

EDUCATIONAL TECHNOLOGY (EDTC)

EDTC 500 - Introduction to Educational Technology 3 Credits

This course is an introduction to the philosophical, pedagogical, and practical dimensions of educational technology. Students explore major tenets and trends in the fields of educational technology, instructional technology, and media literacy. Students develop a cognitive framework for understanding the new literacies associated with digital media and examine learning theories, including behaviorism, cognitivism, and constructivism. The emphasis is bridging theory with practice and critically examining the possibilities and challenges associated with accessing and implementing communications technology within educational settings. On a practical level, the course introduces students to the vast network of multiple media forms and systems that define educational technology. 3 hours lecture.

EDTC 501 - Curriculum and Technology Development: Global Perspectives 3 Credits

Prerequisite(s): EDTC 500. This course provides a global view of education, technology, and pedagogy worldwide. Through collaboration with educators worldwide, students compare epistemologies in the United States with those of other countries. Students examine the potential roles, regulations, and renewal of the technologies of education within the social and political democracy of the United States. 3 hours lecture.

EDTC 502 - Assessment and Evaluation of Learning with Technology 3 Credits

This course explores quantitative and qualitative approaches to researching the impact of technology within educational and instructional settings. Students learn theory and practice of design, development, utilization, management and formative and summative evaluation of processes and resources for learning. Students select an area of inquiry, define a research problem, and collect and interpret preliminary data. This course provides a scaffold for the Capstone Project. 3 hours lecture.

EDTC 510 - Technology Planning for Education Renewal 3 Credits

Prerequisite(s): EDTC 500, EDTC 501, and EDTC 502 or graduate program coordinator's approval. Students assist district or organizational leaders in the systemic design and implementation of a technology plan that is customized for a school or organization's philosophy, budget, and individual staff needs and abilities. Comprehensive planning considers goals, standards, resources, community structures, school or organization-based support, and staff development. Students conduct a needs assessment, facilitate planning meetings among leaders, educators, staff, parents and community representatives and address practical issues of purchasing and technical support. 3 hours lecture.

EDTC 530 - Integrating Technology Across the Secondary Curriculum 3 Credits

Prerequisite(s): EDTC 500 and EDTC 501 or graduate program coordinator's approval. This laboratory course provides students with hands-on experiences in creating educational and instructional technology environments that are student-centered, collaborative, inquiry-based, and emphasize critical thinking. The course explores the fundamentals of interactive design using both Macintosh and PC-based computer platforms. Students orchestrate object, print, video and digital media technologies to support specific curricular goals at the middle- and high-school levels. 3 hours lab.

EDTC 550 - Innovations in Educational Technology Design 3 Credits

Prerequisite(s): EDTC 500, EDTC 501, and EDTC 502 or graduate program coordinator's approval. This course offers an integrated approach to the design of educational technology environments with an emphasis on the uses of adaptive and assistive technologies. Students engage in an inquiry-based approach to educational design within schools, corporations, public agencies or community-based settings. The course holistically defines technology to include object, print, audio, video, and digital media formats and emphasizes a needs-based design of educational technology to foster diversity and social justice. 3 hours lecture.

EDTC 561 - Production Seminar I: Portfolio Development 3 Credits

This course introduces students to various types of portfolios including presentational, teaching and reflective. Students engage in strategic planning, design, development and assessment of a digital portfolio that incorporates multiple media forms and artifacts. 3 hours lab.

EDTC 563 - Production Seminar I: Multimedia Authoring 3 Credits

This course introduces students to the design and production of non-linear multimedia projects using text, images, sound, graphics, and animation. Students experiment with various digital authoring tools, explore elements of instructional design, and develop appropriate assessment strategies for educational media environments. 3 hours lab.

EDTC 565 - Production Seminar I: Digital Video Editing 3 Credits

This course emphasizes advanced design, production and integration of video programs in the context of non-linear hypermedia. Students gain hands-on experience in special effects, animation and graphic design using Photoshop and FinalCut Pro software. 3 hours lab.

EDTC 591 - Production Seminar II: Developing Databases for Educational Settings 3 Credits

Prerequisite(s): Evidence of advanced computer proficiency. This laboratory course introduces students to the tools available to assist in building databases and database applications for educational settings. Students engage in a systematic approach to identifying the necessary steps in creating a database and managing data with an emphasis on user needs. 3 hours lab.

EDTC 593 - Production Seminar II: Web-based Instruction 3 Credits

Prerequisite(s): Evidence of advanced computer proficiency. This laboratory course leads students through the systematic use of web technology to design and manage learning and training experiences. Students gain hands-on experience in developing synchronous and asynchronous classrooms with an emphasis on the needs of the non-traditional learner. Technologies include HTML and course management systems such as WebCT and Blackboard. 3 hours lab.

EDTC 595 - Production Seminar II: Television Production 3 Credits

This laboratory course involves hands-on exploration of television programming, including elements of conceptual creativity, pre-planning, set design, floor direction, control room operations and basic television directing. Students work in the Dumont TV Center and on location. 3 hours lab.

EDTC 597 - Production Seminar II: Virtual Communities of Learning 3 Credits

Prerequisite(s): Evidence of advanced computer proficiency. This hybrid lecture/laboratory course provides students with direct experience with videoconferencing technologies to explore the globalization of e-learning as it relates to education, commerce, politics, and culture. Students explore the global impact of networked communication technologies and develop educational, technical and business strategies for the design of learning environments. 3 hours lab.

EDTC 600 - Supervised Field Experience in Educational Technology

3 Credits

Prerequisite(s): Graduate program coordinator's approval. The supervised field experience is designed to provide the master's candidate with professional field experience in his/her chosen area of emphasis. This semester-long experience bridges theory and practice through the application of best practices under the supervision of professionals in real settings. The student works under an established administrator on some limited function of the position, approved through mutual agreement among the student, the administrator and the university supervisor. 100 hours per semester.

EDTC 670 - Capstone Project in Educational Technology

3 Credits

Prerequisite(s): Graduate committee approval of proposal. The capstone project is designed to provide the master's candidate with both professional and scholarly experience in his/her chosen area of emphasis. Candidates for the master's degree work with a supervising faculty member to design, develop, and implement an educational technology project in the scholarship area of discovery, application, or pedagogy—depending upon the student's professional interests and goals. Pass/fail only. 3 hours other.