

Colorado School of Mines

TEACHER ENHANCEMENT PROGRAM

Office of Special Programs and Continuing Education

EXPLORE

learn

DISCOVER
experience

perform

TEACH

FALL 2008

COLORADO SCHOOL OF MINES

Teacher Enhancement Program

Fall 2008

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
Office of Special Programs & Continuing Education
Colorado School of Mines
P.O. Box 4028
Golden, CO 80401-0028
(303) 273-3314 FAX
(303) 273-3303 or (800) 446-9488, Ext. 3303

Visit our home page at:
http://www.mines.edu/Outreach/Cont_Ed/teacher.shtml

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

With the exception of IPS and FM&E workshop deposits, 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 (\$35 IPS & FM&E) 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

NATURALIST SKILLS (GR. 2-8)

CT-0177-08F

1 semester credit hour

Dates & Times:

August 20, Sept. 3, 17 (6:00-9:00pm) &

August 23, Sept. 6, 20 (8:00am-2:00pm)

Location: Carson Nature Center, Littleton

Course Coordinator: Skot Latona, 303/730-1022

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

Registration Fee: \$85 SSPR residents, \$105 non-residents

Gain skills and learn activities to teach wildlife tracking, bird ID, ecology, and nature interpretation that you can use in any ecosystem.

To register or for more information, contact:

www.sspr.org/nature (class #674511) or

303/347-5999

AGGREGATE MINING AND RECLAMATION TOUR OF CONSTRUCTION MATERIALS IN THE METRO AREA (GR. 6-12)

CT-9709-08F

0.5 semester credit hour

Date: September 13

Time: 7:30am-4:00pm

Location: meet at CSM Campus, Golden

Course Coordinator: Peter Jacobson

Tuition Fee: \$45 (**non-refundable upon registration**)

This course will consist of a CSSGA sponsored bus tour of the metropolitan area highlighting aggregate extraction processes and land reclamation. Please note: you may call CSSGA to confirm receipt of your registration; however, no confirmation letter will be sent.

To register or for more information, contact:

Co. Stone, Sand, & Gravel Association

303/771-5290

ECOLOGY OF THE PIKES PEAK REGION (CBTA FALL WORKSHOP) (6-12)

CT-0875-08F

1 semester credit hour

Dates & Times:

8:30am, September 13 through 3:30pm, September 14

Location: Woodland Park & Divide area

Course Coordinator: Mike Sipes

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

Registration Fee: \$55 (includes lodging)

Explore the area around Woodland Park to learn about the natural history and ecology of the Pikes Peak region through hikes and other programs conducted by local naturalists and educators. Visit Manitou Lake, Catamount Institute, Aspen Valley Ranch, and the Colorado Wolf and Wildlife Center. Sponsored by the Colorado Biology Teacher's Association.

To register or for more information, contact:

Mike Sipes

303/237-4975 or mpsipes@earthlink.net

INTRODUCTION TO CLIMATE CHANGE ONLINE (GR. 6-12)

CT-0762-08F

2 semester credit hours

Dates: September 19- November 2

Instructor: Sandra Henderson

Tuition Fee: \$80 (**payable during workshop**)

Registration Fee: \$225

This online course is designed to guide you through the basics of climate science, integrating content, classroom activities, and community-building discussions to help you understand the answers to common questions about climate variability and change. Offered by the National Center for Atmospheric Research, <http://ecourses.ncar.ucar.edu>.

To register or for more information, contact:

Sandra Henderson, UCAR

303/497-8108, sandrah@ucar.edu

EARTH SYSTEM SCIENCE: A CLIMATE CHANGE PERSPECTIVE ONLINE (GR. 6-12)

CT-0773-08F

2 semester credit hours

Dates: September 19- November 9

Instructor: Sandra Henderson

Tuition Fee: \$80 (**payable during workshop**)

Registration Fee: \$225

This online course is designed to guide you through the basics of understanding Earth as a system, integrating content, classroom activities, and community-building discussions to help you understand the answers to common questions about Earth system functions as related to climate change. Offered by the National Center for Atmospheric Research, <http://ecourses.ncar.ucar.edu>.

To register or for more information, contact:

Sandra Henderson, UCAR

303/497-8108, sandrah@ucar.edu

UNDERSTANDING CLIMATE CHANGE TODAY ONLINE (GR. 6-12)

CT-0860-08F

2 semester credit hours

Dates: September 19- November 9

Instructor: Sandra Henderson

Tuition Fee: \$80 (**payable during workshop**)

Registration Fee: \$225

This online course is designed to guide you through the basics of understanding the impacts of climate change, integrating content, classroom activities, and community-building discussions to help you understand the answers to common questions about what the implications of climate change are today. Offered by the National Center for Atmospheric Research, <http://ecourses.ncar.ucar.edu>.

To register or for more information, contact:

Sandra Henderson, UCAR

303/497-8108, sandrah@ucar.edu

WILDLIFE 101 (K-12)

CT-0880-08F
 0.5 semester credit hour
 Date: September 27
 Time: 8:00am-4:00pm
 Location: Denver Zoo
 Instructor: Rachel Anderson
 Tuition Fee: \$85

Do you want to bring the wild world into your classroom? Come to the Zoo to gather a variety of interactive animal activities incorporating math, literature, art, and science. Discover wildlife and encourage your students to make amazing connections to animals from around the world.

Register online with the Denver Zoo:

<http://www.denverzoo.org/education/teacherWorksops.asp>

ASPEN GOLD AND GHOST TOWNS (K-12)

CT-0292-08F
 1 semester credit hour
 Dates: October 4-5
 Time: 8:00am-6:00pm
 Location: Garden of the Gods Visitor Center, Colorado Springs
 Instructors: Melanie Phelps, Joyce Webb
 Tuition Fee: \$125

Experience Colorado history by exploring mining ghost towns. Hear the eerie squeaking of the old doorjamb beneath the rustle of golden aspen leaves. Study geology of the Colorado mineral belt, pan for gold, and hike to the famous Alpine Tunnel.

To register or for more information, contact:

Melanie Phelps, 719/440-7180
melaniephe@aol.com
www.coloradorivertrip.com

DRAGONFLIES TALE (K-6)

CT-0713-08F
 0.5 semester credit hour
 Date: October 11
 Time: 8:00am-5:00pm
 Location: Butterfly Pavilion, Westminster
 Instructors: Nicole Bickford, Deborah Brooks
 Tuition Fee: \$70

Explore five different Native American cultures via their stories and their art. Create a dragonfly like the Zuni boy who saved his village; discover how Grandmother Spider inspired the Muskogee Indians to catch bad dreams; and create your own dream catcher. Integrate science, literacy, social studies, and visual art in this fun, standards-based workshop.

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

CASTING AND MOLDING FOSSILS (K-12)

CT-9265-08F
 1 semester credit hour
 Dates: October 11-12
 Time: 8:00am-4:30pm
 Location: CSM campus, Golden
 Instructors: Bob O'Donnell, Betty Merchant
 Tuition Fee: \$125

Cover the casting, molding and painting techniques used with fossils plus basic fossil identification. Complete ten molds, make numerous casts and paint the castings. All required materials will be supplied.

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

RAIL TRAILS OF CRIPPLE CREEK BY MOUNTAIN BIKE (K-12)

CT-04122-08F
 1 semester credit hour
 Dates: October 11-12
 Time: 8:00am-5:00pm
 Location: Garden of the Gods Visitor Center, Colorado Springs
 Instructors: Melanie Phelps, Joyce Webb
 Tuition Fee: \$125

Explore the rail trails of yesterday by mountain bike beneath the golden rustling of autumn aspens. Relive the history that gave life to the Pikes Peak region where tons of gold ore rumbled by rail through beautiful Phantom Canyon and along Gold Camp Road.

To register or for more information, contact:

Melanie Phelps, 719/440-7180
melaniephe@aol.com
www.coloradorivertrip.com

DO PARASITES RULE THE WORLD? (GR. 9-12)

CT-0688-08F
 0.5 semester credit hour
 Date: October 18
 Time: 8:00am-5:00pm
 Location: Butterfly Pavilion, Westminster
 Instructor: Cindy Church
 Tuition Fee: \$70

Acquire a working knowledge of parasitic diseases and how they affect their human hosts. Discuss life cycles, host-parasite relationships, and epidemiology of common parasites. Laboratory activities emphasize identification of parasites. The book, *New Guinea Tapeworms & Jewish Grandmothers*, will be used throughout the class.

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

FIELD STUDIES IN PALEONTOLOGY (GR. 6-12)

CT-0640-08F
 0.5 semester credit hour
 Date: October 18
 Time: 8:30am-5:30pm
 Location: Cripple Creek Parks & Recreation
 Instructors: Steve Veatch, Don Miranda
 Tuition Fee: \$30 (**payable during workshop**)
 Registration Fee: \$69

Starting from Cripple Creek, explore the geological and paleontological wonders along the Shelf Road. Follow the old wagon roads used to haul dinosaur bones from Garden Park to Canon City, visit a dinosaur quarry, and explore nearby dinosaur tracks.

To register or for more information, contact:

Cripple Creek Parks & Recreation
 719/689-3514

THE FOSSIL RECORD: INTRO TO PALEONTOLOGY (GR. 6-12)

CT-0697-08F
0.5 semester credit hour
Date: November 1
Time: 8:30am-5:30pm
Location: Cripple Creek Parks & Recreation
Instructor: Steve Veatch
Tuition Fee: \$30 (**payable during workshop**)
Registration Fee: \$69

Get a basic introduction to paleontology, the study of ancient life on earth and the fossils that remain. It is a field of continuous discovery where advances in technology and procedures of inquiry allow scientists to reconstruct earlier and very different worlds. Day includes two field trips.

To register or for more information, contact:
Cripple Creek Parks & Recreation
719/689-3514

USING CLASSROOM COMMUNICATION SYSTEMS (K-12)

CT-0266-08F
1 semester credit hour
Dates & Times:
November 1 (8:00am-4:00pm)
December 6 (8:00am-12:00pm)
Plus 4-6 hours of additional, independent work.
Location: CSM campus, Golden
Instructor: Susan Kowalski, 303/273-3121 or skowalsk@mines.edu
Tuition Fee: \$125
Pre-requisites: A working familiarity with computers and current employment as a classroom teacher in Colorado.

Imagine each of your students with a hand-held wireless device to transmit information to you. Not only will they be more engaged and attentive during class, but you can see their responses instantly for feedback about comprehension, and individual student scores can be recorded in a spreadsheet. Learn how to use this technology, then check out the equipment to use in your own classroom (appropriate for all disciplines). Course completion qualifies you for future check-out privileges.

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

DIGITAL PHOTOGRAPHY ONLINE (K-12)

CT-0562-08F
1.5 semester credit hours
Dates: November 3 – December 7
Location: Online course
Instructor: John LaFerlita
Registration Fee: \$190

Learn how to take better photographs and to manipulate the images using Adobe Photoshop Elements. Topics will include light, composition, nature (landscape, close-ups, and wildlife), and flash. This class is for beginners using PC's. You will need a basic understanding of computers, the Internet, and email attachments.

To register or for more information, contact:
John LaFerlita, 303/678-0312 or laferlit@hotmail.com

ADOBE PHOTOSHOP ELEMENTS ONLINE (K-12)

CT-0737-08F
1.5 semester credit hours
Dates: November 3 – December 7
Location: Online course
Instructor: John LaFerlita
Registration Fee: \$190

Learn to edit photographs and create slide shows and photo albums that you can use in the classroom in this PC-based course. This class is for those who have limited knowledge of Photoshop Elements but have a basic understanding of computers and the Internet.

To register or for more information, contact:
John LaFerlita, 303/678-0312 or laferlit@hotmail.com

DIGITAL PHOTOGRAPHY AND POWERPOINT ONLINE (K-12)

CT-05120-08F
1.5 semester credit hours
Dates: November 3 – December 7
Location: Online course
Instructor: John LaFerlita
Registration Fee: \$190

Learn how to take better photographs, manipulate the images, and transfer them into PowerPoint in this PC-based class. This class is for those who have limited knowledge or experience with PowerPoint but have a basic knowledge of computers and the Internet.

To register or for more information, contact:
John LaFerlita, 303/678-0312 or laferlit@hotmail.com

CRITTERS ACROSS THE CURRICULUM (K-12)

CT-0876-08F
0.5 semester credit hour
Date: November 8
Time: 9:00am-5:00pm
Location: Cheyenne Mountain Zoo, Colorado Springs
Instructor: Katrina Kalasky
Tuition Fee: \$30 (**payable during workshop**)
Registration Fee: \$65.25

Animals are not just for science class! Connect animal activities with other subjects like math, English, geography, and art.

To register or for more information, contact:
Jacki Moore, Cheyenne Mountain Zoo
719/633-9925 x127 or jmoore@cmzoo.org

OPTIMIZING THE USE OF CLASSROOM COMMUNICATION SYSTEMS (K-12)

CT-0783-08F

0.5 semester credit hour

Dates: November 8 & 22

Time: 8:00am-12:00pm

Location: CSM campus, Golden

Instructor: Susan Kowalski

Tuition Fee: \$75

Pre-requisite: A working familiarity with a classroom communication system and current employment as a classroom teacher.

Already competent in the mechanics of using clickers, but want to explore techniques that will optimize their use in your classroom? Designed for those who feel comfortable setting up a classroom communication system and using it in teaching, but now want to focus on how to use this technology to get the most bang for their buck. Since the underlying pedagogical foundation is the same for all brands, it doesn't matter what particular system you are using. Some proven techniques will be demonstrated in class, and there will be time for sharing ideas with your colleagues.

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

LIONS, AND WOLVES, AND BEARS (K-12)

CT-0885-08F

0.5 semester credit hour

Date: November 15

Time: 8:00am-4:00pm

Location: Denver Zoo

Instructor: Rachel Anderson

Tuition Fee: \$85

Discover how carnassial "chompers" make carnivores such unique and impressive mammals. Through guided tours, live animals demonstrations, expert talks, and hands-on activities, you'll be top of the food chain when it comes to the Order that contains some of the most venerated animals – bears, felines, and canines.

Register online with the Denver Zoo:

http://www.denverzoo.org/education/teacherWorks_hops.asp

Additional Programs of Interest

DENVER MUSEUM OF NATURE & SCIENCE PALEONTOLOGY CERTIFICATION PROGRAM

These courses may be taken for your own enrichment or to become qualified to work on the Museum's fossil research. Eight courses are required for certification and you can complete these courses at your own pace. For information, contact the Adult Programs Office at 303/370-6303 or PaleoCert@dmns.org. A complete list of course descriptions and program details is available at www.dmns.org/paleoprogram.

SOUTH PLATTE EDUCATION SERIES

CT-9421; Build-Your-Own Natural History of Colorado

A natural history series designed to your interests and teaching needs. Choose from a menu of courses which provide hands-on exploration of the wildlife and ecosystems along the S. Platte river. Combine classes on evenings and/or weekends to earn one semester credit hour. Visit our website at www.sspr.org/nature for class descriptions.

Contact Skot Latona, South Suburban Park and Recreation District, at 303/730-1022 x14 or email skotl@sspr.org for details or to obtain the special tuition flat rate.

Denver Museum of Nature & Science Course Offerings

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

BUGS, BEETLES, AND BUTTERFLIES (K-5)

CT-0852-08F

0.5 semester credit hour

Date: September 13

Time: 8:00am-4:30pm

Instructor: Kate Geer

Tuition Fee: \$80 member, \$85 non-member

Explore the exciting world of bugs, beetles, and butterflies. Learn about the unique characteristics of these insects through hands-on, inquiry-based learning activities. Interact with the curator of entomology as well as other scientists. Bring back lessons and activities to your classroom of budding entomologists.

DINOSAURS: ANCIENT FOSSILS, NEW DISCOVERIES (K-12)

CT-0879-08F

0.5 semester credit hour

Date: September 27

Time: 8:00am-4:30pm

Instructor: Kate Geer

Tuition Fee: \$80 member; \$85 non-member

Learn the latest dinosaur research and discoveries. Tour the new traveling exhibit *Dinosaurs: Ancient Fossils, New Discoveries* without the crowds, and learn what scientists are discovering about how dinosaurs ate, moved, lived, and died. See the latest technology being utilized by paleontologists to explore these ideas. Learn how to utilize this exhibit in your curriculum with lessons, resources, and activities.

STAR SECRETS (PREK-2)

CT-04162-08F

0.5 semester credit hour

Date: October 18

Time: 8:00am-4:30pm

Instructor: Kristen Jensen

Tuition Fee: \$80 member; \$85 non-member

Ready, set, blast off into the world of space education! First identify, then debunk common misconceptions about the solar system; explore the *Space Odyssey* exhibit; and see the young child-focused planetarium show *Zula Patrol*. Learn about the sun, moon, and planets through

hands-on, inquiry-based classroom activities that can also help young children learn the basics of astronomy.

MATH IN CULTURE, NATURE, AND DESIGN (GR. 6-8)

CT-0878-08F

0.5 semester credit hour

Date: November 8

Time: 8:00am-4:30pm

Instructor: Kate Geer

Tuition Fee: \$80 member; \$85 non-member

Spend a day learning all the fascinating applications math has in nature as well as its role in different cultures. Learn about certain phenomena in nature that have mathematical roots such as Fibonacci sequence and Golden Ratio. Explore the connection between math and art with tessellations and origami. Learn important math discoveries made by different cultures as well as exploring the different number systems that were used.

THE PHYSICS OF LIGHT AND COLOR (GR. 6-12)

CT-0877-08F

0.5 semester credit hour

Date: December 6

Time: 8:00am-4:30pm

Tuition Fee: \$80 member; \$85 non-member

Explore the connections between light and color using DMNS resources such as the *Space Odyssey* exhibit, Coors Gem and Mineral Hall, and the world-class animal diorama halls. Examine the duality of light as both a particle and a wave; discuss the founding theories of Bohr, Einstein, Huygens, Newton, and Planck with Museum scientists; and apply these concepts to the study of color.

**To register for any DMNS course, contact:
DMNS Reservations, 303/322-7009.**

**For more information on a specific course,
contact the course coordinator, Kate Geer at
303/370-6441.**

EcoAdventure Course Offerings

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

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

CT-0463-08F

1 semester credit hour

Dates & Times:

September 6 (12:00-7:00pm)

September 7 (8:00am-4:00pm)

Location: EcoAdventures, Morrison

Tuition Fee: \$120 (**\$130 after August 21st**)

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.

FABULOUS FALL (K-12)

CT-9983-08F

1 semester credit hour

Dates & Times:

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

September 21 (8:00am-3:00pm)

Location: EcoAdventures, Morrison

Tuition Fee: \$120 (**\$130 after Sept. 4th**)

Spend two days hiking during Colorado's fabulous fall. Discover not only the beauty of an aspen grove, but also its remarkable ecological role. Learn how and why leaves change color, and watch as several wildlife species hastily prepare for winter. Through observations, we'll reveal their methods and reasons.

ELK BUGLING (K-12)

CT-95105-08F

1 semester credit hour

Dates: September 27-28

Time: 12:00-7:30pm

Location: EcoAdventures, Morrison

Tuition Fee: \$125 (**\$135 after Sept. 11th**)

Observe and listen to the bull elk bugling during the mating season. Explore adaptations, behavior, and human/elk interactions through activities and observation. By the end of class, you'll be thinking like an elk and understand the important ecological role of this large herbivore.

FEASTS OF FALL (K-12)

CT-0756-08F

1 semester credit hour

Dates & Times:

October 4 (10:00am-6:00pm)

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

Location: EcoAdventures, Morrison

Tuition Fee: \$130 (**\$140 after Sept. 18th**)

Taste a "true" Thanksgiving feast when you cook over an open fire using historic foods and methods of the Plymouth Colonists and the Wampanoag Natives. Bust the myths of the first Thanksgiving, visit a living history museum, and explore the natural history of the wild turkey, Canada goose, corn, beans, pumpkin, squash and gourds.

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

CT-0757-08F

1 semester credit hour

Dates & Times:

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

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

Location: CSM campus, Golden

Tuition Fee: \$120 (**\$130 after October 16th**)

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.

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

CT-0122-08F

1 semester credit hour

Dates & Times:

November 15 (9:00am-5:00pm)

November 16 (9:00am-4:00pm)

Location: CSM campus, Golden

Instructor: Trey Corkern

Tuition Fee: \$125 (**\$135 after October 30th**)

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

NATIVE AMERICAN GAMES AND TOYS (K-8)

CT-0104-08F

1 semester credit hour

Dates & Times:

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

December 7 (9:00am-4:00pm)

Location: CSM Campus, Golden

Tuition Fee: \$140 (**\$150 after November 20th**)

Explore the games and toys of various Native American people in this hands-on history class. Discover other intended benefits, such as modeling of adult roles and physical conditioning. Make several toys and games to take back to your classroom. Great for indoor recess activities!

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

CT-0700-09S

1 semester credit hour

Dates & Times:

January 24 (9:00am-5:00pm)

January 25 (9:00am-4:00pm)

Location: CSM campus, Golden

Tuition Fee: \$130 (**\$140 after Jan. 8th**)

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-9960-09S

1 semester credit hour

Dates & Times:

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

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

Location: CSM campus, Golden

Instructor: Trey Corkern

Tuition Fee: \$125 (**\$135 after Feb. 5th**)

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-9712-09S

1 semester credit hour

Dates & Times:

March 7 (8:00am-5:00pm)

March 8 (9:00am-3:00pm)

Location: CSM campus, Golden

Tuition Fee: \$135 (**\$145 after February 19th**)

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

BIRDS OF PREY (K-12)

CT-9614-09S

1 semester credit hour

Dates & Times:

April 4 (12:00-7:30pm)

April 5 (8:30am-4:00pm)

Location: CSM campus, Golden

Tuition Fee: \$125 (**\$135 after March 19th**)

Learn about Colorado's common birds of prey through activities that will help you to identify and understand their behaviors. Focus on nocturnal and diurnal raptors. Field trips will include owl and hawk watching during the spring migration.

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

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 - Project WET

All Project WILD, Learning Tree and WET 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.

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. Visit our web sites at www.plt.org/events/index.cfm and <http://wildlife.state.co.us/Education/TeacherWorkshops/In dex.asp> for more information.

WILDLIFE WATCH (GR. 5-12)

CT-9914-08F

0.5 semester credit hour

Dates:

Workshop I: October 5

Workshop II: December 7

Time: 9:00am-5:00pm

Location: Plains Conservation Center, Aurora

Tuition: \$34 (**payable during workshop**)

Registration Fee: \$15

Registration Contact: Wildlife Watch, 303/291-7250 or www.wildlifewatch.net

AQUATIC PROJECT WILD (PREK-12)

CT-9684-08F

0.5 semester credit hour

Date: October 11

Time: 9:00am-5:00pm

Location: Downtown Aquarium, Denver

Registration Fee: \$25

Tuition Fee: \$34 (**payable during workshop**)

Registration Contact: Downtown Aquarium, 303/561-4444

BASIC PROJECT LEARNING TREE (K-12)

CT-0822-08F

0.5 semester credit hour

Workshop I

Date: October 11

Time: 8:30am-4:30pm

Location: Metropolitan State College, Denver

Registration Fee: \$20

Registration Contact: Shawna Crocker, 303/202-4662

Workshop II (Gr. 5-8):

Date: October 11

Time: 8:30am-4:30pm

Location: 910 Art, Denver

Registration Fee: \$20

Registration Contact: Shawna Crocker, 303/202-4662

Workshop III *Tree by Tree, The Mile High Million:*

Dates & Time:

October 17 (3:30-6:30pm)

October 18 (9:00am-4:30pm)

Location: East HS, Denver

Registration Fee: \$25 (returned at workshop)

Registration Contact: Shawna Crocker, 303/202-4662

Workshop IV *Colorado Connections (PreK-12):*

Date: November 1

Time: 9:00am-5:00pm

Location: Downtown Aquarium, Denver

Registration Fee: \$35

Registration Contact: Downtown Aquarium, 303/561-4444

Tuition Fee: \$34 (**payable during each workshop**)

PLT FOR HIGH SCHOOL: EXPLORING ENVIRONMENTAL ISSUES IN THE PLACES WE LIVE (GR. 7-12)

CT-0884-08F

0.5 semester credit hour

Date: November 8

Time: 8:30am-4:30pm

Location: 910 Art, Denver

Tuition Fee: \$34 (**payable during workshop**)

Registration Fee: \$20

Registration Contact: Shawna Crocker, 303/202-4662

ADVANCED PROJECT WILD OR LEOPOLD EDUCATION PROJECT – CORRESPONDENCE COURSES

CT-0132/CT-02103

1 semester credit hour each

Dates: can start anytime

Tuition Fee: \$73

Registration Contact: Jeff Brigham, 970/464-7006

Pre-requisite: Basic Project WILD course

PROJECT WILD II WORKSHOPS

Project WILD II workshops are advanced WILD classes. You will explore wildlife/nature related topics in greater depth, and broaden your skills and knowledge to better use Project WILD in the classroom or any other educational settings.

BATS (WILD II WORKSHOP) (K-12)

CT-00101-08F

0.5 semester credit hour

Date: September 27

Time: 8:30am-5:00pm

Location: Colorado Division of Wildlife, Denver

Instructor: Tabbi Kinion

Tuition Fee: \$34 (**payable during workshop**)

Registration Fee: \$20

Pre-requisite: Basic Project WILD/Learning Tree/WET workshop

Registration Contact: Tabbi Kinion, 303/291-7165,

tabbi.kinion@state.co.us

For updated information contact:

Project WILD, 303/291-7262

Project Learning Tree, 303/202-4662

Project WET, 303/291-7601

See the following website for full course descriptions or added workshops:

www.wildlife.state.co.us/education/workshops

Spring 2009 Course Preview

ICE AGE MYSTERIES AND CLIMATE CHANGE (GR. 6-12)

CT-0903-09S
0.5 semester credit hour
Date: January 24
Time: 8:30am-5:30pm
Location: CSM Campus, Golden
Instructor: Steven Veatch
Tuition Fee: \$80

Explore the Ice Age, climate change, the disappearance of large mammals, the expansion of man across the landscape, and examine global warming. Receive hands-on, discovery-oriented activities aligned to the Colorado science, geography, and history standards. A teacher resource kit that integrates content and classroom activities is included.

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

ANIMAL BEHAVIOR (K-12)

CT-0904-09S
0.5 semester credit hour
Date: January 31
Time: 9:00am-5:00pm
Location: Cheyenne Mtn. Zoo, Colorado Springs
Instructor: Katrina Kalasky
Tuition Fee: \$30 (**payable during workshop**)
Registration Fee: \$65.25

Have you ever wondered why animals do certain things? Are some animals smarter than others? Join us as we figure out why animals do what they do.

To register or for more information, contact:

Jacki Moore, Cheyenne Mtn. Zoo
719/633-9925 x127 or jmoore@cmzoo.org

GHOST TOWNS BY CROSS-COUNTRY SKI (K-12)

CT-0301-09S
1 semester credit hour
Dates: February 14-15
Time: 8:00am-5:00pm
Location: Chamber of Commerce, Leadville
Instructors: Melanie Phelps, Joyce Webb
Tuition Fee: \$125

Cross-country ski back in time to the days of the Colorado gold and silver rush. Relive the extravagance and demise of Baby Doe and Horace Tabor, and tour the mining museum and the Matchless Mine. Listen to the snow blowing softly among the ruins of Oro City and California Gulch. Cross-country skiing or snowshoeing experience not required.

To register or for more information, contact:

Melanie Phelps, 719/440-7180
melaniephe@aol.com
www.coloradorivertrip.com

ZOO CAREERS (K-12)

CT-0902-09S
0.5 semester credit hour
Date: February 21
Time: 9:00am-5:00pm
Location: Cheyenne Mtn. Zoo, Colorado Springs
Instructor: Katrina Kalasky
Tuition Fee: \$30 (**payable during workshop**)
Registration Fee: \$65.25

There are lots of jobs at a zoo, not just zookeepers. What do zookeepers really do all day? Explore all of the jobs that are available at the zoo.

To register or for more information, contact:

Jacki Moore, Cheyenne Mtn. Zoo
719/633-9925 x127 or jmoore@cmzoo.org

GETTING KIDS INVOLVED IN CONSERVATION (K-12)

CT-0901-09S
0.5 semester credit hour
Date: March 14
Time: 9:00am-5:00pm
Location: Cheyenne Mtn. Zoo, Colorado Springs
Instructor: Katrina Kalasky
Tuition Fee: \$30 (**payable during workshop**)
Registration Fee: \$65.25

You have been learning about animals all year and your class is very excited, now what? We'll give you lots of options on how to get your class involved in conservation and the zoo.

To register or for more information, contact:

Jacki Moore, Cheyenne Mtn. Zoo
719/633-9925 (x127) or jmoore@cmzoo.org

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

CT-0905-09S
4 semester credit hours
Dates: March 21-29
Location: Ireland
Instructors: Joyce Webb, Melanie Phelps
Tuition Fee: \$1830 plus airfare

Step into the world of modern Ireland as you tour Dublin, Belfast, and the east coast. Discover the intriguing past as you gaze upon the 9th century Book of Kells, explore the ancient passage tomb of Newgrange, and wander through the 6th century Monastery of Glendolough. The past and present become blended into Irish adventure.

To register or for more information, contact:

Melanie Phelps, 719/440-7180
melaniephe@aol.com
www.coloradorivertrip.com

HIDDEN CLIFF DWELLINGS OF THE ANCIENT ONES (K-12)

CT-0819-09S

1 semester credit hour

Dates: April 25-26

Time: 8:00am-5:00pm

Location: Bluff, UT

Instructors: Melanie Phelps, Joyce Webb

Tuition Fee: \$175

Discover decorated pottery shards, fishing twine, a child's woven doll, corn cobs, Kokopelli petroglyphs, and fingerprints preserved in 1000 year old adobe. Explore untouched cliff ruins of the Ancient Ones. Who were they? Where did they go? What stories do their ruins tell? The cliff dwellings are on a reservation and accessible only with a Navajo guide. Enjoy an adventure exploring both Navajo and Anasazi cultures.

To register or for more information, contact:

Melanie Phelps, 719/440-7180

melaniephe@aol.com

www.coloradorivertrip.com

PICKETWIRE DINOSAUR TRACKS BY MOUNTAIN BIKE (K-12)

CT-0350-09S

1 semester credit hour

Dates: May 2-3

Time: 8:00am-5:00pm

Location: LaJunta

Instructors: Joyce Webb, Melanie Phelps

Tuition Fee: \$125

Discover North America's most extensive dinosaur trackway. Picketwire Canyon contains the remnants of a Jurassic beach with over 1,300 dinosaur tracks. View dozens of ancient petroglyphs, and tour Old Bent's Fort and the ruins of an adobe homestead, a Spanish mission, and an old Spanish graveyard. This is a 13-mile, round-trip mountain biking adventure.

To register or for more information, contact:

Melanie Phelps, 719/440-7180

melaniephe@aol.com

www.coloradorivertrip.com

Summer 2009 Course Preview

ECOLOGICAL CATTLE RANCHING (K-12)

CT-0300-09D

3 semester credit hours

Dates: June 6-13

Location: Dove Creek

Tuition Fee: \$115 (**payable during workshop**)

Registration Fee: \$1,500 (includes all meals, bunkhouse, horses, tours; **\$250 deposit required**)

Learn how an ecological cattle rancher works to maintain the balance between man and nature. Be an active participant in herding cattle from one area to another to prevent overgrazing. Study desert flora/fauna and wild horse management while riding through the beautiful canyonlands of southwest Colorado.

To register or for more information, contact:

Catherine Entihar

970/883-2548 or cjscolors@frontier.net

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

CT-0805-09D

5 semester credit hours

Dates: June 7-18

Location: Italy

Instructors: Melanie Phelps, Joyce Webb

Tuition Fee: \$2,960 plus airfare

Travel from Roman temples to medieval churches, from the ruins of Pompeii to Vatican City's treasure trove. Walk through the Roman Forum and sleep in the city of Siena. Experience Florence, the artistic 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:

Melanie Phelps, 719/440-7180

melaniephe@aol.com

www.coloradorivertrip.com

HIGH COUNTRY EQUESTRIAN ADVENTURE I (K-12)

CT-9667

3 semester credit hours

Dates:

Session I: June 21-26

Session II: July 12-17

Session III: July 26-31

Location: San Juan Mtns.

Tuition Fee: \$115 (**payable during workshop**)

Registration Fee: \$900 (includes all meals, group camping equipment, horse expenses, and wranglers; **\$250 deposit required**)

Take a horse pack trip through the beautiful wilderness area of the San Juan Mountains to observe flora and fauna in various altitude zones, incredible geological features, and the ecological impact of human activity in the mountains. Provide your own transportation to and from the trailhead north of Durango. You should be in good physical condition.

To register or for more information, contact:

Catherine J. Entihar

970/883-2548 or cjscolors@frontier.net

THE COLORADO RIVER – RAGING RIVER OF BEAUTY AND CONTROVERSY (K-12)

CT-0221-09M

5 semester credit hours

Dates: June 22-July 1

Locations: Rocky Mountain, Arches, Canyonlands, Grand Canyon National Parks; Lake Powell

Instructors: Melanie Phelps, Joyce Webb

Tuition Fee: \$1,760

Travel and study the Colorado River from its pristine alpine headwaters in Rocky Mountain National Park to where it carves the rugged Grand Canyon. Raft in class III whitewater, canoe through sheer red rock canyons, boat on Lake Powell, and camp on sandy beaches while conducting authentic environmental research.

To register or for more information, contact:

Melanie Phelps, 719/440-7180

melaniephe@aol.com

www.coloradorivertrip.com

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

CT-0428-09M

3.5 semester credit hours

Dates: July 2-8

Location: Cliff Dweller's Lodge, AZ

Instructors: Melanie Phelps, Joyce Webb

Tuition Fee: \$2,720

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. Conduct authentic environmental research. 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, 719/440-7180

melaniephe@aol.com

www.coloradorivertrip.com

HAWAII: VOLCANOES & CORAL REEFS (K-12)

CT-0906-09M

4 semester credit hours

Dates: July 11-20

Location: Big Island of Hawaii

Instructors: Melanie Phelps, Joyce Webb

Tuition Fee: \$2,080 plus airfare

Explore Hawaii's Big Island. Tiptoe across Kilauea's active volcano cladera; step gently through aa and pahoehoe lava flows, then gaze upon molten lava flowing to the sea, if Pelee (Goddess of Fire) is with us. 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, 719/440-7180

melaniephe@aol.com

www.coloradorivertrip.com

MEXICO: MAYAN MYSTERIES AND CORAL ECOLOGY (K-12)

CT-0705-09M

4 semester credit hours

Dates: July 22-31

Location: Yucatan Peninsula, Mexico

Instructor: Melanie Phelps

Tuition Fee: \$2,030 plus airfare

Stand in awe at the power and demise of the Mayan culture, then slip beneath the crystal Caribbean seas as you snorkel or dive the Mexican coral reefs. Explore the mysteries, culture, and ecology of the Yucatan Peninsula, Mexico.

To register or for more information, contact:

Melanie Phelps, 719/440-7180

melaniephe@aol.com

www.coloradorivertrip.com

MUSEUMS OF PARIS (K-12)

CT-04132-09M

4 semester credit hours

Dates: July 24-August 2

Location: Paris, France

Instructor: Joyce Webb

Tuition Fee: \$2,080 plus airfare

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:

Melanie Phelps, 719/440-7180

melaniephe@aol.com

www.coloradorivertrip.com

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

CT-0706-09M

4 semester credit hours

Dates: August 2-10

Location: Scottish Highlands

Instructor: Joyce Webb

Tuition Fee: \$2,430 plus airfare

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 Isle of Skye. Wander with us along the back lanes of Edinburgh and scan Loch Ness for legendary monsters.

To register or for more information, contact:

Melanie Phelps, 719/440-7180

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:

E-mail; home: _____ work: _____

Fax; fax number: () _____

eMail

***required if taking course for credit**

Ethnic Origin (optional):

_____ American Indian or Alaskan Native _____ Caucasian/White, not of Hispanic Origin
 _____ Asian or Pacific Islander _____ Hispanic
 _____ Black, not of Hispanic Origin _____ I do not wish to provide this information, other

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:

Teacher Enhancement Program
 Colorado School of Mines
 P.O. Box 4028
 Golden, CO 80401-0028
 FAX: (303) 273-3314
 Phone: (303) 273-3303

http://www.mines.edu/Outreach/Cont_Ed/teacher.shtml#registration

To pay by credit card:
 VISA MC AMEX
 Card # _____
 Exp. Date: _____
 Cardholder Name: _____
 Signature: _____

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:

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Fax; fax number: () _____

Mail *required if taking course for credit

Ethnic Origin (optional):

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CT- _____	_____	_____	_____
CT- _____	_____	_____	_____
CT- _____	_____	_____	_____
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Total: _____

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 Golden, CO 80401-0028
 FAX: (303) 273-3314
 Phone: (303) 273-3303
http://www.mines.edu/Outreach/Cont_Ed/teacher.shtml#registration

To pay by credit card:
 VISA MC AMEX
 Card # _____
 Exp. Date: _____
 Cardholder Name: _____
 Signature: _____