

Course Descriptions

Wednesday, January 20, 2021

Riparian Law 1

NY CE: 2.0 LS/PE

Laura E. Ayers, Esq.

8:30am – 10:30am

An introduction to Riparian and Littoral Law in New York with emphasis on determining the ownership of lands underwater. This seminar will review the relevant New York Statutes, Regulations and recent case law developments affecting determinations of the ownership of lands underwater.

The Science of Proposal Preparation

NY CE: 1.0 LS/PE

William E. Beardslee, PE, PLS, PP

9:00am – 10:00am

This course serves to enlighten the professional with an important concept: to help understand how to create an effective proposal to satisfy and protect their clients. Then with that knowledge, we will discuss how the proposal becomes a contract.

Photogrammetry in the Age of UAS

NY CE: 1.0 LS/PE (Pending)

Joseph V.R. Paiva, PhD, PE, PLS

11:00am – 12:00pm

This course provides participants with a good look into what close range photogrammetry used with drones is, how it is similar and different from conventional photogrammetry, and basically shows the concept of how it works. With these principles in mind, the participant is then shown how products such as DTMs, orthophotos and other mapping products can be created together with typical applications and examples.

Surveying and GIS – Disruption and the Future

NY CE: 1.0 LS/PE

Brent A. Jones, PE, PLS

11:30am – 12:30pm

A lot has happened in GIS over the past few decades and it has had its impact on surveying – some good, some not so good. What's going on in the rest of the world with land surveying? Is Australia really selling their land registries? Why title insurance? Where did property originate? What are the current technology trends? How is current technology disrupting traditional businesses? What are the enablers of disruption? This presentation will discuss surveying issues domestically and globally, current and future disruptive technologies. With some history, GIS demonstrations and humor threaded in, this is designed to be a highly interactive and take the tough questions along with the softballs. Interested in how to make a mapping app without coding? Want to communicate in new ways

with your clients? Quickly publish a map? Configure a field work scheduling system? What would you like to learn how to do? – Bring your questions!

Meeting Client Needs with Remote Workforce

NY CE: 1.0 LS/PE (Pending)

William E. Beardslee, PLS, PE, PP

1:30pm – 2:30pm

This course serves to enlighten the professional with the importance of keeping client satisfaction in the forefront while dealing with the inefficiencies of remote and flex workers. We will review the deficits and benefits of the process to ensure satisfaction of the clients expectations.

Subdivision Primer

NY CE: 1.0 LS/PE (Pending)

Joanne Darcy Crum, Esq., PLS

1:30pm – 2:30pm

This program will review the requirements for Subdivision and the importance of review of Zoning and Subdivision Regulations for each municipality in which a surveyor plans to offer subdivision surveys. The preparation of sketch plan, preliminary plat and final plat and the necessary accompanying documentation will be reviewed and discussed.

Thursday, January 21, 2021

Riparian Law 2

NY CE: 2.0 LS/PE

Laura E. Ayers, Esq.

8:30am – 10:30am

Riparian and Littoral Law in New York with emphasis on determining the boundary lines along, under and with respect to use and access on our Lakes, Rivers and Coasts. This seminar will review the relevant New York Statutes, Regulations and recent case law developments affecting determinations of riparian and littoral boundary lines as well as the rules of law regarding surface water and surface water diversion.

Structural Monitoring – Tracking Movement in a Fast-Paced World

NY CE: 2.0 LS/PE

William T. Derry, PLS

8:30am – 10:30am

This course will cover essential considerations for surveying as it relates to structural monitoring, including how to review project requirements, determine applicable hardware and software needs, relevant communication and power solutions and installation examples.

Course Descriptions

Health & Safety for Surveyors

NY CE: 1.0 LS/PE

J. Steven Boddecker, PLS

11:00am – 12:00pm

This course will bring to the forefront the health and safety issues surveyors face as a daily occurrence and identify the tools available to minimize dangers through the use of Health & Safety manuals, implementation and completion of job safety analysis forms, establishment of daily tailgate safety meetings proper PPE, types, use & training and adoption of an overall safety culture.

Unmanned Aircraft Systems (Drones) in Surveying

NY CE: 1.0 LS/PE (Pending)

Joseph V.R. Paiva, PhD, PE, PLS

11:00am – 12:00pm

This course is an overview of sUAS (small unmanned aircraft systems) that surveyors may use in their business, the types of sensors they may wish to consider and some of the positive, and where applicable, negative aspects. While most people are aware that piloting a drone is illegal without a license, it will cover in brief the requirements for licensure and aircraft registration that surveyors must do. Finally, because managing drone flying operations is very different from typical surveying operations, the participants will be introduced to business practices and procedures they may want to put in place so that they can be successful with the part of the business that involved surveying and mapping with sUAS.

Ethics for the Geomatics Professional

NY CE: 1.0 LS/PE (Pending)

Scott R. Reeser, PLS

1:30pm – 2:30pm

Attendees will review published definitions of Professional Ethics, as well as related terms. The Canon of Ethics published by the New York State Association of Professional Land Surveyors will also be reviewed.

FEMA's Elevation Certificate

NY CE: 2.0 LS/PE

William Nechamen, CFM

1:30pm – 3:30pm

FEMA elevation certificates are required for proper flood insurance rating and are also used by local communities to determine compliance with floodplain development requirements. The course will go over the elevation certificate form in detail and will provide information on how to obtain the appropriate information from FEMA Flood Insurance rate Maps and Flood Insurance Studies to input the accurate information into the form. We will also go over how elevation data obtained for the elevation certificate can also be used to apply for a FEMA Letter of Map Amendment or a Letter of Map Revision based on Fill.

Thursday, January 28, 2021

The Art of Retracement

NY CE: 2.0 LS/PE

Gary R. Kent, PS

8:30am – 10:30am

Every professional surveyor across the United States knows the phrase "*Follow in the Footsteps of the Original Surveyor*" as it relates to conducting a boundary retracement survey. But what does it really mean and what is the basis for following in the footsteps? And exactly whose footsteps are we talking about? Surveyors also know the effect of the statute of frauds is that what is written in the conveyancing document is considered by the courts to be the highest and best expression of the parties' intentions. But what happens when the evidence of the footsteps on the ground conflicts with the written title? What if there are seemingly no footsteps to follow? What then? In this program we will explore the concept of retracement, how it relates to and is dependent on the document of conveyance, and what controls when conflicts are inevitably encountered. When armed with a full understanding of the concept of retracement, surveyors will be much better equipped to help steer their clients (and their affected neighbors) away from the pain and cost of litigation, and towards an amicable solution based on well-paced confidence and understanding of their respective roles and responsibilities.

Fundamentals of Underground Utility Locating

NY CE: 1.0 LS/PE

James Flint

11:00am – 12:00pm

This course will teach the basic theory behind electromagnetic locating, understand the different functions and options offered by today's instruments, and learn how to maximize their use in the field. Content will include visual demonstrations of equipment use and why they operate in the way they do. Utility locating is a vital part of survey work to provide clients with full information needed to work on pieces of property.

Crisis Management

NY CE: 1.0 LS/PE (Pending)

William E. Beardslee, PE, PLS, PP

11:00am – 12:00pm

This course serves to enlighten professionals with an important concept: to help them now "know what they don't know." Crisis Management is not just of staff, it is also of clients and the public – sometimes an overwhelming situation. The ideas and processes of this course will help them stay in control at various stressful occasions.

Course Descriptions

Best Practices of GNSS Localization with Carlson SurvCE/SurvPC and Carlson Survey

NY CE: 1.0 LS/PE (*Pending*)

Michael Hyman & Nicholas Ford, PLS

1:30pm – 2:30pm

In this session, students will learn more about the ins and outs of GNSS Localization with SurvCE/SurvPC. How to use the NYSNET Network vs. Using a GNSS Base-Rover Setup for Localizing on your project that could be from 10+ years ago and/or for today's project when GNSS is used. Single Point, 2 Point, Grid Coordinate, Local Coordinates and Multi Point Localization methods will be discussed. State Plane Zones, GEOIDS, Grid-to-Ground and recommended procedures with SurvCE and SurvPC will be reviewed and discussed for Boundary, Topo and Construction projects.

The ICC's Railroad Valuation Records

NY CE: 1.0 LS/PE

David A. Pfeiffer

1:30pm – 2:30pm

This course will familiarize the student with the Valuation Act of 1913 and the subsequent activities of the ICC's Bureau of Valuation. We will cover the different series of valuation records at the National Archives, their relationship to land surveying and the procedures concerning access to these records.

Friday, January 29, 2021

Preparing for Change – New Datums

NY CE: 2.0 LS/PE

Daniel J. Martin

8:30am – 10:30am

In 2022, NGS had planned to replace the US horizontal and vertical datums (NAD 83 and NAVD 88). For a multitude of reasons, this release has been delayed until 2024 - 2025 time-frame. In this talk, I will highlight the reasons for the delay and identify areas where participants can use this extra time to better prepare for, and to take advantage of the new datums.

Surveyor Liability

NY CE: 2.0 LS/PE (*Pending*)

Knud E. Hermansen, PhD, Esq., PE, PLS

8:30am – 10:30am

This workshop will discuss sources for surveyor liability. The workshop will cover what constitutes liability and what the surveyor can do to avoid and prevent liability. The workshop will also discuss what the surveyor can and should do when the surveyor is made a defendant in a civil lawsuit. At the end of the program, the surveyor will understand what actions to take to help prevent liability or defend themselves against a liability claim.

Geodesy 101

NY CE: 1.0 LS/PE

Nicholas Ford, PLS

11:00am – 12:00pm

What the heck is a geoid? What about an ellipsoid? Projections, how do they work? As GNSS continues to be a staple in the modern surveyor's diet, it becomes helpful, if not necessary, for users to understand what is going on "under the hood" of the coordinates they are determining. This course is designed to explain these concepts and how they relate to GNSS measurements. This course is well suited toward individuals who have been acquainted with these ideas, but would appreciate a refresher or toward individuals who feel totally lost when discussions of geoids and ellipsoids are present.

Real World Perspectives

NY CE: N/A

Jeremy E. Thompson, PLS

11:00am – 12:00pm

Session includes a panel discussion focusing on the different types of Land Surveying firms available, ranging from the sole proprietor to the huge multi-disciplined professional service firms. The panelists will discuss what you can expect from each type of firm and the different career paths and opportunities they can provide.

Using and Understanding OPUS

NY CE: 1.0 LS/PE

Daniel J. Martin

1:30pm – 2:30pm

The National Geodetic Survey's (NGS's) Online Positioning User Service (OPUS) provides free, easy access to the National Spatial Reference System (NSRS), by allowing users to upload their GPS data to the NGS to be processed by NGS computers. To use OPUS successfully, it is critical that users understand both the requirements for data input as well as the processing output. This course will describe the steps involved in processing data with OPUS and will explain the output so that users can interpret and have confidence in the results.

Surfaces, Contours, Terrain Models, Volumes and How-Tos with Carlson Software

NY CE: 1.0 LS/PE (*Pending*)

Michael Hyman

1:30pm – 2:30pm

In this interactive session, students will learn how to use and create better contour maps with Carlson Software. We will review the basics of surface modeling and contour map creation with an industry leading software package. From there, we will highlight and discuss the various tools within the 'software's toolbox' of commands to help you meet the requirements for your Land Surveying projects. We will also review volume calculations along with DTM/TIN manipulation and merging of surfaces.