

## STEM Ed Certification Program 2020

**June 8, 9:00-12:00, 1:00-4:00: EDUC 548 - STEM Introduction, Kern 1112** (Michelle Schoeck)

This course will introduce STEM and 21<sup>st</sup> century learning through a global perspective as it pertains to classroom instruction.

**June 9-10, 9:00-12:00: EDUC 549 - Project Based Learning, KERN 1112** (Michael Dragoni)

This course will include an overview of project-based learning and how this educational approach engages students and educators in authentic work that is grounded in real-world contexts and demands real-world solutions

**June 9-24, 1:00-4:00: EDUC 629 - STEM Problem Solving, KERN 1112** (Michelle Schoeck)

With a focus on teaching STEM learners in PK-12 classrooms, creativity, problem solving, and critical will be explored through hands-on instruction.

<b>June 11-12: 9:00-12:00 Electives 1 &amp; 2</b>	<b>June 15-16: 9:00-12:00 Electives 3 &amp; 4</b>	<b>June 17-18: 9:00-12:00 Electives 5 &amp; 6</b>	<b>June 22-23: 9:00-12:00 Electives 7 &amp; 8</b>
<b>EDUC 560-01 Survival Architecture (Erik Taylor) Kern 1112</b> This course will introduce the method of project-based learning through STEM-related challenges focused on survival architecture. The potential for natural disasters is a problem every architect must face when designing structures.	<b>EDUC 560-03 Maker Movement (Karen Czaicki) Kern 1112</b> Design labs and Makerspaces are everywhere. This elective will explore different spaces, materials and activities while finding ways to incorporate the Maker Movement into your setting.	<b>EDUC 560-05 Escape Rooms (Nikkole Briggs) Kern 1112</b> Join a team of out of the box critical thinkers and communicators to share an experience of behind the scenes in creating an Escape Room. Building Escape Rooms is appropriate for many ages and is a profound way to get excited about how learning can look and feel different and still be tied to standards.	<b>EDUC 560-07 Novel Engineering (Shenee McCoy) Kern 1112</b> Learn to integrate STEM education and the engineering design loop into literacy instruction. Novel Engineering is a natural extension to literature that builds problem-solving, creativity, and critical thinking skills.
<b>EDUC 560-02 Forensic Science (Stacy Donovan) Kern 1113</b> In this hands-on STEM elective, you will walk away with a plethora of forensic science activities to engage young minds by experiencing a mock crime scene. Learn about the science behind the activities and work with tools and methods used by real crime scene investigators. Channel your inner Nancy Drew and Sherlock Holmes to see if you can solve the case!	<b>EDUC 560-04 Robotics (Chris Sellers) Kern 1113</b> Robotics is an interdisciplinary approach to engineering design incorporates mechanical engineering, electrical engineering, information technology, and computer science. Participants will design, construct, operate, and use robots, as well as the create code to control the robot.	<b>EDUC 560-06 Digital Fieldtrips (Dustin York) Kern 1113</b> Gain hands-on experience with the newest Oculus Quest Virtual Reality, a library of Augmented Reality resources, and 360 degree cameras. Leave with skills and resources to bring new media learning tools to your classroom.	<b>EDUC 560-08 Integration of Music using EarSketch (Ashley McGhaw) Kern 1113</b> This course is designed for educators to learn the fundamentals of using EarSketch. It provides an introductory examination of how to implement and use EarSketch across all content.