



Join the Department of Science and Mathematics Education at UT Dallas for Hands-On Workshops!

Thursday, November 10

8:00-9:00 AM, Manchester

Taste the Chemistry

We will use grocery store supplies to explore different science concepts, mainly in chemistry. Using dry ice to carbonate fruit can tell the store of how fish get oxygen to breathe or how increasing carbon dioxide levels affects oceans. We will taste a periodic trend as well as polarity.

Dr. Stephanie Taylor, Associate Professor of Instruction

8:00-9:00 AM , Cardinal

Into the Field! Creating Authentic Project-Based Learning Experiences by Partnering With Local Informal STEM Education Providers

Do museums, zoos, nature preserves, and more excite your students? Come see how to create trips (both in-person and virtual) to informal science education destinations while incorporating project-based learning to increase content attainment and engagement as students do the work of scientists! Attendees will participate in hands-on sample lesson exploration and interactive brainstorming sessions about leveraging informal science education partnerships to meet curriculum standards and leave with multiple, ready-to-use customizable lessons from local destinations.

Dr. Kate York, Master Teacher Katie Donaldson, Master Teacher and Associate Director for UTeach Dallas

1:40-2:00 PM, Governors Lecture Hall

Engage Students with a Vivid Earth Science Introduction to Plate Tectonics

Plate tectonics is a subject that is often challenging to both teach and learn. At the University of Texas at Dallas, a multidisciplinary team of geoscientists/educators (Drs. Wang, Stern, and Urquhart) and middle school teachers came together for more than two years to create a new series of six engaging videos designed to integrate into Texas classrooms. In this multimedia session learn about the science, the collaboration, how to access the videos, and more!

Dr. Mary Urquhart, Associate Professor and Department Head





Friday, November 11

11:00-12:00 PM, Carpenter

What Makes a Habitable World? Exploring the Solar System and Beyond

Earth is the only known planet with life, yet we live in a solar system filled with other worlds and a galaxy of hundreds of billions of stars, and there are more galaxies in the known universe than stars in our Milky Way. From better understanding life on Earth to exploring worlds in our solar system and beyond, what are scientists looking for? Through discussions, activities, and resources, come learn what makes a habitable world!

Dr. Mary Urquhart, Associate Professor and Department Head

2:30-4:30 PM, Westcott

For the Love of CT! Computational Thinking in the K-5 Science Classroom

This session will explore the computational thinking (CT) practices of decomposition, pattern recognition, abstraction, and algorithms. Participants will engage in computational thinking activities and explore how CT principles can help develop students' scientific and engineering practices. Participants will dive into the updated science TEKS and discuss how CT practices align with the TEKS and can be used in their own classrooms.

Denise Gregory, Master Teacher

Amin Lalani, Master Teacher

<u>Did you know?</u> UT Dallas is recruiting Mentor Teachers for our STEM teacher preparation program, **UTeach Dallas**, and offers in-service teachers **Master of Arts in Teaching** degrees in **Science Education** and **Mathematics Education**, taught by faculty with a mix of STEM and STEM education expertise. To learn more, see the UT Dallas booth #459, http://sme.utdallas.edu or contact Emily Hennessy ehennessy@utdallas.edu



Interested in learning more? Use the QR code to fill out our interest form!