

# Instructional Design and Technology (IDT)

## Courses

### IDT 500. Survey of Instructional Design. 3 Credits.

This course provides students with an in-depth overview of the field of Instructional Technology. Topics include the history and critical issues of the field; a description of instructional design; applications of instructional technology, and associated areas of research.

### IDT 510. Technology-Based Instruction: Applications and Methods. 3 Credits.

A study of the various methods for using technology to deliver and/or support instruction: tutorials, drills, simulation, interactive video, instructional games, intelligent computer-based instruction, performance support systems, job aids, testing, distance learning, intelligent tutoring systems, and instructional management systems.

### IDT 520. Instructional Systems Analysis and Design. 3 Credits.

The first course in a two-course required sequence, IDT 520 is a study of methodologies for analyzing and designing instruction. Topics include needs analysis, job/task analysis, and assessment of instructional outcomes. IDT 525 is the second required course in this two-course sequence.

### IDT 525. Development, Implementation, and Evaluation of Instructional Materials. 3 Credits.

This course focuses on the development, implementation, and evaluation of instructional materials that have been created according to instructional design principles. The second course in a two-course sequence, this course completes the instructional design process begun in IDT 520. After completing this two-course sequence, students will have the skills needed to conduct the full instructional design process in a variety of settings, and with a variety of learners, modalities, and domains. Prerequisite: Program major or permission of instructor; IDT 520.

### IDT 530. Introduction to Computer-Based Instruction. 3 Credits.

An examination of the technology (hardware and software) for developing and delivering computer-based instruction (CBI). A study of the characteristics of high-quality CBI, addressing such topics as program structure, user interface, navigation, message/screen design, use of graphics, response analysis, feedback strategies, error checking, branching, and computer-managed instruction. Prerequisite: IDT 520.

### IDT 535. Advanced Computer-Based Instructional Development. 3 Credits.

This course is designed to extend the CBT/CBI design and development skills acquired in IDT 530. Students will study advanced CBT/CBI techniques and applications such as artificial intelligence, intelligent tutoring systems, electronic performance support systems, authoring tools, learning objects, pedagogical agents, SCORM compliant programming, simulations and games, the use of CBT/CBI for research purposes, and learning management systems (LMS). In addition to studying these areas, students will build a CBT/CBI unit that implements one or more of these applications. Prerequisite: Program Major; IDT 530.

### IDT 540. Digital Media and the Internet in Schools. 3 Credits.

This course builds on the theories and approaches to technology integration first introduced in IDT 510. Students will gain practice developing lesson plans and examples of student artifacts with specific media such as digital video, digital audio, digital photography, and the Internet. Students will gain competency in generating and using media according to the principles of technology integration, rather than technology use. Prerequisite: IDT 510 and IDT 520.

### IDT 545. Instructional Simulations and Games. 3 Credits.

This course provides an in-depth study of the theoretical, philosophical, and practical issues surrounding the use of simulations and games in learning environments. Methods and approaches for integrating commercial games into learning environments and for developing new simulations and games around content will be examined. Prerequisite: Program major or permission of instructor.

### IDT 549. Graduate Seminar in Instructional Design and Technology. 3 Credits.

Seminar on critical reading and writing related to scholarship in the field of Instructional Design and Technology. Prerequisite: Program major or permission of instructor.

### IDT 550. Theories and Models of Instructional Design. 3 Credits.

This course focuses on pedagogical theories from education and psychology as they relate to instructional design, and on alternate models of instructional design. Topics include epistemological views of knowledge, major schools of thought on the nature of learning, a survey of instructional and learning theories, and a survey of instructional design models. Particular emphasis is placed on the interrelation of theories, models, and practice in the field of instructional design. Prerequisite: Program major or permission of instructor.

### IDT 560. Instructional Design Consulting. 3 Credits.

This course trains students in the theoretical, (e.g., needs analysis, change agency, data-driven decisions, solution specification) and practical (e.g., management of client relationship, project management skills, budgeting) of instructional design consulting. Role-play, response to an RFP, and discussion of modern approaches to managing the consulting process will be primary activities in this course. Prerequisite: Program major or permission of instructor; IDT 520.

### IDT 570. Human Performance Technology. 3 Credits.

An overview of the Human Performance Improvement (HPI) and Human Performance Technology (HPT) models and processes. Particular emphasis on determining whether instructional interventions or performance improvement interventions are called for, models and techniques for identifying performance gaps, specifying solutions, measuring results, and managing or adjusting the improvement. Job aids, electronic performance support systems, authoring tools, and other performance technologies will be covered. Prerequisite: IDT 500 and IDT 520.

### IDT 580. Introduction to Web-Based Instruction. 3 Credits.

This course trains students to design and develop web-based instruction, including basic web site design tools and theory, design and development of online learning with course management systems, supporting technologies in web-based instruction, pedagogical approaches to the design and development of online learning environments. Prerequisite: Program major or permission of instructor; IDT 520.

### IDT 584. Internship in Instructional Design and Technology. 2-4 Credits.

The internship is a culminating experience in which the student assumes responsibility for an instructional design and technology project. Repeatable to 4 credits. Repeatable to 4.00 credits.

### IDT 590. Special Topics in Instructional Design and Technology. 1-3 Credits.

An in-depth study of a selected topic in instructional design and technology. Topics will vary with faculty expertise and current issues. Some topics would include simulations, instructional applications of the World Wide Web, performance support systems, adaptive testing, intelligent tutoring systems, and hypermedia applications. Repeatable to 3.00 credits.

### IDT 591. Readings in Instructional Design and Technology. 1-3 Credits.

Selected readings with oral and written reports.

### IDT 592. Research in Instructional Design and Technology. 1-3 Credits.

Supervised research in areas of student interest. Repeatable to 3.00 credits. F,S,SS.

### IDT 593. Directed Studies in Instructional Design and Technology. 1-3 Credits.

Individual project work in the design and development of technology-based instruction. All projects will require a final report. Repeatable to 3 credits. Repeatable to 3.00 credits.

### IDT 995. Scholarly Project. 2 Credits.

The scholarly project demonstrates critical analysis and application of information and experiences gained throughout the program of study.

### IDT 996. Continuing Enrollment. 1-12 Credits.

Repeatable. S/U grading.

### IDT 997. Independent Study. 2 Credits.

The independent study requires the student to investigate a topic related to the major field of study and to prepare a formal report summarizing this investigation.

**IDT 998. Thesis. 4-9 Credits.**

The thesis is an original research project completed. Repeatable to 9 credits.  
Repeatable to 9.00 credits.

**IDT 999. Dissertation. 1-12 Credits.**

Students work on the dissertation / doctoral capstone project. Prerequisite:  
Consent of the advisor. F,S,SS.