

Teacher Enhancement Program for K-12 Educators

AT THE COLORADO SCHOOL OF MINES



FALL 2020

<http://te.csmspace.com>

COLORADO SCHOOL OF MINES

Teacher Enhancement Program

Fall 2020

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 checks/credit card information should be mailed or faxed to:**

Teacher Enhancement Program
Colorado School of Mines
924 16th St., Suite 221
Golden, CO 80401
(303) 384-2695 FAX
(303) 384-2692

Visit our home page at
<http://te.csmspace.com> for the
most up-to-date course listings.

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. 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 www.mines.edu/Outreach/Cont_Ed/tep15.html.

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.

All courses offered in cooperation with the Extended Studies Program of the Colorado Commission on Higher Education

Fall Course Offerings

WESTERN RMNP BUTTERFLIES (K-12)

CT-1426-20F
0.5 semester credit hour
Date: September 4
Time: 8:30am-5:00pm
Location: Trail River Ranch in RMNP near Grand Lake
Instructors: Paul Opler, Evi Buckner-Opler
Tuition Fee: \$40 (**payable during workshop**)
Registration Fee: \$80

Butterflies are easily observed insects which fly in every life zone of RMNP. Learn butterfly biology, behavior, and diversity. Visit several different habitats on the west side of the Park to search for late summer species. Learn to identify these species and discuss their life histories and ecology, host-plant associations, and conservation concerns, including the impact of loss of lodgepole pine stands to bark beetles. Observe butterflies through binoculars, digital photography, and net-and-release.

To register or for more information, contact:

Rachel Balduzzi, Rocky Mtn. Conservancy
970/586-3262
Rachel.balduzzi@rmconservancy.org

2020 ADVANCING ENVIRONMENTAL EDUCATION VIRTUAL FALL CONFERENCE (PREK-12)

CT-2003-20F
0.5-1 semester credit hour
Dates: September 13-14
Times: varies, see website
Tuition Fee: \$50/\$65 (**payable during workshop**)
Registration Fee: CAEE member \$60

The 20th annual Colorado Advancing Environmental Education Conference (also known as Teaching Outside the Box) offers engaging speakers and sessions, networking. Discover new ideas, and resources and techniques in environmental education for both inside and outside the classroom. This year's theme is "Regeneration-Inspiring all generations to build resilient, healthy communities through collaborative actions."

To register or for more information, contact:

Nell Nelson, CAEE
info@caee.org or 303/273-9527

INTRODUCTION TO CITIZEN SCIENCE ONLINE (K-12)

CT-1430-20F
2 semester credit hours
Dates: September 25-October 25
Instructor: Sarah Jones
Tuition Fee: \$95 (**payable during workshop**)
Registration Fee: \$70

Become familiar with five successful citizen science projects suited to both formal and informal educational settings. These may include eBird, CoCoRatts, FrogWatch USA, Picture Post, and budburst. Explore two programs in-depth, learn how to participate, and how to incorporate engaging student activities.

To register or for more information:

Sarah Jones, 919/616-4098
sjones@chicagobotanic.org
www.chicagobotanic.org/education/citizen_scienc_academy

REVOLUTIONIZING READING: THE 5 COMPONENTS OF READING WITH ORTON GILLINGHAM (K-5)

CT-2022-20F
1.5 semester credit hours
Session I:
Dates: October 10, 17, 24
Time: 8:00am-4:00pm
Location: Hampton Inn, Ft. Collins
Tuition Fee: \$85 (**payable during workshop**)
Registration Fee: \$500
Session II:
Dates: October 17-November 14 (online)
Tuition Fee: \$85 (**payable during workshop**)
Registration Fee: \$350
Instructor: Bri Schupp

The fundamental process for teaching literacy is changing. Get up to speed with the upcoming teaching practices that will soon be required for all teachers instructing literacy in K-5. Find out about research-based, classroom proven strategies and systems to effectively teach the 5 Components of Reading to students of all ages. Gain an in-depth understanding of the importance of systematic and explicit instruction in phonological awareness, phonics, fluency, vocabulary, and comprehension. Learn how to recognize common reading deficits such as dyslexia, and learn the techniques needed to foster reading growth. Utilizing the Orton Gillingham approach, this course will ensure you are teaching literacy in the most effective way while building enthusiasm and a love of reading in all students.

To register or for more information, contact:

Bri Schupp, 970/217-1085
bri@readingrev.com, www.readingrev.com

ROCKCS: COLORADO COMPUTER SCIENCE TEACHERS CONFERENCE (K-12)

CT-2016-20F
1-.5 semester credit hour
Dates: November 14-15
Time: 9:00am-5:00pm
Location: St. Vrain Innovation Center, Longmont
Course Coordinator: Christine Liebe, 970/274-6688
Tuition Fee: \$50 for .5 credit; \$65 for 1 credit (**payable during trip**)
Registration Fee: \$50 for both days (attend 1 or 2 days)

This high quality professional development event designed by Adams 12 Five Star Schools and St. Vrain Valley School District is open to all educators to learn about teaching computer science and computational thinking.

To register or for more information, contact:

Anna Otto, 720/972-4000
Anna.otto@adams12.org
<http://rockcs.org>

EcoAdventure Course Offerings

Note: Register for EcoAdventure courses through EcoAdventures. See box below.

COLORADO'S UNCIVIL WARS: SAND CREEK, JULESBURG, & THE WAR BETWEEN THE STATES (K-12)

CT-1719-20F

1 semester credit hour

Dates & Times:

September 12 (9:00am-5:00pm)

September 13 (9:00am-4:00pm)

Location: LaJunta, CO

Instructor: Trey Corkern

Tuition Fee: \$165 (**\$185 after Aug. 27th**)

The Civil War and the Indian Wars collided in Colorado from 1861 to 1865, and Coloradans are still dealing with the consequences. Explore the daily life of the Colorado 1st Infantry and the "Bloodless" 3rd Colorado Cavalry, and visit the sites of the Sand Creek massacre, Fort Lyons, and Bent's Old Fort.

ELK BUGLING (K-12)

CT-95105-20F

1 semester credit hour

Dates: September 26-27

Time: 12:00pm-7:30pm

Location: EcoAdventures, Morrison

Instructor: Pam Batton

Tuition Fee: \$165 (**\$185 after Sept. 10th**)

Observe and listen to the bull elk bugling during the mating season. Explore adaptations, behavior, and human/elk interactions through activities and observation. By the end of class you'll be thinking like an elk and understand the important ecological role of this large herbivore.

BEYOND THE SPIRIT OF 1776: LIFE IN COLONIAL AMERICA (K-12)

CT-1101-20F

1 semester credit hour

Dates & Times:

October 3 (9:00am-5:00pm)

October 4 (9:00am-4:00pm)

Location: CSM campus, Golden

Instructor: Trey Corkern

Tuition Fee: \$165 (**\$185 after September 17th**)

Discover how we built a nation, from before the arrival of the Pilgrims at Plymouth to the fledgling colony's victory over the British Empire. Try your hand at pickling, weaving, blacksmithing, and more. Field trip on Saturday to a Colonial reenactment.

RIVER OTTER...THEY'RE HERE IN COLORADO! (K-12)

CT-1923-20F

1 semester credit hour

Dates & Times:

November 7 (8:00am-5:00pm)

November 8 (10:00am-4:00pm)

Location: CSM campus, Golden

Instructor: Pam Batton

Tuition Fee: \$180 (**\$200 after Oct. 22nd**)

Indulge your fascination with otters as you learn about the biology of this active and amusing animal. Learn about otter re-introduction to Colorado and how to find them in the wild. Visit the Denver Aquarium for a curator's otter exhibit talk.

EARLY EXPLORERS OF THE ROCKY MOUNTAINS (K-12)

CT-0518-20M

1 semester credit hour

Dates & Times:

November 14 (9:00am-5:00pm)

November 15 (9:00am-4:00pm)

Location: CSM campus, Golden

Instructor: Trey Corkern

Tuition Fee: \$165 (**\$185 after Oct. 29th**)

Discover the history of the Rocky Mountains in the company of soldiers, trappers, priests, and spies. Use botany, zoology, cartography, journaling, geometry, and celestial navigation to keep up with the likes of Zebulon Pike, Father Escalante, and Kit Carson. Like the original explorers, go home with field specimens.

To register for any EcoAdventures course, mail the CSM enrollment form along with a check payable to EcoAdventures to:

Pam Batton

EcoAdventures

5894 South Meadow Drive

Morrison, CO 80465

303/697-0327

Fax 303/697-0329

Pamsecoadventures.com

Registration/Cancellation/Refund Policy

If payments have not been received by the registration deadline (2 ½ weeks before the class), EcoAdventures reserves the right to charge a late registration fee of \$10.00 or delete you from the class and allow a person from the waiting list to take your spot.

If you notify us of a cancellation before the registration deadline, we will refund your tuition less a \$25.00 cancellation fee. If you cancel after the registration deadline, we will refund your tuition less a cancellation fee of \$35.00. If you cancel 48 hours before a class begins, we will refund half of your tuition. If you cancel 24 hours before a class begins or on the day of class or are a no-show to class, no refund will be offered. These fees also apply to class transfers.

Spring 2021 Course Preview

TEACHING PLANT PHENOLOGY AND CLIMATE CHANGE ONLINE (K-12)

CT-1213-21S

2 semester credit hours

Date: January 22-February 21

Instructor: Sarah Jones

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

Registration Fee: \$70

Discover how studying the life cycles of plants (phenology) reveal how plants respond to climate change. Explore an existing citizen science program that collects scientific data in the form of phenology observations. Implementation strategies are shared including guidance on selecting plants and making observations, suggestions for structuring classroom involvement, and ideas for educational activities to engage your students in data analysis.

To register or for more information, contact:

Sarah Jones, Chicago Botanic Gardens

919/616-4098 or sjones@chicagobotanic.org

WHALE SHARKS, HUMPBACKS & GRAY WHALES (K-12)

CT-1538-21S

4 semester credit hours

Dates: February 13-21

Location: Cabo San Lucas, Mexico

Instructor: Melanie Phelps

Tuition Fee: \$2,875 (does not include airfare)

Snorkel with whale sharks, the largest plankton eating fish. Experience Gray Whales in a bay where these magnificent mammals give birth, often swimming to the boats to be touched. Snorkel or dive near Cabo San Lucas to watch Humpback Whales playfully raising their young.

To register or for more information, contact:

Melanie Phelps, 719/252-1789

melaniephe@aol.com

www.coloradorivertrip.com

SANDHILL CRANES, SAND DUNES & HOT SPRINGS (K-12)

CT-1502-21S

1 semester credit hour

Dates: March 13-14

Location: Alamosa

Instructor: Melanie Phelps

Tuition Fee: \$190 (includes entrance fees, credit)

View flocks of the 20,000 majestic Sandhill Cranes as they migrate through the wetlands near Alamosa. Hear their bugling call and watch their graceful mating dance. Learn about efforts to save the Whooping Crane and see many wetland birds. Learn the geology and tour the Sand Dunes and the Rio Grande Rift Zone.

To register or for more information, contact:

Melanie Phelps, 719/252-1789

melaniephe@aol.com

www.coloradorivertrip.com

COLORADO HISTORY BY TRAIN: DENVER TO GLENWOOD (K-12)

CT-1303-21S

1 semester credit hour

Dates: April 10-11

Location: Denver to Glenwood Springs

Instructor: Melanie Phelps

Tuition Fee: \$490 (includes train fare, lodging, tours, credit)

Ride one of the last passenger trains in America, the Amtrak, from Denver through the historic Moffat Tunnel, Winter Park, Gore Canyon, and into Glenwood Springs. Explore caves and soak in the soothing waters the Ute Indians believed had magical powers. Learn the history of Colorado railroads and how the West was tamed.

To register or for more information, contact:

Melanie Phelps, 719/252-1789

melaniephe@aol.com

www.coloradorivertrip.com

PICKETWIRE DINOSAUR TRACKS BY MOUNTAIN BIKE (K-12)

CT-0350-21S

1 semester credit hour

Dates: May 1-2

Time: 8:00am-5:00pm

Location: LaJunta

Instructor: Melanie Phelps

Tuition Fee: \$155 (includes credit)

Mountain bike 13-miles round trip to see a fossilized Jurassic beach containing over 1300 dinosaur tracks, some big enough to sit in. This important site showed scientists that dinosaurs were herding animals. Tour Old Bent's Fort and view stage coach ruts on the Old Stagecoach Trail. Learn Colorado history from the Jurassic to the Dust Bowl.

To register or for more information, contact:

Melanie Phelps, 719/252-1789

melaniephe@aol.com

www.coloradorivertrip.com

Summer 2021 Course Preview

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

CT-1820-21D
6 semester credit hours
Dates: May 25-June 16
Location: Kenya & Tanzania, Africa
Instructor: Melanie Phelps
Registration Fee: \$7355 (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. You want to help Africa pull itself out of poverty and know the answer is ecotourism. Your lifelong dream – make it happen!

To register or for more information, contact:

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

CLIFF DWELLINGS AND VOLCANOES OF NEW MEXICO (K-12)

CT-1031-21D
1 semester credit hour
Dates: June 24-25
Location: meet in Pueblo; drive to NM
Instructor: Melanie Phelps
Tuition Fee: \$155 (includes credit)

Experience the volcanoes of New Mexico and the Bandelier ruins of the ancient Pueblo Indians who tunneled their homes into volcanic tuff cliffs. See the youngest volcanic fields in the continental U.S., with cinder cones, a massive caldera, radial dikes, and more. Discover the Rio Grande Rift, which causes the volcanoes as North America is being stretched apart. Learn the history of southern Colorado coal mines and labor wars, and tour the site of the Ludlow Massacre.

To register or for more information, contact:

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

RUINS AND VOLCANOES OF NEW MEXICO II (K-12)

CT-1402-21D
2 semester credit hours
Dates: June 26-29
Location: meet in Santa Fe, NM
Instructor: Melanie Phelps
Tuition Fee: \$335 (includes entrance fees, credit)

Explore the history of Santa Fe, a trading hub of Old Mexico. Hike through Petroglyph National Monument where the ancient natives etched 15,000 petroglyphs into the black basalt. Continue to El Malpais to explore lava tubes, pahoehoe, aa, cinder cones, craters, and calderas. Seek out the peacefulness of Chaco Canyon, one of the largest trade centers of the Ancient Pueblo Indians.

To register or for more information, contact:

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

BLACK HILLS: MAMMOTHS, MONUMENTS, AND WARS (K-12)

CT-1428-21M
2 semester credit hours
Dates: July 7-11
Location: meet in Scotts Bluff, NE
Instructor: Melanie Phelps
Tuition Fee: \$420 (includes entrance fees and credit)

Retrace the Oregon Trail near Scotts Bluff, Nebraska. Explore giant land mammals at Agate Fossil Beds, and solve the ancient mystery of an ancient bog where only male mammoths died. Discover the wonders of South Dakota: Custer State Park, Badlands, Mt. Rushmore, Crazy Horse, and The Little Bighorn, then wind your way through caves, and discover the secrets of Black Hills gold. In Wyoming, tour a bison cliff kill site, and the giant columns of Devil's Tower.

To register or for more information, contact:

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

BONAIRE: CORAL REEF BIODIVERSITY ENCHANTMENT (K-12)

CT-2002-21M
4 semester credit hours
Dates: July 17-25
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 worlds 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
www.coloradorivertrip.com

TALES & TRAILS OF CO GHOST MINES (K-12)

CT-1165-21M
1 semester credit hour
Dates: July 31-August 1
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
www.coloradorivertrip.com

Course Enrollment Form

Please Print

Full Name: _____
 Mailing Address: _____
 City: _____ State: _____ Zip: _____
 Social Security Number*: _____ Date of Birth: _____
 Telephone: (school) _____ (cell/home) _____
 School: _____ Grade Level: _____
 Email: _____

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

o E-mail: _____

o Fax; fax number: () _____

oMail

***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 class(es) 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. Many, but not all, listings will direct you to fill out the form above 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.

Make checks payable to CSM Office of Continuing Education unless otherwise noted.

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

CSM Teacher Enhancement Program
 924 16th St., Suite 221
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