

Teacher Enhancement Program for K-12 Educators

AT THE COLORADO SCHOOL OF MINES



SUMMER 2014

<http://te.csmspace.com>

COLORADO SCHOOL OF MINES

Teacher Enhancement Program

Summer 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

Summer 2014 Course Offerings

RMNA TEACHER INSTITUTE (K-12)

CT-1044-14D
2 semester credit hours
Dates: June 2-5
Time: 8:00am-4:30pm
Location: Rocky Mtn. Conservancy, Estes Park
Instructors: Jennifer Taylor, Rachel Balduzzi
Tuition Fee: \$50 (**payable during workshop**)

The RMNA Institute is designed to provide you with a hands-on learning experience while helping you explore the resources available through the RMNA and Rocky Mountain National Park. Develop ways to integrate environmental awareness and stewardship into your curricula. The first credit is paid through a grant from the Next Generation Fund.

To register or for more information, contact:

Rachel Balduzzi, Rocky Mtn Nature Assoc.
970/586-3262, Rachel.balduzzi@rmna.org

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

CT-1216-14M
2 semester credit hours
Dates: June 2-August 10
Instructor: Katie Navin
Tuition Fee: \$90 (**payable during workshop**)
Registration Fee: \$125 CAEE members, \$160 non-members

Explore the history and goals of environmental education; develop an understanding of the professional roles and instructional methods of environmental educators; and interact with other educators via distance learning. Become eligible to submit your work for certification in CAEE's certification program for a discount.

To register or for more information, contact:

Malinda Mochizuki, CAEE
303/273-9527, outreach@caee.org

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, ground transportation, entry fees)

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
www.coloradorivertrip.com

SCIENCE NOTEBOOKING NATURALLY (K-12)

CT-1331-14D
0.5 semester credit hour
Date: June 7
Time: 9:00am-5:00pm
Location: Phillip Miller Library, Castle Rock
Instructor: Laura Arndt
Tuition: \$90

Create your science notebook model while investigating a variety of inquiry science topics outdoors and in. Explore how to capture your student's thinking through free writing, guided scientific process writing and data analysis, and drawing. These entries are logical first steps to formal writing and research that support the Common Core.

To register or for more information, contact:

Laura Arndt, Nature Connections
303/660-6925 or laura.arndt1@gmail.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, 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. 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
www.coloradorivertrip.com

ILLINOIS BASIN FIELD CAMP (K-12)

CT-1435-14D
1.5 semester credit hours
Dates: June 15-19
Location: Peru, IL
Instructor: Davida Buehler
Tuition Fee: \$80 (**payable during camp**)
Registration Fee: \$625-\$725

Join the Geological Society of America as we explore the spectacular geology in LaSalle County, Illinois. Visit the LaSalle Anticline, examine a Silurian reef rich with fossils, and visit "ground zero" for frac sand within the St. Peter Sandstone. Collect rocks, minerals, and fossils for your classroom. More information available at www.geoventures.org.

To register or for more information, contact:

Davida Buehler, GSA
303/357-1015 or dbuehler@geosociety.org

DANCING WITH THE STARS... (GR. 1-7)

CT-0934-14D

1 semester credit hour

Dates: June 16-17

Time: 8:00am-4:00pm

Location: Steele Planetarium, Denver

Instructor: Ralph Sodano

Tuition Fee: \$135

...and rumba with the planets. Cover content standards and content areas of the stars, sun, Earth, moons, and planets. Obtain lots of insightful and hands-on activities that can be brought back into your classroom. Course will be supported by programs under the Steele Planetarium Dome.

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

BLACK CANYON OF THE GUNNISON: SECRET GEM OF THE WEST (K-12)

CT-0557-14D

1 semester credit hour

Dates & Times:

June 17 (8:00am-5:00pm)

June 18 (7:30am-3:30pm)

Locations: Montrose to Delta

Instructor: Tonya MacKendrick

Tuition Fee: \$50 (**payable during workshop**)

Registration Fee: \$80 (meals, lodging, and transportation on your own)

Trace the importance of the Gunnison River as it carved the spectacular views and canyons of the Black Canyon of the Gunnison. Explore the living history of Fort Uncompahgre, followed by a breathtaking guided boat ride at Curcanti National Park on Morrow Point Lake. Class includes a 1 1/2 mile round trip hike and over 200 steps.

To register or for more information, contact:

Tonya MacKendrick, 970/216-2326

TJS4294@aol.com

www.wcoloradohistoricadventures.weebly.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, ground transportation, entrance fees)

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

www.coloradorivertrip.com

WASTEWATER AND RENEWABLE RESOURCES (K-12)

CT-1215-14D

0.5 semester credit hour

Date: June 18

Time: 8:00am-5:00pm

Location: Metro Wastewater Reclamation District, Denver

Instructor: Alicia Gilley

Tuition Fee: no charge (you must pre-register)

Learn the science behind wastewater treatment. Highlight the biosolids management process, including land application of solid materials, and the production of electricity. Tour the 52,000 acre METROGRO Farm, the Robert W. Hite Treatment Facility, and a working laboratory.

To register or for more information, contact:

Kelley Merritt, Metro Wastewater Reclamation

303/286-3455 or kmerritt@mwr.dst.co.us

ROCKY MOUNTAIN FIELD CAMP (K-12)

CT-1312-14D

2.5 semester credit hours

Dates: June 21-26

Location: starts in Boulder

Instructor: Davida Buehler

Tuition Fee: \$120 (**payable during camp**)

Registration Fee: \$675-\$775

Join the Geological Society of America as you explore the incredible geology in Colorado. Learn to interpret geologic outcrops so you can learn to interpret the geologic history of the Rocky Mountains. Collect rocks, minerals, and fossils for your classroom. More information available at www.geoventures.org.

To register or for more information, contact:

Davida Buehler, GSA

303/357-1015 or dbuehler@geosociety.org

HIGH COUNTRY EQUESTRIAN ADVENTURE (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, 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 Entihar Jones

970/883-2548 or cjscolors@frontier.net

GEOLOGY OF THE SOLAR SYSTEM (GR. 5-12)

CT-1437-14D

1.5 semester credit hours

Dates: June 23-25

Time: 8:00am-5:00pm

Location: Dinosaur Ridge, Morrison

Instructor: Mike Zawaski

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

Registration Fee: \$140

Earth isn't the only planet with a long and eventful geologic history. With an understanding of a few geologic processes on Earth, you can decipher the geologic histories of planets and moons in our solar system. Imagine yourself as geologists exploring a recently discovered planet.

Inquiry-based lessons will engage all abilities. For more information, visit <http://observantnaturalist.org/science-education.html>.

To register or for more information, contact:

Mike Zawaski, 970/302-8043

mike@observantnaturalist.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, ground transportation, and tours)

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

To register or for more information, contact:

Joyce Webb, 719/229-5482

joycewebb@ymail.com

www.coloradorivertrip.com

ASTRONOMY FOR EDUCATORS (K-12)

CT-1231-14D

1 semester credit hour

Dates: June 28-29

Times:

8:00am-5:00pm, and 8:30-10:30pm – day 1

8:00am-5:00pm – day 2

Locations: Dinosaur Ridge & Colorado Mountain Club

Instructor: Mike Zawaski, 970/302-8043

Tuition Fee: \$50 (**payable during workshop**)

Registration Fee: \$115

Immerse yourself in the study of astronomy and the practice of sky watching with inquiry-based lessons (including Kinesthetic Astronomy) and evening sky watching. Content will include sky motions of the sun, planets, stars, seasons, and phases of the moon. Teaching materials will be provided.

To register or for more information, contact:

Colorado Mountain Center

www.cmc.org/astroeducators

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

CT-1213-14M

2 semester credit hours

Dates: July 1-August 1

Instructor: Dennis Ward

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

Registration Fee: \$35

Obtain detailed information about Project BudBurst (a plant-based citizen science program). Learn how to select your plants and make observations, get suggestions for structuring your classroom involvement, receive activities to engage your students in making observations and analyzing data, as well as forming a community with other educators.

To register or for more information, contact:

Lauren Lunsford, NEON

720/746-4844 or llunsford@neoninc.org

Citizenscienceacademy.org

USING PROJECT BUDBURST DATA ONLINE (K-12)

CT-1274-14M

2 semester credit hours

Dates: July 1-August 1

Instructor: Dennis Ward

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

Registration Fee: \$35

Integrate Project BudBurst data in your classroom. Discover an exciting new set of online data visualization tools developed by the National Geographic FieldScope program. Cover plant adaptations to a changing climate, and links between Project BudBurst data and other broad scale data sets.

To register or for more information, contact:

Lauren Lunsford, NEON

720/746-4844 or llunsford@neoninc.org

Citizenscienceacademy.org

INTRODUCTION TO CITIZEN SCIENCE ONLINE (K-12)

CT-1430-14M

2 semester credit hours

Dates: July 1-August 1

Instructor: Dennis Ward

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

Registration Fee: \$35

Receive an overview of citizen science, highlighting several existing programs that are targeted towards educators. Explore each of these programs, including how to participate, suggestions for structuring your involvement, education activities to engage your students, as well as forming a community with other educators.

To register or for more information, contact:

Lauren Lunsford, NEON

720/746-4844 or llunsford@neoninc.org

Citizenscienceacademy.org

WYOUTDOORS: ECOLOGY, GEOLOGY, AND INQUIRY (K-12)

CT-1053-14M

2-3 semester credit hours

Dates:

July 2-13

July 5-13 (western-segment only)

Locations: trip begins in Des Moines, IA or Greybull, WY

Instructor: Kathy Megivern

Tuition Fee: \$90-\$130 (**payable during workshop**)

Registration Fee: \$1,495-\$1,370

Experience the spirit of scientific inquiry and the value of outdoor education in this Wyoming-bound ecological “lithivacation” that carpools from the Midwest (with a western-segment only option). Extensive hiking in varied terrain and temperatures will be an integral component of the course. Canoeing/kayaking, and rafting will also be included.

To register or for more information, contact:

Kathy Megivern

515/681-3271 or kathy.megivern@gmail.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

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

To register or for more information, contact:

Melanie Phelps, 719/252-1789

melaniephe@aol.com

www.coloradorivertrip.com

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

CT-0905-14M

4 semester credit hours

Dates: July 4-12

Location: Eastern & Northern Ireland

Instructor: Joyce Webb

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

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

To register or for more information, contact:

Joyce Webb, 719/229-5482

joycewebb@ymail.com

www.coloradorivertrip.com

CAVES, CASTLES, AND COLORFUL CHARACTERS: HISTORY OF GLENWOOD SPRINGS TO MARBLE (K-12)

CT-1042-14M

1 semester credit hour

Dates & Times:

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

July 10 (8:00am-4:00pm)

Locations: Glenwood Springs, Redstone, Marble

Instructor: Tonya MacKendrick

Tuition Fee: \$50 (**payable during workshop**)

Registration Fee: \$155 (meals, lodging, and transportation on your own)

Pass into the underworld for a thrilling tour of the Glenwood caverns. Enjoy learning about colorful characters such as Doc Holiday. Take a guided jeep tour to the historic Crystal Mill and Crystal City, learning about the rich mining history of the Marble area.

To register or for more information, contact:

Tonya MacKendrick, 970/216-2326

TJS4294@aol.com

www.wcoloradohistoricadventures.weebly.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

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: \$3,800 (includes airfare, lodging, ground transportation, entry fees)

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.

To register or for more information, contact:

Joyce Webb, 719/229-5482

joycewebb@ymail.com

www.coloradorivertrip.com

DINOSAUR RIDGE TEACHERS' WORKSHOP (K-12)

CT-9206-14M
1 semester credit hour
Dates: July 14-15
Time: 8:30am-5:00pm
Location: Dinosaur Ridge Visitors Center, Morrison
Instructors: Pete Modreski, Norb Cygan
Tuition Fee: \$120

Experience an in-depth teacher orientation to the dinosaur bones and tracks found on Dinosaur Ridge near Morrison, and learn how to use them as a resource for teaching. Visit the Trek Through Time Learning Center, the Morrison Natural History Museum, and the Triceratops Trail interpretive site near Fossil Trace in Golden.

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

MAMMOTH CAVE FIELD CAMP (K-12)

CT-1436-14M
2 semester credit hours
Dates: July 14-19
Location: Mammoth Cave Nat'l Park, KY
Instructor: Davida Buehler
Tuition Fee: \$90 (**payable during camp**)
Registration Fee: \$600-\$700

Explore hidden passageways in Mammoth Cave and caves closed to the public. This camp is perfect for Earth and environmental science educators interested in karst, hydrology, and human impact on the environment. Participate in a USGS groundwater research project, and conduct a water dye test. More information available at www.geoventures.org.

To register or for more information, contact:

Davida Buehler, GSA
303/357-1015 or dbuehler@geosociety.org

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

CT-0786/CT-0845/CT-1039-14M
2 semester credit hours (each week)
Dates:
July 14-19 (chapters 1-6)
July 21-26 (chapters 7-11)
July 21-26 (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 9th edition of the IPS text to enhance your knowledge and classroom performance in physical science. Experience the use of student experiments while developing an understanding of basic concepts and laboratory skills.

To obtain an application, contact:

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

WASTEWATER AND AQUATIC BIOLOGY (K-12)

CT-1082-14M
0.5 semester credit hour
Date: July 17
Time: 8:00am-5:00pm
Location: Metro Wastewater Reclamation District,
Denver
Instructor: Julie Stahli
Tuition Fee: no charge (you must pre-register)

Obtain an introduction to the science behind wastewater treatment. Learn about industry efforts to preserve, protect, and improve aquatic environments while protecting public health. Tour a wastewater treatment plant, a water quality laboratory, and visit a river site with a Metro District water quality scientist.

To register or for more information, contact:

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

YOUR HOME IS YOUR HABITAT (PREK-12)

CT-0296-14M
0.5 semester credit hour
Date: July 17
Time: 9:00am-5:00pm
Location: Downtown Aquarium, Denver
Course Coordinator: Colleen Shipley, 303/561-4565
Tuition Fee: \$35 (**payable during workshop**)
Registration Fee: \$75

Take an in-depth look at aquatic and terrestrial habitats while participating in cross-curricular activities that you can take back to your classroom. Take home a curriculum guide that includes background information in each habitat as well as standards-connected activities to use both in your classroom and during future visits.

To register or for more information, contact:

Downtown Aquarium Sales & Service Center
303/561-4444

ROCKS AND MINERALS (K-12)

CT-9666-14M
1 semester credit hour
Dates: July 21-22
Time: 8:00am-5:00pm
Location: CSM campus, Golden
Instructors: Pete Modreski, Jane Dianich
Tuition Fee: \$95

Learn or review the basics of rocks and minerals in dynamic and interactive ways in order to engage your students to learn about them. Examine specimens, do activities, and tour the CSM Geology Museum. See complementary "Walking Tour of Building Stones" field course below.

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

RAFT COLORADO SYMPOSIUM (GR. ECE-8)

CT-1438-14M
1-2 semester credit hours
Dates: July 22-26
Time: 9:00am-4:00pm
Location: RAFT, Denver
Course Coordinator: Amy Turino
Tuition Fee: \$60-\$100 (**payable during workshop**)
Registration Fee: \$50 for RAFT members; \$400 non-members

Join like-minded educators for this summer symposium experience that will explore applications for learning in a collection of sessions that connect curriculum to engaging hands-on activities.

To register or for more information, contact:

Amy Turino, RAFT
720/242-8833, amy@raftcolorado.org

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

CT-04131-14M
0.5 semester credit hour
Date: July 23
Time: 8:30am-5:00pm
Location: Downtown Denver
Instructors: Pete Modreski, Jane Dianich
Tuition Fee: \$75

Learn about rocks and geology as you tour historic Denver buildings in the vicinity of the State Capitol, Denver City and County Building, and the 16th Street Mall. Receive a copy of a field guide written specifically for school groups. See the complementary "Rocks and Minerals" class above.

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

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

CT-1434-14M
1 semester credit hour
Dates & Times:
July 23 (7:00am-5:00pm)
July 24 (8:00am-3:00pm)
Locations: Ouray and Telluride
Instructor: Tonya MacKendrick
Tuition Fee: \$50 (**payable during workshop**)
Registration Fee: \$190 (meals, lodging, and transportation on your own)

Experience the mighty San Juans from a new perspective. Take a guided jeep tour through the heart of the San Juans over Ophir Pass and Imogene Pass. Then learn about the hardships and triumphs experienced by early miners as you explore the past of Telluride through guided walking tours.

To register or for more information, contact:

Tonya MacKendrick, 970/216-2326
TJS4294@aol.com
www.wcoloradohistoricadventures.weebly.com

ROCK AND FOSSIL HANDS-ON ACTIVITIES (GR. 3-4)

CT-1432-14M
1 semester credit hour
Dates: August 4-5
Time: 8:00am-5:00pm
Location: Dinosaur Ridge, Morrison
Instructor: Marsha Barber
Tuition Fee: \$160 (**returned upon successful course completion**)

Learn basic geology and paleontology through hands-on activities and discussions. Discover how sedimentary rocks and fossils form, and then apply this learning to real rocks and fossils at Dinosaur Ridge. Time will be allotted to connect your new learning to district curricula.

To register or for more information, contact:

Marsha Barber
303/517-1724 or marshabarber1@gmail.com

BLACK HILLS: MAMMOTHS, MONUMENTS, AND WARS (K-12)

CT-1428-14M
2 semester credit hours
Dates: August 6-10
Location: meet in Scotts Bluff, NE
Instructor: Melanie Phelps
Tuition Fee: \$365 (includes entrance fees and tuition)

Retrace the Oregon Trail near Scotts Bluff, Nebraska. Explore giant land mammals at Agate Fossil Beds, and solve the ancient mystery of an ancient bog where only male mammoths died. Discover the wonders of South Dakota: Custer State Park, Badlands, Mt. Rushmore, Crazy Horse, and The Little Bighorn, then wind your way through caves, and discover the secrets of Black Hills gold. In Wyoming, tour a bison cliff kill site, and the giant columns of Devil's Tower.

To register or for more information, contact:

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

Additional Programs of Interest

Rocky Mountain Field Seminars

Most field seminars are field-based, hands-on learning experiences in Rocky Mountain National Park. A wide range of topics are available. Visit our website for a list of courses available for credit, www.rmna.org. Many of our seminars fill up, so please register early. RMNA membership discounts are available. For additional information, contact us at 970/586-3262.

EcoAdventure Course Offerings

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

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

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

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

Tuition Fee: \$145 (**\$165 after June 3rd**)

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

Tuition Fee: \$140 (**\$160 after June 6th**)

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.

EARLY EXPLORERS OF THE ROCKY MOUNTAINS (K-12)

CT-0518-14D

1 semester credit hour

Dates & Times:

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

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

Location: EcoAdventures, Morrison

Instructor: Trey Corkern

Tuition Fee: \$140 (**\$160 after June 12th**)

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.

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

Tuition Fee: \$140 (**\$160 after June 11th**)

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

Tuition Fee: \$140 (**\$160 after July 7th**)

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

Tuition Fee: \$140 (**\$160 after July 7th**)

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

Tuition Fee: \$155 (**\$175 after July 21st**)

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.

ELK BUGLING (K-12)

CT-95105-14F
1 semester credit hour
Dates: September 20-21
Time: 12:00pm-7:30pm
Location: EcoAdventures, Morrison
Instructor: Pam Batton
Tuition Fee: \$140 (**\$160 after Sept. 4th**)

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

BEYOND THE SPIRIT OF 1776: LIFE IN COLONIAL AMERICA (K-12)

CT-11101-14F
1 semester credit hour
Dates & Times:
October 4 (9:00am-5:00pm)
October 5 (9:00am-4:00pm)
Location: CSM campus, Golden
Instructor: Trey Corkern
Tuition Fee: \$140 (**\$160 after September 18th**)

Discover how we built a nation, from before the arrival of the Pilgrims at Plymouth to the fledgling colony's victory over the British Empire. Try your hand at pickling, weaving, blacksmithing, and more.

WILD CANINES OF COLORADO (K-12)

CT-9617-14F
1 semester credit hour
Dates & Times:
October 18 (8:00am-5:00pm)
October 19 (7:30am-2:00pm)
Location: EcoAdventures, Morrison
Tuition Fee: \$155 (**\$175 after October 2nd**)

Discover the mischievous coyote, the cat-like canine, red fox, the extirpated wolf, and others. Learn each animal's natural history through hands-on activities and field observation during hikes. Supplement any animal study/ecology curriculum with class topics such as habitat, predator/prey relationships, and populations.

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

CT-0757-14F
1 semester credit hour
Dates & Times:
November 8 (9:00am-5:00pm)
November 9 (9:00am-4:00pm)
Location: CSM campus, Golden
Tuition Fee: \$140 (**\$160 after October 23rd**)

Discover why head butting is common among bighorn sheep and rare (but serious) among mountain goats. Learn about unique adaptations for survival in a rugged habitat.

Hike into bighorn country as the mating season begins to observe their behavior. Learn why the mountain goat truly is a beast the color of winter.

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

CT-0122-14F
1 semester credit hour
Dates & Times:
November 15 (9:00am-5:00pm)
November 16 (9:00am-4:00pm)
Location: CSM campus, Golden
Instructor: Trey Corkern
Tuition Fee: \$140 (**\$160 after October 30th**)

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

WILD ABOUT WILDLIFE CRAFTS & LITERATURE (K-6)

CT-9860-14F
1 semester credit hour
Dates & Times:
December 6 (9:00am-5:00pm)
December 7 (9:00am-4:00pm)
Location: CSM campus, Golden
Tuition Fee: \$145 (**\$165 after Nov. 20th**)

Discover some of Colorado's wildlife through crafts, activities, children's literature, and short field trips. Create a craft for each of these species and learn their natural history: cottontail rabbit, Canada goose, red-tailed hawk, porcupine, deer mouse, grasshopper, and spider. Bring a favorite wildlife craft to share.

To register, mail the CSM enrollment form along with a check payable to EcoAdventures to:
Pam Batton
EcoAdventures
5894 South Meadow Drive
Morrison, CO 80465
303/697-0327, Fax 303/697-0329
Pamsecoadventures.com

Registration/Cancellation/Refund Policy

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

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

Denver Museum of Nature and Science Course Offerings

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

ELEMENTARY INQUIRY ACADEMY HYBRID COURSE (GR. 3-5)

CT-1150-14F

3 semester credit hours

Dates: June 16-October 12

June 16-19 (8:00am-3:30pm); at Museum

October 11 (8:00am-3:00pm); at Museum

August 31-Oct. 12 (online portion)

Instructor: Robert Payo

Tuition Fee: \$115

Pre-requisite: For practicing 3-5 grade teachers only.

Become inspired by what inquiry teaching can do for you and your students. Delve into inquiry learning and 21st century skills for your classroom. This hands-on learning experience provides fun and inventive ways of using inquiry while capitalizing on the life and physical science resources and experts available at the Museum. After experiencing inquiry learning first-hand during the onsite sessions, the six-week online portion extends your experience and helps you incorporate these new skills into your daily teaching practice with the support of your Museum facilitator and your fellow colleagues. Focus on how to support inquiry across the curriculum through Colorado Standards and Next Generation Science Standards. Receive a \$150 stipend upon successful completion of the workshop.

M.S. INQUIRY ACADEMY HYBRID COURSE (GR. 6-8)

CT-1214-14F

3 semester credit hours

Dates: June 30-October 19

June 30-July 3 (8:00am-3:30pm); at Museum

October 18 (8:00am-3:00pm); at Museum

September 7-October 19 (online portion)

Instructor: Robert Payo

Tuition Fee: \$115

Pre-requisite: For practicing 6-8 grade teachers only.

Become inspired by what inquiry teaching can do for you and your students. Delve into inquiry learning and 21st century skills for your classroom. This hands-on learning experience provides fun and inventive ways of using inquiry while capitalizing on the life and physical science resources and experts available at the Museum. After experiencing inquiry learning first-hand during the onsite sessions, the six-week online portion extends your experience and helps you incorporate these new skills into your daily teaching practice with the support of your Museum facilitator and your fellow colleagues. Focus on how to support inquiry across the curriculum through Colorado Standards and Next Generation Science Standards. Receive a \$150 stipend upon successful completion of the workshop.

**To register or for more information:
Denver Museum of Nature & Science
www.dmns.org/teachers/professional-development/ or
teacherprograms@dmns.org**

Denver Botanic Gardens Course Offerings

Note: Register for DBG courses through the Gardens. See box below.

TEACHING PLANTS FROM ROOT TO SEED

(GR. 2-12)

CT-0646-14D
0.5 semester credit hour
Date: June 30
Time: 8:30am-4:30pm
Location: Denver Botanic Gardens
Instructor: Kirsten Bell
Tuition Fee: \$35 (**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.

THE GROWING CLASSROOM (K-12)

CT-1221-14M
0.5 semester credit hour
Date: July 8
Time: 8:30am-4:30pm
Location: Denver Botanic Gardens
Instructor: Kacie Warner
Tuition Fee: \$35 (**payable during workshop**)
Registration Fee: \$50 DBG member, \$55 non-member

Classrooms are often hot, cold, or have little to no natural light – all conditions not suitable for growing plants. With a little know-how, your classroom can be green and lush year round. Learn techniques and tips for successfully growing plants in your classroom, and take home a variety of plants you planted yourself.

BUILDING A SCHOOLYARD GARDEN (K-6)

CT-0812-14M
0.5 semester credit hour
Date: July 15
Time: 8:30am-4:30pm
Location: Denver Botanic Gardens
Instructor: Kacie Warner
Tuition Fee: \$35 (**payable during workshop**)
Registration Fee: \$50 DBG member; \$55 non-member

Learn how to create a simple vegetable garden in your schoolyard (in the ground or in containers) and ways to incorporate the garden into your classroom curriculum. Learn tips on gardening, and discover plants that you can plant in spring or fall and harvest before it gets cold or school ends. Learn how your garden can be incorporated into your reading, writing, math, science, and social studies curriculum.

READING, WRITING & ARITHMETIC IN THE GARDEN (PREK-6)

CT-1220-14M
0.5 semester credit hour
Date: July 21
Time: 8:30am-4:30pm
Location: Denver Botanic Gardens
Instructor: Melissa Gula
Tuition Fee: \$35 (**payable during workshop**)
Registration Fee: \$50 DBG member; \$55 non-member

Learn how to use your garden or classroom plants to teach a variety of subjects. Get easy-to-implement ideas on how to teach your content area requirements using plants and gardens. Explore a variety of activities that provide hands-on learning opportunities for your students in math, reading, writing, and social studies.

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

Butterfly Pavilion Course Offerings

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

WHO SWALLOWED A FLY? (K-5)

CT-0532-14D
0.5 semester credit hour
Date: June 17
Time: 8:00am-5:00pm
Instructors: Marissa Copan, Deborah Brooks
Tuition Fee: \$35 (**payable during workshop**)
Registration Fee: \$45

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.

SECRETS OF THE RAINFOREST: FROM MORPHOS TO MALACHITES (K-5)

CT-1108-14D
0.5 semester credit hour
Date: June 24
Time: 8:00am-5:00pm
Instructor: Debbie Brooks
Tuition Fee: \$35 (**payable during workshop**)
Registration Fee: \$45

Watch your curriculum come alive as you travel through the tropical rainforest. Discover the role butterflies play in diverse and disappearing rainforest ecosystems. Learn how to teach sustainability and conservation in a compelling and understandable way. Our hands-on, interdisciplinary activities will compliment and add to any classroom life science unit.

INSECTS IN ART AND CULTURE (K-12)

CT-0321-14M
1 semester credit hour
Dates: June 30-July 1
Time: 8:00am-5:00pm
Instructors: Sarah Folzenlogen, Deborah Brooks
Tuition Fee: \$50 (**payable during workshop**)
Registration Fee: \$100

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.

ART AND SCIENCE SERIES (GR. 5-12)

CT-0921-14M
0.5 semester credit hour
Location: Butterfly Pavilion, Westminster
Course Coordinator: Marissa Copan, 720/974-1877
Tuition Fee: \$35 (**payable during each workshop**)

PRINTMAKING/SCIENTIFIC ILLUSTRATION

Date: July 8
Time: 8:00am-5:00pm
Registration Fee: \$55

What is an aquatic invertebrate? Discover the numerous species that live in our world's oceans and other bodies of

water. Make prints from latex models of several aquatic invertebrates. Then explore historic scientific illustrators who revolutionized the scientific discovery and classification of plant and insect species with observational methods still in practice today. Learn to identify, observe, and draw simple versions of a variety of plants.

PAPERMAKING & PAPER WASPS/ DREAMCATCHERS AND SPIDERS

Date: July 15
Time: 8:00am-5:00pm
Registration Fee: \$55

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. Then 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.

FRIEND OR FOE: EXPLORE PLANT-ANIMAL INTERACTIONS (K-8)

CT-0820-14M
0.5 semester credit hour
Date: July 29
Time: 8:00am-5:00pm
Instructor: Marissa Copan
Tuition Fee: \$35 (**payable during workshop**)
Registration Fee: \$45

Why are so many flowers colorful and fragrant? Plant traits often reflect a history of interactions with animals. Survey a variety of plant-animal relationships including pollination, seed dispersal, plant defense mechanisms, and carnivorous plants. Observe plant-animal interactions in the garden, and then learn how to create a schoolyard habitat for beneficial insects.

EXPLORING CITIZEN SCIENCE: ENGAGING STUDENTS IN REAL RESEARCH (GR. 5-12)

CT-1433-14M
0.5 semester credit hour
Date: August 5
Time: 8:00am-5:00pm
Instructor: Marissa Copan
Tuition Fee: \$35 (**payable during workshop**)
Registration Fee: \$45

Citizen science is an instrumental teaching tool which can help your students become competent researchers who identify personally with science. Delve into research initiatives like Monarch Watch, Lost Ladybug Project, Odonata Central, and the Great Sunflower Project. Explore how to run a program in your classroom, with whom to connect, and how it can transform your students into engaged scientists.

**To register or for more information, contact:
Butterfly Pavilion Adult Education
720/974-1877
mccopan@butterflies.org**

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.

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

CT-0668-14D
1.5 semester credit hours
Dates: June 23-25
Time: 9:00am-5:00pm
Location: The Morrison Nature Center, Aurora
Tuition Fee: \$80 (**payable during workshop**)
Registration Fee: \$50 (checks returned upon successful course completion)

Learn where your drinking water comes from. Explore our mountain watersheds, conduct water quality studies, tour a xeriscape garden, and visit a drinking water treatment plant. Receive Project Learning Tree and WET curriculum guides and access to Aurora Water's innovative educational opportunities.

To register or for more information, contact:
Natalie Brower-Kirton, 720/427-6029
nbrower@auroragov.org

PROJECT LEARNING TREE – IN THE TREES (K-12)

CT-1329
0.5 semester credit hour
Workshop I:
Date: June 28
Time: 8:30am-4:30pm
Location: Carson Nature Center, Littleton
Workshop II:
Date: July 1
Time: 8:30am-4:30pm
Location: Prospect Park, Wheat Ridge
Registration Fee: \$60
Tuition Fee: \$35 (**payable during workshop**)

Learn techniques that build critical thinking skills, incorporate technology, and use differentiated instruction. Focus on those that teach about trees (biology, ecology, and even physics) as you try out a new person adventure sport – tree climbing, with ropes and harnesses.

To register or for more information, contact:
Shawna Crocker
303/278-8822 or www.coloradoplt.org

AQUATIC PROJECT WILD (K-12)

CT-9684-14M
0.5 semester credit hour
Date: July 16
Time: 9:00am-5:00pm
Location: Downtown Aquarium, Denver
Tuition Fee: \$35 (**payable during each workshop**)
Registration Fee: \$25

Receive activities that emphasize an interdisciplinary approach to teaching about aquatic life. Using hands-on activities that create awareness, appreciation, understanding, skills, and commitment you and your students will learn to address environmental and aquatic topics within the framework of your existing curriculum.

To register or for more information, contact:
Downtown Aquarium Sales & Service Center
303/561-4444

GROWING UP WILD! - EARLY CHILDHOOD PROJECT WILD (ECE-PREK)

CT-0974-14M
0.5 semester credit hour
Date: July 22
Time: 8:00am-5:00pm
Location: Butterfly Pavilion, Westminster
Tuition Fee: \$35 (**payable during workshop**)
Registration Fee: \$45

Explore the early childhood curriculum from Project WILD that builds on children's sense of wonder about nature and invites them to explore wildlife and the world around them.

To register or for more information, contact:
Marissa Copan, Butterfly Pavilion
720/974-1877, mcopan@butterflies.org

ENVIRONMENTAL EXPERIENCES FOR EARLY CHILDHOOD (PREK-K)

CT-1208-14M
0.5 semester credit
Date: July 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
720/865-3580 or <http://catalog.botanicgardens.org>

PROJECT LEARNING TREE – IN THE TREES (K-12)

CT-1441-14M
1 semester credit hour
Date: August 2-3
Time: 8:30am-4:30pm
Location: CalWood Ed. Center, Jamestown
Tuition Fee: \$50 (**payable during workshop**)
Registration Fee: \$150 (\$125 if camping)

Learn techniques that build critical thinking skills, incorporate technology, and use differentiated instruction. Focus on those that teach about trees (biology, ecology, and even physics) as you try out a new person adventure sport – tree climbing, with ropes and harnesses. Then safely ascend into the canopies of teaching trees and experience dances with branches while absorbing the natural history, biology, and folklore surrounding the species being climbed.

To register or for more information, contact:
Shawna Crocker
303/278-8822 or www.coloradoplt.org

BASIC PROJECT LEARNING TREE: FREE TREES FOR TEACHERS (PREK-12)

CT-0822-14M
0.5 semester credit hour
Date: August 8
Time: 8:30am-4:30pm
Location: Colorado State Forest Service Nursery, Ft. Collins
Tuition Fee: \$35 (**payable during workshop**)
Registration Fee: \$25 (check refunded at workshop)

Trees are easy to locate and fun to study. Learn how to teach trees at all grade levels and subjects, tree planting techniques, and how to obtain free trees and grants for student projects.

For more information or to register, contact:
Shawna Crocker
303/278-8822, www.coloradoplt.org

For updated information:
Project WILD, 303/291-7165
Project Learning Tree, 303/278-8822
www.coloradoplt.org
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
Register online: www.centennialcanoe.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: () _____

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

Are you Hispanic/Latino? Yes/No

Select one or more:

_____ American Indian or Alaska Native

_____ Native Hawaiian or Other Pacific Islander

_____ Asian

_____ White

_____ Black or African American

Indicate the course(s) for which you are registering

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

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

Make checks payable to CSM Office of Continuing Education.

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

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