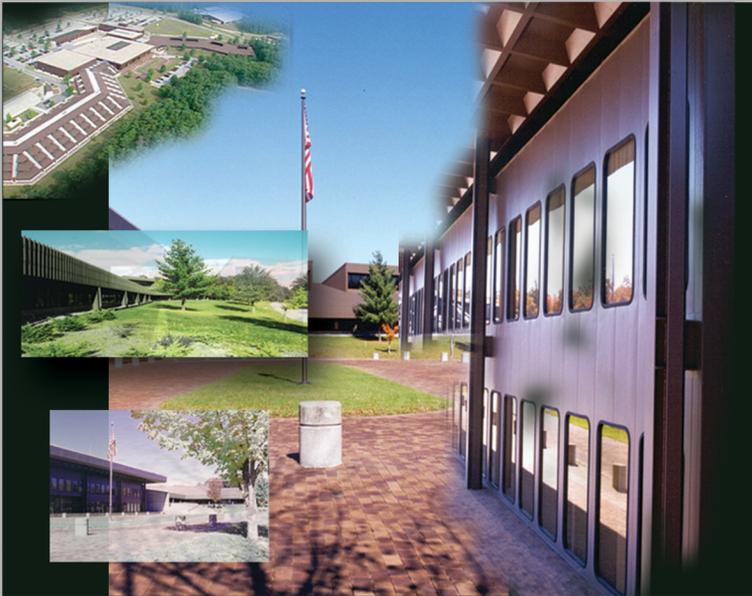


# Courses for MSHA and the Mining Industry



U.S. Department of Labor  
Mine Safety and Health Administration  
National Mine Health and Safety Academy

FY 2008



Dedicated to the Health and Safety  
of the Nation's Miners

Visit the Mine Safety and Health Administration  
website at [www.msha.gov](http://www.msha.gov)



# Courses for MSHA and the Mining Industry



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U.S. Department of Labor  
Elaine L. Chao  
Secretary

Mine Safety and Health Administration

FY 2008



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## **Welcome**

Welcome to the 2008 edition of Courses for MSHA and the Mining Industry.

Our Nation's mines produce more material than ever before. Sophisticated machinery and equipment allow miners to work in areas that are often complex and dangerous. Mining technology changes constantly and every mine is unique. This is why mine safety and health inspections, technical and engineering assistance, and education and training are such important elements in ensuring a safe workplace. These are the three elements of MSHA's triangle of success.

Up-to-date and practical health and safety training is vital since mining occurs in a hazardous, ever-changing environment where there is little room for error.

The National Mine Health and Safety Academy, in Beaver, West Virginia, is the world's largest institution devoted to health and safety in mining. It is a central training facility for Federal mine safety and health inspectors, mine safety professionals, other government agencies, the mining industry, and labor.

Most of the Academy's courses are open to participants from throughout the mining community. Classes are taught by Academy faculty and associate instructors and specialists from the mining industry, trade associations, colleges and universities, manufacturers, and other government agencies.

Whatever your interest in mine health and safety, you will find useful and practical training at the National Mine Health and Safety Academy.

## **History**

Protecting those who work in our Nation's mines requires an awareness and understanding of the conditions that endanger their health and safety.

This problem was recognized more than 135 years ago when a proposal for a Federal mining bureau was submitted to Congress. It was not until nearly five decades later that a series of deadly mine explosions led to passage of the Organic Act of 1910. That act created the Bureau of Mines.

Laws passed over the next 60 years enlarged the scope of legislation aimed at reducing mining hazards. The Federal Coal Mine Health and Safety Act of 1969 contained provisions for the training of Federal mine safety and health inspectors, as well as establishing education and training for states, mine operators, and miners. The Federal Mine Health and Safety Act of 1977 broadened these provisions to include metal and nonmetal mining. The National Mine Health and Safety Academy supports the requirements of the 1977 Act, and the newly enacted Mine Improvement and New Emergency Response Act of 2006.

## **The Academy's Purpose and Goal**

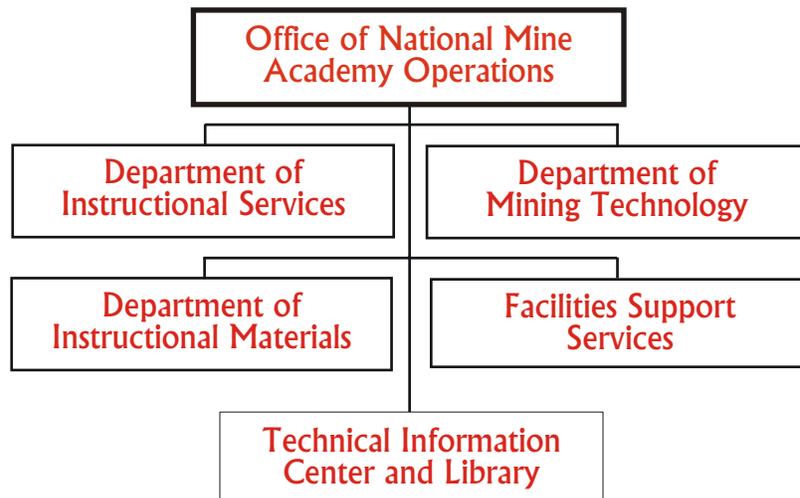
The purpose of the Academy is to design, develop, and conduct instructional programs that will assist in government, industry, and labor efforts to reduce injuries, illnesses, and fatalities in the mineral industries.

All of our programs, seminars, and courses are prepared with one idea in mind – to improve health and safety conditions in mines through education and training. This is our goal. Our success will be measured by the extent to which mine accidents and unhealthful conditions are reduced in future years.

## Academy Organization

The National Mine Health and Safety Academy is supported by the Manager of National Mine Academy Operations with the help of five major units:

- ♦ Department of Instructional Services
- ♦ Department of Mining Technology
- ♦ Department of Instructional Materials
- ♦ Facilities Support Services
- ♦ Technical Information Center and Library



The **Manager of National Mine Academy Operations** is responsible for the immediate management and direction of the Academy and for coordination of all training programs.

The **Department of Instructional Services** manages the work activities and resources assigned to the Department in the following areas: (1) developing and teaching courses for MSHA and the mining industry in safety management, accident investigation and report writing, citations and orders, and inspection

automation, (2) planning, scheduling, and evaluating instructional programs, workshops, conferences, and seminars for MSHA and the mining industry, (3) developing and teaching computer courses for MSHA mine inspection and administrative and clerical personnel, (4) scheduling MSHA entry level programs and preparing records of student progress, (5) converting existing courses and working with instructors to develop new courses that can be presented online and in other distance formats.

The **Department of Mining Technology** manages the work activities and resources assigned to the Department in the following areas: (1) developing and teaching courses for MSHA and the mining industry in technical mine safety and health, (2) planning, scheduling, and evaluating instructional programs, workshops, conferences, and seminars for MSHA and the mining industry, (3) planning, scheduling, and coordinating the activities conducted in the Mine Simulation Laboratory, (4) overseeing the on-the-job training program for entry level mine inspectors.

The **Department of Instructional Materials** manages the work activities and resources assigned to the Department in the following areas: (1) developing training and informational publications for MSHA and the mining industry, (2) developing and teaching courses for MSHA and the mining industry, (3) developing audiovisual materials to support MSHA and industry training, (4) producing graphics materials in support of Agency initiatives and training, and (5) printing, storing, and distributing Academy training products and MSHA informational products.

**Facilities Support Services** aids all Academy programs through coordination of student services, scheduling, recordkeeping, physical plant maintenance, budget and procurement, wellness, contract administration, food service, security, housekeeping, and student registration.

The **Technical Information Center and Library** maintains books, journals, newspapers, technical reports, audiovisual materials, and other information related to mine health and safety. The library gives Academy students and clients immediate and easy access to information sources that can improve the health and safety of miners worldwide.

### **The Academy Campus**

The Academy complex includes classrooms and laboratories to accommodate 600 students and the Residence Hall has 174 lodging rooms.

The **Classroom Building** includes 14 classrooms and 10 laboratories.

The **Distance Learning Lab** provides remote training at National Guard sites throughout the nation.

The **Technical Information Center and Library** is in the Classroom Building.

The **Administration Building** contains faculty and staff offices, the auditorium, cafeteria, and student store.

The **Mine Machinery Laboratory** gives students an opportunity for hands-on health and safety training on different mining and electrical systems.

The **Mine Simulation Laboratory** is an aboveground simulated mine. Here, students can learn about mine ventilation, mine rescue, mine emergency preparedness, and firefighting.

The **Mine Emergency Building** is adjacent to the Mine Simulation Laboratory. It houses mine emergency vehicles and a mine rescue station for MSHA's Mine Emergency Units.

The **Gymnasium** is available for wellness training and leisure time activities. Other wellness facilities at the Academy include tennis

courts, a racquetball court, swimming pool, jogging trail, and athletic field.

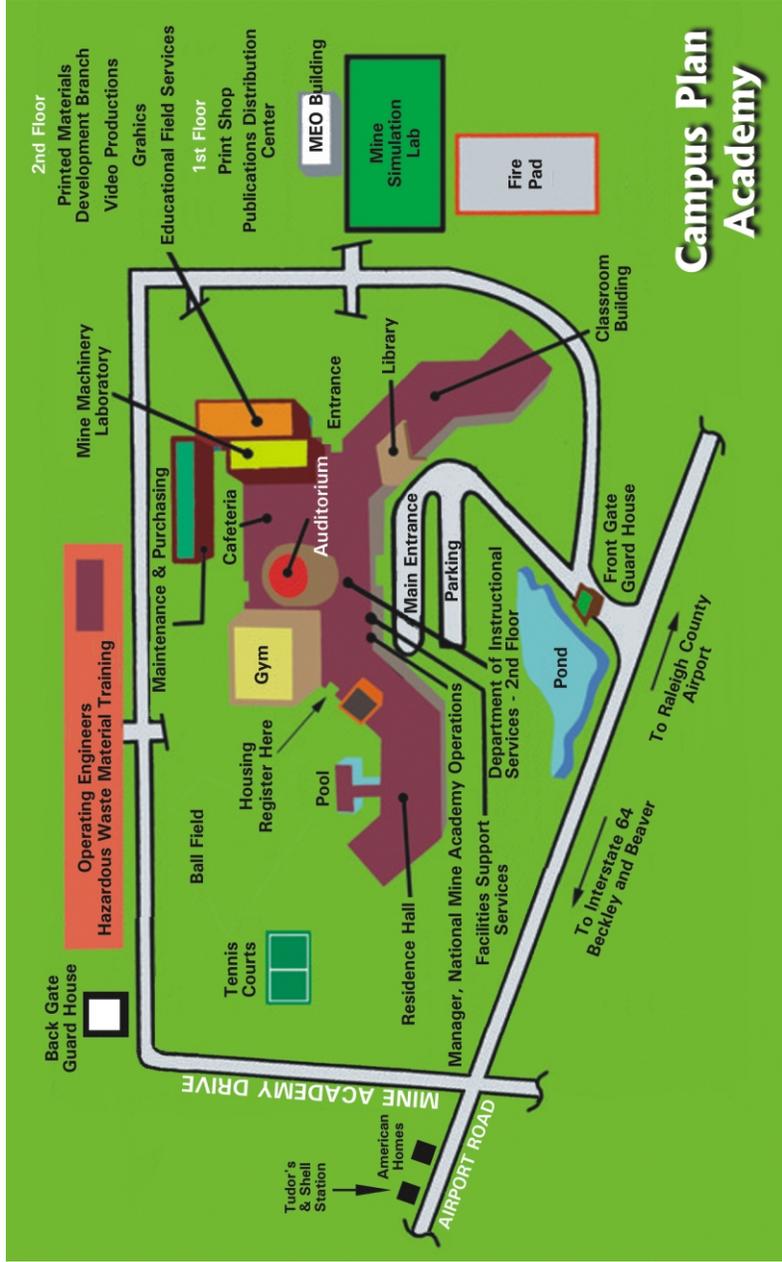
The **Maintenance and Equipment Building** is used to maintain Academy equipment.

The **Publications Distribution Center** houses the print shop, supply and warehouse facilities, and the Department of Instructional Materials.

The **Residence Hall** has 174 units. Each room in the residence hall has a queen-size bed, a private bath, telephone, desk, storage area, refrigerator, coffee pot, and iron and ironing board.

## **Security**

Upon your arrival at the Academy you will need to stop at the main gate. Uniformed security personnel are on duty at all times. Personal photo identification must be presented at the entry gates, and be displayed and worn while at the Academy. Additionally, security guards will issue you a color coded parking permit. Display this card on your vehicle dashboard and park in the area designated on the permit.





## **Academic Programs**

### **MSHA Training**

All newly hired MSHA mine safety and health inspectors receive entry-level training. This training covers technical aspects of mine inspection and additional topics such as effective communications and professionalism.

Entry-level coal mine safety and health inspectors receive six modules of instruction (21 weeks total) at the Academy in conjunction with required web-based training and on-the-job training (OJT) sessions in the field.

Entry-level metal/nonmetal mine safety and health inspectors training includes six modules of instruction (23 weeks total) at the Academy with OJT sessions in the field.

Journeyman training presents up-to-date technical and regulatory information to journeyman mine safety and health inspectors to help them ensure that the mining community is served most effectively. The Academy also presents courses to provide journeymen with more in-depth training on special subjects.

Technical Specialists receive training in a variety of subjects so that they remain informed regarding current technical and regulatory information.

Administrative, clerical, and support personnel receive an annual one-week training program to enhance their ability to assist MSHA personnel and clients.

The Academy offers computer training on various software applications to MSHA personnel and others from the mining industry and other government agencies.

## **Training for Industry**

All Academy courses are open to participants from throughout the mining community. These programs are taught by Academy and visiting outside instructors and specialists from the mining industry, trade associations, colleges and universities, manufacturers, and other government agencies. Seminars, workshops, and conferences are offered during the year, both at the Academy and at sites throughout the country.

Many courses provide certification or qualification to persons who take mandated examinations.

Examples of other courses available to the industry are Electrical Safety for Miners, Hoists and Elevators, Instructor Training Workshop (Part 48), Construction and Repairs Safety, Mine Elevator Inspection Program Training, Noise Hazards, Regulation and Control, and Surface Facilities and Coal Preparation. In addition, the Academy will frequently furnish additional courses to the industry and interested participants if valid requests are made.

Training activities in the Mine Simulation Laboratory cover mine rescue, firefighting, mine emergency response, simulated inspections, ventilation, roof control, haulage, annual refresher subjects, supervisory training, and mine examination. Students come from MSHA, other Federal and state agencies, industry, labor organizations, and international mining delegations.

## **Academic Life**

### **Class Attendance**

Classes are informal and while dress is casual, it should remain professional in nature. Most of our laboratory classes include hands-on activities or outside fieldwork.

A typical class day begins at 8:00 a.m. and ends at 4:00 p.m. All other day classes end by 5:00 p.m., unless otherwise scheduled.

Absences from class are approved for personal illnesses, emergencies, or death in a student's family. Students notify their supervisor and instructors, and make up work assigned while absent.

### **Grading System**

The Academy uses a grading system for entry-level (coal and metal/nonmetal) courses of study and gives examinations in these classes. These grades are recorded, and students are informed of their progress through periodic grade reports.

### **Units of Credit/Certificates of Participation**

Students receive Continuing Education Units (CEUs) upon completion of an Academy program. One CEU is 10 contact hours of participation in an educational experience. The Academy does not grant degrees, but CEUs may be converted into hours of credit at other institutions.

Students who satisfy the Academy criteria for successful completion of any course of study receive a Certificate of Completion documenting the course title, date, and CEUs.

### **College Credit for Academy Courses**

Mine safety and health inspectors can earn an **Associate of Applied Science Degree in Occupational Development: Mine Inspection** from the Community and Technical College of Mar-

shall University, Huntington, West Virginia. This program is a cooperative effort among MSHA, the National Council of Field Labor Locals, the U.S. Department of Labor's Bureau of Apprenticeship and Training, and the university. Marshall will award 43 credit hours to students who complete the equivalent of the mine inspector apprentice requirements. These credits are applied to successful completion of the classroom and on-the-job training parts of Entry Level Mine Inspector training. An additional 22 hours of general education credits are also required.

### **Academic Dishonesty**

The student can be disciplined or dismissed from the Academy for cheating, dishonesty, plagiarism, or knowingly furnishing false information to the Academy.

### **Withdrawal**

The student may withdraw from an Academy program without penalty because of injury or other extenuating circumstances. If you withdraw, you will not receive credit for the courses of study in which you were enrolled.

### **Transcripts**

You may request (in writing) a copy of your academic record. Your request must include your full name and complete address. Submit your request to:

National Mine Health and Safety Academy  
Student Services Branch  
1301 Airport Road  
Beaver, West Virginia 25813-9426  
FAX: (304) 256-3251

## **Student Life**

### **Food Service and Student Store**

Academy food service offers complete meals in a cafeteria setting. You may choose from a selection of freshly prepared entrees and desserts with a full range of beverages available to complement your meal. There is also a made-to-order deli and a salad bar. Heart-healthy and vegetarian selections are also available. Food service personnel can assist anyone who has special dietary needs. If you are an MSHA employee, you will receive a meal card when you check in. Present this card to the cashier upon entering the cafeteria serving line. Non-MSHA students who are in residence must pay for lodging and meals.

The student store, located next to the cafeteria, has a wide variety of sundries, souvenirs, and gifts.

The food service and student store accept all major credit cards.

### **For Your Health and Safety**

Please observe all posted speed limits and all traffic and parking signs.

If you need emergency medical attention, please dial ext. 555 or “0” and request medical assistance. Academy personnel will take you to a medical facility in an Academy vehicle or arrange for an ambulance. If there is no answer, dial 9-911 (Raleigh County Emergency Operations Center) and request medical assistance.

Assistance in completing accident health insurance claim forms for Federal students may be obtained from your class coordinator or a responsible staff person on duty after normal duty hours.

You play an important part in accident prevention at the Academy. Should you see an actual or potential safety hazard, please report it to an instructor, class coordinator, or any Academy staff person.

Pets of any kind are prohibited on all Academy grounds, except for certified service animals accompanying people with impairments.

### **Mail**

You can send or receive mail (Monday through Friday) at the Residence Hall registration desk. Our mailing address is:

National Mine Health and Safety Academy  
1301 Airport Road  
Beaver, WV 25813-9426

### **Vehicles**

Students are required to register vehicles with security personnel at the main entrance to Academy grounds. You will receive a color-coded parking permit that allows you to park in a designated area. There is ample, well-lighted, and secure parking at the Academy.

## Fees And Billing

*All Academy fees are reviewed periodically and subject to change.*

### **Tuition**

The Academy will charge tuition fees to all persons attending Academy courses, except employees of Federal, State, or local governments, persons attending the Academy under a program supported through an MSHA State grant, and persons performing a direct service.

The tuition amount indicated by the course announcement is due on arrival by check, money order, or credit card (VISA and MasterCard) payable to MSHA Finance. We regret that **we cannot accept cash**. Billing is possible with a written request to the Academy's Student Services Branch two weeks in advance. If tuition is submitted in advance, written notification of withdrawal to the Student Services Branch is required to process a full refund.

### **Lodging**

All persons in residence at the Academy, except MSHA personnel, other persons performing a direct service for MSHA, and persons attending a program supported through an MSHA State Grant, are charged for lodging.

The lodging fee is \$43.00 per person per day for a single room and \$56.00 per day for two persons. Lodging fees are due on arrival by credit card (VISA and MasterCard) or check/money order payable to MSHA Finance. We regret that **we cannot accept cash**. Billing is possible with a written request to the Student Services Branch.

Persons staying at the Academy may have their spouses and immediate family as guests provided all appropriate fees are paid on arrival. Advance reservations are required. Guests under 18 years of age must be accompanied by an adult at all times.

If you have special needs, please contact Student Services before your arrival.

### **Meals**

Participants who pay for Academy lodging may register for meals when they check in. Students staying in the Residence Hall are normally required to purchase a meal ticket for breakfast and lunch at the Academy. Dinner is optional. Prices are:

Breakfast	\$9.35
Lunch	\$12.02
Dinner	\$13.36

Participants paying for their meals in the cafeteria may do so by cash, major credit card, or check/money order payable to Basic Contracting Services, Inc.

## Travel to the Academy

Located on a plateau in southern West Virginia, the Academy blends into its Appalachian mountain setting. Scenic vistas and wildlife greet travelers to the Academy, and students experience a restful environment.

Several travel options are available:

### By Air



**Beckley, West Virginia** – The Raleigh County Memorial Airport is located 1 mile from the Academy.

**Charleston, West Virginia** – The Yeager Airport is located 65 miles north of the Academy. Rental cars are available.

**Lewisburg, West Virginia** – The Greenbrier Valley Airport is located 47 miles east of the Academy. Rental cars, taxis, and limousines are available.

### By Train



AMTRAK provides tri-weekly service to and from Prince, West Virginia – located 16 miles from the Academy. Taxi service meets all trains.

### By Bus



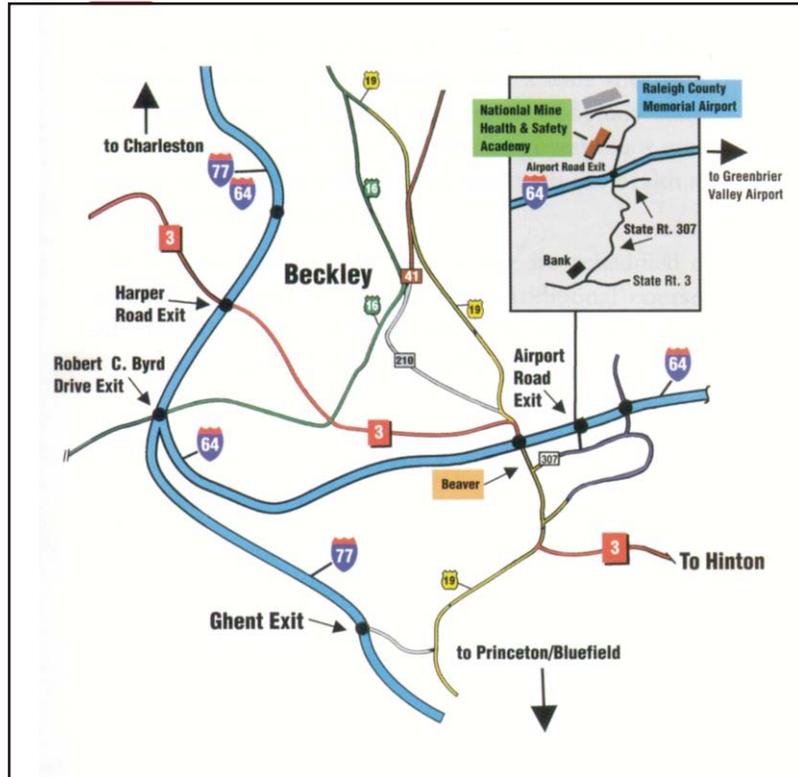
Daily Greyhound service is available to and from Beckley – located 8 miles from the Academy in downtown Beckley. Taxi service is available.

### By Car



See Route Map to the Academy on page 18.

## Route Map to the Academy



### ☞ Arriving from the NORTH

- ◆ When using U.S. 19 South, go to and follow I-77 South, exit at I-64 East
- ◆ Follow I-64 to EXIT 125B, Airport Road
- ◆ Academy is 1 mile on left

### ☞ Arriving from the EAST

- ◆ When using I-64 West, use Exit 125, Beaver/Airport Road
- ◆ Turn RIGHT at bottom of ramp
- ◆ Academy is 1 mile on left

### ☞ Arriving from the SOUTH

- ◆ When using I-77 North, exit and follow I-64 East
- ◆ Use EXIT 125B, Airport Road
- ◆ Academy is 1 mile on left

### ☞ Arriving from the WEST

- ◆ When using I-64 East, use Exit 125B, Airport Road
- ◆ Academy is 1 mile on left

## **Training Courses**

The National Mine Health and Safety Academy develops and presents courses of study which cover a wide spectrum of mine health and safety subjects. These courses of study address training needs of miners, mine safety and health inspectors, government and industry personnel, and others concerned with the health and safety of our Nation's miners.

The courses described in this catalog are scheduled or can be scheduled during the coming year. Additional courses can be scheduled to meet specific needs of miners, mine operators, and mine health and safety specialists.

Please contact Student Services at (304) 256-3252 if you are interested in attending any course listed as "Scheduled Upon Request." A list of students requesting the course will be maintained by that office until a sufficient interest is received. All students will then be notified and a date will be established to hold the training.



## **Metal/Nonmetal Inspection Courses**

### **Journeyman Training**

All metal and nonmetal mine safety and health inspectors will attend one week of training per year, or two weeks every other year. The training will be in a seminar format with subjects in various specialty areas. A list of dates and subjects is on page 37.

The additional courses described in this section are designed for journeyman metal and nonmetal mine safety and health inspectors and Federal, state, mining industry, and labor organization personnel.

Course dates are given at the bottom of the course description.



Courses marked by this icon may be held at your worksite. If your company or organization would like any of these courses presented onsite, contact Doris Fuller at (304) 256-3234. The course will then be scheduled.



If you need more information about contents of a course, contact the technical coordinator for that course at (304) 256-3100 or Doris Fuller at (304) 256-3234.

# To Enroll Contact:

National Mine Health and Safety Academy  
Student Services Branch  
1301 Airport Road  
Beaver, West Virginia 25813-9426

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**TELEPHONE:** (304) 256-3252

**FAX:** (304) 256-3251

## **ACCIDENT INVESTIGATION RETRAINING SEMINAR**

**[IV401G21]**

This seminar is designed to provide continuing education training to MSHA Accident Investigators on a bi-annual basis. Current accident investigators in Coal, Metal/Nonmetal, Technical Support, and EPD are required to attend one of the two journeyman level retraining seminars.

A prerequisite for the seminar is the two-week Basic Accident Investigation and Report Writing course offered by the Academy. **Students should bring their laptop computers.**

### **Some of the projected topics for the seminar are:**

- ♦ Advanced Interviewing Techniques
- ♦ Using Tape Recorders During Interviewing
- ♦ Legal Issues Involving MSHA Investigations
- ♦ Advanced Evidence Collection
- ♦ Critical Incident Stress
- ♦ Report Writing
- ♦ Scene Preservation and Sketching
- ♦ Human Error in Accident Investigation

**Technical Coordinator:** James Beha

**Course Length:** 3 days

**Tuition:** None

**Dates:** February 26-28, 2008

*Additional courses can be scheduled upon request*

**BLASTING (SURFACE) (MNM)**  
**[EX316M]**



This course discusses the characteristics and use of explosives and blasting agents. It is designed to teach blasting standards in accordance with Institute Makers of Explosives (IME) guidelines and the Code of Federal Regulations (30 CFR). The course is structured for MSHA metal/nonmetal safety and health inspectors and industry personnel.

**Contents:**

- ♦ Definitions
- ♦ Transportation and Storage of Explosives and Blasting Agents
- ♦ Detonation Units
- ♦ Misfires
- ♦ Electric and Nonelectric Blasting Operations
- ♦ Explosives Hazards and Accidents
- ♦ Safe Blasting Principles (Work Procedures and Blast Plans)
- ♦ Initiation Systems

**Technical Coordinator:** Douglas Lawson

**Course Length:** 3 days

**Tuition:** \$231.00

**Dates:** *Offered at worksite only*

**ELECTRICAL HAZARDS**  
**[EL301M]**



This course is designed to provide practical methods and techniques for the identification of electrical hazards and the appropriate enforcement actions to be taken. This course is for MSHA metal/nonmetal inspection personnel with little or no electrical expertise.

**Contents:**

- ♦ Basic Electrical Theory
- ♦ Basic Circuitry
- ♦ Grounding
- ♦ Power Distribution Systems
- ♦ Inspection of Electrical Equipment
- ♦ Regulations and Policies
- ♦ Hazard Recognition
- ♦ Citations and Orders
- ♦ Personal Safety

**NOTE:** *This course is not for Electrical Specialists.*

**Technical Coordinator:** Roy Milam  
**Course Length:** 3 days  
**Tuition:** \$231.00  
**Dates:** *Scheduled upon request*

**FIRST RESPONDER TRAIN-THE-TRAINER  
WORKSHOP  
[GS645G]**

This workshop is designed for enforcement personnel, the mining industry, firefighters, police, and emergency medical personnel. It will provide information and precautions that should be taken when arranging emergency medical assistance and transportation of injured persons at the mine site.

This training will also be given at a later date through the Distance Learning Program using the capabilities of the National Guard Distance training facilities throughout the nation.

**Contents:**

- ♦ 30 CFR Parts 77, 75, and 56/57
- ♦ Underground Haulage Hazards and Regulations
- ♦ Emergency Response Planning
- ♦ Haul Truck and Loader Safety
- ♦ Explosives Storage Safety
- ♦ Highwall Miner Safety
- ♦ Surge Pile/Draw-Off Tunnel Safety
- ♦ Belt Conveyor Safety
- ♦ Electrical Fire Hazards on Mine Property
- ♦ Escapeways and Structural Safety Around Mills and Plants
- ♦ Chemicals on Mine Property, and MSDS
- ♦ Use of Mine Equipment for Firefighting and Water Supply
- ♦ Traffic Control on Mine Roadway

**Technical Coordinator:** Johnnie Tyler  
**Course Length:** 1 day  
**Tuition:** None  
**Date:** November 14, 2007

## **GROUND CONTROL HAZARDS**

**[RC301M]**

This course will focus on the Code of Federal Regulations (30 CFR) requirements related to ground control at surface and underground metal and nonmetal mines. The course provides techniques for the recognition and correction of ground control hazards.

### **Contents:**

- ♦ Highwalls
- ♦ Stockpiles
- ♦ Basic Geology
- ♦ Rock Fixtures
- ♦ Surface Structures
- ♦ Underground Support
- ♦ Hazard Recognition
- ♦ Compliance Determination

**Technical Coordinator:** Tom Bonifacio

**Course Length:** 3 days

**Tuition:** \$231.00

**Dates:** *Scheduled upon request*

**HAULAGE (SURFACE) (MNM)  
[HL301M]**



Haulage accidents have been one of the leading causes of fatal accidents for several years at our Nation's surface mines. This course teaches how to recognize the hazards that may exist in surface haulage.

**Contents:**

- ♦ Compliance Determination of 30 CFR Parts 56/57.9000 and 56/57.14000
- ♦ Inspection Procedures for Surface Mining Equipment
- ♦ Use of Signs and Traffic Control on Mine Property
- ♦ Haul Road Design
- ♦ Brake Systems
- ♦ New Technology (video cameras)
- ♦ Rollover Protective Structures (ROPS)
- ♦ Falling Object Protective Structures (FOPS)
- ♦ Tire and Rim Safety
- ♦ Overview of Fatal Accidents

**Technical Coordinator:** Tom Bonifacio  
**Course Length:** 3 days  
**Tuition:** \$231.00  
**Dates:** *Scheduled upon request*

**INSPECTOR'S PORTABLE APPLICATIONS FOR  
LAPTOPS (IPAL) REVIEW – METAL/NONMETAL  
[CT307M]**

The IPAL review course is designed for MSHA metal/nonmetal mine safety and health inspectors. The course reviews the latest version of the IPAL Program. The course also covers the fundamentals of the computer operating system, troubleshooting, and how to use the computer to reference resource material stored in the computer.

**Contents:**

- ♦ IPAL (Inspector's Portable Applications for Laptops)
- ♦ Reference Material (30 CFR, Mine Act, PPM, Policy Information Letters, and Program Information Bulletins)
- ♦ Basic Troubleshooting and Maintenance of the Laptop Computer and the IPAL Program
- ♦ Using Citrix Metaframe

**Technical Coordinator:** Mac Carnes  
**Course Length:** 2 days  
**Tuition:** None  
**Dates:** *Scheduled upon request*

**MARSHALL UNIVERSITY MASTERS OF SAFETY  
DEGREE (MINING EMPHASIS)**

**[NEMU003]**

Courses will be offered pursuant to the Masters of Safety Degree (Mining Emphasis) program offered by the Academy through Marshall University. Courses will be offered in a blended learning environment using distance learning technology. Online courses are also planned to be offered in the Spring, Summer, and Fall 2008 semesters. Marshall University offers courses online through WebCT Vista. This is available to any person enrolled as a Marshall University graduate student. It is extremely important that you be accepted into the program by Marshall University so that any computer issues that may arise can be resolved prior to beginning the course.

Students must be admitted into the program **prior** to course enrollment. Application for Graduate Admission forms may be obtained by calling Cheryl Hoffman at (304) 256-3300 or by going online to [www.marshall.edu](http://www.marshall.edu). College Chemistry 203, Math 130 (college algebra), and Physics 101 or the equivalent are prerequisites for admission to this program, as is a minimum undergraduate GPA of 2.5 or being registered as a professional engineer, or scoring at the mean or above on one area of the General GRE.

Enrollment for these online classes will be limited to 25 students and is on a first come first serve basis. First priority will be given to students who have taken courses previously in pursuit of this degree; those persons successfully admitted into the program through Marshall University will be given next preference.

Tuition and other related fees will be determined and posted at a later date. For more information, contact John Rosiek by email at [rosiek.john@dol.gov](mailto:rosiek.john@dol.gov) or at (304) 256-3211.

**Technical Coordinators:** John Rosiek and John Forte

**Dates:** Spring 2008  
Summer 2008  
Fall 2008

## **MINE ACCIDENT INVESTIGATION AND REPORT WRITING**

### **[IV301G]**

This course is for coal, metal/nonmetal, technical support, EPD, and other MSHA individuals involved in accident investigation. **Other interested individuals should contact the Technical Coordinator.** The course reviews basic guidelines, procedures, and techniques used to investigate and report on accidents and other incidents involving health and safety in the mining industry.

Classroom activities and discussions cover reasons for accident investigations, the investigative process, data collection, accident reconstruction, proper analysis for corrective actions, and completion of investigative reports following relevant MSHA guidelines and policies. At the conclusion of the class, in a practical exercise, students will conduct a simulated accident investigation and prepare a report. **Students should bring their laptop computers.**

#### **Contents:**

- ♦ Overview of Accident Investigation
- ♦ Pre-Investigation Activities
- ♦ Dealing with Family Members
- ♦ Accident Reconstruction
- ♦ Photography/Sketching
- ♦ Interviewing Techniques
- ♦ Data Collection and Evaluation
- ♦ Developing Conclusions and Corrective Actions
- ♦ Report Writing
- ♦ TapRoot<sup>®</sup>

**Technical Coordinators:** James Beha  
Scott Mandeville  
Roy Milam

**Course Length:** 8 days

**Tuition:** None

**Dates:** October 23 - November 1, 2007  
April 22 - May 1, 2008  
August 5-14, 2008  
September 9-18, 2008

**TAILINGS DAM AND WASTE PILE  
INSPECTION – METAL/NONMETAL  
[IM301M]**



This course will introduce the student to the general safety considerations for the design, construction, maintenance, and inspection of dams and waste piles.

**Contents:**

- ♦ Typical Geotechnical Investigations
- ♦ Foundation Analysis
- ♦ Breakthrough Potential Analysis
- ♦ Stability Analysis and Safety Factors
- ♦ Hydrologic and Hydraulic Considerations
- ♦ Construction Monitoring
- ♦ Identification of Deficiencies
- ♦ General Methods of Remediation
- ♦ Applicable Regulations

**Technical Coordinator:** Clifford F. Lindsay  
**Course Length:** 3 days  
**Tuition:** \$231.00  
**Dates:** *Scheduled upon request*

## **TapRoot<sup>®</sup> SYSTEM ACCIDENT/INCIDENT INVESTIGATION TRAINING**

**[IV341G]**

This course is for MSHA coal, metal/nonmetal, technical support, or other MSHA employees who are involved in mine accident/incident investigations. The TapRoot<sup>®</sup> System provides a methodology to lead an investigator through the techniques and steps used to perform an in-depth investigation of an incident's root causes. Training focuses on developing a flow diagram of the events and conditions leading up to the undesired incident, evaluating each condition, identifying causal factors, and evaluating each factor as to root cause. The course will include training on Systems Improvement's SnapCharT<sup>®</sup> and Root Cause Tree<sup>®</sup> software.

The SnapCharT<sup>®</sup> software is a graphic presentation of the sequence of events identified and discovered during the physical onsite investigation. A SnapCharT<sup>®</sup> helps the investigator organize the information gathered, identify the contributing factors that lead to the incident, and identify causal factors. In addition, it helps the investigator identify holes and inconsistencies in the information gathered during the investigation.

The Root Cause Tree<sup>®</sup> software takes over where a SnapCharT<sup>®</sup> stops. While the SnapCharT<sup>®</sup> looks at what happened and the contributing factors involved, the Root Cause Tree<sup>®</sup> looks at why it happened. The Root Cause Tree<sup>®</sup> provides the investigator with a comprehensive list of the root causes that should be considered for every incident.

**Students should bring their laptop computers.**

### **Contents:**

- ◆ Equipment Failure Analysis including:
  - Design Failures
  - Defective Parts
  - Preventive/Predictive Maintenance

**TapRoot® SYSTEM ACCIDENT/INCIDENT  
INVESTIGATION TRAINING** *(continued)*

- ♦ Human Performance Difficulty Analysis including:
  - Procedures
  - Training
  - Quality Control
  - Communications
  - Management Systems
  - Human Engineering
  - Work Direction

**Technical Coordinators:** Scott Mandeville  
Roy Milam

**Course Length:** 3 days

**Tuition:** None

**Dates:** *Scheduled upon request*

**UNDERGROUND VENTILATION  
FOR METAL AND NONMETAL  
MINES**



**[VN303N]**

This course is designed to assist metal/nonmetal miners in the recognition and evaluation of health hazards and effective ventilation methods to eliminate these hazards.

**Contents:**

- ♦ Airborne Contaminants
- ♦ Sampling and Detecting Devices
- ♦ Confined Spaces
- ♦ Hazard Controls
- ♦ Mine Maps
- ♦ Recognition of Areas That May Have Poor Air Quality
- ♦ Measuring Air Quantities
- ♦ Review of Ventilation Regulations

**Technical Coordinators:** William D. McKinney  
Scott Mandeville

**Course Length:** 2 days

**Tuition:** \$154.00

**Dates:** *Scheduled upon request*



## **Metal/Nonmetal Mine Safety and Health Inspectors Retraining**

**[LP311M]**

Metal and nonmetal mine safety and health inspectors are required to receive a minimum of two weeks of training every two years. This is the first year of the current two-year training cycle for metal/nonmetal mine safety and health inspectors.

Listed below are the dates and subjects of the training sessions scheduled at the Academy.

**Tom Bonifacio, Coordinator**

### **SCHEDULE**

February 5-14, 2008

April 1-10, 2008

July 8-17, 2008

### **SUBJECTS**

- ♦ Coal Firing Safety
- ♦ Documentation of Violations, Photographs, Inspections, and Investigations
- ♦ Evaluating Flagrant and Repeat Violations
- ♦ Hazardous Complaint Conditions/MSIS/Mine Profile/IPAL
- ♦ Impoundment Inspections
- ♦ Inspection Procedures
- ♦ Internal Review Summaries
- ♦ Laboratory Inspections
- ♦ Professionalism Review
- ♦ Preparing for Litigation & Testifying
- ♦ Radon Daughter Sampling, Asbestos/Fiber Sampling and Material Recognition
- ♦ Draeger Tubes, Respirable and Total Dust Sampling
- ♦ Review of Part 46/48 Requirements

## **Metal/Nonmetal Entry Level Mine Safety and Health Inspectors Training**

The courses listed in this section are designed for entry level mine safety and health inspectors. However, they may be attended by other Federal, state, mining industry, and labor organization personnel.

Training dates are given with each module.

**Need More Info? Contact:**

Doris Fuller  
Department of Instructional Services  
National Mine Health and Safety Academy  
1301 Airport Road  
Beaver, West Virginia 25813-9426

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**TELEPHONE:** (304) 256-3234  
**FAX:** (304) 256-3247  
**E-MAIL:** fuller.doris@dol.gov

### **Metal/Nonmetal Curriculum (Modules I-VI)**

The following chart shows the required core courses for entry level mine safety and health inspectors.

**Wellness training is scheduled for each module.  
Laptop computer and printer required for all modules.**

**MODULE I (4 WEEKS)**

Orientation	Law, Regulation and Policy	Safety Programs
Introduction to MSHA and Mission	Introduction to Laptops	Employee Accident Reporting
Diversity	Effective Writing	Drug and Substance Abuse Awareness
Root Causes	Safety Talks I and II	Employee Health and Safety
Standards of Conduct	Part 45 - Contractors	Training Requirements
Professionalism	Mine Act - Purpose of Agency	Parts 48 and 46
Communications		

**MODULE II (4 WEEKS)**

Inspector's Portable Applications for Laptops (IPAL)	Notetaking	Citations and Orders Writing
Mine Act - S & S	General Inspection Procedures	Interviewing Techniques
		Electricity

**MODULE III (4 WEEKS)**

Fire Protection	Ground Control I (Surface)	Personal Protective Equipment
Simulated Inspection	Structural Safety	Surface Haulage I
Reporting Requirements - Part 50	Health I (with Chemical Hazards and HazCom)	
Technical Support Briefing	Mine Act - 104(d)	

**MODULE IV (4 WEEKS)**

Drilling and Blasting	Material Storage and Handling	Introduction to Special Investigations
IPAL Review	Conference Presentation	Mine Emergency/Mine Rescue/Part 49
Mine Act - 107(a), 103(g)	Preparation (PP)	
Hoisting	Gas Detecting Devices	
Permissibility		

**MODULE V (4 WEEKS)**

Health II	Underground Ventilation	Industrial Ventilation
Mine Act - 105(c), 110(c), 104(g)(1)	Haulage II/Cranes	Retaining Dams
Cement Plant Processes	Excavation/Trenching Safety	Part 50/Audits
Pressure Vessels & Boilers		Scaffolding Safety

**MODULE VI (3 WEEKS)**

Unique Processes	Courtroom Procedures	Ground Control II (UG)
Accident Investigation	Mine Act - 103(f), 103(k)/General Review	Maintenance & Repair/Construction Safety
Slope and Shaft Sinking Inspection	Jurisdictional Issues	Overall Review
Electrical Review	Graduation	

**Metal/Nonmetal Entry Level  
Mine Safety and Health  
Inspectors Training**  
*(Dates include travel days)*

**GROUP M08**

Advanced Module      November 26 – December 14, 2007 (3 weeks)

**GROUP M09**

Basic Module IV      October 15 – November 9, 2007 (4 weeks)  
Intermediate Module      April 28 – May 23, 2008 (4 weeks)  
Advanced Module      June 9-27, 2008 (3 weeks)

**GROUP M10**

Module III      November 26 – December 21, 2007 (4 weeks)  
Module IV      February 25 – March 21, 2008 (4 weeks)  
Module V      May 19 – June 13, 2008 (4 weeks)  
Module VI      September 8 – 26, 2008 (3 weeks)

**GROUP M11**

Module I      October 15 – November 9, 2007 (4 weeks)  
Module II      January 14 – February 8, 2008 (4 weeks)  
Module III      April 7 – May 2, 2008 (4 weeks)  
Module IV      July 7 – August 1, 2008 (4 weeks)  
Module V      October 20 – November 7, 2008 (3 weeks)  
Module VI      January 12 – February 6, 2009 (4 weeks)

### **GROUP M12**

Module I	November 26 – December 21, 2007	(4 weeks)
Module II	March 17 – April 11, 2008	(4 weeks)
Module III	June 2 – 27, 2008	(4 weeks)
Module IV	October 20 – November 14, 2008	(4 weeks)
Module V	January 26 – February 13, 2009	(3 weeks)
Module VI	April 6 – May 1, 2009	(4 weeks)

### **GROUP M13**

Module I	March 24 – April 18, 2008	(4 weeks)
Module II	July 14 – August 8, 2008	(4 weeks)
Module III	October 20 – November 14, 2008	(4 weeks)
Module IV	January 26 – February 13, 2009	(3 weeks)
Module V	April 6 – May 1, 2009	(4 weeks)
Module VI	July 6 – 31, 2009	(4 weeks)



## Coal Inspection Courses

### Journeyman Training

All journeyman coal mine safety and health inspectors will attend one week of training per year, or two weeks every other year. The training will be in a seminar format with subjects in various specialty areas. A list of dates and subjects can be found on pages 65 and 66.

The additional courses described in this section are designed for journeyman coal mine safety and health inspectors and other Federal, state, mining industry, and labor organization personnel.

Course dates are given at the bottom of the course description.



Courses marked by this icon may be held at your worksite. If your company or organization would like any of these courses presented onsite, contact Doris Fuller at (304) 256-3234. The course can then be scheduled.



If you need more information about contents of a course, contact the technical coordinator for that course at (304) 256-3100 or Doris Fuller at (304) 256-3234.

# To Enroll Contact:

National Mine Health and Safety Academy  
Student Services Branch  
1301 Airport Road  
Beaver, West Virginia 25813-9426

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**TELEPHONE:** (304) 256-3252  
**FAX:** (304) 256-3251

**ACCIDENT INVESTIGATION RETRAINING  
SEMINAR**

**[IV401G21]**

This seminar is designed to provide continuing education training to MSHA Accident Investigators. Current accident investigators in Coal, Metal/Nonmetal, Technical Support, and EPD are required to attend a seminar.

A prerequisite for the seminar is the two-week Basic Accident Investigation and Report Writing course offered by the Academy. **Students should bring their laptop computers.**

**Some of the projected topics for the seminar are:**

- ♦ Advanced Interviewing Techniques
- ♦ Using Tape Recorders During Interviewing
- ♦ Legal Issues Involving MSHA Investigations
- ♦ Advanced Evidence Collection
- ♦ Critical Incident Stress
- ♦ Report Writing
- ♦ Scene Preservation and Sketching
- ♦ Human Error in Accident Investigation

**Technical Coordinator:** Scott Mandeville

**Course Length:** 3 days

**Tuition:** None

**Dates:** *Not scheduled for FY 2008*

**BLASTING (SURFACE) (COAL)**  
**[EX316C]**



This course discusses the characteristics and use of explosives and blasting agents. It is designed to teach blasting standards in accordance with Institute Makers of Explosives (IME) guidelines and the Code of Federal Regulations (30 CFR). The course is structured for MSHA coal mine safety and health inspectors and industry personnel.

**Contents:**

- ♦ Definitions
- ♦ Transportation and Storage of Explosives and Blasting Agents
- ♦ Detonation Units
- ♦ Misfires
- ♦ Electric and Nonelectric Blasting Operations
- ♦ Explosives Hazards and Accidents
- ♦ Safe Blasting Principles (Work Procedures and Blast Plans)
- ♦ Initiation Systems

**Technical Coordinator:** Douglas Lawson

**Course Length:** 3 days

**Tuition:** \$231.00

**Dates:** *Scheduled upon request*

**ELECTRICAL SAFETY FOR COAL MINERS**  
**[EL601C]**

This course is designed to provide practical methods and techniques to identify electrical hazards and the appropriate enforcement actions to be taken. This course is for coal inspection personnel with limited or no electrical expertise.

**Contents:**

- ♦ Basic Electrical Theory
- ♦ Basic Circuitry
- ♦ Hazard Recognition
- ♦ Grounding
- ♦ Power Distribution Systems
- ♦ Regulations and Policies
- ♦ Personal Safety
- ♦ Citations and Orders
- ♦ Inspection of Electrical Equipment
- ♦ Permissibility

**NOTE:** *This course is not intended for Electrical Specialists.*

**Technical Coordinator:** Roy Milam  
**Course Length:** 3 days  
**Tuition:** \$231.00  
**Dates:** *Scheduled upon request*

**FIRST RESPONDER TRAIN-THE-TRAINER  
WORKSHOP  
[GS645G]**

This workshop is designed for enforcement personnel, the mining industry, firefighters, police, and emergency medical personnel. It will provide information and precautions that should be taken when arranging emergency medical assistance and transportation of injured persons at the mine site.

This training will also be given at a later date through the Distance Learning Program using the capabilities of the National Guard Distance training facilities throughout the nation.

**Contents:**

- ♦ 30 CFR Parts 77, 75, and 56/57
- ♦ Underground Haulage Hazards and Regulations
- ♦ Emergency Response Planning
- ♦ Haul Truck and Loader Safety
- ♦ Explosives Storage Safety
- ♦ Highwall Miner Safety
- ♦ Surge Pile/Draw-Off Tunnel Safety
- ♦ Belt Conveyor Safety
- ♦ Electrical Fire Hazards on Mine Property
- ♦ Escapeways and Structural Safety Around Mills and Plants
- ♦ Chemicals on Mine Property, and MSDS
- ♦ Use of Mine Equipment for Firefighting and Water Supply
- ♦ Traffic Control on Mine Roadway

**Technical Coordinator:** Johnnie Tyler  
**Course Length:** 1 day  
**Tuition:** None  
**Date:** November 14, 2007

**HAULAGE (SURFACE) (COAL)**  
**[HL301C]**



Haulage accidents have been one of the highest categories of fatal accidents for several years at our Nation's surface mines. This course teaches the recognition of hazards that may exist in surface haulage.

**Contents:**

- ♦ Compliance Determination of 30 CFR Parts 77.400 and 77.1600
- ♦ Inspection Procedures for Surface Mining Equipment
- ♦ Use of Signs and Traffic Control on Mine Property
- ♦ Haul Road Design
- ♦ Brake Systems
- ♦ New Technology (video cameras)
- ♦ Rollover Protective Structures (ROPS)
- ♦ Falling Object Protective Structures (FOPS)
- ♦ Tire and Rim Safety
- ♦ Overview of Fatal Accidents

**Technical Coordinator:** Johnnie Tyler

**Course Length:** 3 days

**Tuition:** \$231.00

**Dates:** *Scheduled upon request*

**INDUSTRIAL HYGIENE**  
**[IH315C]**



This course will enable mine safety and health inspectors to recognize and effectively assess health hazards, other than dust and noise, in coal mines and related areas. Laboratory exercises will include sampling procedures and techniques for more common health hazards that may be encountered during inspections. Other health hazard sampling procedures and techniques as well as health effects – respiratory, dermatological, carcinogenic – will be discussed.

**Contents:**

- ♦ Industrial Hygiene Terminology
- ♦ Toxicology
- ♦ Solvents
- ♦ Asbestos
- ♦ Radiation (Gamma, Ultraviolet)
- ♦ Sampling Methods
- ♦ Methods of Control
- ♦ Contaminants Detected at Mine Sites

**Technical Coordinator:** William D. McKinney  
**Course Length:** 3 days  
**Tuition:** \$231.00  
**Dates:** *Scheduled upon request*

**INSPECTOR'S PORTABLE APPLICATIONS FOR  
LAPTOPS (IPAL) REVIEW – COAL  
[CT307C]**

The IPAL review course is designed for MSHA coal mine safety and health inspectors. The course reviews the latest version of the IPAL Program. The course also covers the fundamentals of the computer operating system, troubleshooting, and how to use the computer to reference resource material stored in the computer.

**Contents:**

- ♦ IPAL (Inspector's Portable Applications for Laptops)
- ♦ Reference Material (30 CFR, Mine Act, PPM, Policy Information Letters, and Program Information Bulletins)
- ♦ Basic Troubleshooting and Maintenance of the Laptop Computer and the IPAL Program
- ♦ Using Citrix Metaframe

**Technical Coordinator:** Mac Carnes  
**Course Length:** 2 days  
**Tuition:** None  
**Dates:** *Scheduled upon request*

**LONGWALL MINING AND  
INSPECTION PROCEDURES**  
**[MS302C]**



This course will introduce the student to longwall mining. It will also make the experienced coal mine inspectors more familiar with the trends and new technology in longwall mining. It will cover all aspects of longwall mining, including approved MSHA plans.

The first part of the course will cover all aspects of mining, including a review of all basic components of longwall mining systems and their functions. It will also cover longwall moves, degasification, and ground control for longwall faces.

The second part of the course will stress inspection procedures. It will cover all areas – from outby to the longwall face. This section has accompanying text and relates inspection procedures to the applicable standards in 30 CFR Parts 75 and 18.

**Contents:**

- ♦ History and Trends
- ♦ Parts of a Longwall (shearer, plow, panline, stage loader, drives, etc.)
- ♦ Shields (parts and controls)
- ♦ Strata Control (above the longwall)
- ♦ Hydraulics
- ♦ Longwall Moves
- ♦ Special Roof Control Products for Longwalls
- ♦ Ventilation (section, gob, bleeder, bleeder fans)
- ♦ Basic Longwall Electrical Systems
- ♦ CO Monitors
- ♦ Degasification
- ♦ Respirable Dust Control
- ♦ Inspection Procedures (Special Emphasis)
- ♦ Regulations

**Technical Coordinator:** Joseph Fama

**Course Length:** 3 days

**Tuition:** \$231.00

**Dates:** *Scheduled upon request*

**MARSHALL UNIVERSITY MASTERS OF SAFETY  
DEGREE (MINING EMPHASIS)  
[NEMU003]**

Courses will be offered pursuant to the Masters of Safety Degree (Mining Emphasis) program offered by the Academy through Marshall University. Courses will be offered in a blended learning environment using distance learning technology. Online courses are also planned to be offered in the Spring, Summer, and Fall 2008 semesters. Marshall University offers courses online through WebCT Vista. This is available to any person enrolled as a Marshall University graduate student. It is extremely important that you be accepted into the program by Marshall University so that any computer issues that may arise can be resolved prior to beginning the course.

Students must be admitted into the program **prior** to course enrollment. Application for Graduate Admission forms may be obtained by calling Cheryl Hoffman at (304) 256-3300 or by going online to [www.marshall.edu](http://www.marshall.edu). College Chemistry 203, Math 130 (college algebra), and Physics 101 or the equivalent are prerequisites for admission to this program, as is a minimum undergraduate GPA of 2.5 or being registered as a professional engineer, or scoring at the mean or above on one area of the General GRE.

Enrollment for these online classes will be limited to 25 students and is on a first come first serve basis. First priority will be given to students who have taken courses previously in pursuit of this degree; those persons successfully admitted into the program through Marshall University will be given next preference.

Tuition and other related fees will be determined and posted at a later date. For more information, contact John Rosiek by email at [rosiek.john@dol.gov](mailto:rosiek.john@dol.gov) or at (304) 256-3211.

**Technical Coordinators:** John Rosiek and John Forte

**Dates:** Spring 2008  
Summer 2008  
Fall 2008

## **MINE ACCIDENT INVESTIGATION AND REPORT WRITING**

**[IV301G]**

This course is for coal, metal/nonmetal, technical support, EPD, and other MSHA individuals involved in accident investigation. **Other interested individuals should contact the Technical Coordinator.** The course reviews basic guidelines, procedures, and techniques used to investigate and report on accidents and other incidents involving health and safety in the mining industry.

Classroom activities and discussions cover reasons for accident investigations, the investigative process, data collection, accident reconstruction, proper analysis for corrective actions, and completion of investigative reports following relevant MSHA guidelines and policies. At the conclusion of the class, in a practical exercise, students will conduct a simulated accident investigation and prepare a report. **Students should bring their laptop computers.**

### **Contents:**

- ♦ Overview of Accident Investigation
- ♦ Pre-Investigation Activities
- ♦ Dealing with Family Members
- ♦ Accident Reconstruction
- ♦ Photography/Sketching
- ♦ Interviewing Techniques
- ♦ Data Collection and Evaluation
- ♦ Developing Conclusions and Corrective Actions
- ♦ Report Writing
- ♦ TapRoot<sup>®</sup>

**Technical Coordinators:** James Beha  
Scott Mandeville  
Roy Milam

**Course Length:** 8 days

**Tuition:** None

**Dates:** October 23 - November 1, 2007  
April 22 - May 1, 2008  
August 5-14, 2008  
September 9-18, 2008

**NOISE HAZARDS, REGULATION,  
AND CONTROL**  
[IH321G]



This course provides the participant with information on the hazards associated with overexposure to noise. It thoroughly reviews 30 CFR Part 62 and appropriate monitoring and control methods. The course also discusses the elements of an effective hearing conservation program.

**Contents:**

- ♦ Characteristics of Noise
- ♦ Impact of Noise on Health
- ♦ Noise Monitoring
  - Sound Level Meters
  - Dosimeters
  - Octave Band Analysis
- ♦ Audiometric Examinations
- ♦ Noise Regulation - Compliance Discussion
  - Exposure levels
  - Monitoring
  - Hearing Conservation Programs
  - Training Requirements
- ♦ Control methods

**Technical Coordinator:** William D. McKinney  
**Course Length:** 3 days  
**Tuition:** \$231.00  
**Dates:** *Scheduled upon request*

## **ROOF CONTROL SEMINAR**

### **[RC501C]**

This seminar is designed for miners, company managers, engineers, trainers, roof bolter machine operators, and for any individual involved with coal mine roof safety. Federal and state enforcement personnel desiring to increase their knowledge in the latest developments in roof and rib control will also find this seminar very beneficial.

This seminar will update personnel on new products and methods related to roof stability. It will also include presentations by personnel from the Academy, Technical Support, MSHA headquarters, other government agencies, and industry. All subjects will incorporate safe mining practices which will help reduce roof fall injuries and fatalities. The seminar will discuss new roof control techniques, trends, and developments.

#### **Contents:**

- ♦ New Roof Bolting Products
- ♦ Supplemental Supports
- ♦ Roof Control Fatality Trends and Prevention
- ♦ Roof Control Machinery Updates

**Technical Coordinators:** Joseph Fama  
John Rosiek

**Course Length:** 2 days

**Tuition:** None

**Dates:** May 28-29, 2008

## **SLOPE AND SHAFT SINKING SAFETY**

**[RC310G]**

This course will include a description of the most common conventional slope and shaft construction process, the hazards associated with slope and shaft work, and inspection procedures. It will also discuss the hazards associated with hoisting and cover the inspection procedures for wire ropes.

### **Contents:**

- ♦ Slope and Shaft Construction Process
- ♦ Ventilation
- ♦ Ground Control
- ♦ Hoisting
- ♦ Electrical
- ♦ Health
- ♦ Slope and Shaft Sinking Plans
- ♦ Inspection Guidelines
- ♦ Hazard Identification

**Technical Coordinator:** Ed Newcomb

**Course Length:** 2 days

**Tuition:** \$154.00

**Dates:** *Scheduled upon request*

## **SURFACE FACILITIES AND COAL PREPARATION [PP601C]**

This course is designed to familiarize the student with: equipment and processes used in coal preparation plants; hazards that might exist around preparation plants; and inspection requirements for such plants. This course has been expanded to include structural safety in an effort to eliminate surface structural failures in the mining industry.

### **Contents:**

- ♦ Structural Safety
- ♦ Equipment Guarding
- ♦ Stockpile Safety
- ♦ Delivery Methods to the Plant
- ♦ Crushing, Sizing, and Washing Processes
- ♦ Dewatering and Drying
- ♦ Storage of Raw and Clean Coal
- ♦ Potential Hazards
- ♦ Preparation Plant Inspection

**Technical Coordinators:** Clifford F. Lindsay  
Johnnie Tyler

**Course Length:** 3 days

**Tuition:** \$231.00

**Dates:** *Scheduled upon request*

**TapRoot<sup>®</sup> SYSTEM ACCIDENT/INCIDENT  
INVESTIGATION TRAINING  
[IV341G]**

This course is for coal, metal/nonmetal, technical support, and other MSHA employees who are involved in mine accident/incident investigations. The TapRoot<sup>®</sup> System provides a methodology to lead an investigator through the techniques and steps used to perform an in-depth investigation of an incident's root causes. Training focuses on developing a flow diagram of the events and conditions leading up to the undesired incident, evaluating each condition, identifying causal factors, and evaluating each factor as to root cause. The course will include training on Systems Improvement's SnapCharT<sup>®</sup> and Root Cause Tree<sup>®</sup> software.

The SnapCharT<sup>®</sup> software is a graphic presentation of the sequence of events identified and discovered during the physical onsite investigation. A SnapCharT<sup>®</sup> helps the investigator organize the information gathered, identify the contributing factors that lead to the incident, and identify causal factors. In addition, it helps the investigator identify holes and inconsistencies in the information gathered during the investigation.

The Root Cause Tree<sup>®</sup> software takes over where a SnapCharT<sup>®</sup> stops. While the SnapCharT<sup>®</sup> looks at what happened and the contributing factors involved, the Root Cause Tree<sup>®</sup> looks at why it happened. The Root Cause Tree<sup>®</sup> provides the investigator with a comprehensive list of the root causes that should be considered for every incident.

**Students should bring their laptop computers.**

**Contents:**

- ◆ Equipment Failure Analysis including:
  - Design Failures
  - Defective Parts
  - Preventive/Predictive Maintenance

**TapRoot® SYSTEM ACCIDENT/INCIDENT  
INVESTIGATION TRAINING** *(continued)*

- ♦ Human Performance Difficulty Analysis including:
  - Procedures
  - Training
  - Quality Control
  - Communications
  - Management Systems
  - Human Engineering
  - Work Direction

**Technical Coordinators:** Scott Mandeville  
Roy Milam

**Course Length:** 3 days

**Tuition:** None

**Dates:** *Scheduled upon request*



## **TRAINING FOR NEW ELECTRICAL SPECIALISTS (EL402G)**

This course is for new electrical specialists (less than 5 years with Agency). While conducting many of the procedures and tests required to ensure that electrical equipment and circuitry is safe for the miner, the specialist is exposed to potentially hazardous conditions many times a day. This advanced training is required to perform these tasks safely, and has proficiency testing for each topic covered.

### **Contents:**

- ♦ Permissibility
- ♦ Diesel
- ♦ Substation Testing
- ♦ Grounding
- ♦ Low and Medium Voltage Testing
- ♦ Methane Monitors
- ♦ PPE and Meter Safety
- ♦ Regulation and Policy
- ♦ Hazardous Locations (NEC)
- ♦ Outby Circuits

**Technical Coordinators:** Roy Milam  
Art Wooten

**Course Length:** 8 days

**Dates:** February 5-14, 2008  
May 13-22, 2008  
August 19-28, 2008

## **UNDERGROUND DIESEL EQUIPMENT/ VENTILATION**

**[VN321G]**

This course provides the participants with techniques to conduct an evaluation of existing underground diesel mining equipment. Basic air sampling principles will be presented. The impact of diesel equipment on the mine ventilation system and the mine ventilation plan will be discussed. The health hazards associated with diesel equipment and diesel fuel will be examined.

Primary emphasis will focus on the Code of Federal Regulations (30 CFR) related to underground mining operations. The class will integrate technology with case studies and basic laboratory work.

### **Contents:**

- ♦ Code of Federal Regulations Review
- ♦ Air Sampling Procedures
- ♦ Introduction to Basic Air Flow Measurement Techniques
- ♦ Equipment
- ♦ Health Hazards
- ♦ Proper Health Sampling Techniques
- ♦ Review of Diesel Technology

**Technical Coordinators:** William D. McKinney  
Scott Mandeville

**Course Length:** 3 days

**Tuition:** \$231.00

**Dates:** *Scheduled upon request*

**UNDERGROUND HAULAGE,  
TRANSPORTATION, AND  
MACHINERY (COAL)**  
[HL321C]



Haulage or Machinery-related accidents continue to be one of the leading causes of fatalities in underground mining. These two categories are also the leading causes of nonfatal accidents in underground mining which result in lost work days.

This course for MSHA Coal Journeyman inspectors teaches recognition of some of the hazards associated with haulage equipment and other machinery found in underground coal mines and methods to eliminate them. The inspector will recognize haulage hazards and the appropriate enforcement action to take.

**Contents:**

- ♦ Recent Statistical Data
- ♦ Investigative Findings of Some Recent Accidents
- ♦ Difference Between Accidents Classified as Haulage and Those Classified as Machinery
- ♦ Regulations and Policy
- ♦ Safeguards
- ♦ Enforcement Action: Citations and Orders

**Technical Coordinator:** Roy Milam  
**Course Length:** 2 days  
**Tuition:** \$154.00  
**Dates:** *Scheduled upon request*



## **Coal Mine Safety and Health Inspectors Retraining**

**[LP311C]**

MSHA underground and surface coal mine safety and health inspectors are required to receive a minimum of two weeks of training every two years. This is the first year of the current two-year training cycle for journeyman coal mine safety and health inspectors.

Listed below are the dates of the training sessions scheduled at the Academy.

### **UNDERGROUND COAL MINE SAFETY AND HEALTH INSPECTORS (LP311C)**

**Richard McDorman, Coordinator**

#### **SCHEDULE**

January 8-17, 2008 (Cancelled)  
March 25 – April 3, 2008 (Cancelled)  
April 22 – May 1, 2008  
July 22-31, 2008

#### **SUBJECTS**

Break Cars & Hoists  
Cable Bolts & Trusses  
Computer Data Retrieval Issues  
Diesel  
Electrical Enforcement Consistency  
Fatality Review & Library Retrieval Issues  
Fire Protection on Conveyor Belt Lines  
Hands-on Permissibility  
Health Issues  
Internal Review Issues  
New Miner Act & S&S  
Rigging  
Seals

**SURFACE COAL MINE  
SAFETY AND HEALTH INSPECTORS  
(LP312C)**

**Johnnie Tyler, Coordinator**

**SCHEDULE**

September 9-18, 2008

**SUBJECTS**

Surface Coal Overview  
SLAM Risks & Root Cause Process for Accident,  
Incident & Violation Analysis  
Maintenance, Construction & Repairs Accident  
Reduction Program  
Thin Seam Highwall Miners  
Health Procedures  
Surface Haulage Issues  
PowerPoint and Inspection Closeout  
Electrical  
Law, Regulation and Policy  
Surface Blasting Technology  
Basic Rigging  
Advanced Citation & Order Writing  
Interviewing and Notetaking  
Provisions for Clear Cutting on Surface Mines

Three days of training will be combined with the Construction, Maintenance, and Repairs Seminar and the Surface Haulage Seminar.

## **Coal Entry Level Mine Safety and Health Inspectors Training**

The courses listed in this section are designed for entry level coal mine safety and health inspectors. However, they may be attended by other Federal, state, mining industry, and labor organization personnel.

Training dates are given with each module.

**Need More Info? Contact:**

Doris Fuller  
Department of Instructional Services  
National Mine Health and Safety Academy  
1301 Airport Road  
Beaver, West Virginia 25813-9426

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**TELEPHONE:** (304) 256-3234

**FAX:** (304) 256-3247

**E-MAIL:** fuller.doris@dol.gov

### **COAL CURRICULUM (MODULES I-VI)**

The following chart shows the required core courses for entry level mine safety and health inspectors.

**Wellness training is scheduled for each module.  
Laptop computer and printer required for all modules.**

**MODULE I (4 weeks)**

Orientation	Law, Regulation, & Policy	Notetaking/Citations and
Introduction to MSHA and Mission	Introduction to Laptops	Orders Writing
Diversity	Root Cause Analysis	Inspector's Portable
Effective Writing	Inspection Procedures	Applications for Laptops (IPAL)

**MODULE II (4 weeks)**

Mine Acts S&S & 104(d)/ Part 45 Contractors	Workplace Examinations	Professionalism
Safety Talks I	Combustible Materials and Rockdusting	Part 48 Training Requirements
Part 50 Reporting Requirements & Auditing	Conference Presentation Preparation (PP)	Conference Presentation Communication
Introduction to Special Investigations/Mine Acts 105(c), 110(c)	Noise/Respirable Dust	IPAL Review A

**MODULE III (4 weeks)**

Interviewing Techniques	Mine Act 107(a)/103(g)	Fire Protection
Mine Wide Monitoring	Mine Electricity	Simulated Inspection
Courtroom Procedures	Diesel Permissibility	Electrical Permissibility
Ground Control	Shaft and Slope Sinking Inspection	

**MODULE IV (3 weeks)**

Surface Installation	Longwall	Longwall High Voltage
Roof Control	Ventilation, Mine Maps, Gas Detecting Devices	
Mine Act 104(g)/Part 48		

**MODULE V (3 weeks)**

Hoisting	Surface Haulage	Drilling and Blasting
Structural Safety		

**MODULE VI (3 weeks)**

Underground Haulage	Impoundments	Mine Act (103(f), 103(k)
Mine Rescue/Part 49	Electrical Review	General Review
Accident Investigation	IPAL Review B	Overall Review/Graduation

The following courses must be completed prior to Module I:

- ♦ Employee Health & Safety
- ♦ Standards of Conduct
- ♦ Employee Accident Reporting
- ♦ Computer Security Awareness
- ♦ Keyboarding –students demonstrate 25 wpm with 75% accuracy

The following on-line courses must be completed prior to Module II:

- ♦ Hazard Communications
- ♦ Miscellaneous Health Standards
- ♦ Part 48 Training Requirements
- ♦ Professionalism
- ♦ Safety Talks I
- ♦ Part 45 Contractors

This course will be completed after Module II:

- ♦ Safety Talks II (talk given in field, reported to Academy)

The following on-line courses must be completed prior to Module III:

- ♦ Behavior Based Safety
- ♦ Tree Cutting
- ♦ Structural Safety

The following on-line courses must be completed prior to Graduation:

- ♦ Miscellaneous Safety Standards
- ♦ Technical Support Overview
- ♦ Wellness

## **Coal Entry Level Mine Safety and Health Inspectors Training**

*(Dates include travel days)*

### **GROUP 49**

Module VIII	October 15 – November 2, 2007	(3 weeks)
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### **GROUP 55**

Module V	October 15 – November 2, 2007	(3 weeks)
Module VI	January 7 – 25, 2008	(3 weeks)

### **GROUP 56**

Module V	October 15 – November 2, 2007	(3 weeks)
Module VI	January 7 – 25, 2008	(3 weeks)

### **GROUP 57**

Module V	November 26 – December 14, 2007	(3 weeks)
Module VI	February 25 – March 14, 2008	(3 weeks)

### **GROUP 58**

Module IV	November 26 – December 14, 2007	(3 weeks)
Module V	February 25 – March 14, 2008	(3 weeks)
Module VI	June 2 – 20, 2008	(3 weeks)

### **GROUP 59**

Module III	October 15 – November 9, 2007	(4 weeks)
Module IV	January 28 – February 15, 2008	(3 weeks)
Module V	April 21 – May 9, 2008	(3 weeks)
Module VI	July 14 – August 1, 2008	(3 weeks)

### **GROUP 60**

Module III	October 15 – November 9, 2007	(4 Weeks)
Module IV	January 14 – February 1, 2008	(3 Weeks)
Module V	April 7 – 25, 2008	(3 Weeks)
Module VI	July 7 – 25, 2008	(3 Weeks)

### **GROUP 61**

Module III	October 15 – November 9, 2007	(4 Weeks)
Module IV	January 7 – 25, 2008	(3 Weeks)
Module V	April 7 – 25, 2008	(3 Weeks)
Module VI	July 14 – August 1, 2008	(3 Weeks)

### **GROUP 62**

Module III	November 26 – December 21, 2007	(4 Weeks)
Module IV	February 11 – 29, 2008	(3 Weeks)
Module V	May 5 – 23, 2008	(3 Weeks)
Module VI	August 4 – 22, 2008	(3 Weeks)

### **CMI GROUP 63**

Module II	November 26 – December 21, 2007	(4 Weeks)
Module III	February 25 – March 21, 2008	(4 Weeks)
Module IV	June 2 – 20, 2008	(3 Weeks)
Module V	September 8 – 26, 2008	(3 Weeks)
Module VI	December 1 – 19, 2008	(3 Weeks)

### **CMI GROUP 64**

Module II	November 26 – December 21, 2007	(4 Weeks)
Module III	February 4 – 29, 2008	(4 Weeks)
Module IV	April 28 – May 15, 2008	(3 Weeks)
Module V	August 11 – 29, 2008	(3 Weeks)
Module VI	December 1 – 19, 2008	(3 Weeks)

### **CMI GROUP 65**

Module II	November 26 – December 21, 2007	(4 Weeks)
Module III	March 10 – April 4, 2008	(4 Weeks)
Module IV	June 2 – 20, 2008	(3 Weeks)
Module V	September 8 – 26, 2008	(3 Weeks)
Module VI	December 1 – 19, 2008	(3 Weeks)

### **CMI GROUP 66**

Module I	October 15 – November 9, 2007	(4 weeks)
Module II	November 26 – December 21, 2007	(4 weeks)
Module III	February 11 – March 7, 2008	(4 weeks)
Module IV	June 9 – 27, 2008	(3 weeks)
Module V	September 15 – October 3, 2008	(3 weeks)
Module VI	December 1 – 19, 2008	(3 weeks)

### **CMI GROUP 67**

Module I	October 15 – November 9, 2007	(4 weeks)
Module II	January 7 – February 1, 2008	(4 weeks)
Module III	March 24 – April 18, 2008	(3 weeks)
Module IV	July 14 – August 1, 2008	(3 weeks)
Module V	September 22 – October 10, 2008	(3 weeks)
Module VI	January 5 – 23, 2009	(3 weeks)

### **CMI GROUP 68**

Module I	October 15 – November 9, 2007	(4 weeks)
Module II	November 26 – December 21, 2007	(4 weeks)
Module III	March 17 – April 11, 2008	(4 weeks)
Module IV	June 9 – 27, 2008	(3 weeks)
Module V	September 22 – October 10, 2008	(3 weeks)
Module VI	January 5 – 23, 2009	(3 weeks)

### **CMI GROUP 69**

Module I	November 26 – December 21, 2007	(4 weeks)
Module II	January 28 – February 22, 2008	(4 weeks)
Module III	April 14 – May 9, 2008	(4 weeks)
Module IV	July 7 – 25, 2008	(3 weeks)
Module V	September 22 – October 10, 2008	(3 weeks)
Module VI	January 26 – February 13, 2009	(3 weeks)

### **CMI GROUP 70**

Module I	November 26 – December 21, 2007	(4 weeks)
Module II	January 28 – February 22, 2008	(4 weeks)
Module III	April 7 – May 2, 2008	(4 weeks)
Module IV	July 14 – August 1, 2008	(3 weeks)
Module V	October 20 – November 7, 2008	(3 weeks)
Module VI	January 26 – February 13, 2009	(3 weeks)

### **CMI GROUP 71**

Module I	February 25 – March 21, 2008	(4 weeks)
Module II	April 21 – May 16, 2008	(4 weeks)
Module III	August 4 – 29, 2008	(4 weeks)
Module IV	October 27 – November 14, 2008	(3 weeks)
Module V	January 26 – February 13, 2009	(3 weeks)
Module VI	April 13 – May 1, 2009	(3 weeks)



## Computer Training Schedule

Contents of each computer class are listed followed by a schedule by course dates. All persons attending, except employees of Federal, state, or local governments, will be charged a tuition fee of \$231.00 for a three-day class; \$154.00 for a two-day class; and \$77.00 for a one-day class.

Additional information may be obtained by contacting the Course Coordinator: Mac A. Carnes (304) 256-3398.

To Enroll Contact:

National Mine Health and Safety Academy  
Student Services Branch  
1301 Airport Road  
Beaver, West Virginia 25813-9426

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**TELEPHONE:** (304) 256-3252  
**FAX:** (304) 256-3251

**MICROSOFT® EXCEL 2003 – BASIC**  
**[CT721G]**

Excel 2003 is a spreadsheet program that can be used to organize, analyze and attractively present data, such as a budget or sales report. This course requires a prior knowledge of computers. Classroom activities include hands-on work in the Computer Laboratory.

**Contents:**

- ♦ Excel Basics
- ♦ Entering and Editing Data
- ♦ Modifying a Worksheet
- ♦ Using Functions
- ♦ Formatting Worksheets
- ♦ Printing
- ♦ Creating Charts
- ♦ Using the Help Feature

**Technical Coordinator:** Mac Carnes  
**Course Length:** 3 days  
**Tuition:** \$231.00  
**Dates:** February 12-14, 2008

**MICROSOFT® EXCEL 2003 – INTERMEDIATE  
[CT722G]**

Excel 2003 is a spreadsheet program that can be used to organize, analyze and attractively present data, such as a budget or sales report. This course requires a prior knowledge of computers and the Basic Excel course. Activities include hands-on work in the Computer Laboratory.

**Contents:**

- ♦ Working With Large Worksheets
- ♦ Working With Multiple Worksheets and Workbooks
- ♦ Advanced Charting
- ♦ Advanced Formatting
- ♦ Using Templates
- ♦ Additional Functions
- ♦ Protecting Parts of a Worksheet

**Technical Coordinator:** Mac Carnes  
**Course Length:** 3 days  
**Tuition:** \$231.00  
**Dates:** March 4-6, 2008

## **MICROSOFT® POWERPOINT 2003**

**[CT711G]**

Microsoft® PowerPoint 2003 is a presentation program that allows users to create overhead slides, speaker notes, audience handouts and outlines – all in a single presentation file. PowerPoint offers powerful tools to help create and organize a presentation step by step. This class includes hands-on work in the Computer Laboratory, and development of a sample presentation.

### **Contents:**

- ♦ Choose the Best Method to Start a Presentation
- ♦ Create a Presentation Using Suggested Content and a Design Template
- ♦ Browse Through a Presentation
- ♦ Enter and Edit Text in a Presentation
- ♦ View a Presentation
- ♦ Insert Slides from Other Presentations
- ♦ Rearrange Slides in a Presentation
- ♦ Create a Folder to Store a Presentation
- ♦ Change Text Alignment and Spacing
- ♦ Find and Replace Text and Fonts
- ♦ Correct Text While Typing
- ♦ Check Spelling and Presentation Styles
- ♦ Add a Header and Footer
- ♦ Choose the Right Print Settings
- ♦ Preview and Print a Presentation
- ♦ Enter and Print Speaker Notes

**Technical Coordinator:** Mac Carnes  
**Course Length:** 3 days  
**Tuition:** \$231.00  
**Dates:** May 20-22, 2008

## **MICROSOFT® WORD 2003**

**[CT706G]**

Microsoft® Word 2003 is a word-processing program that is used to compose and update a wide range of business documents. It offers many desktop-publishing features that let you enhance the appearance of documents. Word also has the power and flexibility to produce professional documents quickly and easily.

### **Contents:**

- ♦ Create a Document
- ♦ Edit and Format
- ♦ Present Information in Tables and Columns
- ♦ Work with Graphics/Charts
- ♦ Customize Word for the Way You Work
- ♦ Create Form Letters and Labels
- ♦ Create Forms
- ♦ Work with Footnotes and Bookmarks
- ♦ Work with Tables of Contents and Indexes

**Technical Coordinator:** Mac Carnes  
**Course Length:** 3 days  
**Tuition:** \$231.00  
**Dates:** August 5-7, 2008



## Certification and Qualification Courses

The courses in this section are available to MSHA and industry personnel. Upon successful completion of any of these courses, participants will receive the required MSHA certification for the particular area covered.



Courses marked by this icon may be held at your worksite. If your company or organization would like any of these courses presented onsite, contact Doris Fuller at (304) 256-3234. The course can then be scheduled.

QUESTIONS?

If you need more information about contents of a course, contact the technical coordinator for that course at (304) 256-3100 or Doris Fuller at (304) 256-3234.

To Enroll Contact:

National Mine Health and Safety Academy  
Student Services Branch  
1301 Airport Road  
Beaver, West Virginia 25813-9426

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**TELEPHONE:** (304) 256-3252  
**FAX:** (304) 256-3251

**ANNUAL RETRAINING FOR  
IMPOUNDMENT QUALIFICATION  
[IM602C]**

This course provides the annual retraining requirements for qualified impoundment mine safety and health inspectors. Impoundment mine safety and health inspectors are required to receive annual retraining in accordance with the requirements specified in the Code of Federal Regulations [30 CFR 77.107-1(b)].

**Contents:**

- ♦ Reviews of Proper Inspection Procedures
- ♦ Signs of Impoundment Stress
- ♦ Instrumentation Monitoring
- ♦ Construction Monitoring
- ♦ Emergency Action Planning
- ♦ Foundation Analysis
- ♦ Geotechnical Investigations
- ♦ Breakthrough Potential Analysis

**Technical Coordinator:** Clifford F. Lindsay  
**Course Length:** 4 hours  
**Tuition:** \$44.00  
**Dates:** November 8, 2007  
January 17, 2008  
May 1, 2008  
August 21, 2008

**QUALIFICATION FOR  
IMPOUNDMENT INSPECTION  
[IM601C]**



This course provides the initial training for personnel who are required to inspect impoundments. Successful completion of this course qualifies the participant to inspect impoundments as required by the Code of Federal Regulations [30 CFR 77.216-3(g)].

**Contents:**

Introductory training on:

- ♦ Proper Inspection Procedures
- ♦ Recognizing Deficiencies and Signs of Distress
- ♦ Failure Modes
- ♦ Foundation Analysis
- ♦ Geotechnical Investigation
- ♦ Breakthrough Potential Analysis
- ♦ Common Instrumentation
- ♦ Facility Configurations
- ♦ Field Hazard Classifications
- ♦ Reporting Requirements
- ♦ Inspection Forms

**Technical Coordinator:** Clifford F. Lindsay  
**Course Length:** 8 hours  
**Tuition:** \$77.00  
**Dates:** November 7, 2007  
January 15, 2008  
April 29, 2008  
August 19, 2008

**RESPIRABLE COAL MINE DUST SAMPLER  
CALIBRATION/MAINTENANCE CERTIFICATION  
[IH602C]**

This course provides the initial training for personnel who are required to calibrate and maintain coal mine dust sampling equipment.

Successful completion of this course certifies the participant to calibrate and maintain respirable coal mine dust sampler units under the current Code of Federal Regulations (30 CFR Parts 70/71/90).

**Contents:**

- ♦ Properties of the Approved Sampling Unit
- ♦ Responsibilities of the Certified Person for Maintenance and Calibration

**Hands-on Instruction:**

- ♦ Pump Calibration Procedures
- ♦ Maintenance Requirements
- ♦ Sampling Unit Inspection
- ♦ Pre-Shift Checks of Approved Sampling Unit

**Technical Coordinator:** William D. McKinney

**Course Length:** 8 hours

**Tuition:** \$77.00

**Dates:** May 8, 2008  
July 31, 2008

## **RESPIRABLE COAL MINE DUST SAMPLING CERTIFICATION**

**[IH601C]**

This course provides the initial training for personnel who are required to collect coal mine dust samples.

Successful completion of this course certifies the participant to collect and submit respirable coal mine dust samples under the current Code of Federal Regulations (30 CFR Parts 70/71/90).

### **Contents:**

Instruction in the Regulations Governing the Coal Mine Operator's Respirable Dust Sampling Program including:

- ♦ Nature of Respirable Dust Hazards
- ♦ Responsibilities of the Certified Sampler
- ♦ Respirable Dust Sampling Procedures
- ♦ Approved Sampler Units
- ♦ On-Shift Parameter Checks

### **Hands-on Instructions for Sampling Unit:**

- ♦ Assembly
- ♦ Inspection
- ♦ Use

**Technical Coordinator:** William D. McKinney

**Course Length:** 8 hours

**Tuition:** \$77.00

**Dates:** May 7, 2008

July 30, 2008



## General Courses for MSHA and the Mining Industry

The Academy courses described in this section are available to MSHA and industry personnel.



Courses marked by this icon may be held at your worksite. If your company or organization would like any of these courses presented onsite, contact Doris Fuller at (304) 256-3234. The course can then be scheduled.

QUESTIONS?

If you need more information about contents of a course, contact the technical coordinator for that course at (304) 256-3100 or Doris Fuller at (304) 256-3234.

To Enroll Contact:

National Mine Health and Safety Academy  
Student Services Branch  
1301 Airport Road  
Beaver, West Virginia 25813-9426

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**TELEPHONE:** (304) 256-3252  
**FAX:** (304) 256-3251

**ACCIDENT PREVENTION  
TECHNIQUES**  
[SF601G]



This course is designed for safety managers/directors, mine managers, or anyone in the mining industry involved in safety management. Several proven accident reduction techniques are covered during the three-day class.

The course begins with a discussion on the principle of multiple causation and the importance of identifying the significant contributing factors in most mining accidents. Accidents/incidents are divided into the three levels of causation with examples of each level discussed. Discussions focus on the indirect level of causation through a technique of identifying performance problems as either skill or motivational. Unsafe conditions and unsafe work practices are addressed through job safety analysis and job observation. Stress, safety communications, and effective safety talks will be covered.

The class concludes with a health and safety survey which can identify the strengths and weaknesses of a company's health and safety program.

**Contents:**

- ♦ Accident/Incident Analysis
- ♦ Analyzing Performance Problems
- ♦ Safety Communications/Promotion
- ♦ Developing Effective Safety Talks
- ♦ Managing Stress
- ♦ Job Safety Analysis
- ♦ Job Observation
- ♦ Accident Investigation
- ♦ Mine Safety Program Rating Procedures

**Technical Coordinator:** John Forte

**Course Length:** 3 days

**Tuition:** \$231.00

**Dates:** *Scheduled upon request*

**ELECTRICAL SAFETY FOR COAL MINERS**  
**[EL601C]**

This course is designed to provide practical methods and techniques to identify electrical hazards and the appropriate enforcement actions to take to correct them. This course is for coal industry personnel with limited or no electrical expertise.

**Contents:**

- ♦ Basic Electrical Theory
- ♦ Basic Circuitry
- ♦ Hazard Recognition
- ♦ Grounding
- ♦ Power Distribution Systems
- ♦ Regulations and Policies
- ♦ Personal Safety
- ♦ Inspection of Electrical Equipment
- ♦ Permissibility

**NOTE:** *This course is not intended for Electrical Specialists.*

**Technical Coordinator:** Roy Milam  
**Course Length:** 3 days  
**Tuition:** \$231.00  
**Dates:** *Scheduled upon request*

**ELECTRICAL SAFETY FOR METAL/NONMETAL  
MINERS  
[EL601M]**

This course is designed to provide practical methods and techniques to identify electrical hazards and the appropriate enforcement actions to take to correct them. This course is for metal/nonmetal industry personnel with limited or no electrical expertise.

**Contents:**

- ♦ Grounding
- ♦ Power Distribution Systems
- ♦ Inspection of Electrical Equipment
- ♦ Regulations and Policies
- ♦ Hazard Recognition
- ♦ Personal Safety

**NOTE:** *This course is not intended for Electrical Specialists.*

**Technical Coordinator:** Roy Milam  
**Course Length:** 2 days  
**Tuition:** \$154.00  
**Dates:** *Scheduled upon request*

## **HAZARD COMMUNICATION (HAZCOM)**

**[IH616G]**

This course is designed to provide operators with information necessary to develop an effective HazCom program. It will review the requirements of 30 CFR Part 47, including identification of chemicals at the mine site, determining which chemicals are hazardous, establishing a HazCom Program, and informing miners about chemical hazards and appropriate protection measures.

### **Contents:**

- ♦ Purpose and Scope of the HazCom Standard
- ♦ Operators and Chemicals Covered
- ♦ Identification of Hazardous Chemicals
- ♦ Requirements for a HazCom Program
- ♦ Container Labels and Other Forms of Warning
- ♦ Material Safety Data Sheet (MSDS) Requirements
- ♦ HazCom Training Requirements
- ♦ Availability of HazCom Information
- ♦ Trade Secret Provisions
- ♦ Exemptions

**Technical Coordinators:** Tom Bonifacio  
William D. McKinney  
Johnnie Tyler

**Course Length:** 1 day

**Tuition:** \$77.00

**Dates:** *Scheduled upon request*

## **HOISTS AND ELEVATORS**

**[HS603C]**



This course provides instruction to the student in the basic parts of mine personnel hoists and elevators. It includes discussion of drums, sheaves, and cages, but mainly concentrates on wire ropes and terminations. The class will also cover some of the requirements in the American Society of Mechanical Engineers (ASME) A17.1 and A17.2 which apply to elevators. The student will learn basic wire rope and termination technology and how to use this knowledge to enforce removal criteria according to the Code of Federal Regulations (30 CFR 75.1400 or 56.19000). The student will also learn how to conduct an adequate inspection for personnel hoists and elevators. There are exercises on hazard recognition. This course is for MSHA coal and metal/ nonmetal mine safety and health inspectors and industry personnel.

### **Contents:**

- ♦ Wire Rope Technology
- ♦ Terminations and Attachments
- ♦ Removal Criteria According to 30 CFR
- ♦ How to Apply ASME A17.1 & A17.2
- ♦ Hazard Recognition
- ♦ Inspection Procedure
- ♦ Citation and Order Writing

**Technical Coordinator:** Joseph Fama  
**Course Length:** 3 days  
**Tuition:** \$231.00  
**Dates:** April 29 – May 1, 2008

**INDUSTRIAL HYGIENE: SAMPLING FOR  
RESPIRABLE SILICA DUST AND NOISE  
[IH621M]**

*(Offered on site)*

This class, developed in cooperation with the National Stone, Sand and Gravel Association, **is to be scheduled at your worksite**. It involves two days of classroom work and a full day of on-site sampling for silica and noise. It prepares miners and mine operators to conduct ongoing sampling. Results of noise sampling are available immediately; dust samples require analysis in the laboratory, and the cost of analysis is picked up by the mine operator.

A minimum of 10 students is required; the maximum class size is 15 students.

**Contents:**

- ♦ Hazards of Silica and Noise
- ♦ Introduction to Industrial Hygiene
- ♦ Sampling Equipment and Techniques Laboratory
- ♦ Record Keeping
- ♦ Calculations
- ♦ Controls

**Technical Coordinator:** William D. McKinney

**Tuition:** \$250.00 per student

**Dates:** *Limited availability; to be arranged with individual operators*

**INSTRUCTOR TRAINING WORKSHOP (PART 48)  
[GS643G]**

This course is intended to improve the instructional skills, abilities, and knowledge of mine trainers. Participants will be required to select, develop, and present a 15-minute training segment on a health or safety topic in 30 CFR Part 48. The presentation will be videotaped for playback and individual review.

Approval as a Part 48 instructor is a two-part process. (1) You must demonstrate that you have knowledge of the subjects that you will be teaching. This is generally accomplished by submitting a resume to the local MSHA District showing your mining experience and education. (2) You must demonstrate that you have the ability to teach. Successful completion of this course will enable you to meet this requirement.

**Contents:**

- ♦ Principles of Adult Instruction
- ♦ Developing Objectives
- ♦ Developing Criterion Test Items
- ♦ Outlining the Training Content
- ♦ Determining the Instructional Methods
- ♦ Developing and Using Training Aids
- ♦ Developing a Lesson Plan
- ♦ Using Facilitation Skills
- ♦ Part 48 Requirements

**Technical Coordinator:** Belinda Parsons  
**Course Length:** 3 days  
**Tuition:** \$231.00  
**Dates:** October 16-18, 2007  
January 15-17, 2008  
May 20-22, 2008  
August 26-28, 2008

**INTERMEDIATE TOXICOLOGY**  
**[IH606G]**



This course will provide the students with a review of the uptake, distribution, metabolism, and elimination of industrial and environmental chemicals. Dose- and time-response relationships will be discussed. Toxic effects of metals, particulates, solvents, and other chemicals found in the mine environment will be examined.

**Contents:**

- ♦ Introduction to Fundamental Concepts of Toxicology
- ♦ Review of Terminology Used in Toxicology
- ♦ Comparison of Inhalation, Ingestion, and Dermal Exposures
- ♦ Definition of Endpoints of Toxicity
- ♦ Summary of Acute Versus Chronic Toxicity
- ♦ Discussion of Toxicity Data Used to Develop Exposure Limits for Humans

**Instructor:** Michelle Schaper  
**Technical Coordinator:** William D. McKinney  
**Course Length:** 3 days  
**Tuition:** \$231.00  
**Dates:** *Scheduled upon request*

## **INTRODUCTION TO MINING**

**[MS701G]**

The mining industry fulfills the important function of providing society's raw materials. Increasingly, mining has become more complex, due to rapid technological changes and comprehensive regulations. This complexity coupled with the industry's rich and traditional use of unique terminology can make understanding mining difficult for persons unfamiliar with it. This course introduces participants to the broad scope of mining, and is for those with little or no mining knowledge. It will provide participants with a working understanding of the various aspects of the industry.

### **Contents:**

- ♦ Mining Terminology
- ♦ Mineral Exploration and Geology
- ♦ Description of the Different Mining Methods
- ♦ Coal Preparation and Mineral Processing
- ♦ Health and Safety Regulations including:
  - Ground/Roof Control
  - Ventilation and Dust Control
  - Haulage and Hoisting
  - Personal Protective Equipment
  - Mapping
  - Mine Examinations
  - Electricity
  - Explosives
  - Industrial Hygiene

**Technical Coordinator:** Jimmy L. Shumate

**Course Length:** 3 days

**Tuition:** \$231.00

**Dates:** August 5-7, 2008

**MARSHALL UNIVERSITY MASTERS OF SAFETY  
DEGREE (MINING EMPHASIS)**

**[NEMU003]**

Courses will be offered pursuant to the Masters of Safety Degree (Mining Emphasis) program offered by the Academy through Marshall University. Courses will be offered in a blended learning environment using distance learning technology. Online courses are also planned to be offered in the Spring, Summer and Fall 2008 semesters. Marshall University offers courses online through WebCT Vista. This is available to any person enrolled as a Marshall University graduate student. It is extremely important that you be accepted into the program by Marshall University so that any computer issues that may arise can be resolved prior to beginning the course.

Students must be admitted into the program **prior** to course enrollment. Application for Graduate Admission forms may be obtained by calling Cheryl Hoffman at (304) 256-3300 or by going online to [www.marshall.edu](http://www.marshall.edu). College Chemistry 203, Math 130 (college algebra), and Physics 101 or the equivalent are prerequisites for admission to this program, as is a minimum undergraduate GPA of 2.5 or being registered as a professional engineer, or scoring at the mean or above on one area of the General GRE.

Enrollment for these online classes will be limited to 25 students and is on a first come first serve basis. First priority will be given to students who have taken courses previously in pursuit of this degree; those persons successfully admitted into the program through Marshall University will be given next preference.

Tuition and other related fees will be determined and posted at a later date. For more information, contact John Rosiek by email at [rosiek.john@dol.gov](mailto:rosiek.john@dol.gov) or at (304) 256-3211.

**Technical Coordinators:** John Rosiek  
John Forte

**Dates:** Spring 2008  
Summer 2008  
Fall 2008

**MINE ACCIDENT  
INVESTIGATION TECHNIQUES  
[IV601G]**



This course is directed towards safety directors, managers, foremen, union safety committee persons, or mining industry (metal/nonmetal or coal) individuals involved in accident investigation. Course content reviews basic guidelines, procedures, and techniques for the preparation and handling of investigations of accidents and other incidents involving health and safety in the mining industry.

Classroom activities and discussions cover reasons for accident investigations, the investigative process, data collection, accident reconstruction, and proper analysis for corrective actions. Hands-on exercises are stressed along with class participation.

**Contents:**

- ♦ Overview of Accident Investigation
- ♦ Pre-Investigation Activities
- ♦ Accident Reconstruction
- ♦ Photography/Sketching
- ♦ Interviewing Techniques
- ♦ Data Collection and Evaluation
- ♦ Developing Conclusions and Recommendations

**Technical Coordinator:** Scott Mandeville

**Course Length:** 3 days

**Tuition:** \$231.00

**Dates:** November 27-29, 2007

May 6-8, 2008

**MINE CONSTRUCTION,  
MAINTENANCE, AND REPAIRS  
SAFETY**  
**[MS615G]**



This course is designed for the mining construction industry, related support groups, mining regulatory agencies, and others that are involved with the planning, design, and application of mine construction and maintenance activities.

**Contents:**

- ♦ Accident Analysis and Prevention
- ♦ Effective Work Area Examinations
- ♦ Mobile Equipment Examinations
- ♦ Fall Prevention
- ♦ Basic Crane Safety
- ♦ Material Storage and Handling
- ♦ Conveyor Belt Safety
- ♦ Confined Space Safety
- ♦ Wire Ropes and Slings
- ♦ Surface Installations

**Technical Coordinator:** Tom Bonifacio  
**Course Length:** 2 days  
**Tuition:** \$154.00  
**Dates:** *Scheduled upon request*

**MINE ELEVATOR INSPECTION  
PROGRAM TRAINING – MODULE I  
[HS606G]**



This training module covers the inspection of mine elevators and the impact of the mine environment on critical elevator components. It will enable the student to perform basic mine elevator inspections, focusing on critical safety concerns, including those identified in recent mine elevator accidents. The material will be correlated to the applicable sections of ASME A17. Many visuals and actual elevator hardware will be used throughout the program.

This module is a stand-alone program for elevators used in harsh environments. It also can be used as the first in a series of modules designed to prepare the student for taking the Qualified Elevator Inspector (QEI) certification examination.

**NOTE:** *Students should bring the latest version of elevator codes ASME A17.1 & A17.2.1 with them, although they are not mandatory.*

**Technical Coordinator:** Ed Newcomb  
**Course Length:** 3 days  
**Tuition:** \$231.00  
**Dates:** *Scheduled upon request*

## **MINE RESCUE TRAINING**

### **[ME601G]**

This course is designed for mine rescue teams and mining industry personnel that may be associated with responding to mine emergencies, such as mine fires, explosions, and inundations. The major part of the training involves participation in exercises in the Mine Simulation Laboratory.

#### **Contents:**

- ♦ Mine Emergency Response Overview
- ♦ Mine Emergency Operations
- ♦ Mine Emergency Personnel
- ♦ Mine Emergency Communications and Decision Making
- ♦ Mine Emergency Practices and Procedures
- ♦ Mine Emergency Rescue and Recovery Strategy
- ♦ Tactical Implementation of Operations

**Technical Coordinator:** Mack Wright  
**Course Length:** 1 day  
**Tuition:** \$77.00\*  
**Dates:** *Scheduled upon request*

\* *Tuition may be waived for mine rescue team members participating in team training activities, up to ten (10) days per calendar year.*

## **NOISE HAZARDS, REGULATION, AND CONTROL [IH321G]**

This course provides the participant with information on the hazards associated with overexposure to noise. It thoroughly reviews 30 CFR Part 62 and appropriate monitoring and control methods. The course also discusses the elements of an effective hearing conservation program.

### **Contents:**

- ♦ Characteristics of Noise
- ♦ Impact of Noise on Health
- ♦ Noise Monitoring
  - Sound Level Meters
  - Dosimeters
  - Octave Band Analysis
- ♦ Audiometric Examinations
- ♦ Noise Regulation - Compliance Discussion
  - Exposure Levels
  - Monitoring
  - Hearing Conservation Programs
  - Training Requirements
- ♦ Control Methods

**Technical Coordinator:** William D. McKinney  
**Course Length:** 3 days  
**Tuition:** \$231.00  
**Dates:** *Scheduled upon request*

**ROOT CAUSE ANALYSIS  
WORKSHOP**  
[SF602G]



The purpose of the Root Cause Analysis Workshop is to begin action toward reducing violations, accidents, and incidents at a mining operation. Root Cause Analysis recognizes that violations, accidents, and incidents are an indicator of a breakdown which allows these occurrences to happen. This method will result in a professional approach to accident prevention, and can act as a training mechanism for workers and mine operators.

Class activities will involve citations and orders issued during an inspection and the incidents and/or accidents that a mine has encountered to initiate a process of analysis that will start an inquiry into questions such as:

- ♦ What is causing these violations, accidents, and incidents to occur at the mining operation?
- ♦ Why does the mine have the same type of violations at each inspection?
- ♦ Why does the mine continue to have the same kind of accidents and incidents?
- ♦ What can be done to eliminate the violations, accidents, and incidents at this mine?

**Technical Coordinator:** John Forte

**Course Length:** 1 day

**Tuition:** \$77.00

**Dates:** *Scheduled upon request*

**SURFACE FACILITIES AND COAL PREPARATION  
[PP601C]**

This course is designed to familiarize the student with: equipment and processes used in coal preparation plants; hazards that might exist around preparation plants; and inspection requirements for such plants. This course has been expanded to include structural safety in an effort to eliminate surface structural failures in the mining industry.

**Contents:**

- ♦ Structural Safety
- ♦ Equipment Guarding
- ♦ Stockpile Safety
- ♦ Delivery Methods to the Plant
- ♦ Crushing, Sizing, and Washing Processes
- ♦ Dewatering and Drying
- ♦ Storage of Raw and Clean Coal
- ♦ Potential Hazards
- ♦ Preparation Plant Inspection

**Technical Coordinators:** Clifford F. Lindsay  
Johnnie Tyler

**Course Length:** 3 days

**Tuition:** \$231.00

**Dates:** *Scheduled upon request*

## **Seminars/Workshops for MSHA and the Mining Industry**

The Academy Seminars/Workshops described in this section are available to MSHA and industry personnel.

**QUESTIONS?**

If you need more information about contents of a seminar/workshop, contact the technical coordinator for that seminar/workshop at (304) 256-3100 or Doris Fuller at (304) 256-3234.

**To Enroll Contact:**

National Mine Health and Safety Academy  
Student Services Branch  
1301 Airport Road  
Beaver, West Virginia 25813-9426

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**TELEPHONE:** (304) 256-3252  
**FAX:** (304) 256-3251

**BLASTING SEMINAR  
(PRIOR MINE BLASTING SAFETY AND  
APPLICATION SEMINAR)**

**[EX524G]**

This seminar is designed for company managers, blasting engineers, blasters, state and Federal mine safety and health inspectors (coal and metal/nonmetal), and others involved with the planning, design, and the use of explosives in the mining industry. The most recent blasting techniques, trends, and developments will be discussed. Participants will have the opportunity to share ideas in small group sessions.

**Contents:**

- ♦ Vibration Analysis/Seismographs/Efficient Blasting Techniques
- ♦ Storage of Explosives
- ♦ Handling and Use of Explosives
- ♦ Silica Dust and Toxic Gas Hazards in Blasting
- ♦ Blasting Agents and Emulsions

**Technical Coordinator:** Douglas Lawson  
**Course Length:** 2 days  
**Tuition:** None  
**Dates:** January 23-24, 2008

## **FIRST RESPONDER TRAIN-THE-TRAINER WORKSHOP**

**[GS645G]**

This workshop is designed for enforcement personnel, the mining industry, firefighters, police, and emergency medical personnel. It will provide information and precautions that should be taken when arranging emergency medical assistance and transportation of injured persons at the mine site.

This training will also be given at a later date through the Distance Learning Program using the capabilities of the National Guard Distance training facilities throughout the nation.

### **Contents:**

- ♦ 30 CFR Parts 77, 75, and 56/57
- ♦ Underground Haulage Hazards and Regulations
- ♦ Emergency Response Planning
- ♦ Haul Truck and Loader Safety
- ♦ Explosives Storage Safety
- ♦ Highwall Miner Safety
- ♦ Surge Pile/Draw-Off Tunnel Safety
- ♦ Belt Conveyor Safety
- ♦ Electrical Fire Hazards on Mine Property
- ♦ Escapeways and Structural Safety Around Mills and Plants
- ♦ Chemicals on Mine Property, and MSDS
- ♦ Use of Mine Equipment for Firefighting and Water Supply
- ♦ Traffic Control on Mine Roadway

**Technical Coordinator:** Johnnie Tyler  
**Course Length:** 1 day  
**Tuition:** None  
**Date:** November 14, 2007

 **NEW COURSE** **MINE CONSTRUCTION AND SURFACE HAULAGE OPERATION, MAINTENANCE, AND REPAIRS SEMINAR**  
**[MS503G]**

This new seminar combines the primary topics of the Mine Construction, Maintenance, and Repairs Workshop and the Surface Haulage Safety Workshop into one expanded, integrated format. The new format is designed to bring together representatives dealing with the unique demands of construction, maintenance, repair and/or haulage on the surface of mining operations. Presentations will feature the latest technology and regulations dealing with the planning, design, and application of mine construction and maintenance activities or the planning, design, and use of surface mine haulage equipment and systems.

**Contents:**

- ♦ Construction Blasting
- ♦ Fall Protection
- ♦ Electrical Hazards Affecting Construction
- ♦ First Annual Metal/Nonmetal Electrical Troubleshooting Contest
- ♦ Crane Safety
- ♦ Confined Spaces
- ♦ Structure Demolition
- ♦ Wire Ropes and Slings
- ♦ Accident Review
- ♦ Regulations Affecting Contractors
- ♦ Welding Safety
- ♦ First Annual Beam Cutting Competition
- ♦ HazCom
- ♦ Equipment Brake and Safety Instructions
- ♦ Tire Safety
- ♦ Cab Ergonomics
- ♦ Discriminating Alarm Systems

- ♦ Dump Point Safety
- ♦ Diesel Electric Equipment
- ♦ Fire Suppression on Haulage Equipment
- ♦ Haul Road Accident Prevention
- ♦ Hazards in Belt Conveyor Operations
- ♦ Equipment Systems – Conveyors, Trucks, Dozers, Shovels
- ♦ Haul Road Design

**Technical Coordinator:** Tom Bonifacio (CMR)  
Roger Montali (Surface Haulage)

**Course Length:** 3 days

**Tuition:** None

**Dates:** September 9-11, 2008

## **ROOF CONTROL SEMINAR**

### **[RC501C]**

This seminar is designed for miners, company managers, engineers, trainers, roof bolter machine operators, and for any individual involved in coal mine roof safety. Federal and state enforcement personnel desiring to increase their knowledge of the latest developments in roof and rib control will also find this seminar very beneficial.

This seminar will update personnel on new products and methods related to roof stability. It will also include presentations by personnel from the Academy, Technical Support, MSHA headquarters, other government agencies, and industry. All subjects will incorporate safe mining practices which will help reduce roof fall injuries and fatalities. The seminar will discuss new roof control techniques, trends, and developments.

#### **Contents:**

- ♦ New Roof Bolting Products
- ♦ Supplemental Supports
- ♦ Roof Control Fatality Trends and Prevention
- ♦ Roof Control Machinery Updates

**Technical Coordinators:** Joseph Fama  
Jon Braenovich

**Course Length:** 2 days

**Tuition:** None

**Dates:** May 28-29, 2008

**TRAM/NATIONAL MINE INSTRUCTORS SEMINAR  
[GS501G]**

This seminar provides opportunities for health and safety trainers to improve their training programs with new materials and new ideas. The seminar will also include an exhibit of training materials developed by MSHA, state grants recipients, and the mining industry. Small workshops allow participants to interact with workshop leaders and other participants.

**Contents:**

- ♦ Innovative Instructional Techniques
- ♦ Instructional Technology and Computer Applications
- ♦ Underground Mine Safety (Metal/Nonmetal and Coal Topics)
- ♦ Surface Mine Safety (Metal/Nonmetal and Coal Topics)
- ♦ General Safety
- ♦ Health
- ♦ Ergonomics
- ♦ Supervisory Issues

Another feature of the seminar is the Training Materials Competition. Health and safety training materials entered in the competition will be judged and winners will be announced at the Seminar. All materials entered in the competition will be displayed.

**Technical Coordinator:** Robert Glatter  
**Course Length:** 2½ days  
**Tuition:** None  
**Dates:** October 9-11, 2007  
October 14-16, 2008



## Technical Specialists Training

MSHA mine safety and health inspectors, supervisors, specialists, administrative, and clerical personnel are to receive a minimum of two weeks advanced training every two years.

Listed below are the groups and dates for which training sessions have been scheduled at the Academy:

**Accident Investigators** [IV401G21 - 21 hours]

Coordinator: James Beha

Not held in FY 2008

**Administrative/Clerical/Support Personnel** [GS711G - 21 hours]

Coordinator: Judy Burns

July 8-10, 2008

August 19-21, 2008

**Electrical Specialists**

Coordinator: Ed Newcomb

January 8-17, 2008 (MNM) [EL401M- 56 hours]

March 11-20, 2008 (Coal) [EL401C - 56 hours]

**Health Specialists** [IH401G]

Coordinator: William D. McKinney

*(Dates not available at time of publication)*

**Impoundment Specialists** [IM401C - 21 hours]

Coordinator: Clifford F. Lindsay

May 20-22, 2008

**MNM Journeyman Mine Safety and Health Inspectors**

[LP311M - 56 hours]

Coordinator: Tom Bonifacio

February 5-14, 2008

April 1-10, 2008

July 8-17, 2008

**Roof Control Specialists [RC401C - 21 hours]**

Coordinator: John Rosiek

April 15-17, 2008

**Special Investigators [IV402G]**

Coordinator: Robert Simmons

(Dates not available at time of publication)

**Surface Coal Mine Safety and Health Inspectors**

[LP312C - 56 hours]

Coordinator: Johnnie Tyler

September 9-18, 2008

**Underground Coal Mine Safety and Health Inspectors**

[LP311C - 56 hours]

Coordinator: Richard McDorman

January 8-17, 2008 (Cancelled)

March 25 – April 3, 2008 (Cancelled)

April 22 – May 1, 2008

July 22-31, 2008

**Ventilation Specialists [VN401C - 21 hours]**

Coordinator: Scott Mandeville

August 19-21, 2008

## **Courses and Seminars/Workshops**

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# Schedule of Academy Events

## By Date

### OCTOBER 2007

#### October 8 - 12, 2007

- ♦ TRAM/National Mine Instructors Seminar. . . 10/09-11/07

#### October 15 - 19, 2007

- ♦ Instructor Training Workshop (Part 48) . . . . . 10/16-18/07

#### October 22 - 26, 2007

- ♦ Mine Accident Investigation and Report  
Writing . . . . . 10/23-11/01/07

### NOVEMBER 2007

#### November 5 - 9, 2007

- ♦ Qualification for Impoundment Inspection  
(Industry)(8 hrs) . . . . . 11/07/07
- ♦ Annual Retraining for Impoundment  
Qualification (Industry)(4 hrs) . . . . . 11/08/07

#### November 12 - 16, 2007

- ♦ First Responder Train-the-Trainer Workshop . . . 11/14/07

#### November 26 - 30, 2007

- ♦ Mine Accident Investigation Techniques . . . . 11/27-29/07

### DECEMBER 2007

No classes scheduled.

## **JANUARY 2008**

### **January 7 - 11, 2008**

- ◆ Underground Coal Mine Inspectors  
Journeyman Retraining . . . . . 1/08-17/08
- ◆ MNM Electrical Specialists Retraining . . . . . 1/08-17/08

### **January 14 - 18, 2008**

- ◆ Instructor Training Workshop, Part 48  
(Industry) . . . . . 1/15-17/08
- ◆ Qualification for Impoundment Inspection  
(Industry)(8 hrs) . . . . . 1/15/08
- ◆ Annual Retraining for Impoundment  
Qualification (Industry)(4 hrs) . . . . . 1/17/08

### **January 21 - 25, 2008**

- ◆ Blasting Seminar . . . . . 1/23-24/08

## **FEBRUARY 2008**

### **February 4 - 8, 2008**

- ◆ MNM Journeyman Mine Safety and Health  
Inspectors Retraining . . . . . 2/05-14/08
- ◆ Training for New Electrical Specialists . . . . . 2/05-14/08

### **February 11 - 15, 2008**

- ◆ Basic Excel . . . . . 2/12-14/08

### **February 25 - 29, 2008**

- ◆ Accident Investigation Retraining Seminar . . . 2/26-28/08

## **MARCH 2008**

### **March 3 - 7, 2008**

- ◆ Intermediate Excel. . . . . 3/04-06/08

### **March 10 – 14, 2008**

- ◆ Coal Electrical Specialists Retraining. . . . . 3/11-20/08

### **March 24 - 28, 2008**

- ◆ Underground Coal Mine Safety and Health  
Inspectors Journeyman Retraining. . . . . 3/25-4/03/08

## **APRIL 2008**

### **March 31 - April 4, 2008**

- ◆ MNM Journeyman Mine Safety and Health  
Inspectors Retraining. . . . . 4/01-10/08

### **April 14 - 18, 2008**

- ◆ Roof Control Specialists Retraining . . . . . 4/15-17/08

### **April 21 - 25, 2008**

- ◆ Mine Accident Investigation and Report  
Writing . . . . . 4/22-5/01/08
- ◆ Underground Coal Mine Safety and Health  
Inspectors Journeyman Retraining. . . . . 4/22-5/01/08

### **April 28 - May 2, 2008**

- ◆ Hoists and Elevators. . . . . 4/29-5/01/08
- ◆ Qualification for Impoundment Inspection  
(Industry)(8 hrs) . . . . . 4/29/08
- ◆ Annual Retraining for Impoundment  
Qualification (Industry)(4 hrs) . . . . . 5/01/08

## **MAY 2008**

### **May 5 - 9, 2008**

- ◆ Mine Accident Investigation Techniques . . . . . 5/06-08/08
- ◆ Respirable Coal Mine Dust Sampling  
Certification . . . . . 5/07/08
- ◆ Respirable Coal Mine dust Sampling  
Calibration and Maintenance . . . . . 5/08/08

### **May 12 - 16, 2008**

- ◆ Training for New Electrical Specialists . . . . . 5/13-22/08

### **May 19 - 23, 2008**

- ◆ Impoundment Specialists Retraining . . . . . 5/20-22/08
- ◆ Instructor Training Workshop, Part 48  
(Industry). . . . . 5/20-22/08
- ◆ Microsoft Power Point . . . . . 5/20-22/08

### **May 26 - 30, 2008**

- ◆ Roof Control Seminar . . . . . 5/28-29/08

## **JUNE 2008**

**No classes scheduled.**

## **JULY 2008**

### **July 7 - 11, 2008**

- ◆ Administrative/Clerical/Support Personnel  
Retraining . . . . . 7/08-10/08
- ◆ MNM Journeyman Mine Safety and Health  
Inspectors Retraining. . . . . 7/08-17/08

**July 21 - 25, 2008**

- ◆ Underground Coal Mine Safety and Health  
Inspectors Journeyman Retraining . . . . . 7/22-31/08

**July 28 - August 1, 2008**

- ◆ Respirable Coal Mine Dust Sampling  
Certification . . . . . 7/30/08
- ◆ Respirable Coal Mine Dust Sampler Calibration  
and Maintenance Certification . . . . . 7/31/08

**AUGUST 2008**

**August 4 - 8, 2008**

- ◆ Introduction to Mining . . . . . 8/05-07/08
- ◆ Microsoft Word . . . . . 8/05-07/08
- ◆ Mine Accident Investigation and Report  
Writing . . . . . 8/05-14/08

**August 18 - 22, 2008**

- ◆ Administrative/Clerical/Support Personnel  
Retraining . . . . . 8/19-21/08
- ◆ Ventilation Specialists Retraining . . . . . 8/19-21/08
- ◆ Training for New Electrical Specialists . . . . . 8/19-28/08
- ◆ Qualification for Impoundment Inspection  
(Industry) (8 hrs). . . . . 8/19/08
- ◆ Annual Retraining for Impoundment  
Qualification (Industry) (4 hrs). . . . . 8/21/08

**August 25 - 29, 2008**

- ◆ Instructor Training Workshop, Part 48  
(Industry). . . . . 8/26-28/08

**SEPTEMBER 2008**

**September 8 - 12, 2008**

- ◆ Mine Construction and Surface Haulage Operation,  
Maintenance, and Repairs Seminar . . . . . 9/09-11/08
  
- ◆ Mine Accident Investigation and Report  
Writing . . . . . 9/09-18/08
  
- ◆ Surface Coal Mine Safety and Health Inspector  
Journeyman Retraining . . . . . 9/09-18/08

**OCTOBER 2008**

**October 13-17, 2008**

- ◆ TRAM/National Mine Instructors Seminar. . . 10/14-16/08









## Other Available Catalogs

The Academy also publishes a **Catalog of Training Products for the Mining Industry**. To obtain a copy of the products catalog, or additional copies of this catalog, please complete this form and return to:

**National Mine Health and Safety Academy  
ATTN: Printing and Property Management Branch  
Department of Instructional Materials  
1301 Airport Road  
Beaver, West Virginia 25813-9426**

**CALL: (304) 256-3257**

**FAX: (304) 256-3368**

**E-MAIL: [MSHADistributionCenter@dol.gov](mailto:MSHADistributionCenter@dol.gov)**

**Please indicate the number of catalogs you are requesting:**

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