

# Agenda

Presented by Jeffrey L. Snyder, PE

**Types of Slopes and Failures**

- Natural slopes
- Engineered slopes
- Creep failures
- Rock slides – fall/topple failures
- Rotational, translational, multiple/compound failures
- Spread and flow failures
- Typical causes of slope failures

**Brief Overview of Soil Mechanics**

- Soil effective pressure
- Soil shear strength
- Drained vs. undrained strength

**Slope Stability Evaluation**

- Understanding geology and site conditions/topography
- Evaluating surface and groundwater conditions
- Instrumentation
- Basic concepts of slope stability evaluation
- Limit equilibrium analysis
- Stability computer programs (includes demonstration)

**Slope Stabilization Methods**

- Use of vegetation
- Surface protection
- Unloading
- Buttressing
- Drainage
- Reinforcing
- Earth retention structures
- Geosynthetics
- Rock slope stabilization
- Shoreline management

**Slope Stabilization Case Studies**

**Can't Attend? Order the Webinar as an On-Demand Package!**

Recordings of this webinar are available for purchase. See course listing online for more information and please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

## Slope Stabilization and Landslide Prevention

Live, Interactive Webinar - Friday, February 23, 2024

NON-PROFIT  
U.S. POSTAGE PAID  
EAU CLAIRE, WI  
PERMIT NO. 2016

HalfMoon Education Inc.  
PO Box 278  
Altoona, WI 54720-0278



## Learning Objectives

**You'll be able to:**

- Learn** about different types of slope failures, including creep failures, rock slides, rotational failures and spread and flow failures.
- Get** a short review of soil mechanics, including explanations of soil effective pressure and soil shear strength.
- Evaluate** slope stability by considering the impact of geology, site conditions, topography, and the presence of surface and groundwater.
- Explore** slope stabilization methods, including earth retention structures, geosynthetics, and the use of vegetation and site drainage.
- Review** slope stabilization case studies.



HalfMoon Education Live Webinars

# Slope Stabilization and Landslide Prevention

Live, Interactive Webinar - Friday, February 23, 2024



- Analyze** types of slopes and common types of slope failures
- Understand** a brief overview of soil mechanics
- Discuss** geology and site conditions/topography
- Evaluate** slope stabilization methods, including unloading, buttressing, drains and reinforcements
- Learn** from slope stabilization case studies

Continuing Education Credits

- |                                                           |                                                                   |
|-----------------------------------------------------------|-------------------------------------------------------------------|
| <b>Professional Engineers</b><br>6.5 PDHs                 | <b>Landscape Architects</b><br>6.5 HSW CE Hours<br>LA CES Pending |
| <b>Architects</b><br>6.5 HSW CE Hours<br>6.5 AIA LU   HSW | <b>International Code Council</b><br>.65 CEUs (Sitework)          |
|                                                           | <b>Floodplain Managers</b><br>6.5 ASFPM CECs                      |



# Webinar Information

<b>Log into Webinar</b> 8:30 - 9:00 am CST	<b>Break</b> 1:00 - 1:30 pm CST
<b>Morning Session</b> 9:00 am - 1:00 pm CST	<b>Afternoon Session</b> 1:30 - 4:30 pm CST

**Tuition**  
**\$319** for individual registration.  
**\$289** for two or more registrants from the same company at the same time.  
*Included with your registration: PDF seminar manual.*

**How to Register**

- Visit us online at [www.halfmoonseminars.org](http://www.halfmoonseminars.org)
- Call customer service at 715-835-5900

Webinars are presented via GoToWebinar. Instructions and login information will be provided in an email sent close to the date of the webinar. For more information, please visit our FAQ section of our website, or visit [www.gotowebinar.com](http://www.gotowebinar.com).

**Cancellations:** Cancel at least 48 hours before the start of the webinar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another webinar or the on-demand package. You may also authorize another person to take your place.

Learn More and Register:  
**[www.halfmoonseminars.org](http://www.halfmoonseminars.org)**  
Customer Service (715) 835-5900 Ext. 1

or scan here



**Can't Attend? Order the Webinar as an On-Demand Package!**  
Recordings of this webinar are available for purchase. See details online for more information and please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

# Faculty

**Jeffrey L. Snyder, PE** *Senior Geotechnical Engineer at GHD Services, Inc.*  
Mr. Snyder is a geotechnical professional for transportation, commercial, industrial and municipal projects throughout the upper Midwest including in Ohio, Michigan, Illinois, Indiana, Pennsylvania, and Kentucky. He provides analyses and recommendations for shallow and deep foundation systems as well as landslide evaluation and remediation. He has co-authored several papers on lateral loading behavior of driven pile foundations. Mr. Snyder earned his B.S. and M.S. degrees in Civil Engineering from Brigham Young University.

# Credit Information

This webinar is open to the public and is designed to qualify for 6.5 PDHs for professional engineers, 6.5 HSW continuing education hours for licensed architects, and 6.5 HSW continuing education hours for landscape architects in all states that allow this learning method. Please refer to specific state rules to determine eligibility.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider License No: CEA362), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700) and North Carolina (S-0130). HalfMoon Education is deemed an approved continuing education sponsor for New York engineers and architects via its registration with the American Institute of Architects Continuing Education System (Regulations of the Commissioner §68.14(i)(2) and §69.6(i)(2)). Other states do not preapprove continuing education providers or courses.

The American Institute of Architects Continuing Education System has approved this course for 6.5 HSW LUs (Sponsor No. J885). Only full participation is reportable to the AIA/CES.

The Landscape Architecture Continuing Education System has approved HalfMoon Education as a sponsor of continuing education. This course has been submitted for LA CES approval and is currently pending. Only full participation is reportable to the LA CES.

Visit this course listing at [www.halfmoonseminars.org](http://www.halfmoonseminars.org) for updates on pending credits.

The International Code Council has approved this event for .65 CEUs in the specialty area of Sitework (Preferred Provider No. 1232).

This Association of State Floodplain Managers has approved this course for 6.5 CECs for floodplain managers.

Attendance will be monitored, and attendance certificates will be available after the webinar for those who attend the entire course and score a minimum 80% on the quiz that follows the course (multiple attempts allowed).

**On-Demand Credits**  
The preceding credit information only applies to the live presentation. This course in an on-demand format may not be eligible for the same credits as the live presentation; please consult your licensing board(s) to ensure that a structured, asynchronous learning format is appropriate. The following pre-approvals may be available for the on-demand format upon request:  
6.5 HSW LUs (AIA), 6.5 HSW PDHs (LA CES), 6.5 ASFPM CECs

# Additional Learning

- How to Design and Construct a Cantilever Retaining Wall**  
- Monday, January 29, 2024 | 1:00 - 3:00 pm CST
  - Designing Accessible Pedestrian Facilities under ADA, IBC and PROWAG**  
- Tuesday, January 30, 2024 | 8:30 - 11:45 am CST  
- Wednesday, January 31, 2024 | 8:30 am - 12:15 pm CST
  - Managing Construction Projects**  
- Tuesday, January 30, 2024 | 9:00 am - 5:00 pm CST
  - Parking Structure Design, Construction and Maintenance**  
- Friday, February 2, 2024 | 9:00 am - 4:30 pm CST
  - Innovative Onsite Wastewater Treatment Systems**  
- Wednesday, February 7, 2024 | 9:00 am - 5:00 pm CST
  - Tiny House Design and Construction**  
- Wednesday, February 7, 2024 | 9:00 am - 5:15 pm CST
  - Urban Street Design**  
- Wednesday, February 7, 2024 | 9:00 am - 4:30 pm CST
  - Restoring Natural Areas in Urban Areas**  
- Wednesday, February 14, 2024 | 8:30 am - 5:00 pm CST
  - Handling Archaeological Issues on Construction Projects**  
- Thursday, February 15, 2024 | 9:00 am - 12:15 pm CST
  - How to Obtain, Interpret, and Change a FEMA Flood Map**  
- Friday, February 16, 2024 | 12:00 - 3:15 pm CST
  - Confronting Both Climate Change and Sea Level Rise: An Action Plan for Our Planet**  
- Tuesday, February 20, 2024 | 8:30 - 11:50 am CST  
- Wednesday, February 21, 2024 | 8:30 - 11:50 am CST
  - Culvert Design and Construction**  
- Tuesday, February 20, 2024 | 9:00 am - 4:30 pm CST
  - Roadmap to Ethical Issues in Construction: A Primer for Design Professionals**  
- Wednesday, February 21, 2024 | 11:00 am - 1:00 pm CST
  - Stream Restoration in the Eastern U.S.**  
- Wednesday, February 21, 2024 | 7:30 am - 3:30 pm CST
- For more information and other online learning opportunities visit:  
**[www.halfmoonseminars.org](http://www.halfmoonseminars.org)**