

Thematic Field Trip Programs at the UC Davis Tahoe Science Center (Incline Village, NV)

The UC Davis Tahoe Environmental Research Center (TERC) Education Team has developed specialized thematic programs aligned with grade level specific science curriculum. All programs include presentations of the TERC research vessel and laboratory exhibits in the Tahoe Science Center as well as a viewing of our "Lake Tahoe in Depth" 3D movie in the Otellini 3D Visualization Lab. Suggested grade levels for each field trip are listed, but each of our programs can be adapted to any grade level between third and twelfth.

Water on Earth (Grades 3 – 5): Students explore watersheds, the water cycle, water as a limited resource, and Lake Tahoe water quality. Hands-on activities can include Blue Planet, Drop in a Bucket, The Incredible Journey, Just Passing Through, and Incline Creek Stream Monitoring (weather dependent).
Shaping Earth's Surface (Grades 4 – 6): Students explore the forces behind the formation of landforms with an emphasis on erosion. Hands-on activities can include 3D Earthquake Viewer, Topography, and Landforms.
Geology/Plate Tectonics (Grades 4 – 8): Students will learn about the geological processes that formed Lake Tahoe and how tectonic activity is still at work in the Tahoe Basin and around the world. Activities can include viewing the 3D Earthquake Viewer, Quakes at the Lake, Rock Around Tahoe, and Rock Detectives.
Aquatic Food Web (Grades 4 – 12): Students become ecologists as they meet various aquatic species from Lake Tahoe, make observations, ask questions, and discover connections. Hands- on activities can include Tahoe Food Web and Benthic Macroinvertebrate Monitoring (weather dependent).
Environmental Detectives (Grades 6 – 8): Students investigate human impact on both terrestrial and aquatic ecosystems as they assess watershed health and the "Mystery of the Dying Fish," based on GEMS Environmental Detectives.

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Lakes of the World (Grades 5 – 12): This new field trip aims to educate students about how lakes are formed, how they are studied, how lakes are both used and threatened around the world, and actions they can take to help protect global freshwater resources.
The Tahoe System (Grades 3 – 12): This program provides an overview of the Tahoe Basin with a focus on systems thinking. Students explore some of the unique features of Lake Tahoe and learn about different threats to the lake. Hands-on activities can include Tahoe Food Web, Watershed Model, Build Lake Tahoe, Incline Creek Stream Monitoring, (weather dependent) and Benthic Macroinvertebrate Monitoring (weather dependent).
Earth System Science (Grades 3 – 12): This program includes engaging "game show" style activities that help students conceptualize Earth science concepts that can include life webs, cycles of matter, the flowing of energy, the carbon cycle, the carbon budget, and the greenhouse effect. This program helps students grasp the intricate network of relationships that connects the planet's organisms with each other and with the cycles of matter and flows of energy.
High School Field Trips (Grades 9 – 12): With a focus on in-depth discussion of more advanced concepts, any of the above thematic programs are appropriate for high school aged student groups.

Please book your field trip soon as available spaces fill up quickly!

Sign up by contacting TERC at <u>tercinfo@ucdavis.edu</u> or (775) 881-7560, or by submitting an online request form at: <u>http://fs21.formsite.com/TERC/UCDTERC_FieldTripForm/index.html</u>.