

# Teacher Enhancement Program for K-12 Educators

AT THE COLORADO SCHOOL OF MINES



SUMMER 2022

<http://te.csmspace.com>

# COLORADO SCHOOL OF MINES

## Teacher Enhancement Program

### Summer 2022

#### REGISTRATION

All of the courses announced in this brochure are coordinated through the Office of Special Programs and Continuing Education at the Colorado School of Mines. **Unless another organization or individual is specified as the registration contact in a course listing, enrollment forms and tuition check(s) should be mailed to:**

Teacher Enhancement Program  
Colorado School of Mines  
Green Center, Ste. 221  
Golden, CO 80401-0028  
(303) 384-2692

**Courses are added to our website frequently, to view the most up-to-date course listings or to order an official transcript, visit our home page: [te.csmospace.com](http://te.csmospace.com)**

**You must pre-register at least 48 hours prior to the start of a workshop (Saturday and Sunday excluded). Do not show up for a class without a confirmed registration from the Teacher Enhancement Office or person/organization taking the registrations. You are likely to be turned away by the instructor. CSM reserves the right to assign audit (non-credit) status with full tuition responsibility to walk-in participants.**

#### TUITION AND REFUND POLICIES

Registration through Teacher Enhancement must be accompanied by full tuition payment by check or credit card authorization. If a course registrant cancels or transfers an enrollment, the tuition amount **minus** a \$25 cancellation/transfer fee will be refunded or applied to another course. Unless otherwise indicated, you must cancel at least 48 hours in advance of a workshop to qualify for a refund (Saturday and Sunday excluded). **Once a class has begun, no full or partial tuition refunds will be granted.** Colorado School of Mines reserves the right to cancel a course (usually one week prior to delivery) if the minimum enrollment is not reached (with full tuition refund to registrants). Colorado School of Mines and the Teacher Enhancement Office will not be liable for any other expenses incurred by registrants.

When paying tuition by check, please make out a **separate** check to "CSM Continuing Education" for **each** course and for **each** participant.

#### ATTENDANCE POLICY

**Course participants are expected to attend each class session in its entirety.** This includes arriving on time and staying until dismissal. Credit will be granted for a course only when the full contact hour requirements have been met. Missed sessions of a course cannot be made up by attending subsequent offerings of the same class or by completing additional assignments. In consideration of the instructor and other course registrants, **DO NOT** bring children of any age to class under any circumstances.

#### TRANSCRIPT AND CREDIT INFORMATION

The Teacher Enhancement Office and Colorado School of Mines cannot be responsible for meeting individual deadlines for credits toward teacher licensure and/or salary increases. Official transcripts for current course work can be printed upon written request approximately two weeks after the instructor submits course grades to the Teacher Enhancement Office. Individual letters of completion are not available. We are unable to give you any information via phone or email on what courses appear on your transcript due to FERPA. Graduate-level semester credit offered for each course is applicable for license renewal in the State of Colorado and is generally accepted elsewhere. The credit is not applicable toward a degree at CSM. Request for Transcript of Record forms can be found at <http://te.csmospace.com>.

**All policies and requirements stated above are program-wide and not at the discretion of individual instructors. Enrollment in any course offered for CSM credit implies your agreement to comply with program policies and requirements.**

## Summer 2022 Course Offerings

### AFRICAN SAFARI: THE GREATEST WILDLIFE ADVENTURE (K-12)

CT-1820-22D  
6 semester credit hours  
Dates: May 23-June 14  
Location: Kenya & Tanzania, Africa  
Instructor: Melanie Phelps  
Registration Fee: \$7,255 (may be slightly more based on park fees, includes credit)

You have always dreamed of an African Safari. You have imagined the great wildebeest and zebra migrations and envisioned seeing elephants, giraffes, hippos, rhinos, cheetahs, and lions in the wild. Ecotourism helps Africa pull itself out of poverty. Help protect the wild with your lifelong dream!

**To register or for more information, contact:**  
Melanie Phelps, 719/252-1789  
melaniephe@aol.com  
www.coloradorivertrip.com

### ROXBOROUGH STATE PARK TEACHERS' WORKSHOP (K-12)

CT-2203-22D  
1 semester credit hour  
Dates & Times:  
June 6-7 (8:30am-3:00pm)  
June 9 (8:30am-2:00pm)  
Location: Roxborough State Park, Littleton  
Course Coordinator: Tom Smithwick, 303/993-7168  
Tuition Fee: \$90 (includes credit)

Experience a unique setting of 1.7 billion years of geologic history. Learn about the diversity of ecosystems that provide habitat for a variety of plants and animals while you discover our standards-based curriculum offered at this special State Park. Leave with a site-specific manual and lesson plans created by you and your peers.

**To register, mail the CSM enrollment form and tuition check made payable to:**  
"Friends of Roxborough State Park"  
Roxborough State Park  
4751 N. Roxborough Dr.  
Littleton, CO 80125

### ALL ABOUT MINING (K-12)

CT-2204-22D  
1 semester credit hour  
Dates: June 6-7  
Time: 8:00am-6:00pm  
Location: CSM campus, Golden  
Instructor: multiple guest speakers  
Course Coordinator: Sandi Sullivan  
Tuition Fee: Free but you must pre-register

Gain the tools to explore mining-related curricula in earth sciences, math, technology, and engineering. Explore the role mining plays in our 21<sup>st</sup> century lives. Share your learning and knowledge with peers and leave with complete standards-based and grade-level appropriate lesson plans.

**To register or for more information, contact:**  
Sandi Sullivan, All About Mining/CMAEF  
719/588-0466 or workshops@allaboutmining.org  
www.allaboutmining.org

### MINING FOR A STEAM EDUCATION (K-12)

CT-2205-22M  
1 semester credit hour  
Dates: June 6-July 8  
Time: online with 3 live google meet calls  
Instructor: multiple guest speakers  
Course Coordinator: Sandi Sullivan  
Tuition Fee: Free but you must pre-register

Help your students discover the many STEAM concepts throughout the mining cycle. STEAM represents educational concepts that focus on Science, Technology, Engineering, Art, and Mathematics. STEAM-engaged students explore scientific concepts collaboratively through inquiry and problem-based learning methods throughout a creative process.

**To register or for more information, contact:**  
Sandi Sullivan, All About Mining/CMAEF  
719/588-0466 or workshops@allaboutmining.org  
www.allaboutmining.org

### CLASS IS OUT...SIDE! (K-12)

CT-2209-22D  
2 semester credit hours  
Dates: June 7-10  
Time: 8:00am-5:00pm  
Locations: multiple locations around Canon City & Florence  
Instructor: Tracy Predmore  
Tuition Fee: \$95 (**payable during workshop**)  
Registration Fee: \$75

Learn ways to take the learning outside, whether it is the schoolyard, a city park you can walk to, or a field trip location. Experience environmental education activities and topics that can be incorporated into any curriculum.

**To register or for more information, contact:**  
Tracy Predmore, CO Parks & Wildlife  
719/822-4441 or tracy.predmore@state.co.us

### LEADVILLE AND THE COLORADO MINERAL BELT (K-12)

CT-2101-22D  
1 semester credit hour  
Dates:  
**Session I:** June 11-12  
**Session II:** June 13-14  
Time: 8:00am-4:30pm  
Location: Leadville  
Instructors: Danette Ulrich & Ali Dowd  
Course Coordinator: Danette Ulrich  
Registration Fee: \$220 (includes credit, train trip, museum entrances, & 1 lunch)

Learn about the discovery of gold and silver along Colorado's Mineral Belt from placer mining to drilling. Become acquainted with the area and towns that sprang up overnight. Discover the people, businesses, technologies, environment, discoveries, industries, architectural feats, cultural contributions, modes of transportation, and evolution of a state and nation impacted by the discovery of these precious metals.

**To register or for more information, contact:**  
Danette Ulrich  
303/419-3693 or danetteu@gmail.com  
Livingitlearningit.com



## REVOLUTIONIZING READING (K-8)

CT-2022

1.5 semester credit hours

Dates:

**Session I:** June 13-15

**Session II:** July 11-13

Time: 8:00am-4:00pm

Location: Hilton Gardens, Ft. Collins

Instructor: Bri Luna

Tuition Fee: \$85 (**payable during workshop**)

Registration Fee: \$600 (includes course materials and book)

Gain an understanding of the pedagogy recommended by the National Reading Panel and current legislation to effectively teach reading. Implement the Orton Gillingham approach as it relates to phonemic awareness, phonics, vocabulary, fluency, and comprehension. Understand, recognize, and remediate common reading deficits including dyslexia

**To register or for more information, contact:**

Bri Luna, Reading Rev

970/217-1085 or [bri@readingrev.com](mailto:bri@readingrev.com)

## INTRODUCING GREEN CHEMISTRY IN THE HS CLASSROOM (GR. 9-12)

CT-1158-22M

3 semester credit hours

Dates: June 13-August 8

Virtual meetings: June 29, July 14, July 28 @ 9am MST

Location: online

Instructor: Cassandra Javner

Course Coordinator: Kate Anderson

Tuition Fee: \$140 (**payable during workshop**)

Registration Fee: \$475

Green chemistry is a useful tool to remove hazards and make the lab a safer place for students, while also providing context for chemistry concepts. We will focus on the 12 principles of green chemistry, lab safety, and the creation of green chemistry lessons and labs.

**To register or for more information, contact:**

Kate Anderson, Beyond Benign

781/640-2516

[kate\\_anderson@beyondbenign.org](mailto:kate_anderson@beyondbenign.org)

## ADVANCED GREEN CHEMISTRY: CONNECTIONS TO OUR WORLD (GR. 9-12)

CT-1623-22M

3 semester credit hours

Dates: June 13-August 8

Virtual meetings: June 15, 29, July 14, Aug. 8 @ 9am MST

Location: online

Instructor: Tanya Elmer

Course Coordinator: Kate Anderson

Tuition Fee: \$140 (**payable during workshop**)

Registration Fee: \$475

Deepen your understanding of green chemistry with lessons and applications linked to NGSS. Investigate the chemical solutions of Presidential Green Chemistry Challenge technologies and create relevant STEM based lessons to utilize in your classroom.

**To register or for more information, contact:**

Kate Anderson, Beyond Benign

781/640-2516

[kate\\_anderson@beyondbenign.org](mailto:kate_anderson@beyondbenign.org)

## WASTEWATER AND AQUATIC BIOLOGY (K-12)

CT-1082-22D

0.5 semester credit hour

Date: June 16

Time: 8:00am-5:00pm

Location: Metro Water Recovery, Denver

Instructors: Steve Lundt, Jordan Parman

Course Coordinator: Colleen Miller

Tuition Fee: no charge (you must pre-register)

Receive an overview of the treatment process at Metro Water Recovery and highlight the environmental benefits to the South Platte River. Tour the Robert W. Hite Treatment Facility and the facility's laboratory.

**To register or for more information, contact:**

Colleen Miller, Metro Water Recovery

303/286-3184

[cmiller@metrowaterrecovery.com](mailto:cmiller@metrowaterrecovery.com)

## THINGS ARE LOOKING UP (K-12)

CT-2208-22D

2 semester credit hours

Dates: June 21-24

Time: varies

Location: multiple locations around Colorado Springs

Instructor: Tracy Predmore

Tuition Fee: \$95 (**payable during workshop**)

Registration Fee: \$85

After a few rough years, things are looking up, including this course. Look up to learn about birds, trees, pollinators, bats, and drones. Discover how nature can help improve your student's attitudes. Enjoy a night of optional camping at Mueller State Park as well.

**To register or for more information, contact:**

Tracy Predmore, CO Parks & Wildlife

719/822-4441 or [tracy.predmore@state.co.us](mailto:tracy.predmore@state.co.us)

## DEMISTIFYING STEM (K-5)

CT-2207-22F

2 semester credit hours

Dates: June 21-23 (in person), Sept. 26-Oct. 31 (online)

Time: June 21-22 (8am-4pm) & June 23 (9am-12pm)

Location: Denver Museum of Nature & Science & online

Instructor: Brandon Davis, 303/370-8243

Registration Fee: \$300 (includes materials, food, credits)

Learn how teaching STEM can go hand-in-hand with teaching literacy and how inquiry-based lessons can help give your students a head start towards developing 21<sup>st</sup> century skills. In collaboration with the University of Colorado Boulder's TeachEngineering, demystifying STEM is your entry point into engaging and ready to implement STEM teaching practices tailored specifically for the elementary school classroom.

**To register or for more information, contact:**

Denver Museum of Nature & Science

303/370-6000 M-F, 9am-5pm

## **ALASKA: GLACIERS, GOLD, AND GRIZZLIES (K-12)**

CT-1304-22M  
6 semester credit hours  
Dates: June 22-July 6  
Location: Alaska  
Instructor: Melanie Phelps  
Tuition Fee: \$5,855 (includes some airfare, ferry, tours, lodging, ground transportation, credit)

Explore Alaska's towering mountains with sparkling deep blue glaciers, fjords, whales, grizzlies, sea lions, and rookeries. Cruise the Inland Passage on the Marine Alaska Highway Ferry. Tour Ketchikan Totem Pole Park, Glacier Bay, Kenai Fjords, Denali, and Lake Clark to see fishing grizzlies.

### **To register or for more information, contact:**

Melanie Phelps, 719/252-1789  
melaniephe@aol.com  
www.coloradorivertrip.com

## **CUBA: ITS COUNTRY, CULTURE, AND PEOPLE (K-12)**

CT-1718-22D  
3 semester credit hours  
Dates: June 23-30  
Location: Havana & Pinar del Rio, Cuba  
Instructor: Elena Sodano, 303/204-8470 or sodano@mac.com  
Tuition Fee: \$135 (**payable during trip**)  
Registration Fee: \$3,090 (includes airfare, meals, lodging, ground transportation, entrance fees)

Discover Cuba, a mid-century time capsule where 1950's American autos and abandoned Soviet investments clash. Colonial architecture, UNESCO heritage sites, dramatic valleys, pristine beaches, and untouched rural communities are just a few reasons why Cuba is fascinating. Combine all this with Cuba's people to create the perfect educational and cultural experience.

### **To register:**

Eli Arroyo, Your Cuba Travel  
910/635-6955 or eli@yourcubatransel.com

## **SUSTAINABLE SCIENCE (GR. 7-12)**

CT-2026-22M  
1 semester credit hour  
Dates: July 6-27  
Virtual meetings: July 6, 13, 20 @ 9am MST  
Location: online  
Instructor: Erin Mayer  
Course Coordinator: Kate Anderson  
Tuition Fee: \$57 (**payable during workshop**)  
Registration Fee: \$150

This course will provide an introduction to Green Chemistry and provide the skills and knowledge to integrate sustainability through chemistry in your classroom. By investigating how industry is applying sustainable science you will contextualize key science topics, such as ecosystem dynamics, matter and its interactions, and earth and human activity.

### **To register or for more information, contact:**

Kate Anderson, Beyond Benign  
781/640-2516  
kate\_anderson@beyondbenign.org

## **YOUR HOME IS YOUR HABITAT (K-12)**

CT-0296-22M  
0.5 semester credit hour  
Date: July 19  
Time: 9:00am-5:00pm  
Location: Downtown Aquarium, Denver  
Course Coordinator: Colleen Shipley, 303/561-4565  
Tuition Fee: \$40 (**payable during workshop**)  
Registration Fee: \$75 (includes materials, snacks, admission & parking)

From mountains to reefs, beaver ponds and mangroves...how much do you and your students really know about these ecosystems near and far? Take an in-depth look at a variety of aquatic and terrestrial habitats while participating in cross-curricular activities that you can take back to your classroom. Take home a curriculum guide that includes background information in each habitat as well as standards-connected activities to use both in your classroom and during future visits to the Downtown Aquarium. Registrations close 2 weeks before the start of the course.

### **To register or for more information, contact:**

Downtown Aquarium Sales & Service Center  
303/561-4444

## **FORESTS TO FAUCETS (AURORA'S WATER RESOURCES) (K-12)**

CT-0668-22M  
1.5 semester credit hours  
Dates: July 19-21  
Time: 8:00am-5:00pm  
Location: Morrison Nature Center, Aurora  
Tuition Fee: \$85 (**payable during workshop**)  
Registration Fee: \$50 (checks returned upon successful course completion)

Learn where your drinking water comes from. Explore our mountain watersheds, conduct water quality studies, tour a xeriscape garden, and visit a drinking water and wastewater treatment facility. Receive Project Learning Tree and WET curriculum guides and access to Aurora Water's innovative educational opportunities. CSM tuition will be paid by Aurora Water for teachers who teach in the City of Aurora.

### **To register or for more information, contact:**

Natalie Brower-Kirton, 720/859-4363  
nbrower@auroragov.org

**AQUATIC PROJECT WILD (K-12)**

CT-9684-22M  
 0.5 semester credit hour  
 Date: July 20  
 Time: 9:00am-5:00pm  
 Location: Downtown Aquarium, Denver  
 Course Coordinator: Colleen Shipley, 303/561-4565  
 Tuition Fee: \$40 (**payable during workshop**)  
 Registration Fee: \$50 (includes materials)

Aquatic Project WILD is a collection of activities that emphasize an interdisciplinary approach to teaching about aquatic life. Using hands-on activities that create awareness, appreciation, understanding, skills, and commitment, you and your students will learn to address environmental and aquatic topics within the framework of your existing curriculum. Registrations close 2 weeks before the start of the course.

**To register or for more information, contact:**  
 Downtown Aquarium Sales & Service Center  
 303/561-4444

**TALES & TRAILS OF COLORADO GHOST MINES (K-12)**

CT-1165-22M  
 1 semester credit hour  
 Dates: July 21-22  
 Time: 8:00am-5:00pm  
 Locations: Fairplay & Alma  
 Instructor: Melanie Phelps  
 Tuition Fee: \$175 (includes credit)

Capture gold fever as you explore mines, mills, and ghost towns near Fairplay. Peer through broken window frames and trek twisted rails in Leavick. Creep softly through Alma's past looking for the legendary Silver Heels. Let the timberline mines and the railroad history of Como ignite your imagination. Relive the fortunes, dreams, and disasters of Colorado mining history.

**To register or for more information, contact:**  
 Melanie Phelps, 719/252-1789  
[melaniephe@aol.com](mailto:melaniephe@aol.com)  
[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

**FORESTS TO FAUCETS 2 (K-12)**

CT-1734-22M  
 0.5 semester credit hour  
 Date: July 26  
 Time: 8:00am-5:00pm  
 Location: Senac Creek Nature Center, Aurora Reservoir  
 Tuition Fee: \$40 (**payable during workshop**)  
 Registration Fee: \$25 (checks returned upon successful course completion)

This workshop focuses on protecting our water by learning more about conservation, water pollution prevention, and climate change. Receive a Project WET curriculum guide and a Climate Resilience booklet along with access to Aurora Water's innovative resources. CSM tuition will be paid by Aurora Water for teachers who teach in the City of Aurora.

**To register or for more information, contact:**  
 Viviana Zavala, 303/326-8879  
[vzavala@auroragov.org](mailto:vzavala@auroragov.org)

**BONAIRE: CORAL REEF BIODIVERSITY ENCHANTMENT (K-12)**

CT-2002-22M  
 4 semester credit hours  
 Dates: July 27-August 4  
 Location: Ecuador  
 Instructor: Melanie Phelps  
 Tuition Fee: \$2,175 (includes lodging, ground transportation, entrance fees, credit; does not include airfare)

Coral reefs are among the world's most beautiful, diverse, and most endangered ecosystems. Although they only occupy 1% of the land, over 25% of marine species live there, yet 90% of reefs may be irreparably damaged by 2050. Visit, dive, snorkel, love and study this magical ecosystem before time runs out. Bonaire boasts some of the healthiest coral reefs on Earth.

**To register or for more information, contact:**  
 Melanie Phelps, 719/252-1789  
[melaniephe@aol.com](mailto:melaniephe@aol.com)  
[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

## Course Enrollment Form

**Please Print**

Full Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Social Security Number\*: \_\_\_\_\_ Date of Birth: \_\_\_\_\_

Telephone: (school) \_\_\_\_\_ (home/cell) \_\_\_\_\_

School: \_\_\_\_\_ Grade Level: \_\_\_\_\_

Email: \_\_\_\_\_

**When CSM is the registration contact, I prefer to receive a confirmation letter by:**

**o E-mail:** \_\_\_\_\_

**o Mail**

**\*required if taking course for credit**

Are you Hispanic/Latino? Yes/No

Select one or more:

\_\_\_\_\_ American Indian or Alaska Native

\_\_\_\_\_ Native Hawaiian or Other Pacific Islander

\_\_\_\_\_ Asian

\_\_\_\_\_ White

\_\_\_\_\_ Black or African American

### Indicate the course(s) for which you are registering

Course #	Course Title	Course Dates	Tuition
CT-_____	_____	_____	_____
CT-_____	_____	_____	_____
CT-_____	_____	_____	_____
CT-_____	_____	_____	_____
CT-_____	_____	_____	_____

**Total:** \_\_\_\_\_

*Please follow carefully the specific registration instructions which accompany each course listing in this catalog. When the Teacher Enhancement Program is the registration contact fill out the enrollment form and mail along with the tuition amount to the Colorado School of Mines Teacher Enhancement Program. Please send a separate check for each course, and for each participant. Do NOT mail this form to us unless we are listed as the registration contact!*

**Make checks payable to CSM Office of Continuing Education.**

**Mail check(s) and application form (unless otherwise noted in course listing) to:**

CSM Teacher Enhancement Program

Green Center, Ste. 221

924 16<sup>th</sup> St.

Golden, CO 80401

Phone: (303) 384-2692

<http://te.csmspace.com>