

Colorado School of Mines

TEACHER ENHANCEMENT PROGRAM

Office of Special Programs and Continuing Education

EXPLORE

learn

DISCOVER

experience

perform

TEACH

SPRING 2009

COLORADO SCHOOL OF MINES

Teacher Enhancement Program

Spring 2009

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

****Note new 48-hour pre-registration/refund deadline stated below, effective 1/1/07.****

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

Spring 2009 Course Offerings

ON-LINE ENVIRONMENTAL EDUCATION TEACHER'S INSTITUTE (K-12)

CT-0587-09S
2 semester credit hours
Dates: January 19-March 27
Instructor: Mike Way
Tuition Fee: \$80 (**payable during workshop**)
Registration Fee: \$100 (waived for members of CAEE
teacher liaison network)

In 10 dynamic lessons of personal investigations, activities, readings, and on-line group discussions, you will develop new skills to investigate environmental issues and create a student-based, action-oriented community project ready for your classroom.

To register or for more information, contact:

Katie Navin, CAEE
303/273-9527, info@caee.org

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

CT-0762-09S
2 semester credit hours
Dates: January 23- March 8
Instructor: Sandra Henderson
Tuition Fee: \$80 (**payable during workshop**)
Registration Fee: \$225

This facilitated 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, NCAR
303/497-8108, sandrah@ucar.edu

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

CT-0773-09S
2 semester credit hours
Dates: January 23- March 15
Instructor: Sandra Henderson
Tuition Fee: \$80 (**payable during workshop**)
Registration Fee: \$225

This facilitated 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, NCAR
303/497-8108, sandrah@ucar.edu

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

CT-0860-09S
2 semester credit hours
Dates: January 23- March 15
Instructor: Sandra Henderson
Tuition Fee: \$80 (**payable during workshop**)
Registration Fee: \$225

This facilitated 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, NCAR
303/497-8108, sandrah@ucar.edu

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

Examine the Ice Age, climate change, the disappearance of large mammals, the expansion of man across the landscape, and 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.

USING CLASSROOM COMMUNICATION SYSTEMS (K-12)

CT-0266-09S
1 semester credit hour
Dates & Times:
January 24 (8:00am-4:00pm)
February 28 (8:00am-12:00pm)
Plus 4-6 hours of additional, independent work.
Location: CSM campus, Golden
Instructor: Susan Kowalski
Tuition Fee: \$125

Pre-requisite: 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 (clicker) 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. Learn how to use this technology, and then check out the equipment to use in your own classroom (appropriate for all disciplines). Course completion qualifies you for future free check-out of the equipment.

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

ELEPHANTS EXTRAORDINAIRE (K-12)

CT-0918-09S
0.5 semester credit hour
Date: January 31
Time: 8:00am-4:00pm
Location: Denver Zoo
Instructor: Marley Steele-Inama
Tuition Fee: \$85

Learn the latest in conservation and animal intelligence as you study the majestic pachyderm. Tour our elephant exhibit with knowledgeable guides and get a preview of the Zoo's plans for *Asian Tropics*, a new exhibit that will provide sanctuary for elephants and many other animals threatened by extinction. Find out ways you and your students can make a difference for this critically endangered species.

To register or for more information, contact:

Denver Zoo, 303/376-4808
www.denverzoo.org/education/teacherWorkshops.asp

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

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

CT-0783-09S
0.5 semester credit hour
Dates & Times:
January 31 (8:00am-12:00pm) &
February 28 (12:30-4:30pm)
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.

Are you 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.

OCEAN LITERACY (PREK-12)

CT-0710-09S
0.5 semester credit hour
Date: February 7
Time: 9:00am-5:00pm
Locations: Downtown Aquarium, Denver
Course Coordinators: Alyce Todd, Colleen Shipley
Tuition Fee: \$30 (**payable during workshop**)
Registration Fee: \$75

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

To register or for more information, contact:

Downtown Aquarium Sales & Service Center
303/561-4444

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 the 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

BUILDING A SPRING SCHOOLYARD GARDEN (K-6)

CT-0812-09S
0.5 semester credit hour
Date: February 21
Time: 8:30am-5:00pm
Location: Denver Botanic Garden
Instructor: Lisa Davis, 720/865-3613
Tuition Fee: \$30 (**payable during workshop**)
Registration Fee: \$50 DBG members; \$55 non-members

Learn how to create a spring garden with your students (in the ground or in containers) and ways to incorporate the garden into your classroom curriculum. Learn tips on gardening; discover plants that you can plant in early spring and harvest before school's end; and get ideas on how your garden can be incorporated into your reading, writing, math, science, and social studies time.

To register or for more information, contact:
Denver Botanic Gardens Registration
720/865-3580, www.botanicgardens.org

TEACHING COMPASSION AND RESPECT: HUMANE EDUCATION IN THE CLASSROOM (K-12)

CT-9157-09S
1 semester credit hour
Dates: February 21 & 28
Time: 8:30am-4:30pm
Location: Dumb Friends League, Denver
Instructor: Nicole Schimming
Tuition Fee: \$115

Learn easy ways to integrate lessons on compassion, kindness, and respect into your current curriculum. Take grade-appropriate curriculum guides and information back to your classroom, tour behind the scenes of our animal shelter, and learn about our services for pets and people of Colorado.

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

SNOW SCIENCE (K-12)

CT-0307-09S
1 semester credit hour
Dates: March 7-8
Time: 9:00am-5:00pm
Location: CSM campus & Berthoud Pass
Instructor: John Hite
Tuition Fee: \$45 (**payable during workshop**)
Registration Fee: \$80

Explore the basics of avalanche forecasting as you analyze terrain and snowpack, and conduct stability tests. Broaden your knowledge of snow science and utilize activities that you can share with your students. Spend the first day in the classroom and the second on Berthoud Pass. You must provide your own snowshoes or back country skis and transportation to Berthoud Pass.

To register or for more information, contact:
John Hite, 303/329-8464
Jhite1_2000@yahoo.com

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

CLICK YOUR CLASS: POSITIVE REINFORCEMENT IN THE CLASSROOM (K-12)

CT-0916-09S
0.5 semester credit hour
Date: March 21
Time: 8:30am-4:30pm
Location: Dumb Friends League, Denver
Instructor: Nicole Schimming
Tuition Fee: \$63

Clicker train a mascot dog and then learn how to apply similar techniques in your own classroom. Tour behind the scenes at our shelter and learn about the training we do with shelter animals.

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

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 an exciting Irish adventure.

To register or for more information, contact:
Melanie Phelps, 719/440-7180
melaniephe@aol.com
www.coloradorivertrip.com

DIGITAL PHOTOGRAPHY AND POWERPOINT ONLINE (K-12)

CT-05120-09S
1.5 semester credit hours
Dates: March 23-April 26
Instructor: John LaFerlita
Tuition 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

DIGITAL PHOTOGRAPHY ONLINE (K-12)

CT-0562-09S
1.5 semester credit hours
Dates: March 23-April 26
Instructor: John LaFerlita
Tuition 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-0737-09S
1.5 semester credit hours
Dates: March 23-April 26
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

AQUARIUMS AND YOUR CLASSROOM (GR. 1-12)

CT-0259-09S
0.5 semester credit hour
Date: April 4
Time: 9:00am-5:00pm
Location: Downtown Aquarium, Denver
Course Coordinators: Colleen Shipley & Alyce Todd
Tuition Fee: \$30 (**payable during workshop**)
Registration Fee: \$75

Take home a starter aquarium! Practice 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.

To register or for more information, contact:

Downtown Aquarium Sales & Service Center
303/561-4444

APE-RIL FOR EDUCATORS: A STUDY OF PRIMATES (K-12)

CT-0919-09S
0.5 semester credit hour
Date: April 18
Time: 8:00am-4:00pm
Location: Denver Zoo
Instructor: Marley Steele-Inama
Tuition Fee: \$85

Discover the unique intelligence and astounding adaptations of primates. Get an up-close and personal look at the Zoo's great ape exhibit, enhanced by the expertise of our primate specialists. These amazing monkeys and apes will be your window into the fascinating world of animal behavior, social organization, and global conservation.

To register or for more information, contact:

Denver Zoo, 303/376-4808
www.denverzoo.org/education/teacherWorkshops.asp

CLASSROOM PETS: SMALL MAMMALS IN THE CLASSROOM (K-12)

CT-0915-09S
0.5 semester credit hour
Date: April 18
Time: 8:30am-4:30pm
Location: Dumb Friends League, Denver
Instructor: Nicole Schimming
Tuition Fee: \$63

Does having a pet in your classroom foster learning? Does having a classroom pet teach responsibility? Explore these questions and more. Learn about different species of small mammals. Meet with some of these small creatures and decide if a classroom pet is right for you and your classroom.

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

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 1,000-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

CASTING AND MOLDING FOSSILS (K-12)

CT-9265-09S

1 semester credit hour

Dates: May 16-17

Times: 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.

COLORADO MINERAL EXPLORATION SEMINAR (GR. 6-12)

CT-0917-09S

1 semester credit hour

Dates: May 16-17

Time: 8:30am-5:30pm

Location: Western Museum of Mining & Industry,
Colorado Springs

Instructors: Steven Veatch, Brad Poulson

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

Registration Fee: \$15

The study of mineral deposits is one of the most fascinating fields in geology. The geologic and economic nature of mineral deposits will be the focus of this seminar and will enable you to better understand the geologic nature of mineral deposits, methods of mineral exploration and exploitation, and the environmental consequences of utilizing mineral resources.

To register or for more information, contact:

Western Museum of Mining & Industry

719/488-0880 or 800/752-6558

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. Although eight courses are required for certification, 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.

EcoAdventure Course Offerings

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

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.

SOME CALL'EM BUFFALO - WE CALL'EM BISON (K-12)

CT-9616-09S

1 semester credit hour

Dates & Times:

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

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

Location: CSM campus, Golden

Tuition Fee: \$120 (**\$130 after Jan. 22nd**)

Buffalo or bison? Discover the history behind the name and the animal, as well as its natural history. Take a field trip to a bison ranch and get a closer look at a part of our American heritage. Supplement any animal study/ecology, Colorado history, or Native American unit with topics addressed in this class.

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

CT-9960-09S

1 semester credit hour

Dates & Times:

February 28 (9:00am-5:00pm)

March 1 (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 your 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.

WILDFLOWERS OF THE ROCKIES (K-12)

CT-9613-09D

1 semester credit hour

Dates & Times:

Session I:

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

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

Session II:

June 25 (9:00am-5:00pm)

June 26 (9:00am-4:00pm)

Location: EcoAdventures, Morrison

Tuition Fee: \$130 (**\$140 after May 21st/June 11th**)

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 such things as "botany in a bowl," a creative activity to help kids understand the basics of botany.

EXPLORING THE PONDEROSA PINE FOREST (K-12)

CT-0105-09D

1 semester credit hour

Dates & Times:

June 13 (9:00am-5:00pm)

June 14 (9:00am-4:00pm)

Location: EcoAdventures, Morrison

Tuition Fee: \$125 (**\$135 after May 28th**)

Discover the ponderosa pine ecosystem as you spend two days immersed in the rich spring flora and diverse wildlife of the ponderosa pine forest. Explore the natural and cultural history of this massive pine's role in logging and homesteading in Colorado.

EARLY EXPLORERS OF THE ROCKY MOUNTAINS (K-12)

CT-0518-09D

1 semester credit hour

Dates & Times:

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

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

Location: EcoAdventures, Morrison

Tuition Fee: \$125 (**\$135 after June 4th**)

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.

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

CT-95106-09D

1 semester credit hour

Dates & Times:

June 23 (9:00am-5:00pm)

June 24 (9:00am-4:00pm)

Location: EcoAdventures, Morrison

Tuition Fee: \$130 (**\$140 after June 4th**)

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.

WILD EDIBLE PLANTS OF THE ROCKY MOUNTAINS (K-12)

CT-0817-09D

1 semester credit hour

Dates & Times:

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

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

Location: EcoAdventures, Morrison

Tuition Fee: \$130 (**\$140 after June 11th**)

Pre-requisite: CT-9613, Wildflowers of the Rockies

If you are curious about the weeds that could be food, come discover wild edible plants. Learn about identification, safety guidelines, gathering, and storage. Create a sampler of wild edible dishes that you make and taste.

MOOSE IN COLORADO (K-12)

CT-0922-09M

1 semester credit hour

Dates & Times:

July 7 (12:00-8:00pm)

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

Location: Granby

Tuition Fee: \$120 (**\$130 after June 18th**)

Go to moose country for a wildlife watching opportunity with fun moose information and viewing equipment. Discover why an animal often described as a "conglomeration of parts" is so well suited to the wetland environments it inhabits. Moose also weave a unique wildlife management story. Camp or stay at a local hotel.

IT'S SENSE'SATIONAL: HOW ANIMALS SEE, HEAR, SMELL, TOUCH, AND TASTE (K-8)

CT-96102-09M

1 semester credit hour

Dates & Times:

July 11 (9:00am-5:00pm)

July 12 (9:00am-4:00pm)

Location: EcoAdventures, Morrison

Tuition Fee: \$120 (**\$130 after June 25th**)

Let your senses go "wild" and discover what it is like to explore the world using the senses of a variety of Colorado's animals. Understand how differently animals perceive the world with hands-on activities and "make and take" items. Try to follow an owl's acoustic map or see with animal vision.

MONTANE & SUBALPINE WILDFLOWERS (K-12)

CT-9961-09M

1 semester credit hour

Dates & Times:

July 14 (9:00am-5:00pm)

July 15 (9:00am-4:00pm)

Location: Subalpine sites

Tuition Fee: \$120 (**\$130 after June 25th**)

Pre-requisite: CT-9613, Wildflowers of the Rockies

Hike in different montane and subalpine areas discovering the beautiful, but perhaps lesser known, wildflowers. Explore lush meadows and streamside habitats. Continue your identification skills on wildflowers in the montane and subalpine life zones. Discover interesting botanical facts, uses, myths, and legends.

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

CT-0519-09M

1 semester credit hour

Dates & Times:

July 18 (9:00am-5:00pm)

July 19 (9:00am-4:00pm)

Location: EcoAdventures, Morrison

Tuition Fee: \$125 (**\$135 after July 2nd**)

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.

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.

Denver Museum of Nature & Science Course Offerings

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

AMAZING ANIMALS (PREK-2)

CT-0911-09S
0.5 semester credit hour
Date: February 7
Time: 8:00am-4:30pm
Instructor: Kate Geer
Tuition Fee: \$80 member, \$85 non-member

Learn about animals from the experts, spend time in the exhibit halls, and take a side trip to the Denver Zoo. Examine animal adaptations and habits with hands-on, inquiry-based activities that you can take back to your classroom.

NATURE UNLEASHED (K-12)

CT-0912-09S
0.5 semester credit hour
Date: February 21
Time: 8:00am-4:30pm
Instructor: Kate Geer
Tuition Fee: \$80 member, \$85 non-member

Immense forces of geology and weather have shaped our planet and our world. How do they affect us and how do we respond? Can we prevent them? Should we even try? Explore these questions and more in this workshop based on the temporary exhibition *Nature Unleashed: Inside Natural Disasters*. The workshop and exhibition will include visceral experiences, compelling media, and multidisciplinary science that goes beyond the sensational headlines to explore the principles at work behind Earth's most powerful natural phenomena.

EXPEDITION HEALTH (K-12)

CT-0913-09S
0.5 semester credit hour
Date: April 18
Time: 8:00am-4:30pm
Instructor: Kate Geer
Tuition Fee: \$80 member, \$85 non-member

Come experience *Expedition Health*, the new exhibit opening in April 2009. *Expedition Health* provides a personalized, interactive experience for students to learn about human biology with fun exhibits, lab experiments, demonstrations, and an immersive theater show. In addition to exploring the exhibition, hear a lecture from the Museum's curator for health sciences, and try out activities from the new Expedition Health Online Guide.

LAMP: THE SEARCH FOR LUNAR WATER (GR. 6-12)

CT-0914-09S
0.5 semester credit hour
Date: April 25
Time: 8:00am-4:30pm
Instructor: Kate Geer
Tuition Fee: \$80 member, \$85 non-member

Join the Museum for a day of lunar exploration. The Lunar Reconnaissance Orbiter (LRO) mission will conduct investigations that will prepare for and support future human exploration of the moon. LRO focuses on the selection of safe landing sites, identification of lunar resources, and studies of how the lunar radiation environment will affect humans. The Lyman-Alpha Mapping Project (LAMP) is an instrument designed to search for lunar water at the moon's poles. Receive classroom activities designed to help your students explore light, identify chemical signatures, and participate in the search for lunar water.

**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.**

Butterfly Pavilion Course Offerings

Note: Register for Butterfly Pavilion courses through the Butterfly Pavilion. See box on next page.

WHAT'S THE BUZZ? INTRO TO INSECTS IN ART & CULTURE (K-12)

CT-0712-09S
0.5 semester credit hour
Date: February 21
Time: 8:00am-5:00pm
Location: Butterfly Pavilion, Westminster
Instructors: Nicole Bickford, Deborah Brooks
Tuition Fee: \$30 (**payable during workshop**)
Registration Fee: \$40

Discover the cultural significance of insects and the important role they played in everyday life and art in ancient cultures around the world. Learn new standards-based lesson plans and fun hands-on art activities for your classroom that integrate art, science, and culture.

INSECTS IN ART AND CULTURE (K-12)

CT-0321-09D
1 semester credit hour
Dates: June 16-17
Time: 8:00am-5:00pm
Location: Butterfly Pavilion, Westminster
Instructors: Nicole Bickford, Deborah Brooks
Tuition Fee: \$45 (**payable during workshop**)
Registration Fee: \$75

Discover the symbolic meaning of insects in cultures of past and present as you explore human beliefs and environmental conditions through art and literature. Delve into myths and art activities as you explore the lives, history, and significance of honeybees, silk moths, dragonflies, and many more invertebrates.

INSECT INVESTIGATIONS: SCIENCE NOTEBOOKS AND BUGS IN THE CLASSROOM (K-12)

CT-0920-09D
0.5 semester credit hour
Date: June 25
Time: 8:00am-5:00pm
Location: Butterfly Pavilion, Westminster
Instructors: Nicole Bickford, Deborah Brooks
Tuition Fee: \$30 (**payable during workshop**)
Registration Fee: \$40

Explore the amazing world of insects and their relatives as you investigate how inquiry-based learning can enhance discovery in your classroom. Exciting hands-on, take-home activities will allow you to explore how to successfully incorporate literacy and science notebooks in your classroom insect investigations.

WHO SWALLOWED A FLY? (K-6)

CT-0532-09M
0.5 semester credit hour
Date: July 30
Time: 8:00am-5:00pm
Location: Butterfly Pavilion, Westminster
Instructors: Nicole Bickford, Deborah Brooks
Tuition Fee: \$30 (**payable during workshop**)
Registration Fee: \$40

Use a variety of children's literature that focuses on bugs and other invertebrates. Read and play with the language and unique art that make these books memorable. Explore Eric Carle's famous bug stories, find language and art in nature with the Butterfly Alphabet, and bring home lesson plans and ideas that integrate visual and language arts.

FLY FISHING ENTOMOLOGY (GR. 6-12)

CT-0821-09M
0.5 semester credit hour
Date: August 5
Time: 8:00am-5:00pm
Location: Butterfly Pavilion, Westminster
Instructor: Patrick Tennyson
Tuition Fee: \$30 (**payable during workshop**)
Registration Fee: \$40

Investigate the world beneath the surface as a trout sees it. Discover aquatic entomology (study of insects) from a fly-fishing point of view. Learn to distinguish among the multitude of fly patterns and the "natural" insects they imitate. Spend an afternoon on the river exploring aquatic habitats and learning how to "match the hatch."

CAUTION: ENTERING THE INSECT WORLD (K-8)

CT-0711-09F
0.5 semester credit hour
Date: October 3
Time: 8:00am-5:00pm
Location: Butterfly Pavilion, Westminster
Instructor: Denise Price
Tuition Fee: \$30 (**payable during workshop**)
Registration Fee: \$40

Insects have amazing adaptations to help them survive. Explore the world of insects as you visit the exhibits, and learn how insect coloration, flight, symbiosis, behaviors, and much more help insects stay alive. Take home Colorado State Content Standard-based resources and activities for use in your classroom.

DRAGONFLIES TALE (K-6)

CT-0713-09F
0.5 semester credit hour
Date: October 10
Time: 8:00am-5:00pm
Location: Butterfly Pavilion, Westminster
Instructors: Nicole Bickford, Deborah Brooks
Tuition Fee: \$30 (**payable during workshop**)
Registration Fee: \$40

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.

New Program at the Pavilion

ART AND SCIENCE SERIES (GR. 5-12)

CT-0921-09M

0.5-1 semester credit hour

Instructors: Kris Pohl, Deborah Brooks

Course Coordinator: Kris Pohl, 720/974-1868

Tuition Fee: \$30-\$45 (**payable during workshop when two or four workshops completed**)

BATIK & INSECTS

Date: June 30

Time: 7:30am-11:30am

Registration Fee: \$40

Discover the roles of insects used in an ancient form of fabric decoration: batik. Find out how bees make wax, how silk moths are used to create silk and how scale insects can be turned into a spectacular scarlet dye. Create a one-of-a kind batik scarf with these insect products

DREAMCATCHERS AND ARACHNIDS

Date: July 14

Time: 7:30am-11:30am

Registration Fee: \$40

Explore the importance of arachnids in nature as well as in Native American culture. Discover the myth behind the dreamcatcher in Native American tales as you weave your own dreamcatcher.

PAPERMAKING AND PAPER WASPS

Date: July 28

Time: 7:30am-11:30am

Registration Fee: \$30

According to French lore, paper was invented after a nobleman observed paper wasps creating their own hive. Learn a simple method of recycling paper to create handmade paper for stationery, scrapbooking, and cards.

GOURD BASKETS AND POLLINATORS

Date: August 4

Time: 7:30am-11:30am

Registration Fee: \$45

Hardshell gourds are a popular crafter's medium, but what role do insects play? Learn more about pollinators as you transform a hardshell gourd into a lovely art object.

To register for any of the Butterfly Pavilion course offerings, mail the CSM enrollment form along with a check (payable to the Butterfly Pavilion) or credit card information for the Registration Fee to:
Butterfly Pavilion
Kris Pohl, Education
6252 W. 104th Ave.
Westminster, CO 80205
Fax 303/657-5944

Project WILD - Project Learning Tree – Project WET

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

All Project WILD, 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. New PLT materials are available for integrated middle and high school curricula.

Following is a list of upcoming workshops. **Pre-register by calling the person listed and sending in the non-refundable registration fee at least 7 days prior to the first day of the workshop (unless otherwise noted). Tuition will be due on the first day of the workshop. Please register through the person listed, not through the Colorado School of Mines.** Workshops may be cancelled one week before the start date if minimum enrollment numbers have not been met. Other dates may have been added; call for updated workshop listings. Visit our web sites at www.plt.org/events/index.cfm and <http://wildlife.state.co.us/Education/TeacherWorkshops/Index.aspx> for more information.

AQUATIC PROJECT WILD (PREK-12)

CT-9684-09S
0.5 semester credit hour
Date: January 24
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

PROJECT WET

CT-9629-09S
0.5 semester credit hour per workshop
Workshop I (K-5):
Date: January 31
Time: 8:00am-5:00pm
Location: Aurora Reservoir
Registration Fee: \$30
Registration Contact: Joy Thompson, 303/739-2428
Workshop II (PreK-12):
Date: March 7
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**)

BASIC PROJECT WILD AND LEARNING TREE USING SHELTERED INSTRUCTION FOR SECOND LANGUAGE LEARNERS (K-12)

CT-0823-09S
1 semester credit hour
Dates & Times:
Workshop I:
9:30am, January 31 through 4:00pm, February 1
Workshop II:
9:30am, April 25 through 4:00pm, April 26
Location: Cal-Wood Ed. Center, Jamestown
Tuition Fee: \$57 (**payable during workshop**)
Registration Fee: \$105 (includes meals and lodging)
Registration Contact: Rafael Salgado, 303/449-0603 or
info@calwood.org

EARLY CHILDHOOD PROJECT WILD – WILD ABOUT WILDLIFE (PREK-2)

CT-0192-09S
0.5 semester credit hour
Date: February 28
Time: 8:15am-4:30pm
Location: Starsmore Discovery Center, Colorado Springs
Tuition Fee: \$34 (**payable during workshop**)
Registration Fee: \$25
Registration Contact: Lynda Grove, 719/473-1741x139,
Lgrove@hsppr.org

BASIC PROJECT LEARNING TREE

CT-0822
0.5 semester credit hour per workshop
Workshop I *Tree by Tree - The Mile High Million* (PreK-6):
Date: March 7
Time: 8:00am-5:00pm
Location: Denver Botanic Gardens
Registration Fee: \$25 (returned at workshop)
Registration Contact: Shawna Crocker, 303/202-4662
Workshop II *Tree by Tree - The Mile High Million* (Gr. 8-12):
Date: March 14
Time: 8:00am-5:00pm
Location: East High School, Denver
Registration Fee: \$25 (returned at workshop)
Registration Contact: Shawna Crocker, 303/202-4662
Workshop III *Urban Forests (K-6):*
Date: March 14
Time: 8:30am-4:30pm
Location: Bluff Lake Nature Center, Aurora
Registration Fee: \$10
Registration Contact: Kristin Libberton,
303/344-1282
Workshop IV (K-12):
Date: July 9
Time: 8:00am-5:00pm
Location: Butterfly Pavilion, Westminster
Registration Fee: \$25
Registration Contact: Kris Pohl, 720/974-1868
Tuition Fee: \$34 (**payable during each workshop**)

BASIC PROJECT WILD (K-12)

CT-9598

0.5 semester credit hour per workshop

Workshop I:

Date: April 4

Time: 8:30am-5:00pm

Location: Division of Wildlife, Denver

Registration Fee: \$10

Registration Contact: Tabbi Kinion, 303/291-7165

Workshop II:

Date: July 8

Time: 8:00am-5:00pm

Location: Butterfly Pavilion, Westminster

Registration Fee: \$25

Registration Contact: Kris Pohl, 720/974-1868

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

WILDLIFE WATCH (K-12)

CT-9914

0.5 semester credit hour per workshop

Dates:

Workshop I: April 5

Workshop II: August 2

Time: 9:00am-5:00pm

Location: Plains Conservation Center, Aurora

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

Registration Fee: \$15

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

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

Pre-requisite: Basic Project WILD course

Personalize your professional development while extending your understanding and use of Project WILD or LEP. Explore sites and resources in your area for wildlife and nature education, and adapt activities to accommodate your geographic area.

To register or for more information, contact:

Jeff Brigham, 970/464-7006

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.

LIFE IN THE COLD: WINTER ECOLOGY (WILD II WORKSHOP) (GR. 5-12)

CT-94106-09S

1 semester credit hour

Dates & Times:

7:00pm, January 23 through 3:00pm, January 25

Location: High Peak Camp, Estes Park

Tuition Fee: \$57 (**payable during workshop**)

Registration Fee: \$96 for 3/room, \$130 for 2/room

Pre-requisite: Basic Project WILD/Learning Tree
workshop

Registration Contact: Shelly Morrell, 303/291-7328

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/
teacherresources](http://www.wildlife.state.co.us/education/teacherresources)**

Summer 2009 Canoe Trips

Note: Register for canoe trips through Centennial Canoe Outfitters. See box below.

GEOLOGY OF THE COLORADO RIVER BY CANOE, LEVELS I & II (K-12)

CT-9142-09D

2 semester credit hours

Dates & Times:

Lecture: June 17 (9:00am-4:30pm)

Canoe Trip: June 19-21

Locations: The lecture will be held at CSM, Golden.

The trip will begin and end near Grand Junction, CO.

Instructor: Ed Adams

Tuition Fee: \$424 (**\$100 deposit required upon enrollment**)

Canoe a 30-mile stretch of the Colorado River through the Colorado Plateau west of Grand Junction. This gentle river features majestic walls of red sandstone and includes a rare look at the old Pre-Cambrian basement rock, known locally as "Black Rocks", as well as typical canyon cliffs of sedimentary rocks. Camping along the river's bank, exploring a natural amphitheater with ancient rock art, or hiking into deep box canyons will leave you awed by the immensity of geologic time and the silence of the wilderness.

ASTRONOMY IN THE WILDERNESS/GUNNISON RIVER, LEVELS I & II (K-12)

CT-0263-09M

2 semester credit hours

Dates & Times:

Lecture: July 15 (1:00-8:30pm)

Canoe Trip: July 17-19

Locations: The lecture will be held at Fiske Planetarium,

Boulder. The trip will begin and end near Grand Junction, CO.

Instructor: Sanlyn Buxner

Tuition Fee: \$414 (**\$100 deposit required upon enrollment**)

Get away from the city lights and view spectacular sights of the heavens along this remote stretch of the Gunnison River as you canoe through spectacular canyons with petroglyphs and waterfalls. Learn constellations, deep sky objects and basic astronomy, including activities for the classroom. By viewing the wilderness night sky and spending time in the planetarium, you will learn about the galaxies, life cycles of stars, and new topics in astronomy. No previous astronomy experience is necessary.

GEOLOGY OF THE GREEN RIVER BY CANOE, LEVELS I & II (K-12)

CT-9420-09M

3 semester credit hours

Dates & Times:

Lecture: July 27 (9:00am-4:30pm)

Canoe Trip: July 29-August 2

Locations: The lecture will be held at CSM, Golden.

The trip will begin and end in Moab, UT.

Instructor: Ed Adams

Tuition Fee: \$663 (**\$100 deposit required upon enrollment**)

Explore 60 miles of wilderness along Utah's peaceful Green River as it winds through the red-rock formations just north of Canyonlands National Park. The moving panorama of this twisting river is incomparable. Explore vast canyon systems which branch out in all directions on daily excursions, including one full-day exploration. The course will emphasize the unique geology of Utah's canyons with some discussion of the impact of man from early explorers to uranium mining.

To register , mail the CSM enrollment form along with the \$100 deposit (made payable to Centennial Canoe Outfitters) to:

Centennial Canoe Outfitters

P.O. Box 3365

Centennial, CO 80161-3365

720/283-0553 or toll-free 1/877/353-1850

E-mail: info@centennialcanoe.com

Register online: www.centennialcanoe.com

Centennial Canoe Outfitters will supply all canoes, group equipment, meals, and canoeing instruction prior to the trip. You are responsible for your transportation to the river and back. No previous canoeing experience is required.

Level II Courses

Former participants in Level I classes can qualify for Level II credit by completing a special project to be conducted concurrently with the basic class offering.

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, and 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

INCORPORATING PLANTS INTO THE CLASSROOM (K-6)

CT-0645-09D
0.5 semester credit hour
Date: June 16
Time: 8:30am-5:00pm
Location: Denver Botanic Gardens
Instructor: Lisa Davis, 720/865-3613
Tuition Fee: \$30 (**payable during workshop**)
Registration Fee: \$50 DBG member; \$55 non-member

Learn how you can use plants to teach not just science, but also reading, writing, math, and social studies. Get tips on ways to grow plants in your classroom successfully and cheaply.

To register or for more information, contact:

Denver Botanic Gardens Registration
720/865-3580 or www.botanicgardens.org

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

EARTH SCIENCE AND ME (K-12)

CT-0824-09D
1.5 semester credit hours
Dates: June 22-24
Time: 7:30am-4:30pm
Location: West Jefferson Elem., Conifer
Instructors: Doug Scott, Dave Scott
Tuition Fee: \$70 (**payable during workshop**)
Registration Fee: \$175 (non-refundable 2 weeks prior to start date)

Learn about Colorado geology and earth science. Travel to a working mine to examine mining, economics, and reclamation. Receive more than 80 rocks and minerals, and learn how to identify them. All activities are hands-on and ready to use in your classroom.

To register or for more information, contact:

DST & Associates, 303/902-8918

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

ALL ABOUT MINING: A TOTAL CONCEPT OF THE MINING INDUSTRY (K-12)

CT-5700-09M

6 semester credit hours

Dates: June 22-July 17

Time: 7:30am-early afternoon (except on all-day field trips)

Location: CSM campus, Golden

Instructors: Seventy-five authorities from industry, government, academia & private groups

Course Coordinator: Dan Witkowsky, 303/972-1814, DanielWitkowsky@aol.com

Tuition Fee: \$200

Obtain a general overview of the minerals industries, including geology, mining, ore-processing, environmental responsibility, career opportunities, etc., from industry experts via classroom lectures and nine days of field trips to surface/underground mines and processing plants. Finish the course with a set of lesson plans, developed by course participants, that you can apply in your classroom this fall.

To register or for more information, contact:

CMA Education Foundation, Inc.

303/575-9199, FAX 303/575-9194

<http://www.allaboutmining.org>

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. Includes 6.5 days on a motorized raft, helicopter airlift to the rim, flight on a twin engine plane, and all food. Conduct authentic environmental research.

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; and 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

TEACHING PLANTS FROM ROOT TO SEED (K-8)

CT-0646-09M

0.5 semester credit hour

Date: July 21

Time: 8:30am-5:00pm

Location: Denver Botanic Gardens

Course Coordinator: Lisa Davis, 720/865-3613

Tuition Fee: \$30 (**payable during workshop**)

Registration Fee: \$50 DBG member; \$55 non-member

Learn fun and unique ways to teach plant structure and function. Explore what each part of the plant does through hands-on activities that you can transfer easily to your classroom. Cover concepts such as photosynthesis, transpiration, and pollination.

To register or for more information, contact:

Denver Botanic Gardens Registration

720/865-3580, www.botanicgardens.org

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

CT-0705-09M

4 semester credit hours

Dates: July 23-31

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 25-August 2

Location: Paris, France

Instructors: Joyce Webb, Melanie Phelps

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 2-11

Location: Scottish Highlands

Instructor: Joyce Webb

Tuition Fee: \$2,480 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 my confirmation by:

e-mail; home: _____ work: _____

****Choose the e-mail option ONLY if you check and read your e-mail regularly.****

Fax; fax number: () _____

Mail *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 DISC

Card # _____

Exp. Date: _____

Cardholder Name: _____

Signature: _____