EDUCATIONAL TECHNOLOGY (EDTC)

EDTC 3123 Applications of Educational Technologies

Description: Introduction to the design and development of instruction using educational media and technology in the PK-12 classroom. Materials development, contemporary applications of computers and other electronic systems to instruction. Integration of instructional design, instructional media, and instructional computing. May not be used for degree credit with EDTC 4113. Previously offered as CIED 3122.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Undergraduate **Schedule types**: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 4103 Advanced Computing Applications in Education

Description: In-depth exploration of advanced technology use in teaching and learning environments. Examination of current issues of technology use in instructional settings. May not be used for degree credit with EDTC 5103.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Undergraduate Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 4110 Special Topics in Educational Technology

Description: Exploration of contemporary problems or issues in educational technology. Offered for variable credit, 1-3 credit hours,

maximum of 6 credit hours.

Credit hours: 1-3

Contact hours: Lecture: 1-3 Contact: 1-3

Levels: Undergraduate Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 4113 Applications of Media and Technology

Description: Introduction to the application of media and technology to formal and informal learning situations. Intended for non-professional education majors. May not be used for degree credit with EDTC 3123.

Previously offered as CIED 4113.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Undergraduate Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 4223 Introduction to Assistive Technologies

Description: Introduction to assistive technologies and the application of assistive technologies in formal and informal learning environments.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Undergraduate Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 4503 Facilitating Online Learning

Description: Students will apply knowledge of pedagogy, instructional design, learning theory, standards for online teaching, online community building and teaching with technology by developing a proposal for an online course in an area of their choosing. May not be used for degree credit with EDTC 5503.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Undergraduate Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 4753 Introduction to Instructional Design

Description: Introduction to the systematic design of instruction. Topics covered: Analysis, design, development, implementation, and evaluation of instructional materials in a variety of educational settings. Current research, trends and issues in instructional design will be addressed. May not be used for degree credit with EDTC 5753.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Undergraduate Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 4773 Instructional Systems Project Management

Description: Explore essential elements of successful instructional systems project management by defining a project, identifying essential components, developing the project schedule and budget, and managing project quality and risks. Produce complete design documents for an instructional system, including budget, justification, implementation schedule, and evaluation plan.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Undergraduate Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 5000 Master's Report or Thesis Prerequisites: Consent of instructor.

Description: Students studying for a master's degree enroll in this course for a total of 2 credit hours if they write a report or 6 hours if they write a thesis. Offered for variable credit, 1-6 credit hours, maximum of 6 credit

hours.

Credit hours: 1-6

Contact hours: Contact: 1-6 Other: 1-6

Levels: Graduate

Schedule types: Independent Study

Department/School: Educ Found Leadersh & Aviation

EDTC 5053 Learning in a Digital Age

Description: Foundational understanding of digital learning including history, definitions, common assumptions, cultural competence, ethical issues, standards, methods, and models to maximize digital learners' experience in educational and corporate settings.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate Schedule types: Lecture

EDTC 5103 Advanced Computing Applications in Education

Description: In-depth exploration of advanced technology use in teaching and learning environments. Examination of current issues of technology use in instructional settings. Previously offered as CIED 5103.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation **EDTC 5113 Digital Media Production for Instruction**

Description: Introduction to the production of digital media for instruction. Topics covered: Instructional design for digital media, message design, use of graphics, multimedia development tools. Current research, trends, tools and issues in media production will also be

addressed. Previously offered as CIED 5113.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation **EDTC 5123 Academic Writing in the Learning Sciences**

Description: Introduction to the structure and organization of academic writing appropriate for a Creative Component, project, thesis, or doctoral dissertation. Students will be expected to prepare a proposal for their special topic.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation **EDTC 5153 Computer-Based Instruction Development**

Description: Examinations of curriculum strategies, related research issues, and techniques for developing computer-based instruction. Students will develop and evaluate computer-based instruction with case studies. Previously offered as CIED 5153.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 5203 Foundations of Educational Technologies

Description: A general introduction to the field of Educational Technology. Define, describe, and critically evaluate the foundations, issues and

careers in educational technology.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate
Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 5303 Digital Games and Simulations in the Classroom

Description: Introduces students to the philosophies, theories, processes, and practices of integrating digital games and simulations into the

classroom.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 5403 Creativity and Innovation in Educational Technology

Description: In-depth examination of a variety of innovation technologies and engagement in pedagogies and technologies associated with

creativity, innovation and invention.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 5503 Facilitating Online Learning

Description: Apply knowledge of pedagogy, standards for online teaching, online community building, and teaching with technology to design and

facilitate online learning environments.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate **Schedule types:** Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 5703 Advanced Virtual and Augmented Reality for Social Change

Description: Explores evidence-based design/research informed design through the use and application of Virtual Reality (VR) and Augmented Reality (AR) technology using a multidisciplinary approach to solve current societal problems by applying social science practices with innovative technology. Learn how to develop and apply 3D content in VR/AR. Turn your creative ideas into useful applications. This course is open to all graduate students. No prior coding or design experience is required.

Same course as DM 5083.

Credit hours: 3

Contact hours: Lab: 6 Contact: 6

Levels: Graduate Schedule types: Lab

Department/School: Educ Found Leadersh & Aviation

EDTC 5720 Educ Workshop

Description: For teachers, principals, superintendents and supervisors who have definite problems in instruction or administration. Students must register for the full number of credit hours for which the workshop is scheduled for a particular term. Offered for variable credit, 1-8 credit

hours, maximum of 8 credit hours.

Credit hours: 1-8

Contact hours: Contact: 1-8 Other: 1-8

Levels: Graduate

Schedule types: Independent Study

Department/School: Educ Found Leadersh & Aviation

EDTC 5753 Introduction to Instructional Design

Description: Introduction to the systematic design of instruction. Topics covered: Analysis, design, development, implementation, and evaluation of instructional materials in a variety of educational settings. Current research, trends and issues in instructional design will be addressed.

Previously offered as CIED 5753.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate
Schedule types: Lecture

EDTC 5763 Introduction to Assistive Technology

Description: Introduction to assistive technologies and the application of

assistive technologies to formal and informal situations.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate
Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 5773 Instructional Systems Management

Description: Principles of management relevant to instructional systems, including, but not limited to: project, resource, quality, change, financial, information technology, human resource, program evaluation, product, knowledge and performance management. Previously offered as CIED 5773.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate
Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 5783 Learning and Teaching with Mobile Devices

Description: Exploring the potential of learning with mobile devices in formal education settings and factors to consider when designing an effective and innovative mobile learning environment.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate
Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 5793 Design-Based Research

Description: Design-Based Research seeks to contribute to theory-building about learning and the design of learning environments. Course provides an examination of the history of this research approach along with related current literature, commentary and research.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 5850 Directed Study

Prerequisites: Consent of instructor.

Description: Directed study for master's level students. Offered for variable credit, 1-3 credit hours, maximum of 3 credit hours.

Credit hours: 1-3

Contact hours: Contact: 1-3 Other: 1-3

Levels: Graduate

Schedule types: Independent Study

Department/School: Educ Found Leadersh & Aviation

EDTC 6000 Doctoral Dissertation

Description: Required of all candidates to the Doctor of Education degree. Credit is given upon completion of the thesis. Offered for variable credit,

1-15 credit hours, maximum of 15 credit hours.

Credit hours: 1-15

Contact hours: Contact: 1-15 Other. 1-15

Levels: Graduate

Schedule types: Independent Study

Department/School: Educ Found Leadersh & Aviation

EDTC 6153 Advanced Computer-Based Instructional Development

Prerequisites: EDTC 5153 or consent of instructor.

Description: Design of user-friendly instructional interfaces and

computer-based learning management systems.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation **EDTC 6283 Performance Improvement Technology**

Description: Overview of performance improvement, as defined within the field of Educational Technology. Training and non-training interventions to improve performance in learning situations. Sample topics may include needs assessment, motivation systems, compensation systems, job aids,

or electronic performance support systems.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 6333 Human Computer Interaction

Prerequisites: EDTC 5153 or consent of instructor.

Description: Human cognitive architecture, information processing, and

design of effective educational, computer-based interfaces.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate **Schedule types:** Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 6423 Trends and Issues in Educational Technology

Description: Selected problems, issues and trends in educational

technology.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 6553 Media and Learning in Educational Technology

Description: Exploration of topics from media studies relevant to educational technology, especially online learning. Reading of classic works in media studies in tandem with related contemporary works addressing new developments in educational technology, online learning, online gaming, and social media for learning.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate
Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 6613 Instructional Systems Design

Description: Overview of theoretical foundations of the systematic design of instruction and their applications in design practice including analyzing, defining, sequencing, developing, and validating instructional components. Current research, theory, and future directions in design theory and practice will be addressed. Course previously offered as EPSY 6613 and ABSE 6613.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate **Schedule types:** Lecture

EDTC 6793 Advanced Design-Based Research

Description: Exploration of current DBR literature, research and research

implementations. **Credit hours:** 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate
Schedule types: Lecture

Department/School: Educ Found Leadersh & Aviation

EDTC 6850 Directed Reading Prerequisites: Consent of instructor.

Description: Directed reading for students with advanced graduate standing to enhance students' understanding in areas where they wish additional knowledge. Offered for variable credit, 1-6 credit hours,

maximum of 6 credit hours.

Credit hours: 1-6

Contact hours: Contact: 1-6 Other: 1-6

Levels: Graduate

Schedule types: Independent Study

Department/School: Educ Found Leadersh & Aviation

EDTC 6880 Internship in Education Prerequisites: Consent of instructor.

Description: Directed off campus experiences designed to relate ideas and concepts to problems encountered in the management of the school program. Offered for variable credit, 1-8 credit hours, maximum of 8 credit

hours.

Credit hours: 1-8

Contact hours: Contact: 1-8 Other: 1-8

Levels: Graduate

Schedule types: Independent Study

Department/School: Educ Found Leadersh & Aviation

EDTC 6910 Practicum

Prerequisites: Consent of instructor.

Description: Helps the student carry out an acceptable research problem (practicum) in a local school situation. Credit given upon completion of the written report. Offered for variable credit, 1-6 credit hours, maximum

of 6 credit hours. **Credit hours:** 1-6

Contact hours: Contact: 1-6 Other: 1-6

Levels: Graduate

Schedule types: Independent Study