

# Teacher Enhancement Program for K-12 Educators

AT THE COLORADO SCHOOL OF MINES



SPRING 2014

<http://te.csmspace.com>

# COLORADO SCHOOL OF MINES

## Teacher Enhancement Program

### Spring 2014

#### REGISTRATION

All of the courses announced in this brochure are coordinated through the Office of Special Programs and Continuing Education at the Colorado School of Mines. **Unless another organization or individual is specified as the registration contact in a course listing, enrollment forms and tuition check(s) should be mailed to:**

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

**To view the most current course listings or to order an official TE transcript, visit our home page at:  
<http://te.csmospace.com>**

**You must pre-register at least 48 hours prior to the start of a workshop (Saturday and Sunday excluded). Do not show up for a class without a confirmed registration from the Teacher Enhancement Office or person/organization taking the registrations. You are likely to be turned away by the instructor. CSM reserves the right to assign audit (non-credit) status with full tuition responsibility to walk-in participants.**

#### TUITION AND REFUND POLICIES

Registration through Teacher Enhancement must be accompanied by full tuition payment by check or credit card authorization. If a course registrant cancels or transfers an enrollment, the tuition amount **minus** a \$25 cancellation/transfer fee will be refunded or applied to another course. Unless otherwise indicated, you must cancel at least 48 hours in advance of a workshop to qualify for a refund (Saturday and Sunday excluded). **Once a class has begun, no full or partial tuition refunds will be granted.** Colorado School of Mines reserves the right to cancel a course (usually one week prior to delivery) if the minimum enrollment is not reached (with full tuition refund to registrants). Colorado School of Mines and the Teacher Enhancement Office will not be liable for any other expenses incurred by registrants.

When paying tuition by check, please make out a **separate** check to "CSM Continuing Education" for **each** course and for **each** participant.

#### ATTENDANCE POLICY

**Course participants are expected to attend each class session in its entirety.** This includes arriving on time and staying until dismissal. Credit will be granted for a course only when the full contact hour requirements have been met. Missed sessions of a course cannot be made up by attending subsequent offerings of the same class or by completing additional assignments. In consideration of the instructor and other course registrants, **DO NOT** bring children of any age to class under any circumstances.

#### TRANSCRIPT AND CREDIT INFORMATION

The Teacher Enhancement Office and Colorado School of Mines cannot be responsible for meeting individual deadlines for credits toward teacher licensure and/or salary increases. Official transcripts for current course work can be printed upon written request approximately two weeks after the instructor submits course grades to the Teacher Enhancement Office. Individual letters of completion are not available. We are unable to give you any information via phone or email on what courses appear on your transcript due to FERPA. Graduate-level semester credit offered for each course is applicable for license renewal in the State of Colorado and is generally accepted elsewhere. The credit is not applicable toward a degree at CSM. Request for Transcript of Record forms can be found at <http://te.csmospace.com>.

**All policies and requirements stated above are program-wide and not at the discretion of individual instructors. Enrollment in any course offered for CSM credit implies your agreement to comply with program policies and requirements.**

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

## Spring 2014 Course Offerings

### MISSION COGNITION: HYBRID COURSE ON THE BRAIN (GR. 5-8)

CT-1407-14S

1.5 semester credit hours

Dates: January 11-February 9 - **online**

**face-to-face sessions:**

January 11 & 25 (8:00am-3:30pm)

February 8 (8:00am-12:00pm)

Instructor: Robert Payo

Location Denver Museum of Nature & Science

Tuition Fee: \$70

Further your understanding of current research about the mechanics of how humans learn and process information, and demonstrate how these studies can make a difference in the way you teach your students. Use the mysterious organ we know as the brain to explore, imagine, and think critically. Receive a \$75 stipend upon successful course completion.

**To register or for more information, contact:**

DMNS Reservations

303/370-6000 (9am-5pm daily)

### ROCKY MOUNTAIN MAMMALS (K-12)

CT-1126-14S

1 semester credit hour

Dates: February 8-9

Time: 9:00am-5:00pm

Location: CSM campus, Golden

Instructor: Marty Colon

Tuition Fee: \$125

The Rocky Mountains are blessed with a great diversity of wildlife. Learn how to easily identify mammals and see more wildlife. Explore how the past has impacted current mammal distribution, and what the future holds for Rocky Mountain mammals.

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

### DRAGONFLY'S TALE (K-6)

CT-0713-14S

0.5 semester credit hour

Date: February 8

Time: 8:00am-5:00pm

Location: Butterfly Pavilion, Westminster

Instructors: Marissa Copan, Deborah Brooks

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

Registration Fee: \$45

Explore five different Native American cultures through 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 or for more information, contact:**

Becky Campbell-Howe, Butterfly Pavilion

720/974-1861

[www.butterflies.org](http://www.butterflies.org)

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

CT-0301-14S

1 semester credit hour

Dates: February 15-16

Time: 8:00am-5:00pm

Location: Leadville

Instructor: Melanie Phelps

Tuition Fee: \$140

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 Healy House. 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, 719/252-1789

[melaniephe@aol.com](mailto:melaniephe@aol.com)

[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

### TEACHING OUTSIDE THE BOX CONFERENCE: COLORADO'S CONFERENCE ON ENVIRONMENTAL EDUCATION (PREK-12)

CT-1406-14S

0.5-1 semester credit hour

Dates: March 20-22

Location: University of Denver

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

Registration Fee: varies; check website [www.cae.org](http://www.cae.org)

This action-packed conference brings together the best in environmental education with engaging presentations, networking, resource sharing, classroom-ready activities, and more. Choose from over 50 sessions on topics ranging from outdoor skills, forestry, wildlife, art and nature, science and literacy, and environmental education and standards.

**To register or for more information, contact:**

Michelle Mendieta, CAEE

[info@cae.org](mailto:info@cae.org) or 303/273-9527

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

CT-1112-14S

4 semester credit hours

Dates: March 22-30

Location: Belize, Central America

Instructor: Melanie Phelps

Tuition Fee: \$3,170 (includes airfare)

Submerge yourself in the colorful world of the Belize coral reefs. Explore the fish as they change sexes, groom each other, and develop complex relationships of symbiosis. Then wander into the land of the ancient Mayans, with their extravagant architecture, rituals, and games.

**To register or for more information, contact:**

Melanie Phelps, 719/252-1789

[melaniephe@aol.com](mailto:melaniephe@aol.com)

[www.coloradorivertrip.com](http://www.coloradorivertrip.com)



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

CT-1201-14S  
4 semester credit hours  
Dates: March 22-30  
Locations: Spain  
Instructor: Joyce Webb  
Tuition Fee: \$3,670 (includes airfare, lodging, ground transportation, tours, tuition)

Experience Spain from the art and architecture of Madrid to Sevilla's Alcazar, Christopher Columbus' tomb, and the romance of Flamenco dancers. Visit the Rock of Gibraltar and take a day trip to the mysterious Tangiers on Africa's Moroccan coast. Wander Granada's grand Alhambra while learning of Spain's tangled history.

### **To register or for more information, contact:**

Joyce Webb, 719/229-5482  
[joycewebb@ymail.com](mailto:joycewebb@ymail.com)  
[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

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

CT-1309-14S  
0.5 semester credit hour  
Date: March 29  
Time: 8:00am-4:00pm  
Location: RMNA, Estes Park  
Instructor: Jared Gricoskie  
Tuition Fee: \$35 (**payable during workshop**)  
Registration Fee: \$70

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

### **To register or for more information, contact:**

Rachel Balduzzi, RMNA  
970/586-3262 or [rachel.balduzzi@rmna.org](mailto:rachel.balduzzi@rmna.org)

## **OCEAN LITERACY (PREK-12)**

CT-0710-14S  
0.5 semester credit hour  
Date: April 5  
Time: 9:00am-5:00pm  
Locations: Downtown Aquarium, Denver  
Course Coordinator: Colleen Shipley  
Tuition Fee: \$35 (**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 Visitor Center  
303/561-4444

## **ANIMAL TRACKING: THE SCIENTIFIC METHOD IN ACTION (K-12)**

CT-9938-14S  
1 semester credit hour  
Dates: April 12-13  
Time: 9:00am-5:00pm  
Location: CSM campus, Golden  
Instructor: Marty Colon  
Tuition Fee: \$125

Tracking is a basic naturalist's skill that will greatly expand your experience, knowledge, and understanding of nature. Learn a systematic method that will enable you to identify virtually any North American mammal's footprints. After you learn to track, the outdoors will never look the same!

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

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

CT-1308-14S  
0.5 semester credit hour  
Date: April 17  
Time: 8:00am-4:30pm  
Location: RMNA, Estes Park  
Instructor: Jeff Maugans  
Tuition Fee: \$35 (**payable during workshop**)  
Registration Fee: \$70

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

### **To register or for more information, contact:**

Rachel Balduzzi, RMNA  
970/586-3262 or [rachel.balduzzi@rmna.org](mailto:rachel.balduzzi@rmna.org)

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

CT-1303-14S  
1 semester credit hour  
Dates: April 26-27  
Location: Denver to Glenwood Springs  
Instructor: Melanie Phelps  
Tuition Fee: \$440 (includes train fare, lodging, tours, tuition)

Ride Amtrak from Denver through the historic Moffat Tunnel, Winter Park, Gore Canyon, and into Glenwood Springs. Explore caves and soak in the soothing waters the Ute Indians believed had magical powers. Learn the history of Colorado railroads and how the West was tamed.

### **To register or for more information, contact:**

Melanie Phelps, 719/252-1789  
[melaniephe@aol.com](mailto:melaniephe@aol.com)  
[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

## KNOW YOUR RANGE PLANTS (K-12)

CT-1405-14S  
0.5 semester credit hour  
Date: May 3  
Time: 8:00am-5:00pm  
Location: Plains Conservation Center, Aurora  
Instructor: Michael Johnson  
Tuition Fee: \$90

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

### To register or for more information, contact:

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

## PICKETWIRE DINOSAUR TRACKS BY MOUNTAIN BIKE (K-12)

CT-0350-14S  
1 semester credit hour  
Dates: May 3-4  
Time: 8:00am-5:00pm  
Location: LaJunta  
Instructor: Melanie Phelps  
Tuition Fee: \$140

Mountain bike 13 miles round trip to see a fossilized Jurassic beach containing over 1300 dinosaur tracks, some big enough to sit in. This important site showed scientists that dinosaurs were herding animals. Tour Old Bent's Fort and view stage coach ruts on the Old Stagecoach Trail. Learn Colorado history from the Jurassic to the Dust Bowl.

### To register or for more information, contact:

Melanie Phelps, 719/252-1789  
[melaniephe@aol.com](mailto:melaniephe@aol.com)  
www.coloradorivertrip.com

## LIFE SIGNS: TRACKING THE INVISIBLE (K-12)

CT-1235-14S  
0.5 semester credit hour  
Date: May 14  
Time: 8:30am-4:30pm  
Location: RMNA, Estes Park  
Instructor: Kevin Cook  
Tuition Fee: \$35 (payable during workshop)  
Registration Fee: \$70

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

### To register or for more information, contact:

Rachel Balduzzi, RMNA  
970/586-3262 or rachel.balduzzi@rmna.org

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

CT-1031-14S  
1 semester credit hour  
Dates: May 24-25  
Time: 8:00am-5:00pm  
Location: meet in Pueblo; drive to NM  
Instructor: Melanie Phelps  
Tuition Fee: \$140

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

### To register or for more information, contact:

Melanie Phelps, 719/252-1789  
[melaniephe@aol.com](mailto:melaniephe@aol.com)  
www.coloradorivertrip.com

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

CT-1402-14S  
2 semester credit hours  
Dates: May 26-29  
Time: 8:00am-5:00pm  
Location: meet in Santa Fe, NM  
Instructor: Melanie Phelps  
Tuition Fee: \$270 (lodging not included)

Explore the history of Santa Fe, a trading hub of Old Mexico. Hike through Petroglyph National Monument where the ancient natives etched 15,000 petroglyphs into the black basalt. Continue to El Malpais to explore lava tubes, pahoehoe, aa, cinder cones, craters, and calderas. Seek out the peacefulness of Chaco Canyon, one of the largest trade centers of the Ancient Pueblo Indians.

### To register or for more information, contact:

Melanie Phelps, 719/252-1789  
[melaniephe@aol.com](mailto:melaniephe@aol.com)  
www.coloradorivertrip.com

## 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-0700-14S

1 semester credit hour

Dates & Times:

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

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

Location: CSM campus, Golden

Instructor: Pam Batton

Tuition Fee: \$140 (**\$160 after January 2<sup>nd</sup>**)

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-9616-14S

1 semester credit hour

Dates & Times:

February 8 (9:00am-5:00pm)

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

Location: CSM campus, Golden

Instructor: Pam Batton

Tuition Fee: \$140 (**\$160 after January 23<sup>rd</sup>**)

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. Taste its healthful qualities as we sample our subject at a buffalo restaurant. Explore the connection of Native people to the bison then and now.

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

CT-9960-14S

1 semester credit hour

Dates & Times:

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

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

Location: CSM campus, Golden

Instructor: Trey Corkern

Tuition Fee: \$140 (**\$160 after Feb. 6<sup>th</sup>**)

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-9712-14S

1 semester credit hour

Dates & Times:

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

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

Location: CSM campus, Golden

Instructor: Pam Batton

Tuition Fee: \$145 (**\$165 after February 20<sup>th</sup>**)

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

### BIRDS OF PREY (K-12)

CT-9614-14S

1 semester credit hour

Dates & Times:

April 5 (12:00pm-7:30pm)

April 6 (8:30am-4:00pm)

Location: CSM campus, Golden

Instructor: Pam Batton

Tuition Fee: \$140 (**\$160 after March 20<sup>th</sup>**)

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-9613-14D

1 semester credit hour

Dates & Times:

**Session I:**

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

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

**Session II:**

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

June 29 (9:00am-4:00pm)

Location: EcoAdventures, Morrison

Instructor: Pam Batton

Tuition Fee: \$145 (**\$165 after May 28<sup>th</sup>/June 13<sup>th</sup>**)

Spend time in the wildflowers as you explore a variety of elevations and identify and discover interesting botanical facts, uses, myths and legends about wildflowers. Experience "botany in a bowl," a creative activity to help kids understand the basics of botany.

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

CT-95106-14D

1 semester credit hour

Dates & Times:

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

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

Location: EcoAdventures, Morrison

Instructor: Pam Batton

Tuition Fee: \$145 (**\$165 after June 3<sup>rd</sup>**)

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.

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

CT-0519-14D

1 semester credit hour

Dates & Times:

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

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

Location: EcoAdventures, Morrison

Instructor: Pam Batton

Tuition Fee: \$140 (**\$160 after June 6<sup>th</sup>**)

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.

## **BEAVER ECOLOGY (K-12)**

CT-95102-14D

1 semester credit hour

Dates & Times:

June 25 (1:00-9:00pm)

June 26 (2:00-9:00pm)

Location: EcoAdventures, Morrison

Instructor: Pam Batton

Tuition Fee: \$140 (**\$160 after June 11<sup>th</sup>**)

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

## **MOOSE IN COLORADO (K-12)**

CT-0922-14M

1 semester credit hour

Dates & Times:

July 23 (1:00-9:00pm)

July 24 (7:00am-3:00pm)

Location: near Granby, Rand, Gould

Instructor: Pam Batton

Tuition Fee: \$140 (**\$160 after July 7<sup>th</sup>**)

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-96102-14M

1 semester credit hour

Dates & Times:

July 26 (9:00am-5:00pm)

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

Location: EcoAdventures, Morrison

Instructor: Pam Batton

Tuition Fee: \$140 (**\$160 after July 7<sup>th</sup>**)

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.

## **BEAR ME IN MIND: NATURAL HISTORY OF THE BLACK BEAR (K-12)**

CT-9737-14M

1 semester credit hour

Dates & Times:

August 2 (8:00am-5:00pm)

August 3 (2:00pm-8:00pm)

Location: EcoAdventures, Morrison

Instructor: Pam Batton

Tuition Fee: \$155 (**\$175 after July 21<sup>st</sup>**)

The natural history of the black bear will unfold through hands-on activities and a field trip to a wildlife sanctuary. Discover unique adaptations and behaviors of this large omnivore. Supplement any animal study/ecology curriculum with topics such as habitat, predator/prey relationships, and human/bear relationships.

**To register, mail the CSM enrollment form along with a check payable to EcoAdventures to:**

**Pam Batton**

**EcoAdventures**

**5894 South Meadow Drive**

**Morrison, CO 80465**

**303/697-0327, Fax 303/697-0329**

**[Pamsecoadventures.com](http://Pamsecoadventures.com)**

### **Registration/Cancellation/Refund Policy**

If payments have not been received by the registration deadline (2 ½ weeks before the class), EcoAdventures reserves the right to charge a late registration fee of \$10.00 or delete you from the class and allow a person from the waiting list to take your spot.

If you notify us of a cancellation before the registration deadline, we will refund your tuition less a \$25.00 cancellation fee. If you cancel after the registration deadline, we will refund your tuition less a cancellation fee of \$35.00. If you cancel 48 hours before a class begins, we will refund half of your tuition. If you cancel 24 hours before a class begins or on the day of class or are a no-show to class, no refund will be offered. These fees also apply to class transfers.

## Project WILD - Project Learning Tree - Project WET

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

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

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

### WILDFIRE IMPACTS ON POPULATIONS: AIR & WATER QUALITY (K-12)

CT-1408-14S

0.5 semester credit hour

#### Workshop I (Urban):

Date: January 25

Location National Jewish Hospital, Denver

#### Workshop II (Rural):

Date: March 1

Location: Lake County M.S.

Time: 8:30am-4:30pm

Instructor: Shawna Crocker

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

Registration Fee: \$25 (refunded after workshop)

Smoke, ozone, and particulates reach cities near and far from fire. Smoke from prescribed burns are less damaging than that of raging wildfires. Ash and erosion from burned hillsides effects water quality, and suppression costs add up. A \$50 stipend to those who provide student survey following implementation.

#### To register or for more information, contact:

Shawna Crocker

303/278-8822 or [www.coloradoplt.org](http://www.coloradoplt.org)

### PROJECT WET (K-12)

CT-9629-14S

0.5 semester credit hour

Date: February 22

Time: 9:00am-5:00pm

Location: Downtown Aquarium, Denver

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

Registration Fee: \$35

Project WET is a collection of innovative and water-related K-12 activities that are interdisciplinary, hands-on, and easy to use. These activities, taken from the Project WET Curriculum & Activity Guide, may focus on large and small group learning and laboratory investigations.

#### To register or for more information, contact:

Downtown Aquarium Sales & Service Center

303/561-4444

### ENVIRONMENTAL EXPERIENCES FOR EARLY CHILDHOOD (PREK-K)

CT-1208-14S

0.5 semester credit

Date: April 27

Time: 8:30am-4:30pm

Location: Denver Botanic Gardens

Registration Fee: \$50 DBG members, \$55 non-members

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

Learn how to integrate environmental education into your ECE classroom using PLT. Discover how to provide environmental experiences for young children through literature, music, art, and movement. Take ideas from the Mordecai Children's Garden to create natural play and exploration spaces in your school yard.

#### To register or for more information, contact:

Denver Botanic Gardens Registrations

720/865-3580 or <http://catalog.botanicgardens.org>

#### For updated information:

Project WILD, 303/291-7165

Project Learning Tree, 303/278-8822

[www.coloradoplt.org](http://www.coloradoplt.org)

[www.wildlife.state.co.us/Education](http://www.wildlife.state.co.us/Education)



## Summer 2014 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-9142-14D

2 semester credit hours

Dates & Times:

Lecture: June 26 (9:00am-5:00pm)

Canoe Trip: June 28-30

Locations: The lecture will be held at CSM, Golden. The trip will begin and end near Grand Junction, CO.

Instructor: Ed Adams

Tuition Fee: \$479

Canoe a 26-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/COLORADO RIVER, LEVELS I & II (K-12)**

CT-0262-14M

2 semester credit hours

Dates & Times:

Lecture: July 24 (1:00-8:30pm)

Canoe Trip: July 26-28

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: \$479

Get away from the city lights and view spectacular sights of the heavens along the Colorado River as you canoe through canyons of the Colorado Plateau. Learn about basic properties of stars and stellar evolution, constellations, properties of light, basic optics, deep sky objects, solar system dynamics, and new topics in astronomy. Course includes fun ways to teach astronomy in the classroom.

**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](mailto:info@centennialcanoe.com)**  
**Register online: [www.centennialcanoe.com](http://www.centennialcanoe.com)**

## Summer 2014 Course Preview

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

CT-0805-14D

5 semester credit hours

Dates: June 5-17

Location: Italy

Instructor: Joyce Webb

Tuition Fee: \$4,410 (includes airfare, lodging, transportation, entry fees, tuition)

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:

Joyce Webb, 719/229-5482

[joycewebb@ymail.com](mailto:joycewebb@ymail.com)

[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

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

CT-1304-14D

6 semester credit hours

Dates: June 13-27

Location: Alaska

Instructor: Melanie Phelps

Tuition Fee: \$5,050 (includes airfares, lodging, ground transportation, tuition)

Explore Alaska's towering mountains with sparkling deep blue glaciers, fjords, whales, grizzlies, sea lions, and rookeries. Cruise the Inland Passage on the Marine Alaska Highway Ferry. Tour Ketchikan Totem Pole Park, Glacier Bay, Kenai Fjords, Denali, and Lake Clark to see fishing grizzlies. Fee includes flights, ferries, tours, and lodging. Price may vary based upon air and ferry fares.

#### To register or for more information, contact:

Melanie Phelps, 719/252-1789

[melaniephe@aol.com](mailto:melaniephe@aol.com)

[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

### MUSEUMS OF PARIS (K-12)

CT-04132-14D

4 semester credit hours

Dates: June 17-25

Location: Paris, France

Instructor: Joyce Webb

Tuition Fee: \$3,670 (includes airfare, lodging, transportation, entrance fees, tuition)

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

#### To register or for more information, contact:

Joyce Webb, 719/229-5482

[joycewebb@ymail.com](mailto:joycewebb@ymail.com)

[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

### HIGH COUNTRY EQUESTRIAN ADVENTURE I (K-12)

CT-9667

3 semester credit hours

Dates:

**Session I:** June 22-27

**Session II:** July 20-25

Location: San Juan Mtns.

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

Registration Fee: \$900 (includes all meals, camping equipment, horse expenses; **\$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 Entihar Jones

970/883-2548 or [cjscolors@frontier.net](mailto:cjscolors@frontier.net)

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

CT-5700-14M

6 semester credit hours

Dates: June 23-July 18

Time: 8:00am-mid/late afternoon (except on full-day field trips)

Location: CSM campus, Golden

Instructors: more than ninety authorities from industry, government, academia & private groups

Tuition Fee: \$250 (\$300 for registrations after May 31)

Obtain a general overview of the metals, industrial minerals, aggregates, and solid-fuels energy industries, including geology, mining, ore-processing, environmental responsibility, career opportunities, etc., from industry experts via ten days of classroom lectures and nine days of field trips to surface/underground mines and processing plants. For more information [www.allaboutmining.org](http://www.allaboutmining.org).

#### To register or for more information, contact:

CMA Education Foundation, Inc.

303/575-9199, [colomine@coloradomining.org](mailto:colomine@coloradomining.org)

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

CT-0419-14M

4 semester credit hours

Dates: June 25-July 4

Location: Ireland

Instructor: Joyce Webb

Tuition Fee: \$2,870 (includes airfare, lodging, transportation, tours, tuition)

Experience the unpretentious simplicity of Ireland. Tour the southwestern Emerald Isle from castles to peat bogs, and explore the famous Aran Islands, the Burrens, and the Gaelic-speaking Dingle Peninsula. Kiss the Blarney Stone and climb the Rock of Cashel.

#### To register or for more information, contact:

Joyce Webb, 719/229-5482

[joycewebb@ymail.com](mailto:joycewebb@ymail.com)

[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

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

CT-0428-14M  
3.5 semester credit hours  
Dates: July 3-9  
Location: Grand Canyon  
Instructor: Melanie Phelps  
Tuition Fee: \$3,360 (includes food and tuition)

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

**To register or for more information, contact:**

Melanie Phelps, 719/252-1789  
[melaniephe@aol.com](mailto:melaniephe@aol.com)  
[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

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

CT-0905-14M  
4 semester credit hours  
Dates: July 4-12  
Location: Ireland  
Instructor: Joyce Webb  
Tuition Fee: \$2,870 (includes airfare, lodging, transportation, tours, tuition)

Tour Dublin, Belfast, and the east coast of Ireland. Discover the past as you gaze upon the Book of Kells, explore the tomb of Newgrange, and wander through the 6<sup>th</sup> century Monastery of Glendolough. Visit Trim Castle and explore the volcanic columns of the Giant's Causeway. The past and present become blended into another Irish adventure.

**To register or for more information, contact:**

Joyce Webb, 719/229-5482  
[joycewebb@ymail.com](mailto:joycewebb@ymail.com)  
[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

## AUSTRALIA: REEFS AND RAINFORESTS DOWN UNDER (K-12)

CT-0606-14M  
6 semester credit hours  
Dates: July 11-30  
Location: Australia  
Instructor: Melanie Phelps  
Tuition Fee: \$5,550 (includes airfare, lodging, ground transportation, tuition)

Tiptoe through the ancient rainforest in search of the elusive cassowary; snorkel or dive beneath the crystal waters of the Great Barrier Reef; sojourn to the Outback to

glimpse the Red Kangaroos; and camp on a secluded coral and mangrove island. Fly to Uluru to hike and explore the outback around Ayer's Rock and the Olga Mountains.

**To register or for more information, contact:**

Melanie Phelps, 719/252-1789  
[melaniephe@aol.com](mailto:melaniephe@aol.com)  
[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

## PARIS TO NORMANDY: WORLD WAR I AND II SITES (K-12)

CT-0964-14M  
4 semester credit hours  
Dates: July 13-23  
Locations: Belgium & France  
Instructor: Joyce Webb  
Tuition Fee: \$3,970 (includes airfare, lodging, transportation, entry fees, tuition)

Explore trenches and bunkers used during the German occupation of Belgium's North Coast. Tour the battlefields in Southern Belgium's Flanders Field; then travel to Normandy for an in-depth view of WWII's beaches, cemeteries and other war sites. Continue your journey to Paris for a visit to one of the world's best WWI and II museums. Learn how the German occupation affected Belgium, Paris, and the rest of France.

**To register or for more information, contact:**

Joyce Webb, 719/229-5482  
[joycewebb@ymail.com](mailto:joycewebb@ymail.com)  
[www.coloradorivertrip.com](http://www.coloradorivertrip.com)

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

CT-0786/CT-0845/CT-1039-14M  
2 semester credit hours (each week)  
Dates:  
July 14-18 (chapters 1-6)  
July 21-25 (chapters 7-11)  
July 21-25 (chapters 12-16)  
Time: 8:30am-4:00pm  
Location: CSM Campus, Golden  
Instructor: Bob Stair  
Tuition Fee: \$390 (per week)

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

**To obtain an application, contact:**

Bob Stair, SCI  
303/988-5041 or [rstair@sci-ips.com](mailto:rstair@sci-ips.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:** \_\_\_\_\_

**Fax; fax number:** ( ) \_\_\_\_\_

**oMail**

**\*required if taking course for credit**

Are you Hispanic/Latino? Yes/No

Select one or more:

\_\_\_\_\_ American Indian or Alaska Native

\_\_\_\_\_ Native Hawaiian or Other Pacific Islander

\_\_\_\_\_ Asian

\_\_\_\_\_ White

\_\_\_\_\_ Black or African American

### Indicate the course(s) for which you are registering

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

**Total:** \_\_\_\_\_

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

**Make checks payable to CSM Office of Continuing Education.**

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

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