Instructional Technology (IST)

Instructional Technology (IST) Courses

IST 5003. Foundations of Instructional Technology. (3-0) 3 Credit Hours.
This introductory course provides an overview of the field of instructional technology. Course content and activities will help students develop an awareness and understanding of the history, theories, and philosophies driving the field.

IST 5313. Development of Instructional Technology. (3-0) 3 Credit Hours.
An introduction to web development within the context of creating web-based instructional materials; effective, usable, and accessible designs; and project management, key concepts, and standard practices in eLearning projects.

IST 5323. Learner-Centered Design. (3-0) 3 Credit Hours.
Prerequisite: IST 5003 or consent of instructor. This course provides an overview of learner-centered theories, design, and tools. Course content and activities provide opportunities to develop an understanding of the history, frameworks, philosophy, tools, and technologies that support learner-centered practices.

IST 5343. Instructional Design Theory. (3-0) 3 Credit Hours.
Prerequisite: IST 5003 or consent of instructor. An investigation of theories, principles, and processes of instructional and digital learning design including their application to instructional product and curriculum development. (Same as EDP 5343. Credit cannot be earned for both IST 5343 and EDP 5343. EDP 5343 may not be substituted for IST 5343 in the M.A. in Education Instructional Technology Concentration).

IST 5363. Distance Learning and Teaching. (3-0) 3 Credit Hours.
Examination of the application of tools, resources, and strategies to support, deliver, and enhance technology-supported curriculum. Students actively participate in online activities as they engage in design.

IST 5383. Instructional Technology for Training and Professional Development. (3-0) 3 Credit Hours.
Prerequisite: IST 5343 or consent of instructor. The dynamic nature of technology development and innovation requires strategies to ensure that professional populations are well prepared. Activities in this course include a review of models of training and professional development in adult educational settings, design and development of technology-supported training and professional development using industry-standard tools, and evaluation.

IST 5703. Technology and Learning Cultures. (3-0) 3 Credit Hours.
Prerequisite: IST 5003 or consent of instructor. An examination of technology-delivered and -mediated instruction as it interacts with the learners’ views of the world and themselves. This course provides opportunities to explore the implications of culture and community on the design, delivery, and evaluation of instruction.

IST 5883. Digital Storytelling and Learning. (3-0) 3 Credit Hours.
Digital storytelling is a multimodal narrative practice through which people create and share cultural artifacts by combining textual and audiovisual components. It offers opportunities for documentation, self-reflection, expression, communication, and case-based reasoning. This course explores approaches, tools, and techniques to effectively integrate it in learning settings. (Formerly C&I 5883. Credit cannot be earned for both IST 5883 and C&I 5883).

IST 6103. Virtual Learning and Teaching. (3-0) 3 Credit Hours.
Prerequisite: IST 5003 or consent of instructor. Virtual and augmented reality provide opportunities to learn through active participation in designed environments. This course explores instructional applications across formal and informal educational settings.

IST 6353. Multimedia Design and Development. (3-0) 3 Credit Hours.
Prerequisite: IST 5313 or consent of instructor. This course explores the design and development of multimodal materials and resources in learning settings by investigating issues related to usability, interactivity, accessibility, and aesthetics.

IST 6373. Games and Learning. (3-0) 3 Credit Hours.
This course investigates games as a learning technology. Learners will review, design, and evaluate practical examples as well as the literature on games in formal and informal learning spaces. The class will require learners to engage with the latest trends and research in games and learning.

IST 6513. Emergent Technologies in Education. (3-0) 3 Credit Hours.
Prerequisite: IST 5003 or consent of instructor. This course explores emergent technologies in terms of functional and pedagogical frameworks of use. Students will complete theoretical and practical application tasks.

IST 6613. Media Literacy and Education. (3-0) 3 Credit Hours.
Media literacy is the ability to critically analyze, evaluate, understand, produce, and share media. It is a set of skills and habits necessary for an informed and responsible participation in society. This course provides an overview of research and educational perspectives on media literacy examining topics such as ideology, propaganda, censorship, bias, and stereotyping.

IST 6623. New Literacies and Youth Cultures. (3-0) 3 Credit Hours.
New literacies involve new ways of being, doing, and participating through practices such as multimodality, transmedia, and remixing. Youth cultures are personal and social domains in which people express, reinterpret, and share their interests, often through the use of digital technologies. This course provides an overview of new literacies and youth cultures, and their relationships, offering theoretical and practical approaches to leverage them in educational settings.

IST 6943. Internship. (0-0) 3 Credit Hours.
Prerequisites: Consent of instructor and Graduate Advisor of Record. Individually supervised field experience in a setting that provides direct experience with the design, development, implementation, or evaluation of technology-mediated learning experiences. (Credit cannot be earned for both IST 6943 and other internships.).

IST 6953. Independent Study. (0-0) 1 Credit Hour.
Prerequisites: Approval of the instructor and the Graduate Advisor of Record. Independent reading, research, discussion and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the degree.

IST 6953. Independent Study. (0-0) 3 Credit Hours.
Prerequisites: Approval of the instructor and the Graduate Advisor of Record. Independent reading, research, discussion and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the degree.
IST 6973. Special Problems. (3-0) 3 Credit Hours.
Prerequisite: Consent of instructor. An organized course that offers graduate students the opportunity to engage in specialized study not normally or not often available as part of the program’s regular course offerings. Special Problems courses may be repeated for credit when topics vary, but not more than 6 hours, regardless of discipline, will apply to the M.A. in Education degree.

IST 6983. Master’s Thesis. (0-0) 3 Credit Hours.
Prerequisites: Permission of the Graduate Advisor of Record and thesis director. Thesis research and preparation. May be repeated for credit, but not more than 6 hours will apply to the Master’s degree. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress.

IST 7003. Proseminar in Instructional Technology. (3-0) 3 Credit Hours.
This course is intended to provide an opportunity to explore the main theories, practices, and areas of research in instructional technology. Readings include seminal work in instructional technology, instructional design, learning theories, and design-based research. Students will become familiar with the tools and practices of successful doctoral work.

IST 7013. Field Research in Instructional Technology. (3-0) 3 Credit Hours.
This course is designed to support students in doing field research in instructional technology, including observations, interviews, and analysis. Students will undertake their own research study and discuss relevant literature.

IST 7023. Design and Development of Learning Environments. (3-0) 3 Credit Hours.
Students will design, develop, pilot, and evaluate a learning environment using the theories and practices of instructional technology.

IST 7033. Current Research in Instructional Technology. (3-0) 3 Credit Hours.
Focused exploration of current research in the field of instructional technology. Students will have opportunities to deeply engage with current research across a variety of active research fields.

IST 7043. Technology and Global Learning. (3-0) 3 Credit Hours.
Structured exploration of the conditions, platforms, and implications of technology-supported learning in culturally and linguistically diverse contexts.

IST 7053. Evaluation in Instructional Design. (3-0) 3 Credit Hours.
An overview of evaluation models, procedures, tools, and philosophies as they apply to applications of technology in education.

IST 7771. Independent Study. (0-0) 1 Credit Hour.
Prerequisites: Doctoral standing and permission in writing (form available) of the instructor and the student’s Graduate Advisor of Record. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work as part of the regular course offerings. May be repeated for credit, but no more than 6 hour will apply to the Doctoral degree.

IST 7773. Independent Study. (0-0) 3 Credit Hours.
Prerequisites: Doctoral standing and permission in writing (form available) of the instructor and the student’s Graduate Advisor of Record. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work as part of the regular course offerings. May be repeated for credit, but no more than 6 hour will apply to the Doctoral degree.

IST 7893. Directed Doctoral Research. (0-0) 3 Credit Hours.
Supervised research on a topic in Interdisciplinary Learning and Teaching. May be repeated for credit, but no more than 6 hours may be applied to the Doctoral degree.