TECHNOLOGY (TECX)

TECX 500   ePortfolio Tools for the Classroom 3 credits
Learning portfolios have been a best practice in the classroom long before the digital age. However, with advancements in content hosting and curation, portfolios have gotten a 21st-century upgrade in the form of e-portfolios. But how do you manage a large Web-based project like this? What structures do you put in place to keep students on task and engaged, and what programs do you use that will ensure appropriate accessibility and privacy? In this course, you will construct an e-portfolio strategy for your classroom and incorporate best practices to enhance the learning experience for your students. You'll survey research supporting the positive impact of this type of project, and select the e-portfolio tools that will work best for your students' diverse needs and your specific educational context. In addition, you'll learn how to structure your assessment plans to better integrate a portfolio project so you can more easily compile students' learning artifacts. This course is offered through Advancement Courses. By the end of this course, you will have a comprehensive plan to implement an e-portfolio project that will help students reflect on their previous learning, demonstrate alignment with course standards, and showcase their proficiency to the outside world. This course is offered through Advancement Courses.

TECX 501   Essential Classroom Technology for Teachers 3 credits
The importance of technology in our society cannot be overstated. However, teaching with technology can be overwhelming, if not frustrating. How do you sort through all the options available, make sure you know how to use what you select, and keep students on task while using technology? This course arms you with concrete strategies for how to choose, use, and monitor technology in the classroom. You will learn to use technology as a teaching and planning tool, design meaningful learning experiences, incorporate technical terminology in your speech, and accommodate underserved populations such as special education and English language learners. You will also learn how to plan instruction that meets the standards for technological literacy set forth by the International Society for Technology in Education (ISTE) and the Common Core State Standards (CCSS). After finishing this course, you'll be able to immediately implement technology-based activities in your classroom, allowing your students the opportunity to connect to content in new and engaging ways and giving them skills they will use far beyond your classroom. This course is offered through Advancement Courses.

TECX 502   Fostering Computer Literacy 3 credits
It goes without saying that computer literacy is essential in today's world. Every career, every mode of communication, every aspect of life is touched by computers and technological devices, and our students must be prepared to enter that world. Regardless of what subject or grade you teach, you can help your students develop and master computer literacy skills. In this course, you will learn how to integrate computer literacy lessons into any classroom to meet Common Core and ISTE standards and prepare your students for a lifetime of computer use. You will develop strategies for teaching students typing skills, the difference between hardware and software, and how to be good digital citizens. In addition, you will explore how you can take advantage of Google tools for education and coach students on how to care for school-owned and personal devices. With the knowledge and techniques from this course, you will be prepared to provide your students with a plethora of engaging learning opportunities to encourage computer literacy in your classroom. This course is offered through Advancement Courses.

TECX 503   Social Media Tools for Teaching and Learning 3 credits
Although some teachers may view social media as nothing but a distraction, it can actually be an effective instructional tool when used correctly. Social media can help students become media literate and teach collaboration, communication, and critical-thinking skills they will need for future success in this technological age. In this course, you will receive an in-depth guide to successfully planning and implementing authentic, integrated social media tools regardless of what grade you teach. You'll cultivate strategies for how to integrate a variety of social media applications into core curriculum content areas, prepare students to participate safely through digital citizenship practices, and support the needs of diverse learners through social media platforms. In addition, you will examine how you might use social media for formative and summative assessment, and how to create rubrics for these assessments. Using the methods from this course, you will be able to increase student engagement and improve overall achievement through the use of various social media tools. This course is offered through Advancement Courses.

TECX 504   Teaching Computer Science in 6-12 3 credits
Our society's increased dependence on technology is generating a need for highly qualified individuals who have the skills to support and create that technology. Therefore, it is essential to equip middle and high school students with the fundamentals of computer science so they have a foundation upon which to navigate the world and their future careers. In this course, you'll learn how to prepare students to meet the needs of our modern economy through an overview of what computer science is, a discussion of how it affects our society, and tools for bringing computer science skills into a variety of learning environments. You'll review several resources and choose which ones will work best in your classroom setting given your level of access to technology. In addition, you'll examine the long-term benefits of teaching students computer science skills and how to be good digital citizens. With the techniques from this course, you'll be able impart skills that students will use for a lifetime and also give them a head start in a highly valuable vocational field. This course is offered through Advancement Courses.

TECX 505   Teaching Computer Science in K-5 3 credits
Our society's increased dependence on technology is generating a need for highly qualified individuals who have the skills to support and create that technology. Thus, it is never too early to introduce the fundamentals of computer science to elementary school students—and this course will help you do just that. In this course, you'll learn strategies for preparing children to meet the needs of our modern economy, starting with the basics of computational thinking in K–3 and moving into beginning programming in grades 4–5. You'll review a variety of resources and choose which ones will work best in your classroom setting given your access to technology. In addition, you'll learn the long-term benefits of teaching students computer science skills and how to be good digital citizens. With the techniques from this course, you'll be able impart skills that students will use for a lifetime and also give them a head start in a highly valuable vocational field. This course is offered through Advancement Courses.

TECX 506   The Role of Technology in the Inclusive Classroom 3 credits
Both individualized education programs (IEPs) and new technologies can sometimes feel like overwhelming additions to your already-packed curriculum. However, in reality, technology tools can be a great solution for you when planning differentiated instruction for the diverse needs of your students, and can also be a valuable way for your students to become more independent learners. In this course, you will discover how to use technology to engage your students and help meet their special needs, thereby improving behavior and attention span and increasing the likelihood of academic success. Using Universal Design for Learning principles, you'll learn how to plan instruction that will motivate a wide variety of learners, and how to stay organized and efficient while managing a scaffolded, individualized curriculum. In addition, you'll explore digital tools (including assistive technology) that you can use to present core content so all students can access the curriculum according to their specific needs. With the strategies from this course, you'll be able to use technology to foster a sense of independence and empowerment among all your students to encourage them to grow and succeed. This course is offered through Advancement Courses.

TECX 507   Using Tablets to Support 21st Century Instruction 3 credits
Some teachers cringe at the thought of having tablets in their classroom. Why introduce yet another thing you have to compete with for students' attention? However, tablets actually have numerous practical and educational benefits; you just have to know how to manage them effectively in your class. In this course, you will explore how tablets can extend and enhance student learning, improve 21st-century skills, and engage reluctant learners. Moreover, you will learn how tablets can assist in nearly every component of effective teaching and learning, including lesson planning, classroom management, and meeting the needs of diverse learners. You'll cultivate strategies to help students become independent technology users who can create, explore, discover, problem solve, and innovate while fostering the 21st-century skills they need to thrive in college and careers. Using the techniques from this course, you'll be able to successfully and appropriately integrate tablet technology into your classroom to increase student achievement and engagement. This course is offered through Advancement Courses.

TECX 508   Using Technology to Support Students With Special Needs 3 credits
Today's teachers are tasked with meeting the needs of students who have a diverse range of abilities and learning styles, and differing levels of prior knowledge in specific content areas. Students who have learning differences face even more challenges than their peers in accessing the general education curriculum. Fortunately, teachers have the opportunity to use technology to inspire and ignite their students' interest in learning before these challenges become true roadblocks to academic success. In this course, you will learn all about the wide variety of technology resources available to teach subjects such as reading, writing, math, science, and social studies. You'll develop strategies for incorporating assistive technologies to help all students access curriculum, and further, how to use technology to differentiate instruction and motivate students with disabilities. In addition, you will explore methods for choosing the right technology tools for your classroom and finding funding to help ensure your students with special needs get the resources they require. Using the techniques from this course, you will be equipped to select and implement technology into your curriculum for a wide variety of subjects to meet the needs of all students in your classroom. This course is offered through Advancement Courses.

TECX 509   Computerless Coding: Play-Based Strategies and Tools 3 credits
Coding has quickly become one of the most important 21st-century skills. Coding is behind every app, every web page, and every social media post, and it will only become more integral to our students' lives and careers as technology advances. But how can you teach this essential skill to students without depending on constant access to a classroom's worth of computers? In this course, you will learn basic coding skills and how to teach these skills to students through play-based classroom activities—no computer and no previous coding knowledge required! You'll develop lesson plans and classroom activities to help students develop the logical thinking and problem-solving skills they need for coding. Algorithms, patterns, flowcharts, conditionals, and variables will all transform from scary words into fun classroom games. You'll also learn how to create a classroom environment where the word coding is associated with fun and where you are nurturing the next generation of coding masters. With the knowledge and skills from this course, you will be equipped to teach coding foundations to your students in a way that supports their future success as coders and critical thinkers. This course is offered through Advancement Courses.