

Dr. William Gates and Mr. Brendan Fisher are nationally recognized for their rock slope expertise and were recently honored by an invitation to conduct a one-day short course on rock slope engineering at the National Meeting of the Association of Engineering Geologists in Vail Colorado, 2003. They are scheduled again for the AEG national meeting in Las Vegas in September 2005.

Applied Rock Slope Engineering, Vail, CO & Highway Rockslope Engineering, Las Vegas, NV

Course Description

This one-day short course will focus on basic rock slope engineering presented from the standpoint of practitioners responsible for the design and construction aspects of excavations in rock. The course will focus on:

- Rock slope field data collection methods and drilling and sampling techniques
- Rock mass rating systems
- Estimation of discontinuity and rock mass shear strength
- Kinematic slope stability analysis via stereonet projection
- Two and three dimensional limit equilibrium block stability analysis
- Two dimensional force and moment equilibrium rock mass analysis
- Rockfall modeling
- Rockfall hazard rating systems
- Slope remediation strategies including:
 - Slope reconfiguration
 - Drainage
 - Block reinforcement
 - Mesh
 - Buttresses
- Overview of blasting techniques, and
- Case histories involving highway reconstruction (time allowing)



Short course notes for 2003
AEG meeting in Vail, CO.

Basic engineering theory will be covered during the course although the focus will be on the practical applied aspects of rock slope design and remediation.

Instructors

Dr. William Gates (Bill) is a Principal Geological Engineer with Kleinfelder's Technical Resource Center. He received a BS in geology from Campbell College, an MS in geological engineering from the South Dakota School of Mines, and a Ph.D. in geology and geological engineering from the University of Nevada at Reno. He is registered as an Engineering Geologist, Hydrogeologist, and Professional Engineer in several of the western states. Bill has been practicing geological engineering for over 35 years and has been involved with numerous rock slope engineering projects throughout the country including the states of Arizona, California, Colorado, Idaho, Iowa, Kansas, New Mexico, Oregon, Utah, and Nevada, Washington, and Mexico.

Brendan Fisher is an Engineering Geologist at Kleinfelder, Inc. He received a BA in geology from Potsdam University, an MS in engineering geology from Radford University, an MS in geotechnical engineering from Virginia Polytechnic University, and is completing his Ph.D. in geological engineering (rock mechanics) at the University of British Columbia. He is registered as a Professional Engineer in Oregon, Idaho, New Mexico, California and Washington and a Geologist in Washington, California, and Utah. Brendan has completed the design of literally hundreds of highway rock excavations throughout the western United States.