

Teacher Enhancement Program for K-12 Educators

AT THE COLORADO SCHOOL OF MINES



SUMMER 2017

<http://te.csmspace.com>

COLORADO SCHOOL OF MINES

Teacher Enhancement Program

Summer 2017

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
Office of Special Programs & Continuing Education
Colorado School of Mines
Golden, CO 80401-0028
(303) 279-3855

To view the most current teacher enhancement course listings, or to order an official transcript, visit our website 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. 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 2017 Course Offerings

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., 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

PIKES PEAK GOLD RUSH (GR. 3-12)

CT-1533-17D

1 semester credit hour

Dates: June 3-4

Time: 8:00am-6:30pm

Locations: meet at Woolly Mammoth Lot, I-70 & CO 26

Instructor: Michael Johnson

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

Registration Fee: \$165 (includes tour fees)

Learn basic geology concepts and visit historical sites made famous during the Pikes Peak Gold Rush of '59. Tour an authentic gold mine, pan for gold, and visit the historical towns of Idaho Springs, Central City, and Georgetown.

To register or for more information, contact:

Michael Johnson, 720/548-0560

Montanamike8@gmail.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 Otaviato. 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

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

CT-1216-17M

2 semester credit hours

Dates: June 6-August 14

Instructor: Katie Navin

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

Registration Fee: \$125 CAEE members, \$160 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.cae.org.

To register or for more information, contact:

Katie Navin, CAEE

303/273-9527, outreach@cae.org

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 fumaroles, 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

WHIZ BANG SCIENCE (GR. 3-7)

CT-0542-17D

1 semester credit hour

Dates: June 13-14

Time: 8:00am-4:00pm

Location: Steele School, Denver

Instructor: Ralph Sodano

Tuition Fee: \$135

Explore and arrive at a fuller understanding of subjects including electricity, magnetism, photosynthesis, atmosphere, seasons, light, and more through simple but striking demonstrations and activities that can be brought into your classroom. Topics on astronomy and space will be covered under the Steele Planetarium dome.

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

WASTEWATER AND RENEWABLE RESOURCES (K-12)

CT-1215-17D

0.5 semester credit hour

Date: June 15

Time: 8:00am-5:00pm

Location: Metro Wastewater Reclamation District, Denver

Instructor: Alicia Gilley

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 from the biosolids digestion process. Tour the 52,000 acre METROGRO Farm, the Robert W. Hite Treatment Facility, and the on-site laboratory.

To register or for more information, contact:

Kelley Merritt, Metro Wastewater Reclamation District

303/286-3455 or kmerritt@mwrddst.co.us

ALL ABOUT MINING HYBRID COURSE (K-12)

CT-5700-17M

6 semester credit hours

Dates: June 15-17, 19-23

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

GERMANY: ROMANS, CASTLES, & KINGS (K-12)

CT-1509-17M

6 semester credit hours

Dates: June 17-July 1

Location: Germany

Instructor: Joyce Webb

Tuition Fee: \$4,755 (includes airfare, lodging, ground transportation, tours, credit)

Visit historical castles, vibrant cities, and quaint villages while traveling across Germany. Cruise on the Rhine River and gaze in awe at the castles that line both sides. Ascend Zugspitze, the highest point in Germany. Discover where German unity and democracy were born, and then visit the infamous WWII death camp, Dachau.

To register or for more information, contact:

Joyce Webb, 719/229-5482

joycewebb@ymail.com

www.coloradorivertrip.com

ROCKS AND MINERALS (K-12)

CT-9666-17D

1 semester credit hour

Dates: June 21-22

Time: 8:00am-5:00pm

Location: CSM campus, Golden

Instructors: Pete Modreski, Jane Dianich

Tuition Fee: \$100

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.

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

CT-04131-17D

0.5 semester credit hour

Date: June 23

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 16th 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.

ECOLOGY AND ART: YAMPA RIVER AND DESERT (K-12)

CT-1703-17D
1.5 semester credit hours
Dates June 23-25
Location: Yampa River near Craig, CO
Instructor: Karen Caddis
Tuition Fee: \$479

While canoeing, camping, and hiking, investigate the natural environment of the Yampa River, its riparian ecosystem, and the surrounding desert. Learn how human, plant, and animal life in these special areas have adapted to this unique environment. Be inspired by the natural surroundings to create art and poetry, learn how to gather and prepare plants for food and utilitarian uses. Receive background material, resource contacts, and a resource kit of materials and connections to help teach the activities you participated in.

To register or for more information, contact:

Centennial Canoe Outfitters, 720/283-0553
Julia@centennialcanoe.com
www.centennialcanoe.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

DO YOU KNOW YOUR 3 R's? RADIATION, RADIOACTIVITY & RADON (GR. 5-12)

CT-9898-17D
1 semester credit hour
Dates & Times: June 27-28 (8:00am-5:00pm), June 29 (9:00am-12:00pm)
Locations: CSM campus & Denver Federal Center
Instructors: Christine Nichols, Bob Beckman
Course Coordinator: Chrys Kelley, 303/692-3442
Tuition Fee: \$55

Use Geiger counters and cloud chambers (available for check-out) to "see" ionizing radiation in our environment. Explore basic concepts of radioactivity (nuclear emissions, half-life, decay series). Develop an understanding of radioactive radon's source and effect on humans. Take home the curriculum of 15 activities (plus resources).

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

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

CT-0706-17M
4 semester credit hours
Dates: July 1-10
Location: Scotland
Instructor: Joyce Webb
Tuition Fee: \$3,575 (includes airfare, 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
www.coloradorivertrip.com

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

CT-1718-17M
3 semester credit hours
Dates: July 1-8
Location: Havana & Pinar del Rio, Cuba
Instructor: Elena Sodano, 303/204-8470 or sodano@mac.com
Tuition Fee: \$135 (**payable during trip**)
Registration Fee: \$3,500 (includes airfare, meals, lodging, ground transportation, entrance fees)

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

To register:

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

DINOSAUR RIDGE TEACHERS' WORKSHOP (K-12)

CT-9206-17M
1 semester credit hour
Dates: July 10-11
Time: 8:30am-5:00pm
Location: Dinosaur Ridge Discovery Center, Morrison
Instructors: Pete Modreski, Norb Cygan
Tuition Fee: \$130

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.

THE MIGHTY SAN JUANS: MINING HISTORY AND SURVIVAL (K-12)

CT-1434-17M
1 semester credit hour
Dates & Times:
July 10 (7:30am-5:30pm)
July 11 (9:00am-4:00pm)
Locations: Ouray and Telluride
Instructor: Tonya MacKendrick
Tuition Fee: \$55 (**payable during workshop**)
Registration Fee: \$175 (meals, lodging, and transportation on your own)

Experience the mighty San Juans from a new perspective. Take a guided jeep tour through the heart of the San Juans over Ophir Pass and Imogene Pass. Then learn about the hardships and triumphs experienced by early miners as you explore the past of Telluride through guided walking tours. This class will involve some walking and moving around at high altitudes.

To register or for more information, contact:

Tonya MacKendrick, 970/216-2326
Tmackendrick530@gmail.com
www.wcoloradohistoricadventures.weebly.com

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

CT-0419-17M
4 semester credit hours
Dates: July 11-20
Location: Ireland
Instructor: Joyce Webb
Tuition Fee: \$3,775 (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

SILVER, GOLD, AND GHOSTS: HISTORY OF MINING IN THE SAN JUANS (K-12)

CT-0559-17M
1 semester credit hour
Dates & Times:
July 12 (8:00am-5:00pm)
July 13 (7:45am-4:00pm)
Location: Ouray, Silverton
Instructor: Tonya MacKendrick
Tuition Fee: \$55 (**payable during workshop**)
Registration Fee: \$145 (meals, lodging, and transportation on your own)

Explore the history of silver and gold in the beautiful San Juan Mountains. Walk through old ghost town remains, and enjoy a guided tour through the Mayflower Mill and Old Hundred Gold Mine in Silverton. Finish with a professionally guided jeep tour to Yankee Boy Basin viewing mining sites along the way.

To register or for more information, contact:

Tonya MacKendrick, 970/216-2326
Tmackendrick530@gmail.com
www.wcoloradohistoricadventures.weebly.com

STUDYING WATER IN YOUR LOCAL STREAM (K-12)

CT-1123-17M
0.5 semester credit hour
Date: July 13
Time: 8:00am-4:30pm
Location: Prospect Park, Wheat Ridge
Instructors: Pete Modreski, Jane Dianich
Tuition Fee: \$80

Conduct hands-on field measurements to explore water flow and quality in a section of Clear Creek in Wheat Ridge. Learn about hydrology, ecology, geology, and fostering an appreciation for the natural environment.

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

WASTEWATER AND AQUATIC BIOLOGY (K-12)

CT-1082-17M
0.5 semester credit hour
Date: July 13
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)

Obtain an overview of the treatment process at Metro Wastewater Reclamation District and highlight the environmental benefits to the South Platte River. Tour the Robert W. Hite Treatment Facility and the Metro District Laboratory.

To register or for more information, contact:

Kelley Merritt, Metro Wastewater Reclamation
303/286-3455 or kmerritt@mwr.dst.co.us

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

CT-0905-17M
4 semester credit hours
Dates: July 20-28
Location: Ireland
Instructor: Joyce Webb
Tuition Fee: \$3,675 (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@ymail.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.

To register or for more information, contact:

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

AQUARIUMS AND YOUR CLASSROOM (GR. 1-12)

CT-0259-17M
0.5 semester credit hour
Date: July 26
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, admission)

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

YOUR HOME IS YOUR HABITAT (PREK-12)

CT-0296-17M
0.5 semester credit hour
Date: July 27
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)

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

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

Additional Programs of Interest

Rocky Mountain Conservancy – Field Institute

Most field seminars are field-based, hands-on learning experiences in Rocky Mountain National Park. A wide range of topics are available. Visit our website at www.rmconservancy.org. If you have any questions, including information on our refund policy, would like to talk with a person at the Field Seminar Center, or experience technical difficulties, please call (970)586-3262. Many of our seminars fill up, so please register early. We look forward to seeing you in a field seminar this year. RMNA membership discounts are available.

EcoAdventure Course Offerings

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

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

CT-1719-17D

1 semester credit hour

Dates & Times:

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

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

Location: LaJunta, CO

Instructor: Trey Corkern

Tuition Fee: \$165 (**\$185 after May 25th**)

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, then visit the sites of the Sand Creek massacre, Fort Lyons, and Bent's Old Fort.

WILDFLOWERS OF THE ROCKIES (K-12)

CT-9613-17D

1 semester credit hour

Dates & Times:

June 10 (9:00am-5:00pm)

June 11 (9:00am-4:00pm)

Location: EcoAdventures, Morrison

Instructor: Pam Batton

Tuition Fee: \$165 (**\$185 after May 25th**)

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.

BEAVER ECOLOGY (K-12)

CT-95102-17D

1 semester credit hour

Dates & Times:

June 15 (1:00-9:00pm)

June 16 (2:00-9:00pm)

Location: EcoAdventures, Morrison

Instructor: Pam Batton

Tuition Fee: \$160 (**\$180 after June 1st**)

Explore beaver ecology and learn about their natural history and role in cultural history. Discover activity ideas including the use of mini-experiments to highlight behavior and adaptations, and uncover management issues through a simulation project. Wander in a beaver habitat, and enjoy wildlife observations at an active beaver pond.

EARLY EXPLORERS OF THE ROCKY MOUNTAINS (K-12)

CT-0518-17D

1 semester credit hour

Dates & Times:

June 17 (9:00am-5:00pm)

June 18 (9:00am-4:00pm)

Location: EcoAdventures, Morrison

Instructor: Trey Corkern

Tuition Fee: \$165 (**\$185 after June 1st**)

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

WILD CANINES OF COLORADO (K-12)

CT-9617-17M

1 semester credit hour

Dates & Times:

July 18 (8:00am-5:00pm)

July 19 (7:30am-2:00pm)

Location: EcoAdventures, Morrison

Instructor: Pam Batton

Tuition Fee: \$170 (**\$190 after June 15th**)

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. Supplement any animal study/ecology curriculum with class topics such as habitat, predator/prey relationships, and populations.

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

CT-95106-17M

1 semester credit hour

Dates & Times:

July 20 (9:00am-5:00pm)

July 21 (9:00am-4:00pm)

Location: EcoAdventures, Morrison

Instructor: Pam Batton

Tuition Fee: \$165 (**\$185 after June 15th**)

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.

WOMEN OF COLORADO (K-12)

CT-1720-17M

1 semester credit hour

Date & Time:

July 22 (9:00am-5:00pm)

July 23 (9:00am-4:00pm)

Location: EcoAdventures, Morrison

Instructor: Trey Corkern

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

Colorado has been the crucible for creating remarkable women. Discover the astounding stories of stateswomen, entrepreneurs, authors, politicians, physicians, saints, educators, and others who forged the Centennial state. Part of this class will include a walking lecture through Denver and Golden.

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

CT-0519-17M

1 semester credit hour

Dates & Times:

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

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

Location: EcoAdventures, Morrison

Instructor: Pam Batton

Tuition Fee: \$160 (**\$180 after July 17th**)

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.

DUST ON OUR BOOTS: COWBOYS OF COLORADO (K-12)

CT-1721-17M

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: \$160 (**\$180 after July 17th**)

Mount up, and discover who the cowboys were, how they did their jobs, and why they became the romantic symbol of self-reliance in the American west. Discuss the caballeros, bull-doggers, cow-punchers, and desperados. Try your hand at branding, roping, gambling, and making a chuck wagon dinner.

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

CT-1125-17M

1 semester credit hour

Dates & Times:

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

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

Location: EcoAdventures, Morrison

Instructor: Trey Corkern

Tuition Fee: \$160 (**\$180 after July 17th**)

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:

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.

Denver Museum of Nature & Science Course Offering

ECOSYSTEM INTERACTIONS: FINDING THE BALANCE CANOE TRIP (K-12)

CT-1705-17F

1.5 semester credit hours

Dates:

June 10 (lecture)

June 16-18 (canoe trip)

September (classroom implementation)

Time: 8:00am-3:30pm (lecture)

Instructor: Tim Blesse, 303-370-8298

Tuition Fee: \$456

Participate in a 4-day river/museum field course led by Museum staff to explore the interactions that occur every day in nature. Learn how humans continuously affect these interactions. Deepen your understanding of ecology and critical environmental resource issues and participate in journaling and citizen science projects.

To register or for more information, contact:

Centennial Canoe Outfitters, 720/283-0553

<http://www.centennialcanoe.com/destinations/?trip=302&river=2>

Projects WILD and WET Course Offerings

PIKES PEAK TEN: SHIFT HAPPENS – NATURE VERSUS PEOPLE (K-12)

CT-1724-17D

2 semester credit hours

Dates: June 19-23

Time: varies

Location: varies, Colorado Springs area

Instructor: Tracy Predmore

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

Registration Fee: \$80 (includes materials, snacks, lunch 1 day)

Discover environmental and conservation activities for your students to use in the field and your classroom. Learn in-depth information about sites around the Pikes Peak region and experience hands-on activities to complement classroom curriculum.

To register or for more information, contact:

Tracy Predmore, Colorado Parks & Wildlife
719/227-5207

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

CT-0668-17M

1.5 semester credit hours

Dates: July 18-20

Time: 8:00am-5:00pm

Location: The Morrison Nature Center, Aurora

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

Registration Fee: \$50 (checks returned upon successful course completion)

Learn where your drinking water comes from. Explore our mountain watersheds, conduct water quality studies, tour a xeriscape garden, and visit a drinking water and wastewater treatment facility. Receive Project Learning Tree and WET curriculum guides and access to Aurora Water's innovative educational opportunities. Aurora Water will cover the cost of credits for Aurora teachers.

To register or for more information, contact:

Natalie Brower-Kirton, 720/427-6029
nbrower@auroragov.org

Fall 2017 Course Preview

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

CT-1534-17F

0.5 semester credit hour

Date: September 2

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

Rachel.balduzzi@rmconservancy.org

EXPLORING CHANNEL ISLANDS NATIONAL PARK (GR. 6-12)

CT-1723-17F

1.5 semester credit hours

Dates: September 27-October 1

Location: Ventura, CA

Course Coordinator: Mile Sipes

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

Registration Fee: \$675 (includes lodging, meals, ground transportation, fees)

Experience the unforgettable opportunity to explore the "Galapagos of North America" - Channel Islands National Park. The Channel Islands, and the waters surrounding them, are home to one of the most biologically diverse concentrations of terrestrial and marine life in the world.

To register or for more information, contact:

Mike Sipes, 303/237-4975

mpsipes@centurylink.net

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:

E-mail: _____

Fax; fax number: () _____

Mail ***required if taking course for credit**

Are you Hispanic/Latino? Yes/No

Select one or more:

_____ American Indian or Alaska Native

_____ Native Hawaiian or Other Pacific Islander

_____ Asian

_____ White

_____ Black or African American

Indicate the course(s) for which you are registering

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

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

Make checks payable to CSM Office of Continuing Education.

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

CSM Teacher Enhancement Program
 1600 Jackson St., Ste. 160A
 Golden, CO 80401
 Phone: (303) 279-3855
<http://te.csmspace.com>