. The culmination of the class will be a usable student generated project involving visual literacy skills.

**IT 726 ACCESSIBILITY AND UNIVERSAL DESIGN:** (3 credit hours)
Students in this course will design and develop a project that includes the essential elements of Universal Design for Learning (UDL) using technology. The course will include a review of the literature specifically related to accessibility & UDL. Students will be able to identify learner needs and plan curriculum that will include accessibility to learning for all.

**IT 727 INTEGRATING EDUCATIONAL TECHNOLOGY INTO TEACHING:** (3 credit hours)
This course is designed to enhance and extend the technology skills of practicing educators, apply those skills in innovative ways, and create lesson plans that support collaborative, project-based learning. It examines the theoretical and philosophical underpinnings required to transition to a technology-rich classroom. Practical ideas, suggestions and lesson plans to ensure successful technology integration will be provided.

**IT 743 ACTIVE LEARNING THROUGH MAKERSPACES:** (3 credit hours)
3-D printers, robotics, programming, wearable computing, and Raspberry Pis are capturing the imaginations of today’s students. When new and emerging technologies combine with hands-on traditions, your classrooms become a makerspace. This course enables students to learn about makerspaces, how to create one in the classroom or other venue, and different methodologies styles including competency-based learning and problem based learning. Students will also have the opportunity to make your own makerspace project in the course.
IT 743 ADOBE AFTER EFFECTS: (3 credit hours)
This course will give you an introduction to Adobe After Effects. This course will highlight ways it can be used to enhance videos for eLearning projects for corporate, academic, or any other online learning/training setting. This course will cover effects that come pre-built with the software as well as explore some third-party plugins. Students will discuss the ways different effects can be incorporated into the learning environment. Students will also produce weekly projects that will build upon each other to produce their final project.

IT 743 ARTICULATE STORYLINE: (3 credit hours)
Introduction to Articulate Storyline, presents a systematic method for the planning and development of a course using the Articulate Storyline platform. Students will examine the features and capabilities of the platform, develop a course using proper instructional design methodology, identify additional resources and reference for continued learning and improvement. Students will use previous knowledge and experience to ensure each sample course uses the proper research, theory, and principles supporting contemporary methods of instructional design as well as analyze and apply instructional design principles to specific instructional design cases and problems. The course will culminate with a final publication of each student’s project.

IT 743 AUDIO AND SOUND IN ELEARNING: (3 credit hours)
This course is a look into incorporating audio and sound into eLearning projects for corporate, academic, or any other online learning/training setting. This first half of the course will critically analyze the use of audio as an enhancement to the online learning process and the second half will be a more hands-on technical approach to recording and editing audio using sound editing/processing software.

IT 743 CANVAS LEARNING MANAGEMENT SYSTEM: (3 credit hours)
This course presents Canvas Learning System as a medium for content delivery. Students will examine research about learning management systems, discuss Canvas setup issues, as well as how to use Canvas from both the learner and instructor perspectives. By the end of the course, students will be able to load a variety of instructional media into the Canvas system as well as use the content, assessment, and communication tools. The course will culminate with an instructional unit developed using Canvas as the delivery medium.

IT 743 SCENARIO-BASED LEARNING: (3 credit hours)
This course will address methods to convert traditional eLearning presentation into animated scenario-based eLearning. This will include all aspects of scenario design and scriptwriting as well as exploring the latest trends in eLearning animated presentation such as avatars and animated whiteboarding.
IT 743 TECHNOLOGY MANAGEMENT: (3 credit hours)
This course introduces students to "behind-the-scene" dimensions of instructional technology found in educational institutions and other public or private workplaces. Students will examine those issues, policies, and practices which impact heavily upon the life and success of instructional technology innovations in both the public and private sector. Topics will include: the role of leader, educational planning, project management, assessment and evaluation, and other emerging topics in technology leadership.

IT 743 WEB 2.0 COLLABORATION TOOLS: (3 credit hours)
Keep up to date with cutting edge trends using Web 2.0 Collaboration Tools. You will have a chance to research, explore, and create your own Web 2.0 tools related to your instructional design interest area. Web 2.0 tools provide the optimal digital media for reaching a new generation of learners. Join us to pick up some new tips and tricks for teaching and learning.

IT 743 VIRTUAL LEARNING ENVIRONMENTS: (3 credit hours)
This course explores the theory and implementation of virtual environments for improved instructional engagement. More specifically, this course covers not only the foundations of virtual environments, but also how we can use this emerging learning environment to improve specific domains of teaching and learning, such as math, science, social science and language learning, special education and more. Characteristics of digital generations, social and cultural implications of using these new media, and drawbacks of using them will also be discussed.

IT 850 CORPORATE ELEARNING: (3 credit hours)
This course will concentrate on the application of instructional design principles and eLearning development tools for the corporate eLearning environment. This will include application of theory in settings that demand communication skills and teamwork to develop corporate eLearning education. Examples include designing and developing educationally unique approaches to compliance, job specific, and other directed types of corporate training.