

EDUCATIONAL TECHNOLOGY (EDTC)

EDTC 4301 Introduction to Educational Technology 3 Credits

This course covers the principles and applications of technology literacy in education. Topics include designing effective teaching strategies and environments conducive to learning, application of media and computer technologies in teaching, the use of the Web in teaching K-12, Microsoft Office applications, developing home pages, evaluating software, and examining new technologies for education. A field experience is included in this course. Previously MD 0300.

EDTC 4304 Imagining Libraries in the 21st Century 3 Credits

This course will focus on the ongoing transformation and re-orientation of public and academic libraries in an age of ubiquitous access to digital content. The role of the library will be examined from its mid-20th century position of largely storing paper-based materials and providing the professional services that allowed user to access those materials, to its evolving status as a service provider - offering everything from streaming videos and downloadable e-books to community events and craft- and technology-based maker spaces. The course will culminate with each student creating a digital vision of the library of the future.

EDTC 4305 Copyright, Censorship, and Information Control 3 Credits

This course will offer an in-depth examination of the larger question of who controls information. Beginning with a review of the concept and history of copyright laws as a means for assuring economic control, the course will then move into an analysis of censorship by schools, local communities, and national governments. A major portion of the course will also address the relatively new issue of information control effected by digital means - from the use of search engines and misinformation to influence public opinion to the tracking of individuals and the data harvesting that has become the primary economic driver of so many technology platforms.

EDTC 4312 Expanding Education through Informal Learning Environments 3 Credits

This course will examine the ways in which Informal Learning Environments (ILEs) are embedded in a wide range of the 21st century's social and entertainment activities - and how these experiences of these types can be leveraged to move learning outside of its traditionally conceived homes in schools and libraries. Among the ILEs discussed will be zoos and aquariums, museums, mobile games, streaming content, escape rooms, and more. The course will culminate with each student producing an example Informal Learning Environment module using the technologies of their own choice.

EDTC 4313 Online Training for Lifelong Learning 3 Credits

This course will focus on ways in which teachers, trainers, and technology support professionals can use a variety of online tools to engage learners of all ages and types. Students will explore ways to effectively employ podcasts, screen captures, videos, and authoring software to create and support online learning, as well as how to consider relevant technological issues such as file types, bandwidth, policies, and mobile device access.

EDTC 4314 Literacies Across History and Cultures 3 Credits

This course will explore how humans have communicated their ideas across space and time – in essence, what does it mean to be what we now call “literate,” why did literacy arise, and what purposes does it serve? Students will endeavor to define different modes of communication (or literacies) in an age of globalization and of digital information, and look at these “literacies” through various historical, social, and cultural perspectives.

EDTC 4315 Technologies for Building Online Learning Engagement 3 Credits

This course will be offered as can be arranged by faculty with a local museum, library, non-profit, or other institution. Students will spend their semester do in-depth studies of the specific type of organization of focus, and will then collaborate in with staff at the organization to learn how the education takes place there and to complete a project that will be used as part of the entity's educational offerings.

EDTC 4316 Informal Learning Environments (ILE) Practicum 3 Credits

This course will be offered as can be arranged by faculty with a local museum, library, non-profit, or other institution. Students will spend their semester do in-depth studies of the specific type of organization of focus, and will then collaborate in with staff at the organization to learn how the education takes place there and to complete a project that will be used as part of the entity's educational offerings.

EDTC 4317 AI in Teaching & Learning 3 Credits

This course will explore the current possibilities and serious challenges of generative AI for classroom teachers and other educators of all types. Topics covered will include understanding how generative AI operates from a technological standpoint; the role that generative AI can play in a variety of educational settings, from K-12 public schools to universities to informal learning environments ; and the development of appropriate policies and guidelines to support AI use. No previous experience with AI or computer programming is required.

EDTC 5304 Imagining Libraries in the 21st Century 3 Credits

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EDTC 5315 Technologies for Building Online Learning Engagement 3 Credits

Using modern, mobile-based tools to communicate and develop multimedia/interactive experiences can turn a passive, go-at-your-own-pace online course into a highly engaging community learning experience for students. This course will review a range of current technologies that can be applied to delivering content and interacting with students to create such courses. Tools such as SoftChalk, H5P, Microsoft Sway, Microsoft Teams, Slack, and others will be examined, with students completing a final project using one or more of the tools.

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EDTC 5317 AI in Teaching & Learning 3 Credits

This course will explore the current possibilities and serious challenges of generative AI for classroom teachers and other educators of all types. Topics covered will include understanding how generative AI operates from a technological standpoint; the role that generative AI can play in a variety of educational settings, from K-12 public schools to universities to informal learning environments; and the development of appropriate policies and guidelines to support AI use. No previous experience with AI or computer programming is required.

EDTC 5401 Introduction to Educational Technology 3 Credits

This foundational course offers a hands-on overview of effective teaching methods using digital technologies. Candidates will gain understanding of the potential applications of educational technology in schools, organizational settings, and higher education. The course develops candidates' skills in using digital technologies to design and implement effective learning environments for students from diverse academic and social backgrounds. Previously MD 0400.

EDTC 5403 The School Library I 3 Credits

This course, the first in a two-semester sequence, provides an introduction to the current policies and practices of effective school library programs. Candidates will examine the professional skills, dispositions and responsibilities related to the roles of the school library media specialist as defined in AASL standards: instructional partner, teacher, information specialist, program administrator and technology leader. Previously MD 0403.

EDTC 5404 The School Library II 3 Credits

This course, a continuation of the material presented in EDTC 5403, provides an introduction to the current policies and practices of effective school library programs. Candidates will examine the professional skills, dispositions and responsibilities related to the roles of the school library media specialist as defined in AASL standards: instructional partner, teacher, information specialist, program administrator and technology leader. Previously MD 0404.

EDTC 5405 Management of School Library Resources for Teaching and Learning 3 Credits

This course provides candidates with hands-on experience in managing print and digital resources. Topics include: approaches to supporting curriculum through collection development; strategies for purchasing and acquisition of databases, books, and multimedia materials; cataloging and creating MARC records to provide effective access. Each candidate will create a fully functioning circulation/catalog system complete with overdue books, statistics reporting, reserve and temporary items and special collection groups. Recent trends in web-based access to library resources will be explored. Previously MD 0405.

EDTC 5406 Introduction to Reference 3 Credits

Candidates will explore print and online resources and develop competency in selecting, acquiring, and evaluating resources to meet student needs. Course activities will emphasize communication skills and instructional strategies needed to provide effective reference services in school libraries. Previously MD 0406.

EDTC 5409 The Literate Environment: P-12 Literature and Reading 3 Credits

Candidates will explore factors related to creating a literate environment and the roles of school and classroom libraries. This course includes an overview of P-12 literature, an analysis of approaches to reading instruction, and an examination of collaboration between reading professionals: literacy coaches, reading specialists and school library media specialists. Previously MD 0409.

EDTC 5415 Informal Learning Environment (ILE) Practicum 3 Credits

This course will be offered as can be arranged by faculty with a local museum, library, non-profit, or other institution. Students will spend their semester do in-depth studies of the specific type of organization of focus, and will then collaborate in with staff at the organization to learn how the education takes place there and to complete a project that will be used as part of the entity's educational offerings.

EDTC 5430 Digital Storytelling in the Classroom 3 Credits

Studies have shown that our brain organizes, retains, and accesses information through story. Therefore, teaching with story allows students to remember what is being taught, access it, and apply it more easily. This course is designed for any educator looking to utilize technology to encourage storytelling at all levels. While maintaining a focus on traditional conventions of storytelling, such as character development, story mapping, and writing techniques, this course aims to develop the next generation of storytelling through a technological lens. Previously MD 0430.

EDTC 5452 Integrating Technology in the Content Areas: Language Arts and Social Studies 3 Credits

This course addresses the infusion of new technologies in teaching language arts and social studies curricula. Participants study and assess the educational values of innovative teaching strategies that employ a broad range of instructional materials and resources. Museum-based education and community partnerships are an integral part of this course. Based upon a sound theoretical framework, instructional models, and best practices, participants design and create lesson activities and materials integrating technology resources including digital archives, digital storytelling, Geographic Information Systems (GIS), and other online and publishing tools. Previously MD 0452.

EDTC 5459 Understanding the Whole Learner 3 Credits

Understanding the Whole Learner: As teaching and learning has moved, over the past half century, from a one-size-fits-all approach to something that is more individualized, instructional design has been compelled to look at individual learners' needs as well as at their backgrounds and cultural orientations. This course will examine the wide range of considerations that should be employed to successfully teach the Whole Learner, including such topics as inclusive/anti-racist pedagogy; creating equitable learning environments; pedagogy vs. andragogy; building supportive student relationships; Universal Design for Learning; and the Ignatian Pedagogical Paradigm (Context > Experience > Reflection > Action > Evaluation).

EDTC 5460 Principles of Instructional Development 3 Credits

This course covers the principles and application of systemic design of instruction in multimedia curricula design. Topics include designing, developing, and evaluating instructional materials; selecting media; conducting needs assessment and learner analysis; writing instructional objectives; and assessing learner performance. Candidates analyze, evaluate, and propose potential solutions to selected case studies and conduct a needs assessment. Previously MD 0460.

EDTC 5463 Methods for School Library Media 3 Credits

Students will explore effective implementation of the school library media program, integrating current research and actualizing best practices in the field. Topics will include strategies for teaching and learning in multimedia environments, organizing information and support for K-12 classrooms and structured focus to help the future school library media specialist develop the skills and dispositions necessary to manage the roles and responsibilities of teacher and instructional partner. Previously MD 0463.

EDTC 5465 Emerging Technologies 3 Credits

This course will examine specific technologies that are being used in the classroom at an increasing frequency. Specific technologies covered will vary depending on the section. The course can be taken more than once for credit depending on the topic covered with approval from the program director. This is a hands on course, and students will be working with the actual assigned technologies. Possible topics may include: AR/VR in the Classroom, Multimedia in the Classroom, Podcasting in the Classroom, E-Learning in the Classroom, Flipping the Classroom, Google Tools in the Classroom, Mobile Devices in the Classroom, QR Codes in the Classroom, Digital Badging. Previously MD 0465.

EDTC 5469 Establishing Worldwide Learning Communities Through Technology 3 Credits

Worldwide developments continue to heighten awareness of the importance of connections between people on a global scale. When we consider our world from such a perspective, the need for understanding and education becomes glaringly apparent. This course views the benefits of using technology for communication and collaboration on a broad scale from the perspectives of both students and educators. Technologically connected learning communities around the globe occur through students forming partnerships to learn about each others' customs, languages, and cultures; teachers collaborating on teaching strategies and curriculum development; or administrators and policymakers exchanging views on educational issues. Candidates in this course examine the instructional strategies, issues, and concerns for connecting communities of learning globally along with the related technological tools and techniques. Previously MD 0469.

EDTC 5470 Designing for Online Instruction 3 Credits

This course examines the nature of teaching online, the development of online teaching courses and activities, and the use of integrated media resources in online learning in K-12, higher education, and professional development settings. Previously MD 0470.

EDTC 5471 Technologies for Building On-line Engagement 3 Credits

Using modern, mobile-based tools to communicate and develop Multimedia/interactive experiences can turn a passive, go-at-your-own-pace on-line course into a highly engaging community learning experience for students. This course will review a range of current technologies that can be applied to delivering content and interacting with students to create such courses. Tools such as SoftChalk, H5P, Microsoft Sway, Microsoft Teams, Slack, and others will be examined, with students completing a final project using one or more of the tools.

EDTC 5490 Achieving an Interdisciplinary Approach to Teaching Through Technology 3 Credits

Achieving an interdisciplinary approach to teaching is a challenge facing many of today's educators. It is a set of complex tasks that involves integrating content across disciplines, good instructional design, effective planning, and creative pedagogical strategies while at the same time realizing educational equity among a diverse student population. Fortunately, technologies of instruction can help with the realization of these tasks. In preparation for the interdisciplinary challenge, teachers need exceptional instruction in the stages of interdisciplinary curriculum development with technology. This course addresses the selection, use, modifications, design, integration, and implementation of interdisciplinary curricula using technology in a culturally diverse environment. It aims at helping candidates in the course to develop their understanding of the potential use of technologies of instruction in achieving an interdisciplinary cross-cultural approach to education. Previously MD 0490.

EDTC 5547 Planning and Managing the Instructional Design**Process 3 Credits**

Designing instruction requires expertise in pedagogy and technology, but just as important are the planning and project management skills that allow the work to happen smoothly and collaboratively. This course will begin with an examination of the methodologies that can be used to structure and develop courses - ADDIE, SAM, etc. - followed by an examination of standard planning techniques such as the use of wireframes and storyboards. This will conclude with the basic principles and practices of Project Management, including the use of collaboration technologies to facilitate communication and the overall development process.

EDTC 5900 Special Topics (Shell) 3 Credits

This course explores contemporary issues in educational technology. Topics vary from semester to semester and will be chosen by faculty to address issues of current relevance that are not addressed in other course offerings. Previously MD 0401.

EDTC 5950 Practicum in Instructional Design 3 Credits

Candidates develop their individual, group, and consultation skills in this course through placement in an instructional design position, while receiving ongoing individual and group support. Participation requires audio recording at the practicum site for supervision and demonstration of professional competency.

EDTC 6501 Technology and Transformational Culture 3 Credits

Candidates will explore contemporary philosophies in learning and information technologies. Recent research that supports effective approaches to technology integration, and the implications for evidence based practice in instructional settings in schools, agencies and professional development environments will be emphasized. Optional opportunities for field work based on individual professional goals. Previously MD 0500.

EDTC 6503 Research and Evaluation in K-12 Consultation and Leadership 3 Credits

Candidates will examine methods of empirical research and measurement, the role of descriptive and inferential statistics in data assessment and will perform critical analyses of effective quantitative, qualitative, and mixed methods research approaches. Topics will include: evaluation of current research studies and implications for professional practice; data assessment; the roles of the K-12 specialist: school library media specialist, technology specialist, special education/ TESOL/ Bilingual co-teacher and/or consultant in providing support for general education teachers and a diversified student population, and the skills needed for effective data-based decision making in school leadership. Crosslisted with RLDV 6503. Previously MD 0503.

EDTC 6540 Creating and Curating Digital Content 3 Credits

While the explosion of both online educational resources and digital content creation tools has opened up a new world of possibilities for classroom teachers, few instructors have the time to do the exploration and collation necessary to truly take advantage of all the Internet has to offer. In this hands-on course, each student will be given the opportunity to assume the role of digital content developer for an actual university or K-12 course: working closely with an instructor to define and research course content, learning how to evaluate digital tools for presenting material across devices and platforms, and choosing the best options, be they aggregators, e-book creators, online portfolios, or other web tools, to produce, collate, and deliver the content required by the professor or teacher. The materials produced will subsequently be used in actual Fairfield University courses. This course is open only to students enrolled in the Educational Technology program. Previously MD 0540.

EDTC 6541 21st Century Literacies in the Classroom 3 Credits

The term "literacy" used to be associated with the ability to read and write. How we interact with our environment is evolving as technology evolves. This has resulted in an expansion of the definition of literacy. Literacy now includes several facets: Information, Media, and Information and Communication Technologies (ICT). It is important for students to understand 21st century literacies and be able to use them as a guide in the global community that helped create the need for them. This course explores the concept of 21st century literacy and how these skills can be both taught to students and integrated into our teaching to support student learning. Previously MD 0541.

EDTC 6545 Designing and Developing Training Programs 3 Credits

Designed for prospective training specialists, personnel generalists, school media specialists or line personnel in business and industry, this course focuses on designing and developing training programs for administrative professionals, management employees, and school personnel. Course assignments provide individualization and tailoring of course content to candidate needs and working environments. Crosslisted with PSYC 6545. Previously MD 0545.

EDTC 6546 Integrating the Arts and Technology in K-12 Teaching and Learning 3 Credits

The value of the visual and performing arts in supporting essential critical thinking is well documented in recent research. Arts education is closely linked to every goal of school reform, academic achievement, social and emotional development, civic engagement, and equitable opportunity. Candidates will examine integration of the arts in content areas, and the robust opportunities in both formal and informal learning environments offered by technology applications and digital resources. Previously MD 0546.

EDTC 6554 Understanding Media Literacy through Popular Culture and Mediated Environments 3 Credits

Media literacy is the ability to access, analyze, evaluate, and produce media messages through a variety of mediated environments. Class time will consist of a blending of lectures and class discussions that will illustrate how popular culture has altered a generation of children while at the same time looking at how it is understood and perceived by them. Further, we will explore how media literacy can be integrated into classroom lessons to increase motivation and cultural awareness. Previously MD 0554.

EDTC 6594 Survey of Innovation in Technology 3 Credits

Technologies are being introduced at an astounding pace, and their adoption is increasingly being driven by consumers rather than by institutional needs and considerations. For educational technology managers, the ability to critically assess new tools and foresee where technology is heading are essential skills. In this course, students will examine the introduction of a variety of mass communication and digital technologies in the recent past in order to develop an understanding of the common elements that have characterized technical innovation in U.S. society and their potential use in education. In taking a case-study approach to the topic, students will conduct research on the relative success of, and societal/institutional reactions to, the various technologies. Students will also study failed technologies in an effort to understand what elements might have been missing. The course will culminate with each student developing their own measurement and assessment of a current "new" technology and develop a strategic plan as to how it might be pursued/implemented in their own school or district. Previously MD 0594.

EDTC 6596 Leading and Supporting Educational Technology in K-12 Schools 6 Credits

This course is designed to address the specific needs of educational technology professionals for K-12 technology leadership positions. The course will allow students to simultaneously examine both the issues and practices involved in managing technology operations and the technical knowledge required to implement, oversee, and contract for the services required to deliver tech-based learning. The course will lead students through such leadership topics as strategic planning, budgeting, professional development, legal and ethical issues, policy development, and team building, along with the technical concepts of networks, servers, devices and device management, security, and web services as needed to manage technical staff and successfully interact with technology providers. Students will also connect with a technology administrator or director to gain first-hand knowledge of the issues and challenges faced in the field. Previously MD 0596.

EDTC 6990 Independent Study 3-6 Credits

Candidates complete individual study in educational technology with a faculty member after submitting a proposal for independent study. Previously MD 0595.

EDTC 6999 Capstone Experience 3 Credits

Prerequisites: All other required coursework in the Educational Technology program.

This course serves as the final summative assessment for educational technology students. Their final product should reflect their cumulative work from the program. Previously MD 0585.