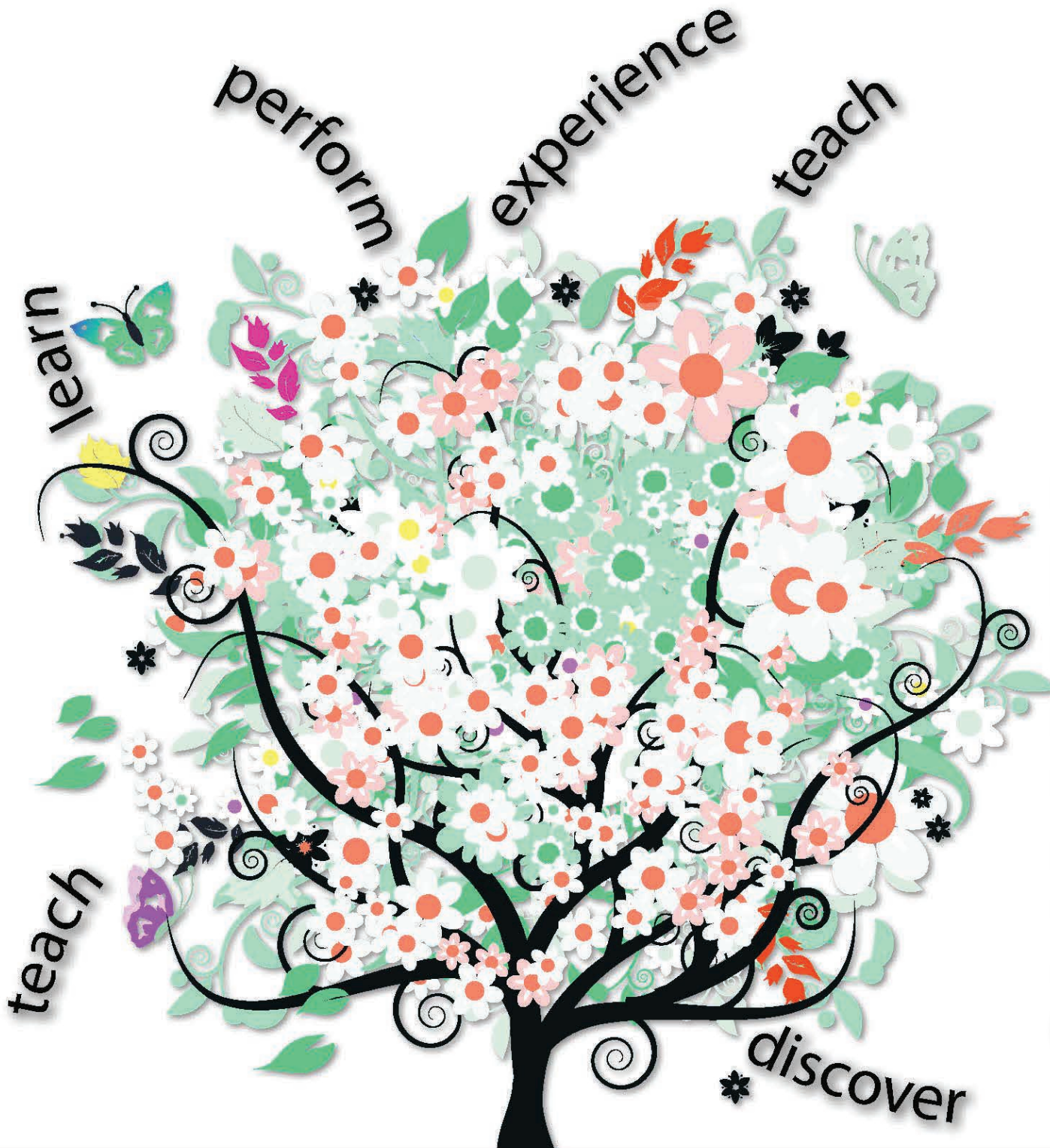


# Teacher Enhancement Program for K-12 Educators

AT THE COLORADO SCHOOL OF MINES



SUMMER 2019

<http://te.csmspace.com>

# COLORADO SCHOOL OF MINES

## Teacher Enhancement Program

### Summer 2019

#### 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  
1600 Jackson St., Ste. 190  
Golden, CO 80401-0028  
(303) 384-2692

**Courses are added to our website often, to view the most up-to-date course listings or to order an official transcript, visit our home page at: [te.csmspace.com](http://te.csmspace.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.csmspace.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 2019 Course Offerings

### SPAIN: HISTORY OF CRUSADERS AND KINGS (K-12)

CT-1201-19D  
4 semester credit hours  
Dates: May 30-June 14  
Locations: Spain  
Instructor: Joyce Webb  
Tuition Fee: \$3,670 (includes airfare, lodging, ground transportation, tours, credit)

Experience Spain from the art and architecture of Madrid to Sevilla's Alcazar, Christopher Columbus' tomb, and the romance of Flamenco dancers. Visit the Rock of Gibraltar and take a day trip to the mysterious Tangiers on Africa's Moroccan coast. Wander Granada's grand Alhambra while learning of Spain's tangled history.

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

Joyce Webb, 719/229-5482  
[joycewebb@ymail.com](mailto:joycewebb@ymail.com)  
[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

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

CT-1031-19D  
1 semester credit hour  
Dates: June 1-2  
Location: meet in Pueblo; drive to NM  
Instructor: Melanie Phelps  
Tuition Fee: \$155

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](mailto:melaniephe@aol.com)  
[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

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

CT-1402-19D  
2 semester credit hours  
Dates: June 3-6  
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](mailto:melaniephe@aol.com)  
[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

### PRINCIPLES AND FOUNDATIONS FOR ENVIRONMENTAL EDUCATION ONLINE (K-12)

CT-1216-19M  
2 semester credit hours  
Dates: June 3-August 11  
Instructor: Katie Navin  
Tuition Fee: \$95 (**payable during workshop**)  
Registration Fee: \$135 CAEE members, \$175 non-members

Explore the history and goals of environmental education; develop an understanding of the professional roles and instructional methods of environmental educators; and interact with other educators online. Become eligible to submit your work for certification in CAEE's certification program for a discount. Register at [www.caee.org](http://www.caee.org).

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

Katie Navin, CAEE  
303/273-9527, [director@caee.org](mailto:director@caee.org)

### ROCKS AND MINERALS (K-12)

CT-9666-19D  
1 semester credit hour  
Dates: June 4-5  
Time: 8:00am-5:00pm  
Location: CSM campus, Golden  
Instructors: Pete Modreski, Jane Dianich  
Tuition Fee: \$110

Learn or review the basics of rocks and minerals in dynamic and interactive ways in order to engage your students to learn about them. Examine specimens, do activities, and tour the CSM Geology Museum. See complementary "Walking Tour of Building Stones" field course below.

To register, mail the enrollment form and full tuition amount to the CSM Teacher Enhancement Office.

### WASTEWATER AND RENEWABLE RESOURCES (K-12)

CT-1215-19D  
0.5 semester credit hour  
Date: June 5  
Time: 8:00am-5:00pm  
Location: Metro Wastewater Reclamation District, Denver  
Instructor: Orren West  
Course Coordinator: Kelley Merritt  
Tuition Fee: no charge (you must pre-register)

Learn the science behind wastewater treatment. Highlight the biosolids management process, including land application of solid materials and the production of electricity. Tour the 52,000 acre METROGRO Farm, a wastewater treatment facility, and the on-site working laboratory.

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

Kelley Merritt  
Metro Wastewater Reclamation District  
303/286-3455 or [kmerritt@mwr.dst.co.us](mailto:kmerritt@mwr.dst.co.us)

## **WALKING TOUR OF BUILDING STONES IN DENVER (K-12)**

CT-04131-19D  
0.5 semester credit hour  
Date: June 6  
Time: 8:30am-5:00pm  
Location: Downtown Denver  
Instructors: Pete Modreski, Jane Dianich  
Tuition Fee: \$80

Learn about rocks and geology as you tour historic Denver buildings in the vicinity of the State Capitol, Denver City and County Building, and the 16<sup>th</sup> Street Mall. Receive a copy of a field guide written specifically for school groups. See the complementary "Rocks and Minerals" class above.

To register, mail the enrollment form and full tuition amount to the CSM Teacher Enhancement Office.

## **BEYOND THE CLASSROOM: AQUATIC ECOLOGY RESEARCH & ENVIRONMENTAL ISSUES (GR. 4-12)**

CT-1742-19D  
1 semester credit hour  
Dates & Times:  
June 6 (7:30am-8:00pm) & June 7 (7:30am-4:00pm)  
Location: Keystone Science School  
Instructors: Jillian Somero, Carrie Scheick  
Course Coordinator: Christina Wheeler  
Tuition Fee: \$55 (**payable during workshop**)  
Registration Fee: \$50 (includes meals, housing, materials)

Receive all the tools necessary to facilitate a complete unit on environmental issues within a traditional classroom. The lessons from the workshop can form a stand-alone unit or supplement a Keystone Science School overnight field trip. Our unbiased framework allows you to explore challenging topics, such as climate science and how it relates to ecology, while learning about all perspectives of an issue. We will be using the topic of water in the West to explore environmental issues but the lessons we present will be adaptable to any local, regional, or global issue. Curriculum can be adapted for younger students.

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

Christina Wheeler, Keystone Science School  
970/368-4082  
cwheeler@keystonescienceschool.org

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

CT-1304-19D  
6 semester credit hours  
Dates: June 7-21  
Location: Alaska  
Instructor: Melanie Phelps  
Tuition Fee: \$5,705 (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. Price may vary slightly based upon air and ferry fares.

### **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-1718-19D  
3 semester credit hours  
Dates: June 9-16  
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. The State Department's new restrictions on travel to Cuba does not impact this educational trip in any manner.

### **To register:**

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

## **ALL ABOUT MINING HYBRID COURSE (K-12)**

CT-5700-19D  
6 semester credit hours  
Dates: June 13-21  
Time: 8:00am-mid/late afternoon (except on full-day field trips)  
Location: online, CSM campus, and field trips  
Instructors: various speakers  
Course Coordinator: Shannon Mann, 720/250-6635  
Tuition Fee: \$300

Gain a detailed overview of America's modern mining industry, answering important questions such as: What does the mining industry really do? How does the mining industry function? Why is mining important to America's society? Visit the website for more information on course requirements.

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

CMA Education Foundation, Inc.  
303/575-9199, coordinator@allaboutmining.org  
www.allaboutmining.org



## **NORWAY: LAND OF GLACIER-BORN FJORDS (K-12)**

CT-1833-19D  
4 semester credit hours  
Dates: June 16-24  
Locations: Norway  
Instructor: Joyce Webb  
Tuition Fee: \$4,600 (includes airfare, lodging, ground transportation, tours, credit)

Start in Oslo with visits to the Viking Museum, Frogner Park, and the Nobel Peace Center. Take the magnificent train ride to Flam to experience a fjord cruise on a finger of Norway's longest and deepest fjord, Sognefjord, before heading to Bergen, a UNESCO sight.

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

Joyce Webb, 719/229-5482  
[joycewebb@ymail.com](mailto:joycewebb@ymail.com)  
[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

## **IRELAND: HAUNTED BY HISTORY AND RICH IN LEGENDS (K-12)**

CT-0419-19M  
4 semester credit hours  
Dates: June 25-July 5  
Location: Ireland  
Instructor: Joyce Webb  
Tuition Fee: \$2,075 (includes lodging, ground transportation, tours, credit)

Experience the unpretentious simplicity of Ireland. Tour the southwestern Emerald Isle from castles to peat bogs, and explore the famous Aran Islands, the Burrens, and the Gaelic-speaking Dingle Peninsula. Kiss the Blarney Stone and climb the Rock of Cashel.

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

Joyce Webb, 719/229-5482  
[joycewebb@ymail.com](mailto:joycewebb@ymail.com)  
[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

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

CT-1428-19M  
2 semester credit hours  
Dates: June 28-July 2  
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](mailto:melaniephe@aol.com)  
[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

## **BUDBURST NATIVARS FOR EDUCATORS (GR. 4-12)**

CT-1920-19M  
1 semester credit hour  
Dates: June 28-July 14  
Instructors: H. Jean Bryan, Jessa Finch  
Tuition Fee: \$55 (**payable during workshop**)  
Registration Fee: \$60

Engage your learners in both pollinator count data collection in the field and data analysis. The Budburst Nativars project contributes data to a national research project aimed at answering a critical question in pollinator conservation. This online course covers basic plant phonology, pollinator biology, how to find or plant a Nativar Research Garden, and the protocols for making and reporting weekly pollinator observations. In addition receive additional classroom activities to support implementation in your unique educational setting.

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

Jessa Finch, Chicago Botanic Garden  
847/835-6945 or [jfinch@chicagobotanic.org](mailto:jfinch@chicagobotanic.org)

## **USING CITIZEN SCIENCE DATA IN THE CLASSROOM ONLINE (GR. 6-12)**

CT-1620-19M  
2 semester credit hours  
Dates: June 28-July 28  
Instructors: H. Jean Bryan, Jessa Finch  
Tuition Fee: \$95 (**payable during workshop**)  
Registration Fee: \$70

New to integrating data collection, manipulation, and display as part of your citizen science related instructional activities? This course will provide a good starting place. This course assumes a basic familiarity with the concept of citizen science and direct experience with, or participation in, at least one citizen science project. Projects highlighted in this course include Budburst, eBird, GroWatch, Picture Post, and CoCoRaHS.

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

Jessa Finch, Chicago Botanic Garden  
847/835-6945 or [jfinch@chicagobotanic.org](mailto:jfinch@chicagobotanic.org)

## **AUSTRALIA: REEFS AND RAINFORESTS DOWN UNDER (K-12)**

CT-0606-19M  
6 semester credit hours  
Dates: July 5-26  
Location: Australia  
Instructor: Melanie Phelps  
Tuition Fee: \$3,955 (includes lodging, ground transportation, tuition)

Tiptoe through the ancient rainforest in search of the elusive cassowary; snorkel or dive beneath the crystal waters of the Great Barrier Reef; sojourn to the Outback to glimpse the Red Kangaroos; and camp on a secluded coral and mangrove island. Fly to Uluru to hike and explore the outback around Ayer's Rock and the Olga Mountains.

### **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)

## **IRELAND II: DAWNING OF A NEW DAY (K-12)**

CT-0905-19M

4 semester credit hours

Dates: July 5-13

Location: Ireland

Instructor: Joyce Webb

Tuition Fee: \$2,100 (includes lodging, ground transportation, tours, credit)

Tour Dublin, Belfast, and the east coast of Ireland. Discover the past as you gaze upon the Book of Kells, explore the tomb of Newgrange, and wander through the 6<sup>th</sup> century monastery of Monasterbolce. Visit Trim Castle and explore the volcanic columns of the Giant's Causeway. The past and present become blended into another Irish adventure.

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

Joyce Webb, 719/229-5482

[joycewebb@ymail.com](mailto:joycewebb@ymail.com)

[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

## **DINOSAUR RIDGE TEACHERS' WORKSHOP (K-12)**

CT-9206-19M

1 semester credit hour

Dates: July 9-10

Time: 8:30am-5:00pm

Location: Dinosaur Ridge Discovery Center, Morrison

Instructors: Pete Modreski, Norb Cygan

Tuition Fee: \$125

Experience an in-depth orientation to the dinosaur bones and tracks found on Dinosaur Ridge near Morrison, and learn how to use them as a resource for teaching. Visit the Trek Through Time Learning Center, the Morrison Natural History Museum, and the Triceratops Trail interpretive site in Golden.

To register, mail the enrollment form and full tuition amount to the CSM Teacher Enhancement Office.

## **CRESTED BUTTE: WET WILD WEST (K-12)**

CT-1921-19M

1 semester credit hour

Dates & Times:

July 9 (8:00am-5:00pm)

July 10 (8:00am-3:00pm)

Locations: Crested Butte & Gunnison areas

Instructor: Tonya MacKendrick

Tuition Fee: \$55 (**payable during workshop**)

Registration Fee: \$190 (meals, lodging, and transportation on your own)

Explore the awesome wet and wild natural and human history of the Crested Butte area. Spend time at the Rocky Mountain Biological Laboratory in Gothic and learn about wildflowers and the mining history of Crested Butte. Finally, learn about the power and importance of water as you raft down the Taylor River.

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

Tonya MacKendrick, 970/216-2326

[Tmackendrick530@gmail.com](mailto:Tmackendrick530@gmail.com)

[www.wcoloradohistoricadventures.weebly.com](http://www.wcoloradohistoricadventures.weebly.com)

## **MINING AND MURDER: COLORFUL HISTORY OF LAKE CITY & CREEDE (K-12)**

CT-1618-19M

1 semester credit hour

Dates & Times:

July 11 (7:30am-5:00pm)

July 12 (7:30am-3:00pm)

Locations: Lake City & Creede

Instructor: Tonya MacKendrick

Tuition Fee: \$55 (**payable during workshop**)

Registration Fee: \$175 (meals, lodging, and transportation on your own)

Step back in time in Colorado's past when legends were made and mining reigned supreme. Enjoy a guided 4wd jeep tour into the heart of the San Juans starting in Lake City and learn about Colorado's most famous cannibal. Then take in Creede's rich silver history by touring a mining museum, attending the historic Creede Theater, and visit ghost towns and structures of days long ago.

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

Tonya MacKendrick, 970/216-2326

[tmackendrick530@gmail.com](mailto:tmackendrick530@gmail.com)

[www.wcoloradohistoricadventures.weebly.com](http://www.wcoloradohistoricadventures.weebly.com)

## **SCOTLAND: THE HIGHLANDS OF GLADES AND LOCHS (K-12)**

CT-0706-19M

4 semester credit hours

Dates: July 13-21

Location: Scotland

Instructor: Joyce Webb

Tuition Fee: \$2,475 (includes lodging, ground transportation, tours, credit)

Journey along mossy mountains, salty isles, and bottomless lochs. Taste haggis, hear bagpipes, and feel the winds of history blowing through the glens. Go time tripping through stone castles, and savor the pristine atmosphere of the Hebrides Islands. Wander with us and scan Loch Ness for legendary monsters.

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

Joyce Webb, 719/229-5482

[joycewebb@ymail.com](mailto:joycewebb@ymail.com)

[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

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

CT-0296-19M  
0.5 semester credit hour  
Date: July 23  
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

### **WASTEWATER AND AQUATIC BIOLOGY (K-12)**

CT-1082-19M  
0.5 semester credit hour  
Date: July 24  
Time: 8:00am-5:00pm  
Location: Metro Wastewater Reclamation District, Denver  
Instructor: Steve Lundt  
Course Coordinator: Kelley Merritt  
Tuition Fee: no charge (you must pre-register)

Receive an introduction to the science behind wastewater treatment. Learn about industry efforts to preserve, protect, and improve aquatic environments while protecting public health. Tour a wastewater treatment facility and a water quality laboratory.

**To register or for more information, contact:**  
Kelley Merritt  
Metro Wastewater Reclamation District  
303/286-3455 or kmerritt@mwr.dst.co.us

### **OCEAN LITERACY (K-12)**

CT-0710-19M  
0.5 semester credit hour  
Date: July 25  
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, parking, admission & snacks)

Even though Colorado is not near an ocean, we are tied to it in many ways. Ocean literacy is an understanding of the ocean's influence on you, and your influence on the ocean. Learn the 7 essential principles of ocean literacy through interactive lessons and visiting the Aquarium residents. Registrations close 2 weeks prior to the start date.

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

### **AQUARIUMS AND YOUR CLASSROOM (GR. 1-12)**

CT-0259-19M  
0.5 semester credit hour  
Date: August 7  
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)

Learn and see how to do aquarium set-up, learn maintenance tips, and try out a variety of activities that you and your students can do with your classroom aquarium as well as with our million-gallon version. Receive an interdisciplinary curriculum guide, go on a behind-the-scenes tour, and meet staff to discuss aquarium careers. Bring the ocean to your classroom, and your class to the ocean, in Denver! 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

## EcoAdventure Course Offerings

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

### **WILDFLOWERS OF THE ROCKIES (K-12)**

CT-9613-19D

1 semester credit hour

Dates & Times:

June 8 (9:00am-5:00pm)

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

Location: EcoAdventures, Morrison

Instructor: Pam Batton

Tuition Fee: \$165 (**\$185 after May 23<sup>rd</sup>**)

Spend time in the wildflowers as you explore a variety of elevations and identify and discover interesting botanical facts, uses, myths and legends about wildflowers. Experience “botany in a bowl,” a creative activity to help kids understand the basics of botany.

### **THE ANCIENT ONES: PRE-HISTORIC NATIVE AMERICANS IN COLORADO (K-12)**

CT-1704-19D

1 semester credit hour

Dates & Times:

June 29 (9:00am-5:00pm)

June 30 (9:00am-4:00pm)

Location: EcoAdventures, Morrison

Instructor: Trey Corkern

Tuition Fee: \$165 (**\$185 after June 7<sup>th</sup>**)

Discover the fascinating stories of the first Native Americans in Colorado. Discover how cultures used different strategies to adapt to Colorado’s unforgiving landscape. Try your hand at hunting techniques, hand drills to start fires, archeoastronomy, and ceramics.

### **THE UTE - A NATIVE AMERICAN WAY OF LIFE IN THE ROCKIES (K-12)**

CT-95106-19M

1 semester credit hour

Dates & Times:

July 8 (9:00am-5:00pm)

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

Location: EcoAdventures, Morrison

Instructor: Pam Batton

Tuition Fee: \$165 (**\$185 after June 24<sup>th</sup>**)

Discover the history of the people of the shining mountains - Ute. Get a campsite up and running; learn the basics of ancient skills used in everyday life; try your hand at fire building, cooking, sewing, beading, twining, tanning and flint knapping.

### **SWEET WITH A STING: THE NATURAL HISTORY OF HONEYBEES (K-12)**

CT-0519-19M

1 semester credit hour

Dates: July 23-24

Times: 9:00am-5:00pm

Location: EcoAdventures, Morrison

Instructor: Pam Batton

Tuition Fee: \$165 (**\$185 after July 8<sup>th</sup>**)

Peer into a glass hive and learn about the natural history of honeybees and their relatives. Examine the life cycle and jobs of a hive bee. Watch field bees in action as they pollinate flowers and do the “waggle dance.” Take a field trip to a bee yard to learn about a beekeeper’s daily activities.

### **WILD CANINES OF COLORADO (K-12)**

CT-9617-19M

1 semester credit hour

Dates & Times:

July 25 (8:00am-5:00pm)

July 26 (7:30am-2:00pm)

Location: EcoAdventures, Morrison

Instructor: Pam Batton

Tuition Fee: \$170 (**\$190 after July 8<sup>th</sup>**)

Discover the mischievous coyote, the cat-like canine, red fox, the extirpated wolf, and others. Learn each animal’s natural history through hands-on activities and field observation during hikes. Visit a wonderful wild canine refuge. Supplement any animal study/ecology curriculum with class topics such as habitat, predator/prey relationships, and populations.

### **THE GHASTLY HISTORY OF MEDICINE (K-12)**

CT-1909-19M

1 semester credit hour

Dates & Times:

July 27 (9:00am-5:00pm)

July 28 (9:00am-4:00pm)

Location: EcoAdventures, Morrison

Instructor: Trey Corkern

Tuition Fee: \$165 (**\$185 after July 8<sup>th</sup>**)

Everyone gets ill, discover how people were able to cope with adversity throughout history. Try your hand at Greek surgical methods, making Egyptian topical medicines, building a Native American herbal kit, diagnosing a European plague, removing a bullet, treating scurvy, deliver a baby, and more.



**TAMING THE FRONTIER: COLORADO'S  
PIONEERS AND HOMESTEADERS (K-12)**

CT-1125-19M

1 semester credit hour

Dates & Times:

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

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

Location: EcoAdventures, Morrison

Instructor: Trey Corkern

Tuition Fee: \$165 (**\$185 after July 22<sup>nd</sup>**)

How did men, women, and children cross an ocean of prairie to build homes and communities? Make sausage, plant heirloom seeds, and make cheese. Learn how to shoe a horse, pack a wagon, and harness draft animals. Visit a working homestead.

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

**EcoAdventures**

**5894 South Meadow Drive**

**Morrison, CO 80465**

**303/697-0327, Fax 303/697-0329**

**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.

## Denver Botanic Gardens Course Offerings

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

### FEEDING COMMUNITIES: AN INTRODUCTION TO URBAN FARMING (K-12)

CT-1524-19M

1.5 semester credit hours

Dates: July 5, 12, 26

Time: 9:00am-5:00pm

Location: Denver Botanic Gardens

Instructor: Brien Darby

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

Registration Fee: \$100 DBG member, \$110 non-member

Learn the skills necessary to plan and manage an urban agricultural project ranging in size from a backyard garden to a multi-acre city lot. Receive lessons on design, soil prep, tool usage, seed starting, pest and diseases, harvesting, and next steps.

To register, visit

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

or contact DBG Resource Center, 720/865-3500  
or registrar@botanicgardens.org

## Denver Museum of Nature & Science Course Offerings

**Note: Register for courses through the Museum. See box below.**

### **SCIENCE IN THE EARLY CHILDHOOD CLASSROOM (PREK-1)**

CT-1827-19D  
0.5 semester credit hour  
Date: June 1  
Time: 8:00am-4:30pm  
Location: Denver Museum of Nature & Science  
Instructor: Cybil Holmes  
Tuition Fee: \$35  
Registration Fee: \$75

What does science instruction look like for our youngest learners? Find out ways to incorporate problem based learning strategies into all of the routines of your early childhood classroom. Explore hands-on materials in a way that fuels curiosity and leads to authentic questions. Learn how to plan investigations that incorporate art, math, and literacy. These new strategies and tools will transform how you teach science and inspire your students.

### **EXPLORING NATURE WITH YOUNG CHILDREN (PREK-1)**

CT-1728-19D  
0.5 semester credit hour  
Date: June 15  
Time: 8:00am-4:30pm  
Location: Denver Museum of Nature & Science  
Instructor: Cybil Holmes  
Tuition Fee: \$35  
Registration Fee: \$75

What young child doesn't enjoy collecting sticks and rocks while they are out for a walk? Learn how to put that natural curiosity to work using engaging opportunities for science inquiry. Explore City Park and experience nature firsthand with hands-on investigations and ways to create authentic connections between home and school. This unique opportunity is sure to pique your curiosity as well!

To register, visit

<https://www.dmns.org/learn/teacher-professional-development/early-childhood-education/> or contact [teacherprograms@dmns.org](mailto:teacherprograms@dmns.org)

## Fall 2019 Course Preview

### 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](mailto:steven.veatch@gmail.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:** \_\_\_\_\_

**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 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  
 1600 Jackson St., Ste. 190  
 Golden, CO 80401  
 Phone: (303) 384-2692  
<http://te.csmspace.com>