



PCPG

Pennsylvania Council of Professional Geologists
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Soil Science: An Overview of Principles, Practical Field Methodologies and Applications (220 mins.)

May 2, 2018

Toftrees Resort and Golf Club,
One Country Club Lane
State College, PA

Program Outline

We will explore the history of soil science and soil basics (i.e. texture, structure, permeability), then focus on the details of the types of soil classifications and taxonomy, published sources of data and the interdisciplinary components, soil genesis and its application, soil management across the spectrum of uses, paleosols and anthropogenic soils and their impacts to various investigations. Methods of soil investigation will be explored including permeability testing, test interpretation, and drainage classification. Some special cases and emerging topics will be explored, as well. Emphasis will be given to practical field methodologies and applications to meet current issues and regulatory requirements (i.e. Soil horizon restoration and reconstruction). Case studies and examples from the real world will be utilized to place the science in context with practice.

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| 12:30 – 1:00 | Registration, Networking, Refreshments |
| 1:00 – 1:05 | Welcome & Introduction |
| 1:05 – 2:55 | Introduction to Soils <ul style="list-style-type: none">• Soil Genesis• Soil Description• Soil Limitations• Soil Surveys• Soil Classification |
| 2:55 – 3:10 | Break |
| 3:10 – 4:45 | Soil Taxonomy <ul style="list-style-type: none">• Methods of Soil Testing• Soil Permeability• Drainage Classification• Special Cases |
| 4:45 – 5:00 | Summary, Question/Answer Session |
| 5:00 | Hand In Completed Evaluation, Sign-Out, and Pick Up Certificate of Attendance |

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About Our Instructor

Russell L. Losco, M.A., P.G., C.P.S.S. (Lanchester Soil Consultants, Inc.) - Mr. Losco has over 40 years' experience as a scientist with over 30 years of that in geology and soil science. He received a B.A. in anthropology/archaeology from Indiana University of PA and an M.A. in Geoscience from West Chester University. He is a Certified Professional Soil Scientist, a Professional Geologist and an adjunct professor at West Chester University and Delaware County Community College and co-founder and owner of Lanchester Soil Consultants, Inc. He served for nine years on the Board of Directors of the Pennsylvania Association of Professional Soil Scientists (PAPSS) and is the lead author of the PAPSS Manual for Soil Investigation in Pennsylvania. He is a member of the Board of Directors of the Pennsylvania Council of Professional Geologists (PCPG). He is a co-author of the book, *Soil and Human Health* and a number of other scientific publications where he is notorious for over-using commas. He is the recipient of the 2015 USEPA Scientific and Technological Achievement Award, Honorable Mention, for his research on Urban Soils and Stormwater Management. He is currently collaborating on a book on the geology of Costa Rica and pursuing research on anthropogenic changes in soil.