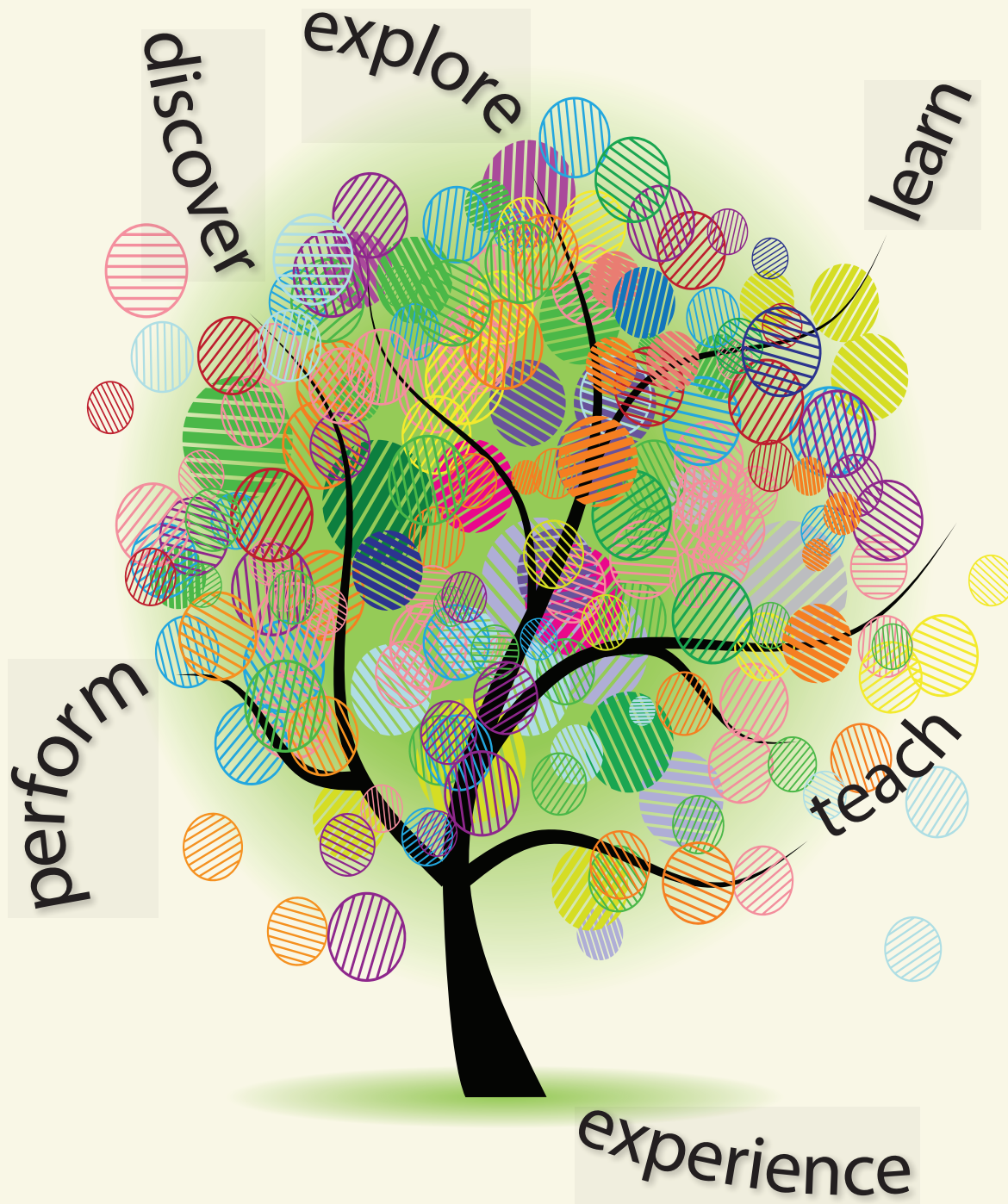


Teacher Enhancement Program for K-12 Educators

AT COLORADO SCHOOL OF MINES



SPRING 2016

COLORADO SCHOOL OF MINES

Teacher Enhancement Program

Spring 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 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.

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

Spring 2016 Course Offerings

INTRO TO PLANT PHENOLOGY AND CLIMATE CHANGE ONLINE (K-12)

CT-1213-16S

2 semester credit hours

Dates:

Session I: February 2-March 4

Session II: April 5-May 6

Instructor: Dennis Ward

Tuition Fee: \$90 (**payable during workshop**)

Registration Fee: \$35

Obtain detailed information about 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. Register online at <http://citizenscienceacademy.org/courses/csa501>.

To register or for more information, contact:

Dennis Ward, NEON

720/746-4924 or dward@neoninc.org

INTRODUCTION TO CITIZEN SCIENCE ONLINE (K-12)

CT-1430-16S

2 semester credit hours

Dates:

Session I: February 2-March 4

Session II: April 5-May 6

Instructor: Dennis Ward

Tuition Fee: \$90 (**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. Register online at <http://citizenscienceacademy.org/courses/csa520>.

To register or for more information, contact:

Dennis Ward, NEON

720/746-4924 or dward@neoninc.org

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

CT-1538-16S

4 semester credit hours

Dates: February 13-21

Location: Baja, Mexico

Instructor: Melanie Phelps

Tuition Fee: TBD

Snorkel with whale sharks, the largest plankton eating fish in the Sea of Cortez. Enjoy Gray Whales in a bay, where they give birth. Snorkel or dive the beautiful coast near Cabo San Lucas, and view Humpback Whales playfully raising their young.

To register or for more information, contact:

Melanie Phelps, 719/252-1789

melaniephe@aol.com

www.coloradorivertrip.com

OCEAN CLASSROOMS' EXPEDITION (K-12)

CT-1529-16S

3 semester credit hours

Dates: February (online & webinars)

Expedition to Bonaire- 3 sessions

March 5-12; March 12-19; March 19-26

Location: Bonaire, Caribbean Netherlands

Instructor: Caine Delacy

Tuition Fee: \$130 (**payable during workshop**)

Registration Fee: \$1,850-\$2,250

Explore the ocean, and take the wonder of the sea back to your classroom. Learn alongside research scientists as you are immersed in the underwater world. Through virtual learning, SCUBA, and field research, you will be able to provide your students with an integrated exploration into STEM.

To register or for more information, contact:

Cyndi Long, Ocean Classrooms

303/895-8207 or cyndi@oceanclassrooms.com

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

CT-1502-16S

1 semester credit hour

Dates: March 5-6

Location: Alamosa

Instructor: Melanie Phelps

Tuition Fee: \$170 (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

2016 ADVANCING ENVIRONMENTAL EDUCATION CONFERENCE (PREK-12)

CT-1602-16S

0.5-1 semester credit hour

Dates: March 18-19

Time: 8:00am-5:00pm

Location: UC Denver

Tuition Fee: \$45-\$60 (**payable during workshop**)

Registration Fee: varies; check website www.caeo.org

This action-packed environmental conference (also known as Teaching Outside the Box) offers engaging speakers and sessions, networking, and discovering new ideas, resources and techniques on a variety of topics for both inside and outside the classroom.

To register or for more information, contact:

Katie Navin, CAEE

director@caeo.org or 303/273-9527

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

CT-1112-16S

4 semester credit hours

Dates: March 19-27

Location: Belize, Central America

Instructor: Melanie Phelps

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

Submerge yourself in the colorful world of Belize coral reefs. Explore the 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

LONDON: A ROYAL EXPERIENCE (K-12)

CT-1501-16S

4 semester credit hours

Dates: March 19-27

Locations: London

Instructor: Joyce Webb

Tuition Fee: \$3,570 (includes airfare, lodging, ground transportation, tours, credit)

Experience the Tower of London, see the crown jewels, hear the chimes of Big Ben, hobnob with the tombstones of Westminster Abbey, and visit the National Gallery with priceless works of art. Travel to Windsor Castle, and spend a day visiting Bath and unlock the mystery of Stonehenge.

To register or for more information, contact:

Joyce Webb, 719/229-5482

joycewebb@ymail.com

www.coloradorivertrip.com

COYOTES: THE SONG DOGS OF THE WEST (K-12)

CT-1309-16S

0.5 semester credit hour

Date: March 26

Time: 8:00am-4:00pm

Location: Rocky Mtn. Conservancy, Estes Park

Instructor: Jared Gricoskie

Tuition Fee: \$35 (**payable during workshop**)

Registration Fee: \$80

Coyotes are one of the most successful and resourceful predators. Explore the country's second largest canine's natural history, Native American stories, discovery by Lewis and Clark, and expansion to the east. Travel into RMNP to study coyote anatomy, habitat, social structure, and interactions with the ecosystem, prey, and mankind.

To register or for more information, contact:

Rachel Balduzzi, RMC

970/586-3262

Rachel.balduzzi@rmconservancy.org

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

CT-1303-16S

1 semester credit hour

Dates: April 9-10

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

THE SECRET LIFE OF PRAIRIE CHICKENS (K-12)

CT-1537-16S

1 semester credit hour

Dates: April 16-17

Location: Holly to Wray

Instructor: Melanie Phelps

Tuition Fee: \$380 (includes tours to leks and credit)

Tour the mating leks of both the Greater and Lesser Prairie Chickens in eastern Colorado. Strutting, stomping, dancing, and booming, the males compete for female affections. Tour Amache Japanese Internment Camp and Sand Creek Massacre site. Probable sightings of Burrowing Owls, prairie, and shore birds.

To register or for more information, contact:

Melanie Phelps, 719/252-1789

melaniephe@aol.com

www.coloradorivertrip.com

NORTH WITH THE SPRING: BIRD MIGRATION (K-12)

CT-1308-16S

0.5 semester credit hour

Date: April 21

Time: 8:00am-4:30pm

Location: Rocky Mtn Conservancy, Estes Park

Instructor: Jeff Maugans

Tuition Fee: \$35 (**payable during workshop**)

Registration Fee: \$80

April in the high country is a time when we welcome back birds that have spent the winter in warmer climates. Explore several locations in and around Estes Park and RMNP identifying as many species as possible by sight and sound, and learn about their natural history.

To register or for more information, contact:

Rachel Balduzzi, RMC

970/586-3262

Rachel.balduzzi@rmconservancy.org

100 YEARS OF ENVIRONMENTAL CHANGE (K-12)

CT-1516-16S
0.5 semester credit hour
Date: May 2
Time: 8:30am-4:30pm
Location: Rocky Mtn Conservancy, Estes Park
Instructor: Ellen Wohl
Tuition Fee: \$35 (**payable during workshop**)
Registration Fee: \$80

Receive an overview of the history of environmental change in the Park, emphasizing human-caused change. Discuss the history of mining, water engineering, recreational development and tourism, atmospheric inputs of dust and nitrates, wildlife management, and climate change in the context of protecting and restoring natural environments within the Park.

To register or for more information, contact:

Rachel Balduzzi, RMC
970/586-3262
Rachel.balduzzi@rmconservancy.org

FLOODS: GOING TO EXTREMES (K-12)

CT-1517-16S
0.5 semester credit hour
Date: May 6
Time: 8:30am-4:30pm
Location: Rocky Mtn Conservancy, Estes Park
Instructor: Ellen Wohl
Tuition Fee: \$35 (**payable during workshop**)
Registration Fee: \$80

Learn basic concepts such as flood recurrence interval, and the physical and ecological importance of floods. Discuss recent floods in the area of Estes Park and the September 2013 flood that affected much of eastern and central Colorado. Visit two sites affected by the recent flood to understand the causes and consequences of floods, and the strategies that communities can use to heighten the beneficial aspects of floods and reduce flood damage.

To register or for more information, contact:

Rachel Balduzzi, RMC
970/586-3262
Rachel.balduzzi@rmconservancy.org

KNOW YOUR RANGE PLANTS! (K-12)

CT-1405-16S
1.0 semester credit hour
Dates: May 7-8
Time: 8:00am-4:00pm
Locations: Rocky Mtn Arsenal, S. Platte
Instructor: Michael Johnson
Tuition Fee: \$50 (**payable during workshop**)
Registration Fee: \$140

Learn the names of native range plants that grow in your school parking lot or on the playground, then teach your students how to identify them. Explore plant taxonomy, and how to identify common plants. Discover how to dry and preserve plants, and how to conduct a soil texture analysis.

To register or for more information, contact:

Michael Johnson
720/548-0560 or montanamike8@gmail.com

PICKETWIRE DINOSAUR TRACKS BY MOUNTAIN BIKE (K-12)

CT-0350-16S
1 semester credit hour
Dates: May 7-8
Time: 8:00am-5:00pm
Location: LaJunta
Instructor: Melanie Phelps
Tuition Fee: \$140 (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

LIFE SIGNS: TRACKING THE INVISIBLE (K-12)

CT-1235-16S
0.5 semester credit hour
Date: May 13
Time: 8:30am-4:30pm
Location: Rocky Mtn Conservancy, Estes Park
Instructor: Kevin Cook
Tuition Fee: \$35 (**payable during workshop**)
Registration Fee: \$80

A swelling on a twig or a hole in a stem, a stray feather or piece of eggshell, an abandoned nest or a mound of soil: so many different things tattle the comings and goings of secretive creatures that otherwise remain invisible. Learn how to acquire then develop the observation skills necessary to read wildlife signs as if they were a newspaper.

To register or for more information, contact:

Rachel Balduzzi, RMC
970/586-3262
Rachel.balduzzi@rmconservancy.org

EcoAdventure Course Offerings

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

THE YUP'IK: ONE OF ALASKA'S FIRST INHABITANTS (K-12)

CT-0700-16S

1 semester credit hour

Dates & Times:

January 30 (9:00am-5:00pm)

January 31 (9:00am-4:00pm)

Location: CSM campus, Golden

Instructor: Pam Batton

Tuition Fee: \$155 (**\$175 after January 14th**)

In a land too cold for polar fleece, imagine life as a hunter/gatherer. You depend on nature for warmth, food, and shelter. Learn about Yup'ik's lifeways, traditions, and culture to see if you could live on the arctic tundra. Try to harvest food with bolas, spears, and atlatl; build a miniature kayak; make a storyknife; and try on traditional clothing.

THE MOUNTAIN MAN: FINDING A HISTORICAL FIGURE BENEATH THE LEGEND (K-12)

CT-9960-16S

1 semester credit hour

Dates & Times:

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

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

Location: CSM campus, Golden

Instructor: Trey Corkern

Tuition Fee: \$155 (**\$175 after Feb. 4th**)

Learn how to separate the historical fur trader from the fictitious mountain man. Trace a remarkable history from 1805 to 1850 with an emphasis on economics, geography, cultural change, and experimental archaeology. Learn how to make moccasin patterns, sample historical foods, and make a fire with flint and steel.

WILD FELINES OF COLORADO (K-12)

CT-9712-16S

1 semester credit hour

Dates & Times:

March 5 (8:00am-5:00pm)

March 6 (9:00am-3:00pm)

Location: CSM campus, Golden

Instructor: Pam Batton

Tuition Fee: \$165 (**\$185 after February 18th**)

Discover the mysterious mountain lion, evasive bobcat, and reintroduced lynx. Explore each animal's natural history through hands-on activities, and an opportunity to observe a live mountain lion, bobcat, and others on a field trip to a feline refuge. Play simulation games to understand habitat, territoriality, predator/prey relationships, and population dynamics.

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.

Butterfly Pavilion Course Offerings

Note: Register for Butterfly Pavilion courses through the Pavilion. See box below.

BEYOND BUTTERFLIES (K-12)

CT-1536-16S
0.5 semester credit hour
Date: February 6
Time: 8:00am-5:00pm
Location: Butterfly Pavilion, Westminster
Instructor: Christine Leahy
Tuition Fee: \$35 (**payable during workshop**)
Registration Fee: \$45

**To register or for more information, contact:
Butterfly Pavilion Adult Education
720/974-1862
education@butterflies.org**

What creatures come to mind when you think of invertebrates? Explore the Butterfly Pavilion's newest exhibit, Invertebrate World, to experience learning tools to tap curiosity, design a lesson to use/adapt, and discover incredible invertebrate diversity, butterflies, and beyond.

To register or for more information, contact:

Christine Leahy, 720/974-1862
education@butterflies.org
www.butterflies.org/learn

Summer 2016 Course Preview

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

CT-1201-16D
4 semester credit hours
Dates: June 2-12 (extension June 12-15)
Locations: Spain
Instructor: Joyce Webb
Tuition Fee: \$3,470 (includes airfare, lodging, ground transportation, tours, credit; extension extra)

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
www.coloradorivertrip.com

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

CT-1509-16D
6 semester credit hours
Dates: June 15-29
Location: Germany
Instructor: Joyce Webb
Tuition Fee: \$4,470 (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

ALL ABOUT MINING HYBRID COURSE (K-12)

CT-5700-16M
6 semester credit hours
Dates: June 23-July 1
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

HAWAII: VOLCANOES & CORAL REEFS (K-12)

CT-0906-16M
4 semester credit hours
Dates: June 25-July 3
Location: Big Island of Hawaii
Instructor: Melanie Phelps
Tuition Fee: \$2,200 (includes ground transportation, lodging, entrance fees, credit)

Explore Hawaii's Big Island – the newest land on earth. Tiptoe across Kilauea's active volcano caldera; step gently through aa and pahoehoe lava flows; and gaze upon molten lava flowing to the sea. Submerge into the shimmering brilliance of coral reef life to conduct biodiversity and environmental impact research.

To register or for more information, contact:

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

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

CT-0706-16M
4 semester credit hours
Dates: June 29-July 8
Location: Scotland
Instructor: Joyce Webb
Tuition Fee: \$3,570 (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

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

CT-0428-16M
3.5 semester credit hours
Dates: July 7-13
Location: Grand Canyon
Instructor: Melanie Phelps
Tuition Fee: \$3,110

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

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

CT-0419-16M
4 semester credit hours
Dates: July 8-17
Location: Ireland
Instructor: Joyce Webb
Tuition Fee: \$3,270 (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

MIDDLE/HIGH SCHOOL IPS PHYSICAL SCIENCE (GR. 7-10)

CT-0786/CT-0845/CT-1039-16M
2 semester credit hours (each week)
Dates:
July 11-15 (chapters 1-6)
July 18-22 (chapters 7-11)
July 18-22 (chapters 12-16)
Time: 8:30am-4:00pm
Location: CSM Campus, Golden
Course Coordinator: Bob Stair
Tuition Fee: \$380 (per week)

Cover 6, 11 or all 16 chapters of the 9th edition of the IPS text to enhance your knowledge and classroom performance in physical science. Experience the use of student experiments while developing an understanding of basic concepts and laboratory skills.

To obtain an application, contact:

Bob Stair, SCI
303/988-5041 or rstair@sci-ips.com

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

CT-1304-16M
6 semester credit hours
Dates: July 15-29
Location: Alaska
Instructor: Melanie Phelps
Tuition Fee: \$5,600 (includes some airfare, ferry, 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

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

CT-0905-16M
4 semester credit hours
Dates: July 16-25
Location: Ireland
Instructor: Joyce Webb
Tuition Fee: \$3,270 (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 Glendolough. 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

SKY ABOVE, WATER BELOW: COLORADO RIVER I & II (K-12)

CT-1507-16M
2 semester credit hours
Dates & Times:
Lecture: July 28 (12:30pm-8:30pm)
Canoe Trip: July 30-August 1
Locations: Sommers-Bausch Observatory, Boulder (lecture)
Instructor: Sanlyn Buxner
Tuition Fee: \$499

Get away from city lights and explore magnificent canyons and deep sky objects on a canoe trip on the Colorado River. Learn to find objects in the sky and discover how scientists study planets, stars, and galaxies. Learn how the Earth helps us make claims about far away worlds, including the possibility of life. Conduct your own research project in the field and discuss how classroom investigations support the Next Generation Science Standards.

To register or for more information, contact:

Centennial Canoe Outfitters, 720/283-0553
info@centennialcanoe.com
www.centennialcanoe.com/destinations/?trip=184&river=16

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

CT-1031-16M

1 semester credit hour

Dates: August 2-3

Location: meet in Pueblo; drive to NM

Instructor: Melanie Phelps

Tuition Fee: \$140

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

To register or for more information, contact:

Melanie Phelps, 719/252-1789

melaniephe@aol.com

www.coloradorivertrip.com

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

CT-1402-16M

2 semester credit hours

Dates: August 4-7

Location: meet in Santa Fe, NM

Instructor: Melanie Phelps

Tuition Fee: \$330 (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

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.

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>