

Teacher Enhancement Program for K-12 Educators

AT THE COLORADO SCHOOL OF MINES



FALL 2016

<http://te.csmspace.com>

COLORADO SCHOOL OF MINES

Teacher Enhancement Program

Fall 2016

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 160A
Golden, CO 80401
(303) 277-8683 FAX
(303) 279-3855

Visit our home page at:
<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. 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

PERSEVERING PIKA: SECRETS OF ALPINE SURVIVAL (K-12)

CT-1534-16F

0.5 semester credit hour

Date: September 3

Time: 8:30am-5:00pm

Location: Rocky Mtn. Conservancy, Estes Park

Instructor: Chris Ray

Tuition Fee: \$40 (**payable during workshop**)

Registration Fee: \$80

Have you ever wondered how non-hibernating animals like yourself might fare trying to survive in the alpine year-round? Watch the American pika demonstrate its survival strategy. Pikas and their hibernating neighbors, yellow-bellied marmots, chipmunks, and squirrels, are easy to watch in the summer and fall as they forage among the alpine wildflowers. Learn how to spot different animals behaviors that provide clues to how each survives the long, cold winter.

To register or for more information, contact:

Rachel Balduzzi, Rocky Mtn. Conservancy

970/586-3262 or

Rachel.balduzzi@rmconservancy.org

EXPLORING ROCKY MOUNTAIN NATIONAL PARK (GR. 6-12)

CT-1634-16F

0.5 semester credit hour

Date: October 1

Time: 8:30am-5:30pm

Location: Rocky Mtn. National Park

Course Coordinator: Mile Sipes

Tuition Fee: \$40 (**payable during workshop**)

Registration Fee: \$30 (includes lunch)

Spend a fall day exploring several of the life zones found in Rocky Mountain National Park. Learn about the possible reintroduction of certain mammals to the Park, as well as the current management of Bighorn Sheep in the Park. Find out how climate change is affecting our national parks and monuments. Meet at Beaver Meadows Visitor Center on US Highway 36.

To register or for more information, contact:

Mike Sipes, 303/237-4975

mpsipes@centurylink.net

INTRO TO PLANT PHENOLOGY & CLIMATE CHANGE THROUGH PROJECT BUBBURST ONLINE (K-12)

CT-1213-16F

2 semester credit hours

Dates: October 4-November 4

Instructor: Dennis Ward, 720/746-4924

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

Registration Fee: \$35

Obtain detailed information on Project BudBurst (a plant-based citizen science program). Learn how to select your plants and make observations, get suggestions for structuring your classroom involvement, receive activities to engage your students in making observations and analyzing data, as well as forming a community with other educators.

To register or for more information, contact:

<http://citizenscienceacademy.org/courses/csa501>

INTRODUCTION TO CITIZEN SCIENCE ONLINE (K-12)

CT-1430-16F

2 semester credit hours

Dates: October 4-November 4

Instructor: Dennis Ward, 720/746-4924

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

Registration Fee: \$35

Receive an overview of citizen science, highlighting several existing programs that are targeted towards educators. Explore each of these programs, including how to participate, suggestions for structuring your involvement, education activities to engage your students, as well as forming a community with other educators.

To register or for more information:

<http://citizenscienceacademy.org/courses/csa520>

USING CITIZEN SCIENCE DATA IN THE CLASSROOM ONLINE (K-12)

CT-1620-16F

2 semester credit hours

Dates: October 4-November 4

Instructor: Sandra Henderson

Course Coordinator: Dennis Ward, 720/746-4924

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

Registration Fee: \$35

The focus of this course is data – its use, analysis, and interpretation – and specifically citizen science collected data. Become comfortable with exploring, analyzing, and visualizing citizen science data. Create a custom lesson plan aligned with education standards for use in your classroom.

To register or for more information:

<http://citizenscienceacademy.org/courses/csa521>

EcoAdventure Course Offerings

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

BACK IN BLACK - RAVENS, CROWS, AND MAGPIES (K-12)

CT-0463-16F

1 semester credit hour

Dates & Times:

September 17 (12:00-7:00pm)

September 18 (8:00am-4:00pm)

Location: EcoAdventures, Morrison

Tuition Fee: \$160 (**\$180 after September 6th**)

Ravens, crows, magpies, and jays form the Corvid family. They are intelligent, social, curious, and one of the most adaptable bird species on earth. Their success is noted in cultural folklore and history. Discover the natural and cultural history of these remarkable birds through hands-on activities and outdoor treks.

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

CT-1101-16F

1 semester credit hour

Dates & Times:

October 1 (9:00am-5:00pm)

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

Location: CSM campus, Golden

Instructor: Trey Corkern

Tuition Fee: \$160 (**\$180 after September 15th**)

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.

JUST BUTTING HEADS? BIGHORN SHEEP & MOUNTAIN GOATS (K-12)

CT-0757-16F

1 semester credit hour

Dates & Times:

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

November 6 (9:00am-4:00pm)

Location: CSM campus, Golden

Tuition Fee: \$160 (**\$180 after October 20th**)

Discover why head butting is common among bighorn sheep and rare (but serious) among mountain goats. Learn about unique adaptations for survival in a rugged habitat. Hike into bighorn country as the mating season begins to observe their behavior. Learn why the mountain goat truly is a beast the color of winter.

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.

Project WILD - Project Learning Tree - WET

Projects WILD and Learning Tree are supplemental, interdisciplinary environmental education programs emphasizing wildlife, forest and water resources, and our interdependence with the natural world. Using hands-on activities that create awareness, appreciation, understanding, skills and commitment, you and your students learn to address environmental issues within the framework of your existing curriculum. You will receive activity guides, posters, prizes, and other supplemental materials.

All Project WILD and Learning Tree PreK-12 activities have been correlated to the Colorado Model Content Standards for Science, Math, Geography, History, Reading and Writing. Spanish translations of activities are available for Project Learning Tree and Project WILD. New PLT materials are available for integrated middle and high school curricula.

Following is a list of upcoming workshops. **Pre-register by calling the person listed and sending in the non-refundable registration fee at least 7 days prior to the first day of the workshop (unless otherwise noted). Tuition will be due on the first day of the workshop. Please register through the person listed, not through the Colorado School of Mines.** Workshops may be cancelled one week before the start date if minimum enrollment numbers have not been met. Other dates may have been added; call for updated workshop listings.

BASIC PROJECT WILD (K-12)

CT-9598-16F

0.5 semester credit hour

Date: September 17

Time: 9:00am-5:15pm

Location: Hotchkiss

Tuition Fee: \$40 (**payable during workshop**)

Registration Fee: \$10

Gain experience and excitement working with your students to integrate Project WILD into your curriculum. Spend a day learning hands-on educational activities, gaining wildlife education resources, and take home the Project WILD and Aquatic WILD curriculum guides.

To register or for more information, contact:

Catherine Brons

970/375-6709 or catherine.brons@state.co.us

For updated information:

Project WILD, 303/291-7165

Project Learning Tree, 303/278-8822

www.coloradoplnt.org

www.wildlife.state.co.us/Education

Spring 2017 Course Preview

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

CT-1502-17S

1 semester credit hour

Dates: March 4-5

Location: Alamosa

Instructor: Melanie Phelps

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

View flocks of 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

MUSEUMS OF PARIS (K-12)

CT-04132-17S

4 semester credit hours

Dates: March 25-April 2

Location: Paris, France

Instructor: Joyce Webb

Tuition Fee: \$3,970 (includes airfare, lodging, ground transportation, entrance fees, credit)

Visit the Louvre, Orsay, Rodin, and Picasso Museums plus tour Versailles. Climb Notre-Dame, cruise the Seine, zip up the Eiffel Tower, and saunter down the Avenue des Champs Elysees to the Arc de Triomphe. Capture the romance and joie de vivre that Paris exudes.

To register or for more information, contact:

Joyce Webb, 719/229-5482

joycewebb@ymail.com

www.coloradorivertrip.com

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

CT-1303-17S

1 semester credit hour

Dates: April 8-9

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-0350-17S

1 semester credit hour

Dates: May 6-7

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 2017 Course Preview

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

CT-1031-17D
1 semester credit hour
Dates: June 2-3
Location: meet in Pueblo; drive to NM
Instructor: Melanie Phelps
Tuition Fee: \$160

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., and 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-1402-17D
2 semester credit hours
Dates: June 4-7
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

ITALY REVEALED: EXPLORING THE LAND OF THE ANCIENT ROMANS (K-12)

CT-0805-17D
5 semester credit hours
Dates: June 5-17
Location: Italy
Instructor: Joyce Webb
Tuition Fee: \$4,420 (includes airfare, lodging, ground transportation, entry fees, credit)

Travel from Roman temples to medieval churches, and from the ruins of Pompeii to Vatican City's treasure trove. Walk through the Roman Forum and sleep in the city of Otviato. Experience Florence, the art capital of the world; hike along Le Cinque Terra, the sun-drenched Italian Riviera; marvel at the Leaning Tower of Pisa; and absorb Venice, the most romantic city in the world.

To register or for more information, contact:

Joyce Webb, 719/229-5482
joycewebb@ymail.com
www.coloradorivertrip.com

ICELAND: LAND OF FIRE AND ICE (K-12)

CT-1506-17D
4.5 semester credit hours
Dates: June 11-21
Location: Iceland
Instructor: Melanie Phelps
Tuition Fee: \$3,700 (includes lodging, ground transportation, tours, credit)

Explore the beautiful fjord Viking capital of Iceland, Reykjavik. Discover the geology of the Mid-Atlantic Ridge and plate tectonics; snorkel the rift between the European and the North American Plates; strap on your crampons and hike an active glacier; then walk among fumeroles, mudpots, steam vents, and geysers and into lava tubes.

To register or for more information, contact:

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

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

CT-0419-17D
4 semester credit hours
Dates: June 19-28
Location: Ireland
Instructor: Joyce Webb
Tuition Fee: \$2,970 (includes airfare, 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
www.coloradorivertrip.com

COSTA RICA: TROPICAL RAINFOREST LEGEND (K-12)

CT-1701-17M
4 semester credit hours
Dates: June 26-July 5
Location: Costa Rica, Central America
Instructor: Melanie Phelps
Tuition Fee: \$2,475 (includes lodging, ground transportation, tours, credit)

Journey to the birding, mammal, and beach capital of Meso-America. Awaken to the calls of Howler and Capuchin Monkeys and 830 species of birds. Explore Monteverde Cloud Forest, LaSelva Research Station, Palo Verde, and Manuel Antonio National Parks. Study the geology and ecology of this narrow land bridge between continents as you explore the Legend of Biodiversity.

To register or for more information, contact:

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

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

CT-0905-17M

4 semester credit hours

Dates: June 27-July 4

Location: Ireland

Instructor: Joyce Webb

Tuition Fee: \$3,275 (includes airfare, 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 6th 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@gmail.com

www.coloradorivertrip.com

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

CT-1112-17M

4 semester credit hours

Dates: July 6-15

Location: Belize, Central America

Instructor: Melanie Phelps

Tuition Fee: \$2,400 (includes lodging, ground transportation, credit)

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.

To register or for more information, contact:

Melanie Phelps, 719/252-1789

melaniephe@aol.com

www.coloradorivertrip.com

THE GRAND CANYON OF THE COLORADO – THE ULTIMATE RIVER EXPEDITION (K-12)

CT-0428-17M

3.5 semester credit hours

Dates: July 20-26

Location: Grand Canyon

Instructor: Melanie Phelps

Tuition Fee: \$3,115

Experience the stunning geology of more than two billion years of earth history as you whitewater raft through some of the world's most famous rapids. Includes 6.5 days on a motorized raft, helicopter airlift to the rim, flight on a twin engine plane, and all food. This is the ultimate river trip.

To register or for more information, contact:

Melanie Phelps, 719/252-1789

melaniephe@aol.com

www.coloradorivertrip.com

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

CT-1304-17M

6 semester credit hours

Dates: July 28-August 11

Location: Alaska

Instructor: Melanie Phelps

Tuition Fee: \$5,605 (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

Course Enrollment Form

Please Print

Full Name: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Social Security Number*: _____ Date of Birth: _____

Telephone: (school) _____ (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 160A

Golden, CO 80401

FAX: (303) 277-8683

Phone: (303) 279-3855

<http://te.csmspace.com>