

# INSTRUCTIONAL SYSTEMS DESIGN TECHNOLOGY (ISDT)

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## **ISDT 5088. Special Topics Instructnl Tech. 1-3 Hours.**

This course presents the instructional, technical and management issues evident in instruction and learning offered via distance delivery systems. Various delivery systems and technology tools within those systems will be studied and critiqued to evaluate the effectiveness of each. The course highlights effective online course design and delivery with an attention to the learning resources and strategies evident in successful online teaching and learning. Variable Credit (1 to 3).

## **ISDT 5319. Critical Anlysis-Instruc Sftwr. 3 Hours.**

Students examine the instructional and educational value of commercially available software for the pre-k through 12th grade and enterprises. Students build upon a foundation of instructional theory to identify appropriate characteristics of instructional software and explore the effectiveness of instructional software in the classroom. This course may not be counted toward the M.S. in Computer and Information Science, Information Assurance and Security or Digital Forensics.

## **ISDT 5336. Educational Multimedia. 3 Hours.**

Students explore the uses of multimedia in the classroom and extend the teachers' skill base in the development of appropriate multimedia examples to support and enhance the middle school and high school curricula. Throughout the course, students gain experience in still and motion digital editing, and audio and animation production. This course may not be counted toward the M.S. in Computer and Information Science, Information Assurance and Security or Digital Forensics.

**Prerequisite:** Graduate standing.

## **ISDT 5337. Desgn Instructnl Mat For Web. 3 Hours.**

Students examine the development of websites for instructional purposes. Students explore the systematic design of instruction, a process that examines the development of appropriate course goals, the identification of measurable objectives that meet those goals, and intelligent approaches to assessing student performance. This design approach is then applied to the development of web-based materials, providing opportunities for skills acquisition in a variety of multimedia applications and their incorporation into a website. The course culminates in the development of a geometry web site for use in schools and businesses. This course may not be counted toward the M.S. in Computer and Information Science, Information Assurance and Security or Digital Forensics.

## **ISDT 5338. Dev of Tech Infrastructre-Schl. 3 Hours.**

This course examines the funding, design and implementation processes required to establish and realize a coherent technology acquisition and management strategy.

## **ISDT 5363. The Role of Technology Liaison. 3 Hours.**

This course is designed to assist the technology liaison in learning how to facilitate classroom teachers throughout the instructional process, supported by technology. Attention is given to the foundation of social, ethical, legal and human issues of technology use in PK-12.

## **ISDT 5365. Technology And Cognition. 3 Hours.**

Students learn to incorporate technology into teaching and learning in relation to the brain development in school-age children, emphasizing instructional techniques for enhancing learner's cognitive development through the use of technology. Students design advanced technological application for instruction, based upon best practices in technology and cognition.

## **ISDT 5367. Rdgs&Trends In Instructnl Tech. 3 Hours.**

Candidates are acquainted with the critical writings and ideas of prominent practitioners, researchers, and theorists in instructional technology with a focus on understanding the trends and issues pertaining to a scholarly study of integrating technology into teaching and learning. Candidates evaluate the best instructional technology strategies evident in the literature and in practice in PK-16 education and industry settings.

## **ISDT 5369. Practicm-Technology Facilitatn. 3 Hours.**

Students are provided with a field-based practicum in a school setting, including a study of the daily duties and responsibilities of a technology facilitator.

## **ISDT 6335. Mgmt Applic Analysis I. 3 Hours.**

Students apply systematic and rational approaches to the analysis, evaluation, and implementation of course management systems from the perspective of pedagogical success, user friendliness, and cost effectiveness.

## **ISDT 6351. Distance Learning I. 3 Hours.**

Students explore the instructional, technical, and management issues in distance education delivery systems. Effective online course design and delivery of teaching and learning resources and strategies are examined.

## **ISDT 6389. Independent Study. 3 Hours.**

Students study individually chosen topics under the supervision of a faculty member. The specific topic is selected from current trends and future research directions, not covered in the Instructional Systems and Design Technology (ISDT) graduate curriculum.

**Prerequisite:** Consent of instructor and approval of department chair.

## **ISDT 7315. Educational Network Design. 3 Hours.**

Students examine the technical, environmental, and policy issues involved in the development of educational technology infrastructures, focusing on network design and evaluation.

**ISDT 7325. Technology Sustainability. 3 Hours.**

Students examine the potential and the challenges associated with initiating and maintaining green and cost-efficient technology infrastructures based on environmental awareness initiatives.

**ISDT 7335. Mgmt Application Analysis. 3 Hours.**

Students are provided a systematic and rational approach to the analysis, evaluation, and implementation of course management systems from the standpoints of pedagogical success, user friendliness, and cost effectiveness.

**ISDT 7336. Instructional Design Assmt. 3 Hours.**

Students apply instructional design theories to the development, analysis, evaluation, and assessment of various digital instructional designs.

**ISDT 7350. Issues in Instructional Tech. 3 Hours.**

Students examine current social, economic, and ethical issues surrounding the acquisition and implementation of technology in instruction. An emphasis is placed on the research of past, present, and future applications of technology in instruction, and applying theory to practice. Theoretical perspectives informing future research in instructional technology are also considered.

**Prerequisite:** Admission into the Ed.D. Instructional Technology program.

**ISDT 7351. Distance Learning II. 3 Hours.**

Students explore the instructional, technical, and management issues evident in instruction and learning offered via distance delivery systems. Various delivery systems and technology tools within those systems are studied and critiqued to evaluate their effectiveness. The course highlights effective online course design and delivery with an attention to the learning resources and strategies evident in successful online teaching and learning.

**ISDT 7352. Instructional Planning. 3 Hours.**

Students are provided with strategies to assist instructional personnel to plan and use digital-age tools.

**Prerequisite:** Admission into the Ed.D. Instructional Technology program .

**ISDT 7353. Professional Development. 3 Hours.**

Students identify technology development needs, research current practices, and design and implement a professional development sequence with support materials.

**Prerequisite:** Admission into the Ed.D. Instructional Technology program.

**ISDT 7354. Leadership in Technology Admin. 3 Hours.**

Students focus on decision-making for effective and efficient implementation of instructional and productivity technologies, to include consideration of policy, current research, emerging technologies, learning needs, and available resources.

**ISDT 7355. Program Evaluation. 3 Hours.**

Students evaluate professional learning programs that integrate technology effectively into instructional practices.

**Prerequisite:** Admission into the Ed.D. Instructional Technology program.

**ISDT 7372. Statistical Methods. 3 Hours.**

This applied foundational statistics course is designed to develop the requisite level of critical thinking for conducting valid quantitative research. Doctoral students will learn to compute and meaningfully interpret descriptive and inferential statistics, including tests of relationship and difference.

**ISDT 7374. Qualitative Analysis. 3 Hours.**

Students develop qualitative research skills by engaging in a substantial field-based instructional technology research project.

**Prerequisite:** Admission into the Ed.D. Instructional Technology program.

**ISDT 7375. Multivariate Analysis and Learning Analytics. 3 Hours.**

Students analyze multivariate data and educational big data related to the fields of instructional technology and learning analytics, and interpret the results of the analyses. The analysis methods include advanced statistical approaches and computational techniques.

**Prerequisite:** ISDT 7372.

**ISDT 7380. Inst Tech Research Methods. 3 Hours.**

Students focus on the research questions, approaches, and measures typically employed by instructional technology researchers.

**ISDT 7385. Doctoral Internship. 3 Hours.**

Under the leadership of a qualified mentor, students research, electronically document, and reflect on their study as they examine the future of technology, strategies for dynamic decision-making, effective and collaborative online communication, equitable access to technology resources for all learners, and community-based learning. At the conclusion of the 150 clock hour internship, students present an online documentary of their internship experiences.

**Prerequisite:** Admission into the Ed.D. Instructional Technology program.

**ISDT 7386. Special Topics. 3 Hours.**

Students study topic(s) that vary based on student-cohort career interests or needs and semester offered. The topics covered are related to Instructional Systems Design and Technology (ISDT) when topics of special interest from those covered elsewhere in the curriculum.

**ISDT 7388. Doctoral Field Studies. 3 Hours.**

Students independently administer an organizational instructional technology needs-analysis. Based on the identified needs of the organization, the student then plans, implements, assesses, and modifies an instructional leadership project/case study to address identified needs.

**Prerequisite:** Admission into the Ed.D. Instructional Technology program.

**ISDT 7389. Independent Study. 3 Hours.**

Students study individually chosen topics under the supervision of a faculty member. The specific topic is selected from current trends and future research directions, not covered in the Instructional Systems and Design Technology (ISDT) graduate curriculum.

**Prerequisite:** Consent of instructor and approval of department chair.

**ISDT 7391. Application of Research. 3 Hours.**

Students develop a dissertation proposal.

**Prerequisite:** 45 hours of coursework required for the Ed.D.

**ISDT 8333. Doctoral Dissertation. 3 Hours.**

The culmination of doctoral study resulting in a dissertation that addresses key topics in Instructional Technology. An original investigation is planned, executed, and defended.

**Prerequisite:** Successful completion of the dissertation proposal defense.