

Instructional Design Certificate Course Descriptions

3-credit Classes

LIB 680 Communication Theory (3)

Examine theoretical models of communication and their application to various technologies of communication (e.g., print, video, motion picture film, etc.) to enhance training and instruction.

ED 626 Instructional Design (3)

The application of the instructional design approach to preparation of multimedia instructional products. Be guided through development of instructional materials, including application of the ID approach to the preparation of computer-assisted instruction.

CSE 606: Video Games and Learning (3)

Introduces educators to principles of learning found in video and computer games, and explores the use of video and computer games in teaching. Develops and expands students' understanding of the educational use of video and computer games through a series of readings, presentations, lab work, demonstrations, small group projects, and independent exploration.

CSE 615: Designing Information (3)

A look at how ideas are organized in a variety of media. Explores how information is encoded in text, graphics, audio and motion media. Focuses on effectively choosing and designing appropriate media for the communication of ideas.

CSE 616: Designing Online Courses (3)

This class will introduce students to the philosophy and methodology of designing online courses and teaching online. Topics will include establishing a community online, fostering meaningful dialogue, facilitating group work, designing effective learning experiences, and assessing student progress. Students will learn skills for course construction in a variety of course formats, and will create a short course that uses tools within a course management system as well as resources available through the Web.

CSE 617: Open Source Tools (3)

This course emphasizes using and evaluating open source (OS) tools for educational purposes while familiarizing participants with a general history of OS software. This is a practical, project driven course where students will actively use open source operating systems, programs, and platforms as they learn how to quickly and accurately evaluate whether open source products meet their professional, district, and/or students' needs.

CSE 625: Creating an Internet Website (3)

Technical and theoretical aspects of designing and creating a website. Concentrates on development software and protocols associated with site design. Examines educational and cultural issues related to the use of the Internet and issues related to development of Web sites in educational settings. Students will create their own Internet website.

CSE 627: Web 2.0 Tools for Teaching and Learning (3)

Explores the many Web 2.0 tools online and looks at proven ways these tools are used in education. Examines how Web 2.0 tools can be used in meaningful ways, when appropriate, to allow additional collaboration between colleagues, teacher and students, and students themselves. Includes hands-on exploration of blogs, wikis, podcasts, screencasts, RSS, social networking, online imaging, online presentation tools, and more.

CSE 628: Geospatial Technologies in Education (3)

This course will introduce educators to a variety of technological tools, software, and devices that can be used to enhance understanding and problem solving for learners from multiple disciplines and at different education levels. The course will focus on accessing, organizing and analyzing spatial information that allows student to make informed decisions. Participants will prepare and present education-related projects using spatial technologies that focus on how to guide students in using technology to communicate information and ideas. Issues of ethical use and the powers of spatial technologies to persuade, extend communication, and inform will be addressed.

CSE 629: Web-based Website Design (3)

Students will create a professional, business, or education related website using free web-based software, widgets, and training. The course emphasizes learning by doing and following best practices for creating user-friendly web sites. This class is designed to train and develop web design skills as well as develop the ability to work with and employ free, online tools. By closely learning one system, students can apply that knowledge and easily integrate with other systems available online.

CSE 660: Video Production 1 (3)

Principles and practices of digital audio and video production and editing for instructional environments. Within this course students will develop skills for video production, examine ways to infuse video into educational contexts and evaluate its potential for the improvement of teaching and learning. This project-based course is taught through a combination of lecture, discussion, demonstration and hands-on practice.

1-credit classes

CSE 684: Creating Web-based Tutorials (1)

Explores a variety of ways for delivering web based instruction using available freeware software and commonly used Microsoft Office products. Students will create and design tutorials using text, audio, images, screen captures, screen casting, animation, wikis, and course authoring products.

CSE 685: Assessment Tools (1)

Class explores the use of assessment to make informed instructional decisions at the classroom, program, school, and district level. The difference between formative and summative assessment and the appropriate use of each will be examined. Students will apply the concepts learned to make informed instructional decisions based on available on-line assessment resources.

CSE 687: Mobile Technologies in Education (1)

This 1-credit class will explore ways to use mobile devices such as smart phones and the iPod Touch for educational purposes in the classroom. Students will learn how to locate and evaluate educational applications to download on their devices and to use these applications effectively with students in their classes. They will develop educational content such as podcasts and movies that can be played on mobile devices, and will learn to program their own simple applications that will run on iPhones

CSE 689: Creating Electronic Portfolios (1)

This course will explore methods of showcasing best works in digital format. Focus on processing documents in a variety of formats so that they can be displayed digitally in a standard format appropriate for universal viewing, such as PDF. Attention to design and display of information.

CSE 690: Digital Photography and Photo Editing (1)

This course is designed to provide background and skills in digital photography for educators and school media specialists. Students will explore all standard functions available on digital cameras, including macro focusing, copy stand work, field photography, and Quicktime movies. The course will also cover digital photo editing, and photo file management and image enhancement, including publishing to the web and importing to documents.

CSE 691: Digital Storytelling (1)

This one-credit course will provide students with hands-on experience writing, shooting, editing, and publishing short videos using simple video-editing tools. Students will learn how to work with video in a classroom setting, and will explore a variety of inexpensive and free online tools.

CSE 692: Learning Objects (1)

This one-credit course will explore the advantages and disadvantages of reusable educational content known as Learning Objects. Through web searches and exploration of learning object repositories, students will locate and evaluate free and inexpensive learning objects in a variety of content areas. They will learn to download and insert objects within educational materials such as websites, online courses, or digital tutorials.

CSE 694: Blogs in Education (1)

This course explores uses of blogs in education, focusing on creating blogs for both teaching and professional development purposes. Students will learn to create blogs using a variety of free blogging tools, add media to blogs, market their blogs, communicate with parents, students, colleagues, and professionals via blogs, teach with blogs, embed blogs in their websites, and more.

CSE 696: Podcasts and Vodcasts (1)

Focuses on developing skills for creating podcasts and vodcasts using free or inexpensive tools. Students will also locate high-quality educational podcasts available through a variety of online sources and will explore uses of podcasts and vodcasts in education.