



# 2012

JUNE 11 - JULY 6, 2012

## PURPOSE

The Colorado Mining Association (CMA) and the Colorado School of Mines (CSM) recognized in 1968 that many educators did not have an understanding of the importance of the metals, industrial minerals, aggregates, and energy industries to the nation and the world. In response, the two organizations developed *All About Mining - A Total Concept of the Mining Industry*, an intensive, summer, informative curriculum that provides teachers with a comprehensive overview of all phases of the mining industries. Since then, more than 1500 teachers have completed this flagship course in CSM's Teacher Enhancement Program, which offers a wide range of nationally-recognized, education curriculum packages that comprise a part of the professional development opportunities for educators offered at the school.

## FACULTY

Approximately 85 authorities from industry, academia, private groups, and government lecture on their respective fields of expertise which include geology, geophysics, exploration, mining methods, metallurgical operations, metal applications, research, marketing, careers, economics, recycling, and environmental responsibility.

## COURSE SCHEDULE

Classes begin at 8:00 am, Monday through Friday except for nine, field trip days. Snacks are shared among teachers during lectures, and teachers are encouraged to bring their own lunches. There are no breaks for lunches except on full days. All classes are held on the CSM campus, unless otherwise directed. Classes and field trips are rigorous and demanding. All scheduled adjournment and break times are approximate and subject to change.

Field trips are an integral part of the class and include visits to study geology, surface and underground mining, milling, heap leaching, steelmaking, and fabrication. Some field trips require walking and climbing at high elevations. Some visits include dusty, noisy, or damp environments. Transportation, accommodations, and meals are provided for the participants on the three-day trip. Trips may begin as early as 6:15 am and may end as late as 7:15 pm.

## FIELD TRIP SCHEDULE (tentative - subject to change)

- **June 11 - United States Geological Survey Earthquake Center** - Golden - 1:40 pm to 2:40 pm
- **June 12 - Colorado Front Range Geology** - Golden and vicinity - 7:15 am to 4:45 pm
- **June 15 - Western Museum of Mining & Industry** - Colorado Springs and **Aggregate Quarry** - Golden - 7:25 am to 4:30 pm
- **June 18 - Earth Mechanics Laboratory** - Golden - 9:30 am to 10:30 am
- **June 19 - Experimental Mine, Underground Molybdenum Mine, Reclamation Site, and Water Treatment Plant** - Clear Creek County and vicinity - 7:00 am to 5:00 pm
- **June 20 - Surface Gold Mine and Heap Leach** - Victor - 6:15 am to 5:15 pm
- **June 21 - Expanded Aggregate Mine/Plant** - Jefferson County, and **Underground Silver Mine** - Boulder County - 7:15 am to 5:45 pm
- **June 22 - Mineral Assay Laboratory** - Golden - 12:30 pm to 3:00 pm
- **June 27 - June 29 - Wall Board Plant, Gypsum Mine, Oil Shale Pilot Plant, Nahcolite Solution Mine, Underground and Surface Coal Mines, Coal Burning Power Plant, and Molybdenum Concentrator** - Western Colorado - Varying from 6:10 am to 7:15 pm
- **July 5 - Steel Mill** - Pueblo - 6:45 am to 5:00 pm

## APPLICATION, TUITION, and COSTS

The attached Registration and Application form with a \$250 registration fee must be received by the CMA Education Foundation (CMAEF) on or before May 31. Registrations received after May 31, are \$300. Registration is closed on

the Thursday before the course begins; no registrations are accepted on that day or the remaining days before the course begins. Acceptance is prioritized on a first-paid-registrations basis with no guarantee of acceptance to the class until payment is received by CMAEF. Every registered teacher will be assigned one or more volunteer sponsors who will provide funds used for additional expenses incurred by CMAEF for each teacher.

If a registered teacher must cancel his/her enrollment, the application fee minus \$25 will be refunded, if the request is received before the close of business on the Wednesday before the course begins. No full or partial refunds will be granted after that date.

Each teacher must provide his/her own steel-toed shoes, or boots, or steel-toed shoe caps for visits to mines, mills, and other operations associated with this course. Information on the various footwear options will be presented during the first day of class. Hard hats; hearing protection; safety glasses; miscellaneous fees; course materials; and transportation, lodging, and meals on field trips will be provided by CMAEF and the sponsors. Other transportation to-and-from classes, meals, and housing are the responsibility of each of the attendees.

Detailed preliminary course information, including a syllabus, will be mailed to each registrant a few weeks before the course begins. Each teacher must bring his/her appropriate state or district teaching standards for use in recording daily insights during the course and for preparing a lesson plan. All of the lesson plans will be copied for distribution to every class member.

Limited financial assistance to help with registration fees, travel, accommodations, and meals may be available for certain teachers who are registered, meet certain requirements, and contact the course coordinator before April 1.

## HOUSING

Teachers enrolled in *All About Mining - A Total Concept of the Mining Industry* who need accommodations must provide their own local room and board for the duration of the course. CSM offers a limited number of nominally priced, residence hall rooms to course attendees. A reservation for a residence hall room is not accepted until after the teacher has registered, the registration fee has been received by CMAEF, and a room request has been made on the application. Residence hall room reservations are accepted on a space-available basis, with first registrations being given preference. Teachers bringing children and/or pets cannot be accommodated in a residence hall and must make off-campus arrangements for housing.

## GRADING and CREDIT POLICY

CSM grants six semester hours of graduate-level, licensure/recertification credit to those who have completed the course and attended all classes and field trips in their entirety. Missed class sessions **cannot be made up** by attending subsequent offerings of the same or related classes or by completing additional assignments. Full credit hours are granted only if **all** the full contact-hour requirements have been met, including arriving on time and staying until dismissed. The licensure/recertification credit hours are accepted by the State of Colorado and are generally accepted by other states, but they cannot be applied toward obtaining a degree at CSM. The course grade is based upon attendance, participation, and submission of a required lesson plan and daily insights about the course and material presented. No one, other than registered course participants and field trip hosts, is allowed in classes and on the field trips. No children are permitted in classes.

## TRANSCRIPT AVAILABILITY

The Teacher Enhancement Office and CSM are not responsible for meeting individual deadlines for credits toward teacher recertification and/or salary increases. Official transcripts for current course work will be available upon request approximately two weeks after the instructor submits course grades to the CSM Teacher Enhancement Office. Individual letters of completion are not available.

## FURTHER INFORMATION

<http://www.AllAboutMining.org>

Contact: Dan Witkowski, Course Coordinator  
303/972-1814 or [DanielWitkowski@aol.com](mailto:DanielWitkowski@aol.com)



# 2012

## REGISTRATION & APPLICATION

### ALL ABOUT MINING A TOTAL CONCEPT OF THE MINING INDUSTRY June 11, through July 6, 2012



(CT-5700 - 6 Semester Hours Recertification Credit)

\_\_\_ Mr. \_\_\_ Ms. NAME \_\_\_\_\_ NICKNAME \_\_\_\_\_

E-MAIL \_\_\_\_\_ SOC. SEC. NO.\* \_\_\_\_\_

TELEPHONE: HOME ( ) \_\_\_\_\_ SCHOOL ( ) \_\_\_\_\_ CELL ( ) \_\_\_\_\_

HOME ADDRESS \_\_\_\_\_

CITY, STATE \_\_\_\_\_ ZIP \_\_\_\_\_

SCHOOL \_\_\_\_\_ DISTRICT \_\_\_\_\_

SCHOOL ADDRESS \_\_\_\_\_

SUBJECT(S) TAUGHT: \_\_\_\_\_ GRADE(S) \_\_\_\_\_

\_\_\_\_\_ GRADE(S) \_\_\_\_\_

TOTAL NUMBER OF STUDENTS TAUGHT PER SCHOOL YEAR \_\_\_\_\_

GRADE LEVEL:

\_\_\_ ELEMENTARY \_\_\_ MIDDLE \_\_\_ JUNIOR HIGH \_\_\_ SENIOR HIGH \_\_\_ ADMINISTRATION \_\_\_ OTHER

DO YOU NEED INFORMATION ON CAMPUS HOUSING? \_\_\_ DO YOU HAVE ANY DIETARY RESTRICTIONS? \_\_\_

I understand that:

- Classes and field trips may be academically and physically demanding and may require extensive walking and climbing at sites that are wet or dusty, noisy, and/or at high elevations.
- Individual accommodations and/or commuting expenses are the responsibility of each teacher.
- Acceptance to the course is prioritized on a first-paid-registrations basis. Registration is not guaranteed until after receipt of the \$250 registration fee by CMAEF by May 31, or \$300 for registrations received after May 31. Registration is closed on the Thursday before the course begins; no registrations are accepted on that day or the remaining days before the course begins.
- No full or partial tuition refunds will be granted after the close of business on the Thursday before the course begins.
- Steel-toed shoes, boots, or toe-caps must be purchased by each teacher and must be worn during field trips.
- All scheduled adjournments and break times are approximate and are subject to change.
- CSM and CMAEF reserve the right to cancel this course, with full tuition refund to participants, if the minimum enrollment is not reached. In such case, CSM, the Teacher Enhancement Office, and CMAEF will not be liable for any expenses incurred by registrants.
- I authorize and permit photos and images of me taken or made during the course to be utilized for publicizing and documenting course activities by CMAEF and the Colorado School of Mines without remuneration of any kind.
- I certify that I am a kindergarten-to-grade-12 teacher, administrator, counselor, or a librarian, and I agree to participate fully in all phases of this course, including preparations of daily insights entries and a lesson plan.
- I will bring my state and/or district teaching standards to the first day of class to aid in the recording of insights and for preparing a lesson plan.

\*Required for security purposes on certain field tours and to receive course credits, but will otherwise be kept confidential.

SIGNATURE: \_\_\_\_\_

**RETURN THIS COMPLETED APPLICATION TO:**

CMA Education Foundation, Inc.  
 216 16th Street, Suite 1250  
 Denver, Colorado 80202-5161  
 TEL (303) 575-9199 FAX (303) 575-9194  
 e-mail: [colomine@coloradomining.org](mailto:colomine@coloradomining.org)  
<http://www.AllAboutMining.org>

DATE \_\_\_\_\_

**To pay by credit card:**

VISA  MC  AMEX

Card # \_\_\_\_\_

Exp. Date: \_\_\_\_\_

Cardholder Name: \_\_\_\_\_

Signature: \_\_\_\_\_