

# Workshop Descriptions

## OPUS Projects - 16 PDH

Presented by: Scott Lokken and Dave Conner

### Workshop Outline

- Introduction
- Step 1: Creating a Project
- Step 2: Uploading Data To Your Project
- Step 3: Session Processing
- Step 4: Network Adjustment
- Open Discussion
- One-on-one

What Is OPUS-Projects? A web-based access to process multiple marks and multiple occupations.

- Data uploading through OPUS
- Data processing using the PAGES software
- Visualization and management aids
- Least squares adjustment

What's In This Workshop? By attending this workshop, you should have enough information to successfully use OPUS-Projects for your own projects. Once the training is completed, you'll be given an opportunity to register your email address thereby authorizing you to create and process new OPUS-Projects.

A project containing a training data set will be assigned to you. You'll have an opportunity to work along with the presentations. In addition, time is allotted for you to explore your project individually.

*Note: Participants in this workshop must bring their own laptop computers to the conference. Laptops must have an internet browser (Chrome or Firefox), wifi, and access to email.*

## Dendrology - 4 PDH

Dendrology: Jason Olzak

Dendrology is the study of woody plants; typically trees but there are other things such as shrubs and vines that bear similarities to trees so they are studied as well. This workshop explores the basic skills of woody plant and tree species identification.

*Note: This is a hands-on workshop to be presented at Boyce Park. Transportation to and from the park will be provided. Dress appropriately. Boots are suggested.*

## Digital Photogrammetry - 8 PDH

Presented by: Kevin Chappell

Driven by the rapid evolution of digital photography and personal computing in recent years, close-range photogrammetry with regular cameras and Small UAVs rapidly changes the way surveyors work worldwide. This workshop will review the principles of photogrammetry, introduce real-life case studies of surveying works, and provide practical hands-on best practices for drafting plans and making measurements directly on images of regular cameras.

## Equipment Calibration - 4 PDH

Presented by: Alexander Thomas & Daniel Zeigafuse

This workshop will provide an overview of common problems and the causes for problems with survey equipment. Also discussed will be how to trouble shoot, how to make adjustments and how to make adjustments and how to calibrate. Instruments that will be covered are prism poles/GPS poles, automatic levels and total station. Attendees are encouraged to bring a tribrach or prism pole to class.

*Note: This is a hands-on workshop*

## Introduction to High Definition Laser Scanning and Measurement - 8 PDH

Presented by: Lukas Duruttya

This course gives a basic overview of 3D laser scanning. Experience the technology first hand with a hardware and software demonstration. At the end of this course you'll have a good understanding of the basic operating principles, 3D image data, applications and platforms, project planning, scanning procedures and digital modeling that comes with 3D laser scanning.

## PA Exam Prep

Presented by: Various Instructors

This 4 part workshop is designed to prepare attendees for taking the licensure exam in Pennsylvania. Rather than reviewing the materials which the attendee should be familiar with, this workshop prepares individuals for what to expect on the exam. Exam format, sample questions, discussion by a few of those who have recently passed the exam, followed by group discussion and a question and answer period.

Part 1. Preparing for the Exam

Part 2. Sample questions and solutions

Part 3. Panel discussion by recent examinees

Part 4. Group discussion – Q/A

## Wetlands and Permitting- 8 PDH

Presented by Laurel Fisher Mueller

Wetlands Recognition: An introduction to plants, hydrology, and hydric soils; significance of land development; surveyor – delineator communication; jurisdictional determination plan requirements. Permitting: An overview of the wetlands permitting process with examples.

*Note: This is a hands-on workshop to be presented at Boyce Park. Transportation to and from the park will be provided. Dress appropriately. Boots are suggested.*

PDHs are calculated under Pennsylvania guidelines. Acceptance of credit by the PA Registration Board is not guaranteed. PSLs will apply for out-of-state approval.