

SUNY Empire

Non-matriculated courses

Professional Development for Religious and Independent School Teachers

Master of Arts in Teaching in Middle Childhood/Adolescent Education

EDUC-6005 U.S. SCHOOLS IN SOCIAL CONTEXT 3 cr.

This course critically examines the philosophical, historic, social and legal foundations of education, as well as contemporary structures, functions and issues in American educational systems. Topics include: broad historical and social contexts within which American schools developed; present and historical relationships between schools and communities; diversity, equity, individuality and schooling; schooling and democracy/citizenship; social structures and cultures of schools; teachers as members of learning communities; computer use in schools; rights and responsibilities of education stakeholders; and contemporary debates and alternative visions of schooling. Students complete at least 12.5 hours observing or participating in school and community-based experiences in settings where their schools are located. Individuals registering for this course will do so by location. This course includes online work with some scheduled face-to-face meetings held at Empire State College centers in Western NY (Rochester or Buffalo), Syracuse, Latham, and New York City (Manhattan). This course is typically offered in the fall.

Learning Objectives: • Understand the history and progression of education in the United States from its inception. • Understand and develop home-school community relationships. • Recognize how social, economic, racial issues affect school-aged children.

EDUC-6010 MIDDLE CHILDHOOD AND ADOLESCENT DEVELOPMENT 3 cr.

This course explores theories/research related to middle child and adolescent development and educational psychology within the contexts of families, cultures, communities and schools. The course will focus on physical, cognitive, social and emotional development; theories of learning and teaching; genetic and environmental factors affecting development; individual differences in abilities and developmental patterns; developmental issues and learning needs of students with special needs; and best practices for teaching, assessment, and creating a positive and motivating learning environment. MAT students (who are seeking certification) will be required to complete content specific classroom observation hours with a certified teacher for this course. This course is typically offered in the fall.

Learning Objectives: • Critically analyze principles and theories of developmental and educational psychology including, how context (e.g., culture, family, community, school) influences the development of children and adolescents. • Understand both normative (expected) achievements of children and adolescents from middle childhood to adolescence, as well as individual and group differences in development. • Apply research based best practices for teaching and assessment to create a positive and motivating learning environment for all students.

EDUC-6100 TEACHING AND CURRICULUM: ENGLISH 3 cr.

This course examines research-based approaches to middle and high school curriculum development in the area of English language arts. Students will consider the relationships between curriculum and classroom management and the relationship between the curriculum and students' individual differences and capabilities. Students learn how to use their content knowledge to develop instructional objectives and to develop or adapt instructional materials appropriate to the middle and high school grade levels they are teaching. Students learn how to use technology for both instruction and information management, and to identify, use, and evaluate technologies appropriate to the ELA classroom. The culminating course assignment is to design a four to six-week unit plan that aligns with ELA edTPA, and MAT program outcomes. This course is typically offered in the fall. Pre-Requisite: EDUC-6020.

Learning Objectives: • Design and implement units of study grounded in research and standards based instructional practices for the grades 5-12 learner. • Demonstrate an understanding of how to create a high-quality classroom environment that includes, but is not limited to a variety of texts and text types, recognition of the importance of spaces for whole group, small group, and independent literacy endeavors, the role environmental print plays in the learning process. • Utilize a variety of informal and formal assessment measures that demonstrate: an understanding of content area pedagogy, individual student learning differences, and the teacher's ability to use assessment results to inform instruction. • Demonstrate an understanding of how to use classroom time to the best advantage for all student learning that includes, but is not limited to independent reading; writing in a variety of genres for various audiences using a multiplicity of modalities; and student presentations and performances.

EDUC-6105 TEACHING AND CURRICULUM: LOTE 3 cr.

This course examines research-based approaches to middle and high school curriculum development, the relationships between curriculum and classroom management, and the relationship between the curriculum and students' individual differences and capabilities. Students learn how to use their subject matter knowledge to develop instructional objectives, and to develop or adapt instructional materials appropriate to the middle and high school grade levels they are teaching. Students learn how to use technology for both instruction and information management, and to identify use and evaluate technologies appropriate to the subjects and levels taught. The study of curriculum is related to the students' areas of certification. Topics include research and theories related to curriculum and instructional strategies; curriculum construction, development of instructional objectives and materials, lesson planning and presentation; pupil evaluation; and technology mediated methods and materials. This course is typically offered in the fall. Pre-Requisite: EDUC-6025.

Learning Objectives: • Advance their repertoire of LOTE teaching strategies. • Assess LOTE in multiple ways. • Utilize technology to enhance 5-12 LOTE learning.

EDUC-6110 TEACHING AND CURRICULUM: MATH 3 cr.

This course examines research-based approaches to middle and high school curriculum development, the relationships between curriculum and classroom management, and the relationship between the curriculum and students' individual differences and capabilities. Students learn how to use their subject matter knowledge to develop instructional objectives, and to develop or adapt instructional materials appropriate to the middle and high school grade levels they are teaching. Students learn how to use technology for both instruction and information management, and to identify use and evaluate technologies appropriate to the subjects and levels taught. The study of curriculum is related to the students' areas of certification. Topics include research and theories related to curriculum and instructional strategies; curriculum construction, development of instructional objectives and materials, lesson planning and presentation; pupil evaluation; and technology mediated methods and materials. This course is typically offered in the fall. Pre-Requisite: EDUC-6030.

Learning Objectives: • Create effective, standards-based lessons and learning segments that are implemented and then reflected upon about their own or classmates' students. • Develop extended-time curriculum planning that align with NYS Core Curriculum, Common Core learning standards, and NCTM standards, as well as any school district requirements. • Conduct and assess classroom practices that employ groups of students, that integrate mathematics and 21st century technologies, and that prepare students for both classroom and high-stakes tests using the reporting framework from edTPA.

EDUC-6115 TEACHING AND CURRICULUM: SCIENCE 3 cr.

This advanced science education course builds upon the participant's prior learning in Teaching and Learning or instructor-approved equivalent. Extending the best-practice science from earlier coursework with science literacy components, inquiry-based laboratory and lecture activities, use of data probes and spreadsheets, and participation in NSTA, the participants now plan and then implement their lessons in their own

classroom, reflecting on student learning and achievement. Planning over monthly and yearly time frames, examination of actual classroom activities with groups and with technologies, and preparation for high-stakes tests is addressed as well. Instructional practices are aligned with the NYS Core Curriculum, taking their strategic focus from the Framework for K-12 Science Education. The reporting and commentary requirements for edTPA are integrated into the course. Within this 100% online course, participants will meet both synchronously and asynchronously. Participants not currently in classrooms will share learning practices with those teaching. This course is typically offered in the fall. Pre-Requisite: EDUC-6035.

Learning Objectives: • Create effective, standards-based lessons and learning segments that are implemented and then reflected upon about their own or classmates' students. • Develop extended-time curriculum planning that align with NYS Core Curriculum and any district requirements. • Conduct and assess classroom practices that employ groups of students, that integrate science and 21st century technologies, and that prepare students for both classroom and high-stakes tests using the reporting framework from edTPA.

EDUC-6120 TEACHING AND CURRICULUM: SOCIAL STUDIES 3 cr.

This course examines research-based approaches to middle and high school curriculum development, the relationships between curriculum and classroom management, and the relationship between the curriculum and students' individual differences and capabilities. Students learn how to use their subject matter knowledge to develop instructional objectives, and to develop or adapt instructional materials appropriate to the middle and high school grade levels they are teaching. Students learn how to use technology for both instruction and information management, and to identify use and evaluate technologies appropriate to the subjects and levels taught. The study of curriculum is related to the students' areas of certification. Topics include research and theories related to curriculum and instructional strategies; curriculum construction, development of instructional objectives and materials, lesson planning and presentation; pupil evaluation; and technology mediated methods and materials. This course is typically offered in the fall. Pre-Requisite: EDUC-6040.

Learning Objectives: • Evaluate curriculum theories for their goals, strengths, and limits. • Develop dispositions and teaching abilities to provide meaningful social studies learning opportunities for all learners with diversities including race, ethnicity, social class, and gender. • Promote their students' construction of connections within the social studies, between the social studies and other subjects, and between themselves and the world beyond the classroom. • Create a standards-based unit rich in inquiry-based, experiential, interactive, technology-enhanced learning.

EDUC-6125 LITERACY 3 cr.

This course is designed for classroom teachers working with students in grades 5-12. Various forms of literacy, including, but not limited to reading, writing, speaking, listening, and digital literacy are explored within a NYS learning standards framework. Units include a critical consideration of theoretical perspectives about language acquisition and the wider social context of literacy in U.S. society in the 21st century. Topics include developmental issues in language acquisition; instruction for literacy in multicultural classrooms; teaching English as a second language; and reading and writing difficulties with a specific focus on content comprehension strategies that classroom teachers can use to differentiate instruction. This course is fully online. This course is typically offered in the fall.

Learning Objectives: • Apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts that they can in turn use with grades 5-12 students. They will draw on their own prior experience and their interactions with other readers and writers in order to scaffold these skills for their own students. • Employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes. • Apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language, and genre to create, critique, and discuss print and nonprint texts. • Conduct an informal case study on an adolescent learner focusing on the learner's interests by generating ideas and questions, and by posing suggestions that

would further the learner's literacy learning and engagement. • Gather, evaluate, and synthesize data from a variety of sources (e.g. working with the students, schoolwork, school records if available, talking to the parents) to develop an informal case study to be shared with the course instructor.

Master of Arts in Teaching in Adolescent Special Education and Master of Education in Adolescent Special Education

SPED-6005 INTRODUCTION TO HISTORY OF SPECIAL EDUCATION LAW 3 cr.

This course will provide a comprehensive overview of the history of education law and the history of education of students with disabilities, advocacy, and disability laws from the mid-20th century. Students will be introduced to the role and responsibilities of the special education teacher in their legal obligation to the exceptional student, parents, and school. Particular emphasis will be placed on federal and New York State Education Department Law- Part 200 mandates and current special education laws and core issues that developed from the disability movement: Individuals with Disabilities Education Act – IDEA (PL 94-142), No Child Left Behind Act (NCLB), Individualized Education Programs (IEP), Parental Rights and Procedural Safeguards, Due Process, introduction to initiatives such as PBIS, FBA and RTI, and future litigation as it comes into effect. Students must complete at least 10 hours NT/ 5 hours CT in the classroom working with a certified teacher to explore the relevance of the topics they are studying to a classroom setting. Observation assignments will integrate theoretical and research-based concepts with classroom practice. This course is typically offered in the fall.

Learning Objectives: • Articulate salient elements of disability law as it pertains to teaching adolescents with disabilities. • Apply knowledge of special education law in providing appropriate student accommodations. • Apply knowledge of special education law as it pertains to fostering partnership with student and family. • Articulate special education law in advocacy.

SPED-6050 TEACHING EXCEPTIONAL ADOLESCENTS IN INCLUSIVE SETTINGS: METHODS II 3 cr.

This course prepares secondary pre-service and in-service teachers to provide modifications for exceptional students in English Language Arts, Math, Science, and Social Studies. The focus of this course is on planning instruction and assessments to meet the needs of all students with an emphasis on the role of literacy instruction in learning content. During the course, students will examine the particular learning needs of students with learning and, emotional disabilities, and giftedness. Students also will explore practical aspects of collaborating with general education content teachers in inclusive settings. Specifically, students will receive instruction and practice in modifying lesson plans of general education content teachers so that they meet the learning needs students with specific exceptionalities. The course also will review various assistive technologies available to students with physical and intellectual disabilities. Teachers will then be prepared to use various instructional models to address the needs of students with these exceptionalities. Among the instructional models to be examined are backwards planning, differentiated instruction, culturally responsive teaching, brain based and cooperative learning, and the Universal Design for Learning. This course also will feature specific responsibilities of teachers and schools regarding student learning and safety. Specifically included are means for identifying and reporting suspected child abuse and maltreatment, means for instructing students for the purpose of preventing child abduction; preventing alcohol, tobacco, and other drug abuse; providing safety education; and instruction in fire and arson prevention. Students must complete at least 10 hours NT/ 5 hours CT in the classroom working with a certified teacher to explore the relevance of the topics they are studying to a classroom setting. Observation assignments will integrate theoretical and research-based concepts with classroom practice. This course is typically offered in the fall. Pre-Requirement: SPED-6025.

Learning Objectives: • Effectively apply their knowledge of classroom planning and managing for the exceptional student in the general education setting. • Effectively and skillfully develop methods of

curriculum planning and development. • Advance their knowledge of assessment and test scores to generate educational goals. • Establish a safe classroom environment.

SPED-6075 FOUNDATIONS OF EDUCATIONAL ACTION RESEARCH 3 cr.

This course provides students with the basic competencies necessary to understand and evaluate the research of others, and to plan and conduct their own research with a minimum of assistance. Topics will include the research process from problem formulation, literature review, research design, and statistical analysis to report writing and dissemination. Both qualitative and quantitative research methods of data collection will be reviewed, and students will be introduced to action research, a form of self-reflective systematic inquiry by practitioners on their own practice. Students will conduct a small action research project over the course of the semester. This process will involve the identification of a specific issue in the student's work setting, researching the literature regarding the issue, designing a proposal to solve the issue, implementing the solution (after the proposal has been approved by the SUNY Empire State College Institutional Review Board), and reporting the results. Students must complete at least 10 hours NT/ 5 hours CT in the classroom working with a certified teacher to explore the relevance of the topics they are studying to a classroom setting. Observation assignments will integrate theoretical and research-based concepts with classroom practice. This course is typically offered in the fall. Pre-Requisite: EDUC-6015.

Learning Objectives: • Apply their knowledge of basic research methodology to conducting action research.

Master of Education in Curriculum and Instruction

CURI-6005 INTRODUCTION TO CRITICAL PEDAGOGY 3 cr.

This course is designed to create a discourse community that questions hegemonic practices, contributing to a larger collective conversation. Through the study of critical ethnographies, students will examine current educational assumptions to develop critically reflective practice and transform thinking. Students will deconstruct dynamics of critical pedagogy through the lenses of diversity including race, gender, and class, developing layered analysis of principles, theorists, and views. This course is typically offered in the fall.

Learning Objectives: • Define and implement critical pedagogy in a classroom or work setting. • Create a community-based project founded on the principles of critical pedagogy. • Analyze qualitative research including ethnography.

CURI-6010 NEW MEDIA AND NEW LITERACIES 3 cr.

This course is designed to explore the implications of new media and new literacies in social, political, economic and personal spheres. Students will investigate theories and research related to meaning-making in and around the contexts of contemporary social media. In addition, students will work collaboratively and collectively to build their knowledge in how these media are created, used, interpreted and re-used by themselves and others. They will explore how affinities for these media enable us to think differently about what it means to read, write, listen, speak, view and participate in often overlapping, and at times juxtaposed, communities of practice. Rather than focus on producing new media, this course will explore the impact new media and the resulting new literacies have on membership in existing and emerging communities of practice. This course is typically offered in the fall and spring.

Learning Objectives: • Understand the ways in which evolving fields of new media and new literacies intersect, diverge and impact the way people learn. • Demonstrate how digital technology influences the process of creating, redesigning, assessing, and validating information. • Describe different ways knowledge can be organized and distributed and the subsequent social, political, and economic impact of various organizational systems and affiliations. • Explore the tools used to communicate, collaborate, and participate in new media and new literacies and critically evaluate the affordances of these tools in different social contexts.

CURI-6015 LEADING IN A LEARNING ENVIRONMENT 3 cr.

This course is designed to examine leadership roles and leadership needs in 21st century education. Students will explore various leadership designs and styles alone and in relationship to curricular planning, professional development and community outreach. Students will examine learning environments to develop strategies and programs around leadership that coincide with the needs of contemporary learners. Additionally, students will read and become well versed on leadership strategies and initiatives, current and historical educational policy, and leadership outreach initiatives that affect learners and the community. They will share some common readings while selecting others to satisfy individual and group inquiries. This course is typically offered in the fall and spring.

Learning Objectives: • Articulate various forms of leadership and select strategies that make each successful. • Initiate programs and policies that optimize learning for all members of educational communities: K-16 students, staff, teachers, administrators, parents/guardians, and community members. • Collaborate in developing a learning reform model grounded in critical thinking, educational policy, current research and emerging employment and cultural trends. • Begin to analyze the role of data in leadership and school settings.

CURI-6050 LITERACY ASSESSMENT 3 cr.

In this course, students will explore a variety of intervention and assessment models for reading, writing, speaking, listening, and viewing as they apply to birth-grade 12 learners. Response to Intervention (RTI) across grade levels, with particular attention to implementing RTI with English learners, will be a primary focus of the course. Case studies will be used to familiarize students with the assessment, diagnosis, and remediation process. Students will administer an informal reading inventory (IRI) to a K-high school student and use the information to pair students with appropriate instructional materials. The literacy portion of the Common Core State Standards (CCSS), as well as the International Literacy Association (ILA) standards for assessment and evaluation will be examined as they pertain to curriculum, evaluation, and assessment. Course learning outcomes reflect ILA Literacy Standard 3. This course is typically offered in the fall.

Learning Objectives: • Demonstrate an understanding of the literature and research related to assessments and their uses and misuses. • Select appropriate assessment tools to monitor student progress and analyze instructional effectiveness. • Administer and interpret appropriate assessments for students, especially those who struggle with reading and writing.

CURI-7122 RESEARCH DESIGN 3 cr.

This course introduces students to quantitative, qualitative and mixed educational research methods, procedures, and best practices. This course fosters critical thinking in terms of evaluating the quality and value of different research methodologies and different kinds of research studies in education. This course discusses the importance of high-quality research to best determine solutions to educational problems and issues. Topics include an overview and comparison of qualitative, quantitative, and mixed methods; ethics in educational research with human subjects; the development of a research question, including, an introduction to the components of an annotated bibliography and a literature review; statistical techniques; causation, validity and reliability; and testing and assessments relevant to educational settings.

Learning Objectives: • Describe and evaluate the processes of educational research, including the components of quantitative, qualitative, and mixed methods, similarities and differences, and various arguments for the use of each form of research. • Analyze and critique sample research studies, identifying the key components, methodology, variables, theoretical framework, and ethical issues. • Understand the key processes involved in constructing a literature review. • Demonstrate an understanding of how research, theories, and policies have impacts upon one's chosen topic. • Complete a draft of an introduction to a literature review, and a literature review.

Master of Arts in Learning and Emerging Technologies

EDET-6005 LEARNING WITH EMERGING TECHNOLOGIES: THEORY AND PRACTICE 3 cr.

This course examines and applies the research, theory and practice of using innovative technologies for improving teaching, learning, and communications. Educators and communicators from government and industry can explore education, sociology, and instructional design literature related to technology-supported learning and 21st century skills, developing reports and papers that analyze and then apply this knowledge to their particular interests. Assistive technologies and instructional design considerations for learners with disabilities, as required by the American Disabilities Act, are addressed as well. Participants also will develop various emerging technologies (tutorials provided within the course), practicing and applying learning and design principles in nascent technology efforts geared towards their intended learners. Throughout the course, participants will share their works and ideas with colleagues in a professional, supportive environment; the course concludes with a collaborative project that previews the role of curriculum and assessment using the context of planning for a virtual environment. (Occasional synchronous meetings.) This course is typically offered in the fall and spring.

Learning Objectives: • Understand and define the foundational education and design principles that can elucidate and frame the evolving nature of communication presently possible through emerging technologies. Plan creatively for the use of emerging and existing technologies in effective ways to meet their own professional and personal needs. • Experience the role that technology-facilitated professional support, interactions, and collaborations can play in increasing learning.

EDET-6010 MEDIA LITERACIES IN EMERGING TECHNOLOGIES 3 cr.

This course is designed to explore emerging technologies and implications of new media and new literacies in social, political, economic and personal spheres. Students will investigate theories and research related to meaning-making in and around the contexts of contemporary social media. In addition, students will work collaboratively and collectively to build their knowledge in how these media are created, used, interpreted and re-used by themselves and others. They will explore how affinities for these media enable us to think differently about what it means to read, write, listen, speak, view and participate in often overlapping, and at times juxtaposed, communities of practice using emerging technologies. This course will explore the impact new media and the resulting new literacies have on membership in emerging communities of practice. This course is typically offered in the fall and summer.

Learning Objectives: • Understand the ways in which evolving fields of new media and new literacies intersect, diverge and impact the way people learn and interact. • Demonstrate how digital technology influences the process of creating, redesigning, assessing, and validating information. • Integrate multimodal literacy theory into learning design and other contexts.

EDET-6015 INSTRUCTIONAL DESIGN FOR ONLINE LEARNING ENVIRONMENTS 3 cr.

The collaborative potential of online tools requires instructors to consider shifts in their pedagogy – to more mindfully plan, facilitate and guide. This represents a change in the roles and relationships between teachers and learners, and requires more attention to the instructional design and interactive communicative strategies of virtual learning experiences. In this course, students are introduced to instructional and digital design principles in order to apply them in a project that can be used as a component for their advanced design portfolios, or final capstone projects. Consideration is given to effective visual communication in digital environments. The course explores stages of the instructional systems design (ISD) process, and strategies for designing and developing multimedia instructional materials. An important aspect of online instructional design is understanding and responding to the context in which instructional materials will be delivered, and the needs, expectations and capacities of the participants. Students will explain their thinking during the creation of a project and demonstrate their understanding of these expectations. This is a required course for the Teaching and Learning with Emerging Technologies advanced certificate. This course is typically offered in the fall and spring.

Learning Objectives: • Demonstrate knowledge of instructional design theory. • Explore methods for the completion of a prototype online instructional design appropriate to an area of interest or specialization. • Demonstrate this knowledge in the evaluation of other students work.

EDET-6020 ISSUES AND ETHICS IN THE DIGITAL AGE 3 cr.

In this course, students will explore major issues related to knowledge production and learning in our digital age. Students will be introduced to pressing issues in the use of technology in various learning environments, and reflect on the assumptions we make about knowledge, creativity, and social dynamics based on our choices. Any one of the topics raised is suitable for more in-depth study as an elective. Topics will include privacy and security, intellectual property rights, the nature of creative commons, access and equity, ethics and legal challenges, digital democracy. Students will consider these concerns as they move into discussions on future trends by reading a variety of current reports, such as: MIT's Technology Review, Ray Kurzweill's AI.net site, Jamais Casco's Open the Future, and the New Media Consortium/Educause's annual Horizon Report, and their Top Teaching and Learning Challenges Project. In the process, they will investigate various strategies for studying futures, including scenarios, prediction markets, the Delphi method, environmental scanning, and crowdsourcing. This course is typically offered in the fall and spring.

Learning Objectives: • Consider social and ethical issues in technology and learning. • Analyze and respond to ethical case studies related to technology. • Use Synthesize research for a literature review on a topic of choice.

EDET-6025 ASSESSING LEARNING IN DIGITAL ENVIRONMENTS 3 cr.

Designing, developing, and learning within digital environments presents new challenges to our understanding of knowledge and skills; to the assessment of learning; and to understanding what constitutes effective participation in such environments. Using both collaborative and independent work, within this course, students will study the literature on digital environment evaluation and will seek to explore and define models of interactions and their assessment that can provide direction, support, and insight to designers and instructors of digital environments. Upon studying the rich, diverse, and novel ways in which humans can learn in these environments and the many emerging tools to assess learning, students will consider ways to value, document, capture, analyze, and evaluate the complex formal and informal ways that learners are making meaning within technology-mediated learning-and-communications environments. This course is typically offered in the fall and spring.

Learning Objectives: • Distinguish appropriate from inappropriate item types for measuring a given learning outcome. • Construct assessment plans utilizing emerging technology appropriate to enhance the process of assessment of learning. • Create an assessment that meets professional standards.

EDET-6045 DIGITAL GAMES, SIMULATIONS, AND LEARNING 3 cr.

Games, simulations, game elements and playful learning provide different ways to think about how, when and what we learn. Students will explore the research and theory in game and simulation-based learning as well as the related fields of game design, psychology, instructional design and education. This will include the analysis and evaluation of when games and simulations are most effective for learning and the associated recommended supportive practices. The theory and practice of game design will be introduced and applied in the development and creation of digital game and simulation prototypes for instruction and learning. Students will have the opportunity to pursue individual areas of interest in digital game or simulation development. This course is typically offered in the fall.

Learning Objectives: • Examine and evaluate research that supports the use of games, gamification and simulations for learning. • Design and construct games for learning that utilize research supported methods and techniques. • Apply professional game design principles and techniques to build working prototypes and functional games for learning.

EDET-6055 DIGITAL MEDIA ARTS AND TECHNOLOGIES 3 cr.

This interdisciplinary project-based course applies theoretical learning in digital media arts and technologies to individualized projects that incorporate at least one arts-based technology. Students will have the opportunity to develop their unique aesthetic vision and technical expertise while experimenting with new forms, within the framework of arts-based learning and research. They will design, implement, build, install, program and/or perform for an audience/viewer/learner within the context of their choice, whether this is within mixed media installations, virtual worlds, a live simulcast, or other digital distribution systems. The primary course project will be threaded throughout the course, including processes such as a proposal, storyboard, script, rough cut/dry run, and refined project. The course will include a critical analysis of aesthetic, ethical, social and professional considerations. Students will be expected to use social media, web 2.0 tools, and emerging media environments for course communications and research. This course is required for the Advanced Certificate in Emerging Media and Technology for the Arts. This course is typically offered in the fall.

Learning Objectives: • Develop unique aesthetic vision and technical expertise while experimenting with new forms, within the framework of arts-based learning and research. • Design, implement, build, install, program and/or perform for an audience/viewer/learner within a selected context, whether this is within mixed media installations, virtual worlds, a live simulcast, or other digital distribution systems. • Demonstrate effective use of social media, web 2.0 tools, and emerging media environments for graduate level course communications and research.

EDET-6070 INNOVATION: MEETING THE CHALLENGES OF ORGANIZATION OR SYSTEMS INTEGRATION 3 cr.

Despite the need for the adoption of technology interventions in our expanding and global networks, the integration of technology innovations can be a challenge for both those who create the innovations and the organization or systems that could possibly benefit from the adoption. Within this course, students will begin with the study of large-scale, documented organizational and institutional responses to innovation and change and then they will research responses to change within the specific organization for which they have a professional interest. This study will lead to students' designing and testing an approach to help them gain the entrance and acceptance of an innovation within the environment of their particular interest. (Occasional synchronous meetings.) This course is typically offered in the fall.

Learning Objectives: • Study how large-scale organizations and institutions adapt to and/or resist the need for innovation and change, studying the psychology and sociology of these organizations. • Determine the organizational and institutional considerations and constraints regarding innovation adoption within an organization or system relevant to the participant. • Develop a specific outreach and approach to encourage assimilation of a technology or innovation of particular relevance to the participant.

EDET-6140 SOCIALLY NETWORKED LEARNING: UNDERSTANDING DESIGNING EVALUATING 3 cr.

The rapid advances in communication and learning technologies have opened new arenas for educators and communicators, however, a conceptual framework about the value and design of these new and rich types of interaction needs to be developed. Plus, for effective educational uses, one needs to assess what happens to the learners and learning and to evaluate the overall productivity of the socially networked environment itself. In this course, participants will study the research about various aspects of these emerging social networks, considering the sociology and the psychology of the individuals and interactions. Working then with their own needs, they will frame and design a social network to meet a learning or communication goal for their students or clientele, developing an implementation, assessment and evaluation plan and articulating a theoretical/conceptual framework to validate their design. (Participants also can choose to work on a project with the instructor.) Two synchronous meetings. This course is typically offered in the fall.

Learning Objectives: • Examine the psychology, sociology, and assessment aspects of socially-networked learning as it is emerging in the world today. • Locate social learning within scenarios relevant to their interest, researching ways these environments could be serving students.

EDET-6150 STEM TOOLS, DEVICES, AND SIMULATIONS: MEASURING REPRESENTING AND UNDERSTANDING THE WORLD 3 cr.

STEM approaches (science, technology, engineering, mathematics), possibly expanded to include arts (STEAM), create problem-solving environments that are often cross-disciplinary, where technology tools can support, share and accelerate learning and where the arts can add to creativity and innovation. Application areas can range from K12, to higher education, to corporate, to healthcare. You will start by overviewing a variety of STEM / STEAM approaches, tools and projects in multiple disciplines. Then selecting several tools relevant to your learner or client needs, you will design an environment that employs the relevant STEM or STEAM tools and that articulates the conceptual, educational, design, and assessment principles employed. You must have a laptop or desktop computer, a Webcam, and a good Internet connection. Three online synchronous meetings are conducted at pre-announced times; for tools that are not web-based, applicants must supply their own devices. (Required for the advanced certificate in STEM Education and Emerging Technologies). This course is typically offered in the fall.

Learning Objectives: • Understand broadly the breadth and scope of STEM/STEAM tools, devices, and simulations. • Study and apply your selected tools to an educationally supported, effective, STEM or STEAM environment to meet the goals, objectives, and assessments for your students or clients. • Learn from shared experiences with peers and the instructor within this socially networked environment.