

Teacher Enhancement Program for K-12 Educators

AT THE COLORADO SCHOOL OF MINES



FALL 2019

<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
1600 Jackson St., Suite 190
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

FIELD STUDIES IN PALEONTOLOGY: EXPLORING THE SHELF ROAD (K-12)

CT-0640-19F
0.5 semester credit hour
Date: September 7
Time: 8:30am-6:00pm
Location: Cripple Creek Parks & Recreation
Instructor: Steve Veatch
Tuition Fee: \$40 (**payable during workshop**)
Registration Fee: \$45

Starting from Cripple Creek, this field-based class offers an unsurpassed opportunity to explore the geological and paleontological wonders along the Shelf Road. Follow the old wagon roads used to haul dinosaur bones from Garden Park to Canon City and explore nearby dinosaur tracks. Field guide included.

To register or for more information, contact:

Cripple Creek Parks & Recreation
719/689-3514

INTRODUCTION TO CITIZEN SCIENCE ONLINE (K-12)

CT-1430-19F
2 semester credit hours
Dates: September 27-October 27
Instructors: Jessa Finch, Carolyn Mohr
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:

Jessa Finch, 847/835-8347
jfinch@chicagobotanic.org
chicagobotanic.org/education/citizen_science_academy

SCIENCE WRITING: PATHWAYS TO DISCOVERY (GR. 9-12)

CT-1166-19F
0.5 semester credit hour
Date: October 26
Time: 8:30am-5:30pm
Location: CSM campus, Golden
Instructor: Steven Veatch
Tuition Fee: \$40 (**payable during workshop**)
Registration Fee: \$55

Explore effective teaching strategies that promote the use of science writing. Discover how to use science writing as pathways to discovery and achievement for your students. Topics include the format of a scientific manuscript, writing research papers, advanced research methods, writing techniques and tips, and the use of illustrations and images.

To register or for more information, contact:

Steven Veatch
719/748-5010 or steven.veatch@gmail.com

Denver Botanic Gardens Course Offerings

Note: Register for the DBG courses through the Gardens. See box below.

STEPPE INTO HISTORY: ENVIRONMENTAL IMPACTS ON THE SHORT GRASS PRAIRIE (K-12)

CT-1950-19F
0.5 semester credit hour
Date: September 28
Time: 9:00am-5:00pm
Location: Plains Conservation Center, Aurora
Instructor: Kirsten Bell
Tuition Fee: \$40 (**payable during workshop**)
Registration Fee: \$55 DBG member; \$65 non-member

Connect history with geography and investigate the impacts humans have made on Colorado's eastern plains. Explore how to use the natural landscape to approach historical and ecological concepts around the short grass prairie.

STEAM IN THE GARDENS (K-8)

CT-1744-19F
0.5 semester credit hour
Date: October 5
Time: 8:30am-4:30pm
Location: Denver Botanic Gardens
Instructor: Kirsten Bell
Tuition Fee: \$40 (**payable during workshop**)
Registration Fee: \$55 DBG member; \$65 non-member

Bring a little STEAM into your classroom curriculum using inquiry methods to teach a variety of subjects using the Gardens as a resource.

TEACHING PLANTS FROM ROOT TO SEED (PREK-8)

CT-0646-19F
0.5 semester credit hour
Date: November 30
Time: 9:00am-5:00pm
Location: Denver Botanic Gardens
Instructor: Kirsten Bell
Tuition Fee: \$40 (**payable during workshop**)
Registration Fee: \$55 DBG member; \$65 non-member

Discover methods of integrating plant science into your classroom curriculum with a detailed look at what each plant part does. Learn plant classification and experience hands-on activities that you can easily transfer to your classroom.

To register or for any questions, contact:

DBG Resource Center

720/865-3500

info@botanicgardens.org

<http://catalog.botanicgardens.org/Default.aspx?tagid=13>

EcoAdventure Course Offerings

Note: Register for EcoAdventure courses through EcoAdventures. See box on the next page.

DENVER WALKING TOUR: INTRO TO COLORADO HISTORY (K-12)

CT-1924-19F

1 semester credit hour

Dates & Times:

September 21 (9:00am-5:00pm)

September 22 (9:00am-4:00pm)

Locations: CSM campus, Golden & Denver

Instructor: Trey Corkern

Tuition Fee: \$165 (**\$185 after Sept. 5th**)

Learn Colorado's history by walking the streets of Denver. Dive into the (in)famous personalities that forged a river-bottom settlement into the Queen City of the Plains. Spend two days hopping the light rail, drinking in fabulous architecture, and sharing the best stories that Denver has to offer.

FEASTS OF FALL (K-12)

CT-0756-19F

1 semester credit hour

Dates & Times:

October 5 (9:00am-4:00pm)

October 6 (9:00am-5:00pm)

Location: EcoAdventures, Morrison

Instructor: Pam Batton

Tuition Fee: \$180 (**\$200 after Sept. 19th**)

Taste a "true" Thanksgiving feast when you cook over an open fire using historic foods and methods of the Plymouth Colonists and the Wampanoag Natives, a meal you won't forget. Bust the myths of the first Thanksgiving and explore the natural history of the wild turkey, Canada goose, corn, beans, pumpkin, squash and gourds.

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

CT-1719-19F

1 semester credit hour

Dates & Times:

October 19 (9:00am-5:00pm)

October 20 (9:00am-4:00pm)

Location: LaJunta, CO

Instructor: Trey Corkern

Tuition Fee: \$165 (**\$185 after Oct. 3rd**)

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.

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

CT-1923-19F

1 semester credit hour

Dates & Times:

November 2 (9:00am-4:00pm)

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

Location: CSM campus, Golden

Instructor: Pam Batton

Tuition Fee: \$180 (**\$200 after Oct. 17th**)

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 behind-the-scenes tour, including an encounter with a live otter.

PUTTING THE COLOR BACK INTO COLORADO – A HISTORY OF MINORITIES IN THE ROCKIES (K-12)

CT-0122-19F

1 semester credit hour

Dates & Times:

November 16 (9:00am-5:00pm)

November 17 (9:00am-4:00pm)

Location: CSM campus, Golden

Instructor: Trey Corkern

Tuition Fee: \$165 (**\$185 after October 31st**)

Examine the other histories that made Colorado: female doctors, African businessmen, Mexican buffalo hunters, Shoshone trappers, geriatric labor leaders, and Comanche traders. Make butter, throw a lariat, and try your hand at tin-smithing.

WILD ABOUT WILDLIFE CRAFTS & LITERATURE (K-6)

CT-9860-19F

1 semester credit hour

Dates & Times:

December 7 (9:00am-5:00pm)

December 8 (9:00am-4:00pm)

Location: CSM campus, Golden

Instructor: Pam Batton

Tuition Fee: \$165 (**\$185 after Nov. 21st**)

Discover some of Colorado's wildlife through crafts, activities, children's literature, and short field trips. Create a craft for each of these species and learn their natural history: cottontail rabbit, Canada goose, red-tailed hawk, porcupine, deer mouse, grasshopper, and spider. Bring a favorite wildlife craft to share.

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 2020 Course Preview

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

CT-1538-20S
4 semester credit hours
Dates: February 15-23
Location: Baja Peninsula, Mexico
Instructor: Melanie Phelps
Tuition Fee: \$2,675 (does not include airfare, includes tuition)

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-1502-20S
1 semester credit hour
Dates: March 14-15
Location: Alamosa
Instructor: Melanie Phelps
Tuition Fee: \$190 (includes entrance fees, tuition)

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

BELIZE: CORAL REEFS AND MAYA RUINS (K-12)

CT-1112-20S
4 semester credit hours
Dates: March 21-29
Location: Belize, Central America
Instructor: Melanie Phelps
Tuition Fee: \$2,375 (does not include airfare, includes tuition)

Submerge yourself in the colorful world of the Belize coral reefs. Explore the coral fish as they change sexes, groom each other, and develop complex relationships of symbiosis. Then wander into the land of the ancient Mayans, with their extravagant architecture, rituals, and games. Experience Belize, brimming with life and mysteries.

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-1303-20S
1 semester credit hour
Dates: April 11-12
Location: Denver to Glenwood Springs
Instructor: Melanie Phelps
Tuition Fee: \$490 (includes train fare, lodging, tours, tuition)

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-0350-20S
1 semester credit hour
Dates: May 2-3
Time: 8:00am-5:00pm
Location: LaJunta
Instructor: Melanie Phelps
Tuition Fee: \$155 (includes tuition)

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 2020 Course Preview

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

CT-1031-20D

1 semester credit hour

Dates: June 3-4

Location: meet in Pueblo; drive to NM

Instructor: Melanie Phelps

Tuition Fee: \$155 (includes tuition)

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-1402-20D

2 semester credit hours

Dates: June 5-8

Location: meet in Santa Fe, NM

Instructor: Melanie Phelps

Tuition Fee: \$335 (includes entrance fees, tuition)

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-1428-20D

2 semester credit hours

Dates: June 11-15

Location: meet in Scotts Bluff, NE

Instructor: Melanie Phelps

Tuition Fee: \$420 (includes entrance fees and tuition)

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

ECUADOR: AMAZON RAINFOREST & GALAPAGOS ISLANDS (K-12)

CT-2000-20M

6 semester credit hours

Dates: June 22-July 5

Location: Ecuador

Instructor: Melanie Phelps

Tuition Fee: \$7,635 (includes lodging, ground transportation, entrance fees, tuition and most meals; does not include airfare to Quito)

Soar over the Andes Mountains, then take a motorized canoe into the Amazon Rainforest with local guides to an enchanted wildlife reserve deep within the forest. Explore the World Heritage Center of Quito. Hike, bike, kayak and snorkel your way around Galapagos Islands, home of diverse finches, tortoises, penguins, and hundreds of other species.

To register or for more information, contact:

Melanie Phelps, 719/252-1789

melaniephe@aol.com

www.coloradorivertrip.com

PERU: MACHU PICCHU & IMPERIAL CUSCO (K-12)

CT-2001-20M

2 semester credit hours

Dates: July 5-9

Location: meet at Cusco, Peru

Instructor: Melanie Phelps

Tuition Fee: \$3,555 (includes lodging, ground transportation, entrance fees, tuition and some meals; flight to Peru from Ecuador included)

Explore the lost lands of the Inca in Peru as you wander through Machu Picchu, perhaps the most magical ancient archeological ruin in the world. Tour Cusco City, with its temples and royal houses, then investigate the Inca Sacred Valley in the high Andes. Climb the Intipunku Mountain, the entrance to Machu Picchu from the Inca Trail and gaze on Huayna Picchu Mountain, and the Sacred Temple of the Moon.

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-2002-20M

4 semester credit hours

Dates: July 18-26

Location: Ecuador

Instructor: Melanie Phelps

Tuition Fee: \$2,175 (includes lodging, ground transportation, entrance fees, tuition; 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

www.coloradorivertrip.com

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

CT-1165-20M

1 semester credit hour

Dates: August 1-2

Time: 8:00am-5:00pm

Locations: Fairplay & Alma

Instructor: Melanie Phelps

Tuition Fee: \$175 (includes tuition)

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

1600 Jackson St., Suite 190

Golden, CO 80401

FAX: (303) 384-2695

Phone: (303) 384-2692

<http://te.csmspace.com>