



Fall 2009

**Pratt**

Center for Continuing and  
Professional Studies/Manhattan



AIA Continuing Education  
Professional Development Series for  
Architects and Professional Engineers

# Table of Contents

Pratt Institute Center for Continuing and Professional Studies located in Chelsea at 144 West 14th Street announces Professional Development Series for Architects and Professional Engineers.

Drawing on Pratt's historically superior Architecture curriculum, we are pleased to announce our expanded program registered with the American Institute of Architects, Continuing Education System (AIA/CES). The Professional Development program guarantees excellent instruction and a forum for exchanging ideas. Classes are determined by the subject matters that are most needed by practitioners.

As an Authorized Autodesk Training Center, Pratt Manhattan's Center for Continuing and Professional Studies offers quality education in accordance with the AIA/CES criteria. For additional AIA/CES approved courses in AutoCAD, Vectorworks, form•Z and more, please call us at 212-647-7199 for a brochure or visit our website at <http://prostudies.pratt.edu>.

## For the Architect

New York State Licensing Board law requires architects to complete 36 professionally related continuing education hours for every three year registration period. Of the 36 hours, 24 must relate directly to HSW issues.

## For the Professional Engineer and Land Surveyor

Every New York State licensed and registered professional engineer and land surveyor must complete continuing education. Professional engineers will be required to complete 36 hours of continuing education during each three year registration period. Land Surveyors will be required to complete 24 hours of continuing education during each three year registration period. Please see courses with PDH's noted.

## State Approval

It is your responsibility to check with the state licensing boards as to whether or not a course is acceptable to meet its continuing education credit requirements. Visit Pratt's website at <http://prostudies.pratt.edu> for courses not acceptable to NYS or see courses that state: *Not accepted by NYS for LU, PDH credit.*

For more information, visit the website for New York State Education Department, Office of the Professions at <http://www.op.nysed.gov/>.

## Pratt AIA On-site Offerings

These lectures can be delivered on-site to corporate clients. For further information, please contact Karen Adler Miletsky at [kmiletsk@pratt.edu](mailto:kmiletsk@pratt.edu).

## Registration Deadlines

Registration deadlines for all courses are one week prior to course start dates, unless otherwise noted. Exceptions will be allowed based on space availability. We recommend that you register early.

## VA Benefits for Certificate Program

This program is approved for veterans and other eligible persons under the GI Bill for education. Contact the Department of Veterans Affairs at 1-888-GI BILL1 (1-888-442-4551), or [www.gibill.va.gov](http://www.gibill.va.gov) regarding eligibility. **Contact:** Perry Han phan@pratt.edu or Karen D'Angelo kdangelo@pratt.edu

## 2 Course Descriptions

## 38 Customer Testimonials

## 39 Program Announcements

## 40 Faculty

## 43 Information

## 44 How to Register

## 45 Registration Form

## Certificate Program

### Sustainable Building, Infrastructure Design and Management

Designers have long been able to meet the needs of their clients and businesses by using their creativity to blend form and function. Today's world of limited resources and changing economic and environmental values requires a new set of tools to design a sustainable world.

This certificate program, Sustainable Building and Infrastructure Design and Management, brings designers into 21st Century design by building on their existing design skills and enhancing them with cutting edge skills and knowledge, enabling them to meet the new goals and challenges of sustainability.

### Why Choose Pratt Institute?

For over a century, Pratt Institute has combined the practice of art and practicality by educating artists and designers in its traditional art, design and architecture classes, at the graduate, undergraduate and professional levels.

This program brings Pratt and you to a new level and a new world of art and design, again in a practical way.

You will learn about the driving forces which are changing your client's needs and the tools needed to meet those challenges and design a sustainable world. In short you will become part of the solution and be able to assist your clients and businesses in succeeding in a carbon constrained world.

**Recommended audience:** architects; engineers; interior designers; urban planners; facilities and construction management professionals; contractors; and government agency professionals.

**Application fee:** \$100, non-refundable

**Certificate Requirements:** The certificate program requires the successful completion of all 7 courses, which totals 49 hours of study.

### Required Courses: Seven

PMPD 600	Climate Change Fundamentals for Design and Management Professionals
PMPD 601	Designing and Renovating Carbon Neutral Buildings
PMPD 602	Performance Modeling for Carbon Neutral Buildings
PMPD 603	Sustainable Standards for Buildings and Infrastructure – LEED, BREAM, Energy Star
PMPD 604	Energy, Greenhouse Gas, Weatherization Audits and Capital Planning
PMPD 605	New Technologies – Smart Grid and Smart Buildings
PMPD 606	Innovative and Entrepreneurial Planning Design and Management Practices

# Course Descriptions

## Adaptive Reuse Re-Imagined

An existing structure presents many opportunities and many challenges. Architects are sometimes reluctant to use the existing infrastructure, hesitant to assume responsibility for unforeseen conditions or they do not recognize the valuable resource they have. It is vitally important to understand what is possible given new technologies. Part of the challenge is to discover hidden features of a property to both preserve and improve the facility by applying creativity and taking the care necessary to envision the end product. This course examines the conceptual underpinnings as well as the methods, materials, and process of reconstructing and adding to an older building.

### Course Outline includes:

- I Survey existing conditions, code and zoning
- II Planning for preservation (old vs. new), building charm and interest
- III Permitting process, the construction process, and case studies

Tu 9am–5pm, 1 session Sept 22  
Steven Zalben, AIA, NCARB  
7 AIA/HSW, LU's/SD's, 7 PDH's  
PMPD 894 \$295

## Analysis of Continuous Spanned Beams I

A popular choice for the analysis of continuous beams later to be used in computer programs solutions has been a classical method, known as the force method in the structural engineering community among engineers and architects. This method had become the engineers tool for designing continuous beams and was deservedly recognized as the alternative method to that of moment distribution established by Hardy Cross.

The seminar gives a detailed overview of designing long spanned continuous beams providing the engineer-architect with the geometric and physical properties of the beam rendering a more effective solution to the design as well.

### Course Outline includes:

- I Structural engineering principles: virtual work, bending of a beam segment, angle changes along a beam, moment area method, reciprocal relations along a beam, moment distribution
- II Layout and solution of the  $n$  linear equations of the continuous beam's geometry to its  $n$ th degree of indeterminate forces. From the solution, a pictorial diagram will show the beams structural response to the loads acting upon it.

Th 9am–1:30pm, 1 session Sept 24  
Kenneth Wagner, PE  
4 AIA/HSW LU's, 4 PDH's  
PMPD 958 \$196

## Analysis of Continuous Spanned Beams II

Established in long usage for the structural analysis of continuous beams, later to be implemented in computer program solutions, the classical method known as the displacement method is today's selected mechanism for the design of continuous beams, the alternative to both that of the force method and moment distribution as well.

This seminar will give an in depth view of an easier and more effective solution for continuous beams than that of the force method.

### Course Outline Includes:

- I Theory of angle changes along a beam
- II Moment area method
- III Stiffness factors for structural elements
- IV Displacement method description
- VI Linear equations for rotations
- VI Moment distribution
- VII Moment diagram for the structural continuous beam

F 9am–1:30pm, 1 session Sept 25  
Kenneth Wagner, PE  
4 AIA/HSW LU's, 4 PDH's  
PMPD 959 \$196

## Analysis of Continuous Spanned Beams

From successful long term usage of analyzing continuous beams the classical methods known as the force method and the displacement method had become the selected tools of the designer's choice for these structural elements mentioned above. The displacement method has become today's more popular choice for the computer solutions of these beams.

The seminar introduces the engineer/architect to an inner depth view of these classical methods mentioned above as alternate solutions to the method of moment distribution implemented in preliminary designs of continuous spanned beams.

### Course Outline includes:

- I Virtual work
- II Bending of a beam segment
- III Angle changes along a beam
- IV Moment area method
- V Reciprocal relationships of deflections along a beam
- VI Moment distribution
- VII Stiffness factors
- VIII Force method description
- IX Displacement method description
- X Establishment of  $n$  linear equations for the force method
- XI Establishment of  $n$  linear equations for the displacement method
- XII Moment distribution
- XIII Shear diagram-force method
- XIV Moment diagram-displacement method
- XV Force method versus displacement method

Sa 9am–5pm, 1 session Oct 17  
Kenneth Wagner, PE  
7 AIA/HSW LU's, 7 PDH's  
PMPD 960 \$295

## An American Revolution: The Invention of Balloon Framing

Many architects and historians are under the impression that balloon framing, and what we now call platform framing, was a gradual evolution from post and beam timber framing. Balloon framing, in fact, sprung from the brain of one man in the summer of 1833 in Chicago. At the time, Chicago was a city of just 150 inhabitants, but it was already rife with wild real estate speculation. In order to keep up with the demand for housing, one man realized that milled 2 x 4s, 2 x 6s and 2 x 8s set at regular intervals could make an easy and fast to erect structure. The idea caught on rapidly and moved west over the course of the next 20 years, making the expansion into the Western Territories much more feasible. Balloon framing also fed America's avid interest in a wide range of house styles, making the variety of housing stock in United States the most diverse in the world.

### Course Outline includes:

- I A review of Timber Framing and its origins in England
- II Chicago: Circa 1830
- III Balloon Framing: Two men – which one is the actual inventor?
- IV The Dissemination of the Idea in the 19th Century
- V Platform Framing and other Improvements
- VI Emerging American House Styles after 1850
- VII The role of Architects versus Pattern Books in Domestic Architecture

Th 9am–4pm, 1 session Sept 17  
Warren Ashworth, RA  
6 AIA/CES LU's, 6 PDH's  
PMPD 940 \$295

### State Approval

It is your responsibility to check with the state licensing boards as to whether or not a course is acceptable to meet its continuing education credit requirements. Visit Pratt's website: [www.pratt.edu/prostudies](http://www.pratt.edu/prostudies) for courses not acceptable to NYS or see courses that state: Not accepted by NYS for LU and PDH credit.

For more information, visit the website for the New York State Education Department, Office of the Professions at [www.op.nysed.gov/](http://www.op.nysed.gov/).

## Architectural Acoustic and Noise Control

This seminar is intended for planners, architects, engineers, interior designers, facilities managers and construction personnel who wish to raise their awareness, sensitivity and technical knowledge of architectural acoustics, noise control, and the related regulations. Though related regulations have existed and been refined over four decades, serious attention is finally being paid to acoustics and noise pollution, as awareness increases about the negative impact of noise and poor acoustics to human comfort, health, safety and welfare contributes to irritability, reduced workplace productivity, sleeplessness, anxiety, exacerbation of learning and hearing disabilities. It makes practical sense that good acoustics and effective noise control be incorporated as determinants in the planning and the design considerations for projects. As an important frontline consideration for government funding of projects, facilities acquisition and construction, noise control and abatement have become critical determinants for proceeding with such project funding, and the impact of noise pollution is also a critical component of environmental site assessment for facilities development. However, the reality is that acoustic and noise control are often overlooked.

### Course Outline includes:

- I Properties and Characteristics of Sound Wave and Noise
- II Institutional Standards and Regulatory Framework
  - Federal, NYS and Municipalities levels
- III Occupational Standards for Noise Control
- IV Indoor Acoustics and noise Control
- V Outdoor noise and noise Abatement

F–Sa 9am–5pm, 2 sessions Oct 9–10  
Alfred Yalaju, RA  
14 AIA/HSW LU's, 14 PDH's  
PMPD 914 \$595

### Registration Deadlines

Registration deadlines for all courses are one week prior to course start dates, unless otherwise noted. Exceptions will be allowed based on space availability. We recommend that you register early.

# Course Descriptions

## **Architectural Restoration: Motivators and Constraints to the Preservation of Older Structures**

This course addresses generating and controlling projects involving architectural restoration, which accounts for a significant portion of all construction. The role of the architect in such projects is pivotal; a pro-active architect with a comprehensive understanding of restoration principals can be instrumental in its success, and can also play a significant role in facilitating these projects. Technical expertise must cover an extremely broad range of knowledge. The architect must be thoroughly familiar, not only with current codes and construction methods, but those of the past as well. The role of the architect in program development, administrative issues and approvals, the technical aspects of restoration, and financial considerations will be explored in depth. Guest speakers with specific areas of technical expertise will participate in open-ended discussions on restoration techniques. Restoration often involves adaptive reuse or historic preservation, as well as broader planning issues. Some projects simply address restoration and repair, but students will cover the full spectrum of building types, architectural styles, and programmatic requirements. Beyond the technical and administrative constraints, understanding, identifying, and satisfying funding sources can be determinant as to whether a project is undertaken. The architect's role in funding process will also be discussed in depth.

### **Course Outline includes:**

- I Motivators for Restoration**
  - Identifying the owner's objectives and desires
- II Administrative Issues**
  - Dealing with municipal authorities, funding sources and contractors; the role of the architect
- III Technical Issues**
  - Selecting and sourcing materials, developing method of construction, dealing with specific issues
- IV Construction Costs and Budgeting**
  - The architect's role and responsibilities
- V Examples**
  - A representative cross section of projects demonstrating different types (residential single family, multi-family, commercial, municipal), program requirements (adaptive reuse, alteration/ addition, pure restoration, historic preservation), and architectural styles.
- VI Discussion**
  - Open ended discussion by all participants. Guest speakers would join in.

Th–F 9am–5pm, 2 sessions Dec 3–4  
Martin Kravitt, RA  
14 AIA/HSW LU's/SD's, 14 PDH's  
PMPD 916 \$595

## **Art Deco: The Architecture of Boom and Bust**

In 1925, the Exposition des Arts Decoratifs (Exposition of Decorative Arts) was held in Paris, France. Its consequences would influence an entire generation of artists and designers, not the least of which was its influence on architects in Europe and America. Starting with the Zig-Zag era of the 1920s, Art Deco, as it came to be known, had three distinct periods in America. With the onset of the worldwide depression in the 1930s, government "make-work" projects would define the second period known as the WPA (Work Progress Administration) era. The WPA sponsored public projects on a grand scale and architectural designs of the day reflected this heroic age of great works. By the late 1930s and early-1940s, before America's entry into WWII, the great depression was receding and America was getting back on her feet and back to work. This optimistic spirit, celebrating the marvels of modern machinery brought about the last period of Art-Deco architecture: the Streamline era. From New York City to Miami to Tulsa, Oklahoma, the capital of art-deco architecture in the United States, the Art-Deco style would be celebrated then forgotten as passé in the post-WWII years. Sadly, many of these great buildings have been lost, but those that remain are now cherished reminders of that great era in which they were created.

### **Course Outline includes:**

- I Les Exposition des Arts Decoratifs**
- II The Influence of Art-Deco**
- III Zig-Zags & Lightning Bolts**
- IV Grand by Design: The WPA era**
- V Colors & Rounded Corners: The Streamline era**

W 8am–1:30pm, 1 session Sept 2  
Jeffrey Syken  
5 AIA/CES LU's  
PMPD 917 \$244

## **Between the Wars: the Golden Age of Bridge Building**

The 1920s and 1930s were the most prolific decades of bridge building the world has ever seen. More important, more bridges were built than at any time before or since-particularly in the United States. The George Washington Bridge (1931) would be the first long-span and heaviest suspension bridge ever built. The Bayonne Bridge (1931) the longest steel arch bridge, while its contemporary, the Sydney Harbor Bridge (1932), would be the largest steel arch bridge ever built. Triborough Bridge (1936) would set the modern standard for linking bridges with arterial highways, while San Francisco's Golden Gate Bridge (1937), at the dramatic ocean entrance to San Francisco Bay, would become the most recognized bridge in the world. The Tacoma-Narrows Bridge would end the era with a humbling lesson on bridge aerodynamics for bridge designers.

This seminar will include a historical overview of bridges built between 1920 and 1940.

### **Course Outline include:**

- I Suspension bridges**
- II Cantilever bridges**
- III Steel arch bridges**
- IV Concrete arch bridges**
- V Continuous truss bridges**

Th 9am–5pm, 1 session Sept 3  
Jeffrey Syken  
7 AIA/HSW LU's, 7 PDH's  
PMPD 886 \$295

## **Bidding the Construction Project**

This how-to course is for architects, engineers, general constructors, construction managers, sub-contractors and other construction personnel interested in the Who, What, Where, When, Why and How of bidding the construction project.

### **Course Outline includes:**

- I The Relationship of the Contracting Parties**
- II Understanding the Project**
- III Overview of Bid Documents**
- IV Assembling the Bid Team**
- V The Role of the Subcontractors**
- VI The Estimate Process**
- VII Bid Day Preparation**
- VIII Bid Day**

Sa 9am–5pm, 1 session Nov 7  
Arnie Weitzman, CPE  
7 AIA/CES LU's, 7 PDH's  
PMPD 861 \$295

## **Big Apple to the Core**

Above all else, what makes New York the greatest city in the world is its architecture. Almost every type, size, and style of building is represented on Manhattan Island-from the sublime to the grandiose. Upon entering the metropolis, the visitor is first treated to the splendor of Grand Central Station, a complex maze culminating in a great hall with the night sky adorning the ceiling high above. Nearby, the Chrysler Building, winner of the great skyscraper race during the late 1920s, the height of art-deco architecture in New York, stands proud, the first man-made structure to out-distance the Eiffel Tower. A few blocks south and west is the Empire State Building, one of the greatest streets in the world, on fashionable Fifth Avenue. For New York, the Empire State Building would be the culmination of the art and science of building tall buildings, for the rest of the world it would become the very symbol of New York City. To make way for the building, the original Waldorf-Astoria Hotel was demolished but reborn on Park Avenue, where it reclaimed its title as one of the greatest hotels in the world. Where 7th Avenue and Broadway form a "bowtie," NYC and the world celebrate New Years at Times Square. Rich in history and at the heart of the theatre district, the area has undergone a renaissance starting

in the 1990s with the restoration of the New Amsterdam Theatre. Aside from these great structures, New York City has some of the greatest residences in the world in the form of townhouses, duplex apartments and lofts.

### **Course Outline includes**

- I Grand Entry: Grand Central Station**
- II Deco Days: Chrysler Building & The Empire State Building**
- III On the Avenue: Fifth Avenue**
- IV NYC's Palace: The Waldorf-Astoria Hotel**
- V Crossroads of the World: Times Square**
- VI Art Nouveau Masterpiece: The New Amsterdam Theatre**
- VII NYC Living: Townhouses, Apartments & Lofts**

W 8am–1:30pm, 1 session Sept 9  
Jeffrey Syken  
5 AIA/CES LU's, 5 PDH's  
PMPD 929 \$244

## **Brick Essentials**

Brick masonry is used in many different ways in the construction industry. Through this seminar you will gain an in depth understanding of brick masonry and its various uses. Learn about the requirements governing clay masonry as established by the American Society for Testing and Materials (ASTM). The discussion will include standards for both brick masonry units and the mortar used in conjunction with those units. Participants will develop a full understanding of brick by size, shape, exposure limitations, and compressive strength. The advantages of brick to sustainability will also be described. In particular, it will be demonstrated how brick may contribute to as many as twenty-nine LEED points toward certification.

### **Course Outline includes:**

- I History of Brick Masonry**
  - Ancient times and modern times
- II Review of ASTM Standards**
  - Brick and mortar
- III Shapes, color, methodology**
  - Extruded and molded
  - Sand struck, water struck
  - Dyeing, Joints
- IV Wall types**
  - Drainage walls:
    - Cavity
    - Veneer (Wood and Steel stud)
    - Rain screen wall
- V Pavers**
  - Rigid underlayment, flexible underlayment
- VI LEEDS**

Tu 9am-5pm, 1 session Oct 13  
Brian Trimble  
7 AIA/HSW LU's, 7 PDH's  
PMPD 918 \$295

# Course Descriptions

## Bridging America

North America is a continent diverse in many ways: people, climate and, not least of all, its geography. Many natural obstacles blocked the way for railroads and highways to traverse the landscape. Bridges in their many forms – suspension, cantilever, steel arch, viaduct, bascular, swing, lift, etc. – and the forces acting on them, both dynamic and static, as well as the loads they must resist: live, dead, wind, seismic, environmental, literally tie the continent together. The technology of bridge building has come a long way from the days in the 19th century when one in four suspension bridges collapsed, exacting a terrible toll in lives and property. In the 20th century, bridge building went from a quasi- to an exact-science based on modern engineering principles learned, very often, from bitter experience such as the collapse in November 1940 of the Tacoma-Narrows Bridge. Advancements in materials, equipment, methods of excavating substructures (foundations), and erecting the superstructure without impeding navigation made possible the bridging of America. Modern bridge design and construction techniques have made bridges an art form, not just a utilitarian linking of two points. Because of its geography, North America has some of the most significant bridges spanning many of the continent's most imposing water barriers. The Mackinaw Straits, which separates the upper and lower peninsulas of the state of Michigan, and the Carquinez Strait, which separates San Pablo from Suisun Bay in Northern California can claim the newest suspension bridge, while the longest bridge in the world spans Lake Pontchartrain in southern Louisiana.

### Course Outline includes:

- I **Pittsburgh: City of Bridges**
- II **David Steinman's Masterwork: The Mackinac Bridge**
- III **End of Isolation: The Lake Pontchartrain Causeway**
- IV **Highway at Sea: The Chesapeake Bay Bridge & Tunnel**
- V **Bridging the Carquinez Strait: The Al Zampa Memorial Bridge**

W 8am–1:30pm, 1 session Sept 16

Jeffrey Syken

5 AIA/CES LU's, 5 PDH's

PMPD 927 \$244

## Registration Deadlines

Registration deadlines for all courses are one week prior to course start dates, unless otherwise noted. Exceptions will be allowed based on space availability. We recommend that you register early.

## Bridging Gotham: NYC Archipelago

Upon his arrival in 1609, Henry Hudson declared the natural harbor a place where: "A thousand ships could rest at anchor." He then set about charting the labyrinth of waterways that separated the land. Of the five boroughs incorporated to form the City of New York in 1898, only the Bronx is connected to the North American continent – all the rest are surrounded by water. The challenge of linking these disparate land masses by bridge and consolidating the great metropolis began with the colonists of the late 17th century and continued into the 1960s. The story of New York City's bridges is the story of New York City itself – they are one and the same.

### Course Outline includes:

- I **Bridge Building: Science as Art**
- II **Predecessors: The Colonial Period**
- III **Industrial Age: The Harlem River Bridges**
- IV **Two Cities As One: Brooklyn Bridge**
- V **The Ugly Duckling: Williamsburg Bridge**
- VI **Cantilever Classic: Queensboro Bridge**
- VII **Deflection Theory Tested: Manhattan Bridge**
- VIII **Grand Arch: Hell Gate Railroad Bridge**
- IX **End of Isolation: Outerbridge, Goethals and Bayonne Bridges**
- X **Form Follows Function: George Washington Bridge**
- XI **Hat Trick: Tri-Borough Bridge**
- XII **Upper East River: Bronx/Whitestone and Throgs Neck Bridges**
- XIII **Grand Finale: Verrazano Narrows Bridge**

Sa 9am–5pm, 1 session Sept 26

Jeffrey Syken

7 AIA/HSW LU's, 7 PDH's

PMPD 871 \$295

## Bridging the World

The Romans were the first great bridge-building civilization. Their stone-arch bridges-many still in use today, literally tied their empire together. Centuries would pass until a new material, cast-iron, would be introduced in the 18th century as a lightweight substitute for masonry. With the introduction of railroads in the 19th century, cast-iron bridges were tested to their limits and failed. The introduction of wrought-iron and steel for all types of bridges– steel arch, cantilever, suspension, bascule, etc.– would allow bridge-building to evolve into a science rather than an art in the 20th and 21st centuries. In the 1890's, the much-needed Tower Bridge joined the two halves of London together while allowing the busiest port in the world to remain open to trade. In post-WWII Japan, a national program to stitch the island-nation together culminated with the opening of the longest bridge in the world: Akashi-Kaikyo. To link Paris with the Mediterranean, the French constructed the tallest bridge in the world: Millau Viaduct, and to relieve the burden

on the original 1938 Blue Water Bridge, linking Ontario with Michigan, a new tied-arch bridge was constructed. The proposed Bering-Strait Bridge would literally "Bridge the World" linking North America, Asia and Europe.

### Course Outline includes:

- I **Bridge History/Development**
- II **Tower Bridge, London**
- III **Akashi Kaikyo: The Longest Bridge in the World**
- IV **Millau Viaduct: The Tallest Bridge in the World**
- V **The New Blue Water Bridge**
- VI **Bridging the Bering Strait**

W 8am–1:30pm, 1 session Oct 28

Jeffrey Syken

5 AIA/CES LU's, 5PDH's

PMPD 930 \$244

## Building Green: An Overview

Depending upon whom you ask, you're likely to get a variety of definitions for the term "Building Green." For governmental agencies, recycled content is typically most relevant but for health conscious organizations, Indoor Environmental/Air Quality matters most. Paramount for environmental organization is the level of Ecodisruption. In general, all interested parties agree that it's all about the built environment being "earth friendly" whereas "Building Healthy" focuses on the built environment being "people friendly." In reality, both Building Green and Building Healthy are two sides of the same coin. The U.S. Green Building Council's (USGBC) LEED (Leadership in Energy & Environmental Design) certification program has provided the parameters by which Environmentally Sustainable/Responsible Design & Construction has become a practical reality in the 21st century. Through graphic and visual presentations, this seminar provides a broad overview of the topic.

### Course Outline includes:

- I **Why Build Green?**
- II **Origins and genesis of the green building movement**
- III **What is sustainability?**
- IV **Understanding USGBC's LEED program**
- V **Industry initiatives**
- VI **Health impacts from the built environment**
- VII **Design principles**

Tu 9am–5pm, 1 session Sept 1

Jeffrey Syken

7 AIA/HSW LU's/SD's, 7 PDH's

PMPD 890 \$295

## Building Green 'Round the World

The green building movement – begun in earnest in the early 1990s – has made its impact felt around the world. From New York to Beijing, from Maine to Mexico, the environmental impacts of the built environment can no longer be ignored in the wake of the industrial revolution and the exponential growth of the human population on planet earth. The release/control of greenhouse gases, electricity usage, water resources, solar energy, ground-water pollution, eco-disruption, deforestation, landfill use/capacity, indoor air quality/pollution, the urban heat island effect, storm water runoff, light pollution, and sustainable materials, are all key aspects of building green. Long ignored in favor of the natural environment, the built environment has, by the 21st century, become the priority of governments, agencies, environmentalists, corporations, and the public-at-large. An integral part of our lives, the places we live, work, and play in control of ours-and-spaceship-Earth's destiny more than we realize.

### Course Outline includes:

- I **Freiberg, Germany: A Solar Village**
- II **Toronto, Canada: A Natural House**
- III **Vermont, USA: Greening the Green State**
- IV **Tijuana, Mexico: Creating an Ecological Park**
- V **Los Angeles, California: A Downtown State Agency's HQ Goes Green**
- VI **British Columbia, Canada: Practicing Sustainable Forestry**
- VII **Iowa, USA: Designing & Constructing a Green Highway Bridge**
- VIII **Pennsylvania, USA: Recycling Goes Mainstream**
- IX **New York City, USA: Vertically Integrating Sustainability**
- X **Western Mexico: Sustainable Design for the Developing World**
- XI **Chicago, Illinois: Greenest City in America?**
- XII **Boston, Massachusetts: Big Dig Reincarnations**
- XIII **China: Building Green on an Epic Scale**
- XIV **Around the World: the Visionaries of Sustainable Design & Construction**

Su 9am–5pm, 1 session Oct 4

Jeffrey Syken

7 AIA/HSW LU's/SD's, 7 PDH's

PMPD 941 \$295

# Course Descriptions

## Building Healthy

Did you know that pollutants inside your home can be 5 to 10x greater than outside – and at levels of concentration up to 100x higher? Two recent trends in homebuilding: tighter building envelopes and the use of synthetic building products, have contributed significantly to the problem of indoor air pollution. Indoor pollutants come in many forms: biological, gases, metallic, mineral, radiation and vapor. Unlike “Building Green” – which takes an “earth-first” approach, “Building Healthy” is all about people and putting their health first by creating and maintaining healthier environments to live and work in. In reality, both building green and building healthy are two sides of the same coin.

This seminar examines the topic of building healthy with a viewing of a videotape series concerning the construction of a healthy house and discussion of the various aspects of building healthy.

### Course Outline includes:

- I IAQ & You
- II Indoor Pollutants
- III Design Principles and Foundation Types
- IV Exterior Finishes and Interior Finishes
- V Insulation, Doors & Windows
- VI Airtight Construction, Framing Options
- VII Electric, Plumbing and HVAC
- VIII Flooring, Cabinetry
- IX Electromagnetic Fields

Su 9am–5pm, 1 session Nov 1  
Jeffrey Syken  
7 AIA/HSW LU's/SD's, 7 PDH's  
PMPD 872 \$295

## Building Naturally

*Touch the Earth Lightly* – the mantra of the *Natural Building* movement, expresses with just a few words a philosophy whereby the built environment is in harmony with the natural world rather than at odds against it. Emphasizing the use of “natural” building materials such as adobe, straw bale, clay, earth, cordwood, etc., and taking advantage of passive solar design, earth sheltering, etc., natural building proponents have distinguished themselves from the more mainstream *Green Building* movement, which focuses on “earth friendly” initiatives such as recycled content, minimizing eco-disruption, and indoor air quality.

### Course Outline includes:

- I Understanding the significant differences between the *Natural Building* and *Green Building* movements as well as their common ground
- II Appreciating the historical background and influences of natural building materials and techniques in the development of human society and the built environment
- III Explore both the cost-to-benefit and benefit-to-burden ratios of natural building

## IV Defining the geographical influences on natural building material/techniques

## V Recognize the overlap of natural building with conventional building methods

## VI A review of hybrid designs that use natural building materials

W 8am–1:30pm, 1 session Dec 9  
Jeffrey Syken  
5 AIA/HSW LU's/SD's, 5 PDH's  
PMPD 988 \$244

## Building The Brooklyn Bridge: An Epic for the Age

Technological innovation and scientific advancement, political corruption, scandal, human tragedy and triumph, the use of steel rather than iron-the building of the Brooklyn Bridge (a.k.a. East River Bridge) had it all. The spanning of the East River between Lower Manhattan and the city of Brooklyn was perhaps the most significant achievement of the post-civil war era. This seminar will give you an understanding of the materials, methods, and systems used to design and build the world's first modern steel and wire cable suspension bridge: the Brooklyn Bridge (1883). The Brooklyn Bridge established the method and means by which suspension bridges could be successfully and safely built.

### Course Outline includes:

- I The history of long-span bridges
- II New York and Brooklyn in the 19th century – two cities, one bridge
- III Building the bridge – the epic drama
  - creating foundations for the two towers
  - the anchorages; running the cables
  - the approaches; suspending the roadbed
  - the terminals
- IV The bridge in use – ever changing, ever the same
- V The bridge as a cultural icon

M 9am–5pm, 1 session Oct 12  
Jeffrey Syken  
7 AIA/HSW LU's, 7 PDH's  
PMPD 867 \$295

## Build It and They Will Come: The Architecture of Sports

Perhaps no other building type generates more raw human emotion than does the sports stadium. From the days of “Bread & Circuses” in ancient Rome, where gladiators fought to the death in the Coliseum, to the most modern domed stadium, sports arenas reflect its civilization's cultural values and technical prowess. No other type of structure in the built environment creates such a strong emotional bond with the community it serves. When a stadium has reached the end of its useful life, it is very often a traumatic experience for the home team's loyal fans to witness its demise.

Today, the two great American pastimes: football and baseball, dominate the architectural and structural designs of stadiums, providing

tremendous capacity and technological innovations such as retractable roofs, movable seating and even movable fields. Very often stadiums serve multi-functional purposes and/or serve as venues for concerts, conventions, etc. In emergencies, stadiums also provide temporary shelter for great numbers of displaced persons. Sports stadiums have come a long way from the days of wooden grandstands in the outfield. Modern stadiums represent the latest advances in architectural design and structural engineering on a grand scale.

### Course Outline includes:

- I The Coliseum, Rome
- II Baseball Parks
- III Notre Dame (Football) Stadium
- IV Domed Stadium
- V Memorial Stadium, Philadelphia

W 8am–1:30pm, 1 session Oct 7  
Jeffrey Syken  
5 AIA/CES LU's, 5PDH's  
PMPD 934 \$244

## Capital City: The Architecture of the District of Columbia

Selected for its location, vistas and proximity to namesake George Washington's home in Mount Vernon, Washington, D.C. serves as the nation's capital and depository for its rich history and cultural values. Having been planned, the architecture of the city reflects best the growth, struggles and triumphs of the city and the nation it serves. Destroyed by the British in the war of 1812, the original capitol building and presidential mansion were re-built larger and grander than before. During the Civil War, the capitol building itself served as a barracks and field hospital for union forces while the enlargement of the capitol dome continued in the midst and strife of war as a symbol and promise to the nation that the union would not fail. Directly across the Potomac, the Pentagon building serves as the headquarters of America's military might and nearby Fort Meade honors its fallen sons and daughters at Arlington National Cemetery. Presidential and war memorials abound and historic structures representing architectural styles ranging from Neo-Classical to Post-Modern line its wide boulevards.

### Course Outline includes:

- I Selecting the Site of the Federal City
- II Construction History of the Capitol Building
- III Presidential Mansion: The White House
- IV Presidential Memorials
- V War Memorials
- VI The Pentagon & Arlington National Cemetery
- VII Miscellaneous Historic structures

Tu 8am–1:30pm, 1 session Oct 6  
Jeffrey Syken  
5 AIA/CES LU's  
PMPD 919 \$244

## Chronicles of Security Technology In the Age of Terrorism and Natural Disasters

This course was specifically designed for Architects and Consulting Engineers interested in the design of complex security systems for large urban facilities. The program offers an historic and antidotal overview of basic concepts in physical security technology from standard locking hardware to state-of-the-art digital computerized surveillance and monitoring systems. Two nationally recognized experts with experience in all areas of physical security will describe the effects of IP networks on digital CCTV Surveillance Systems, access control systems, biometric devices and emphasizes new design criteria to incorporate wide-band Internet networks for all security systems. Case histories of security system successes and failures experienced by the presenters will be discussed. They were directly involved in the introduction of many unique and controversial security projects for public facilities [museums, hospitals, airports] and private complexes such as the World Trade Center, CoOP City, Educational Institutions, Healthcare Institutions and other complex structures. Can a security system protect against manmade and natural disasters in this age of potential terrorist attacks or the event that took place on the Virginia Tech campus?

This timely course will explain how to upgrade security without creating a fortress like environment that may alienate the very public that the building was supposedly built to serve. Every building complex has unique area(s) of vulnerability and the special risk factors in the following structures will be analyzed: Museums; Schools and Colleges; Banks; Hospitals; Hotels; residential and Commercial High Rise.

### Course Outline includes:

- I Door locking systems (conventional hardware to wireless smart keys)
- II Card Access Systems – various card formats – Biometric Devices
- III Addressable IP CCTV Surveillance Systems and IT managed networks
- IV Upgrading Analog to Digital recording formats
- V Analyzing Risk Assessment vs. Basic Security Solutions
- VI Separating “Competent” Security Consultants from Opportunists
- VII Developing Specifications and Bid Package

Th 9am–5pm, 1 session Oct 29  
Charles Schnabolk, PE and Ben Scaglione, CPP  
7 AIA/HSW LU's, 7 PDH's  
PMPD 952 \$295

# Course Descriptions

## Climate Change Fundamentals for Design Professionals

This seminar is an overview of climate change basics and their relation to the design world. The seminar is the first in the Climate Change Certificate Program, and is designed to give design professionals the basic tools needed to begin to design buildings, interiors, products, transportation and cities for a carbon neutral world. Designers will learn how to measure and mitigate the carbon footprint, analyze and adapt to climate change risk, and learn carbon neutral design standards.

### Course Outline includes:

- I What is Climate Change, and what are the effects?
- II What is carbon neutral and how do we measure it?
- III What are the standards?
  - The 2010 and 2030 Imperatives
  - College and University Presidents Climate Change Commitment
  - NYC Stds
  - US Mayors Climate Change Commitment
  - The Kyoto Protocol
  - USGBC LEED
- IV What is mitigation and what tools are available?
  - What is a carbon footprint?
  - How to measure the carbon footprint
    - Greenhouse gas protocol
    - The World Resources Institute
  - How to reduce the carbon footprint
- V What are the risks and how do we adapt?
  - Risks – business, regulatory, physical, investment, social
  - Risk avoidance and mitigation strategies
  - Adaptation – seawalls to power towers
- VI What are the Opportunities?
  - Design, design, design
  - Carbon neutral buildings
  - Carbon neutral products
  - Carbon neutral systems
  - Carbon neutral cities

Sec 1: Sa 9am–5pm, 1 session Oct 3

Sec 2: Su 9am–5pm, 1 session Nov 15

Tony Gelber, LEED® AP (all sections)

7 AIA/HSW LU's/SD's, 7 PDH's

PMPD 600 \$295

## Connecting Us: The Arterial Highway System of the New York-New Jersey Region

In combination with the region's transit systems and intercity rail systems, the region's expressways and parkways provide the essential network for mobility of people and goods in the New York-New Jersey Metropolitan Area. This arterial highway system directly moves people in buses, taxis, HOVs, and automobiles, and gives access to the other "people modes," such as bicycle, rapid transit (bus or rail), ferry, etc. Along with freight rail lines, the expressways also move the vast quantities of goods that support the region's economy. Unlike many other areas, the New York-New Jersey region's arterial highway system, including its key bridge and tunnel links, is provided by a multiplicity of governments and authorities, in both states. The roles of the agencies and organizations involved have undergone many changes over the past 100 years, the period within which the present network developed. This course will review that development, focusing particularly on the period from the 1930s through the present. It will examine key influences and "influencers," system milestones, points of controversy, current system status, and the outlook for the future. The course will also present and analyze past, current, and emerging concepts for policy, planning, design and operations of the arterial highway system.

### Course Outline includes:

- I The Region's Roadways at the Turn of the (20th) Century
- II Emergence of the Automobile (1920s, 1930s)
- III Influences, Inside and Outside of the United States (1930s, early 1940s)
- IV Bridges and Tunnels, Linked and Not-so-Linked (1880s to 1930s)
- V Programs of NYC, NYS, NJ (1920s-early 1940s)
- VI Post-World War II (1950s, 1960s)
- VII Some New Twists (1960s, 1970s)
- VIII Maturing of the Highway System (1980s, 1990s)
- IX Recent Developments (early 2000s)
- X Retrospective, Prospective...A Look Back, and a Look Ahead

Tu 9am–5pm, 1 session Nov 24

Leon Goodman, PE, PTOE

7 AIA/CES LU's, 7 PDH's

PMPD 924 \$295

## Construction Cost Estimating

This course for project managers, architects, engineers and other construction personnel goes beyond the unit pricing and cost book approach, examining how the various trades arrive at their bids. The course will be taught by a team of professional estimators whose in-depth knowledge of New York City construction practices will give an added dimension and relevance to each topic.

### Course Outline includes:

- I Basic estimating procedures for CSI Divisions 2 through 9
  - II Determining the cost of General Conditions
  - III An overview of Bid Day procedures
- Prerequisite:** Blueprint Reading, Construction Methods & Materials or equivalent experience.
- M 6–9pm, 10 sessions Oct 5–Dec 7  
Abraham Kovner, CPE  
George Lawrence, CPE  
William Manfredonia, CPE  
30 AIA/CES LU's, 30 PDH's  
PMCM 104 \$685

## Construction Cost Estimating: "The Bridge"

Estimating provides the critical link or "bridge" between the worlds of design and the construction. With "fast-track" construction schedules as standard today, the estimator plays a new and important role in the design/construction process. This in-depth seminar examines the underlying principles, processes and theory inherent in the complex process of construction cost estimating.

### Course Outline includes:

- Day One: General Construction/Contractor**
- I Estimating
    - Types of Estimates/Estimators, role, attributes of an Estimator
  - II Rules of the Game
    - Do's & Don'ts: making mistakes
  - III Industry hierarchy & the bidding process
  - IV Decision to Bid
    - Internal & external review of factors
  - V Cost Elements & Categories
    - Direct/indirect, overhead & profit determinants
- Day Two: Sub/Trade Construction/Contractor**
- I Bid Package
    - Review/recording of the bid documents, revisions & addenda
  - II Contract documents/requirements
  - III Unit, alternate, breakout, breakdown pricing and allowances, long-lead
  - IV Familiarization, schematics, sketching techniques, the Quantity Survey
  - V Cost Analysis / Computer applications
- Su 9am–5pm, 2 sessions Oct 11–18  
Jeffrey Syken  
14 AIA/CES LU's, 14 PDH's  
PMPD 862 \$595

## Construction Specifications Writing

Learn specifications writing techniques that give you a level of confidence required to research, evaluate, write and edit construction specifications.

Learn correct specifications writing language, use master electronic specifications systems, using the internet to research, evaluate and specify products and systems for construction.

### Course Outline includes:

- I Specifications Writing, history of development to present
  - II Organization of a Project Manual
  - III Specification Writing techniques, structure and language
  - IV How the Contractor views specifications: discussion of *The Contractor's Guide to Change Orders* written by Andrew Civitello
  - V Use of Master Specifications Systems
  - VI Researching and Producing Specifications using the Internet
- F–Sa 9am–5pm, 2 sessions Sept 11–12  
Steven Danielpour, AIA, CCS, LEED® AP  
14 AIA/HSW LU's, 14 PDH's  
PMPD 836 \$595

## Continental Divide: Bridging the Mighty Mississippi

With the famous Hurd vs. Rock Island RR Co. case setting the legal precedent in 1856, the stage was set for bridges of all types and sizes to be built up and down the Mississippi River from Minnesota to Louisiana thus opening the nation to westward expansion and linking east with west via railroads. The bridges of the Mississippi provide the people and industries of the region a vital link for interstate travel and commerce. The river itself very often provides the border between states and serves as a nautical highway to the sea for the agricultural bounty of the Mid-West. From the first use of pneumatic caissons and steel in bridge construction to the economy of cable-stayed suspension bridges, spanning the Mississippi has proven to be an on-going challenge and proving ground for bridge designs and building techniques.

### Course Outline include:

- I Mississippi River History and Geography
  - II Captain James Buchanan Eads & the Bridge at St. Louis
  - III James J. Hill's Stone Arch Bridge at Minneapolis
  - IV Bridge and symbol: Gateway Arch – St. Louis
  - V Super Bridge: Clark Bridge at Alton Illinois
  - VI New Greenville Bridge
- Sa 9am–5pm, 1 session Oct 10  
Jeffrey Syken  
7 AIA/CES LU's, 7 PDH's  
PMPD 931 \$295

## Registration Deadlines

Registration deadlines for all courses are one week prior to course start dates, unless otherwise noted. Exceptions will be allowed based on space availability. We recommend that you register early.

# Course Descriptions

## Designing and Renovating Carbon Neutral Buildings

This seminar will show architects, engineers, and interior designers how to design and renovate carbon neutral buildings. Architects, designers and engineers will learn how to measure and estimate energy use and greenhouse gas emissions, design to reduce energy and greenhouse gasses in both embedded and operational aspects, adapt structures to the effects of climate change, and learn which software tools are needed.

### Course Outline includes:

- I **Review of**
  - causes and effects of climate change
  - procedures for measuring and mitigating greenhouse gas emissions
  - green design standards
- II **Basic overview of energy and greenhouse gas calculations in reference to designing for carbon neutral buildings**
- III **Overview of USGBC LEED green building standards**
  - LEED certified, silver, gold, platinum
  - New construction, renovations, existing buildings
- IV **Overview of software tools available to measure and predict greenhouse gas emissions**
  - DOE 2, Equest
- V **Carbon and energy footprints in structural as well as operational building systems**
  - Embedded energy and carbon
  - Operational energy and carbon
- VI **Case studies of leading carbon neutral buildings**
  - South London, NYC
- VII **Design charette for a carbon neutral building (in class) – New Construction**
  - Green your design team, Brainstorm problems and solutions
  - Set criteria for design decision making
  - Design carbon neutral building systems
- VIII **Design charette for a carbon neutral building (in class) – Major Renovations**
  - Analyze footprint of existing building
  - Set design criteria for the renovation
  - Design a carbon neutral renovation

Su 9am–5pm, 1 session Oct 11  
Tony Gelber, LEED® AP  
7 AIA/HSW LU's/SD's, 7 PDH's  
PMPD 601 \$295

### Registration Deadlines

Registration deadlines for all courses are one week prior to course start dates, unless otherwise noted. Exceptions will be allowed based on space availability. We recommend that you register early.

## Designing for Broadcast and Media Facilities

The architect is introduced to the principles of programming, designing and executing projects in the broadcast and media sector and provides information on developing programmatic requirement, determining S/MEP criteria, establishing acoustic ratings (NRC and STC), designing task appropriate lighting, creating modular programmatic components, and improving ergonomic considerations. Case studies illustrate current state-of-the-art broadcast and media facility.

### Course Outline includes:

- I **Programmatic Issues, Technical Requirements, Support Requirements**
- II **Structural Issues**
  - Loads and Codes
- III **Mechanical/Electrical/Plumbing/Fire Protection Issues**
- IV **Acoustics Issues: NRC and STC Ratings**
- V **Lighting Issues**
- VI **Ergonomic Issues**
- VII **ADA Issues**

Tu 9am–4pm, 1 session Sept 29  
Kent Hikida, AIA, LEED® AP  
6 AIA/HSW LU's, 6 PDH's  
PMPD 800 \$295

## Designing for Museums and Other Cultural Institutions

This course introduces design professionals to the process and fundamental issues involved with creating museum master plans and exhibition projects that are visitor centered. Achieving the mission and goals of the exhibition at every stage of development is articulated.

### Course Outline includes:

- I **Experiential exhibitions that incorporate the following considerations:**
  - Curatorial
  - Interpretive
  - Architectural
  - Engineering
  - Managerial
  - Lighting
  - New media technologies
  - Fabrication
- II **The exhibition team process and phased design documentation are covered in detail**

Th–F 9am–5pm, 2 sessions Dec 17–18  
Larry Langham, Brenda Cowan  
14 AIA/HSW LU's, 14 PDH's  
PMPD 978 \$595

## Designing Research & Development Facilities

This seminar has been developed to provide you with the knowledge and insight to organize the formulation and design of a research and development facility project. You will raise your level of understanding of the issues, concepts, terminology, and processes (design as well as technical) so that they are familiar and manageable. The seminar has been organized into two broad sessions. The morning will concentrate on developing a basic understanding of the R&D Facility type: what labs are; why they are different; the issue and trends that shape them supported by project examples. The afternoon session will focus on developing an understanding of the R&D design process as it is applied to a project.

### Course Outline includes:

- I **Developing a Basic Understanding of the Facility Type**
- II **Developing an Understanding of the R&D Design Process as it is applied to a project**

F 9am–4pm, 1 session Oct 2  
Stanley Stark, FAIA  
6 AIA/HSW LU's, 6 PDH's  
PMPD 803 \$295

## Earth in the Balance

Has the human race reached the “tipping point”? Are the earth's energy resources finite? Is the end of the suburban lifestyle a foregone conclusion? Will the developing world's thirst for energy be the straw that broke the camel's back?

These questions and many others are on the minds of all of us who call planet earth home; from national leaders to peasant farmers, the need for energy affects us all—always and in all ways.

Though the global warming phenomenon caused by emitting greenhouse gases such as carbon dioxide into the atmosphere is now considered by many a reality rather than just a theory, there is hope on the horizon that through the use of “clean energy,” mankind can reduce its “carbon footprint” on the planet, which has been expanding exponentially since the advent of the industrial revolution in the late 19th century.

Clean, renewable energy sources such as: wind, solar, geothermal, nuclear, bio-fuels, hydrogen, etc. are all ways by which the energy horizon for planet earth is looking more like an opportunity for positive change rather than the doomsday scenario some are predicting. Perhaps the 21st century can/will be mankind's finest hour rather than the beginning of our end.

### Course Outline includes:

- I **The End of Suburbia?**
- II **The Golden State: Follow the Leader**
- III **Third World Transformation: Opportunity or Apocalypse?**
- IV **Designing the Future**
- V **Wind Farming: Bumper Harvest**
- VI **Fields of Dreams: Growing Energy**
- VII **Coal: From Dirty to Clean?**
- VIII **Nuclear: Reducing the Risks and the Costs**

W 8am–1:30pm, 1 session Oct 14  
Jeffrey Syken  
5 AIA/ HSW LU's, 5 PDH's  
PMPD 975 \$244

## EIFS and Plaster in Modern Construction

Exterior Insulating & Finish Systems (EIFS) has revitalized the plaster industry—long dormant except for high-end and/or restoration projects, as a result of the rise to prominence of drywall construction systems in the 1960's. Developed in war-ravaged Europe after WWII as a quick, efficient, and inexpensive alternative to traditional masonry construction, it combines both finish and insulating value to a building envelope. With a consistency comparable to a combination of Elmer's glue and latex paint, it can withstand the radical thermal expansion inherent in cold climates and provides a desirable monolithic finish. Ideal for retrofits, interiors and/or new construction, EIFS was introduced to the United States in the 1980's and has found wide acceptance and use, despite problems such as moisture penetration. This seminar also discusses the many aspects of plaster systems presently in use.

### Course Outline includes:

- I **E.I.F.S.: Methods, Materials & Systems**
- II **Lath & Plaster Systems**
- III **Veneer Plaster Systems**
- IV **Ornamental Plaster**
- V **The Gypsum Association**
  - Purpose and publications

Su 9am–5pm, 1 session Oct 25  
Jeffrey Syken  
7 AIA/HSW LU's, 7 PDH's  
PMPD 863 \$295

### State Approval

It is your responsibility to check with the state licensing boards as to whether or not a course is acceptable to meet its continuing education credit requirements. Visit Pratt's website: [www.pratt.edu/prostudies](http://www.pratt.edu/prostudies) for courses not acceptable to NYS or see courses that state: Not accepted by NYS for LU and PDH credit.

For more information, visit the website for the New York State Education Department, Office of the Professions at [www.op.nysed.gov/](http://www.op.nysed.gov/).

# Course Descriptions

## **Empire State Building: Monarch of the Sky**

Such was the public's fascination and instant love affair with the Empire State Building, rising phoenix-like at the height of the Great Depression giving hope to millions for a better tomorrow. Born of the "Dream Team" of legendary builder Starrett Bros. & Eken and the very capable architectural firm of Shreve, Lamb & Harmon, the Empire State Building was – as Col. Starrett said of building skyscrapers: "the nearest peace-time equivalent to war." Empire State would be the culmination of his career and fifty years of skyscraper evolution.

Prefabrication of major building components, just-in-time delivery of materials, fast-track scheduling, assembly line-like organization of the work force, etc., were all aspects of the Empire State's design & construction. Perhaps New York Times architectural critic Paul Goldberger summed it up best in 1981 – the 50th anniversary of the Empire State Building: "It is about height, it is about commerce, it is about entertainment, it is about views, it is about the very meaning of the skyline itself."

### **Course Outline includes:**

- I Evolution of the skyscraper: 1883-1929
- II The Site: historical context
- III End of an era: Waldorf-Astoria makes way for the world's tallest building
- IV NYC in the 1920s: building boom and the race for the sky
- V Designer: Shreve, Lamb & Harmon, Architects
  - Constructor: Starrett Bros., & Eken, Builders
  - Thirteen Months: constructing the Empire State
  - Legacy

Sa 9am–5pm, 1 session Oct 17  
Jeffrey Syken  
7 AIA/CES LU's, 7 PDH's  
PMPD 891 \$295

## **Energy, Greenhouse Gas, Weatherization Audits and Capital Planning**

This seminar will teach architects, engineers, interior designers and facility and construction managers to perform audits (energy, greenhouse gas and weatherization) and then develop capital plans to reduce energy, and greenhouse gasses while improving occupant comfort, and improving productivity.

### **Course Outline includes:**

- I Energy audits
  - Residences, commercial and industrial buildings, using standard and investment grade practices, monitoring and verification standards and financial analysis such as simple paybacks and return on investment (ROI)
- II Greenhouse gas audits
  - Inventories of buildings, fleets and transport systems using software

- Development of capital plans to comply with voluntary and mandatory climate change standards

### **III Weatherization audits**

- Housing and commercial buildings to improve occupant comfort and work performance, while reducing energy and greenhouse gasses
- Techniques include R value analysis, blower door performance testing, and infrared surveys.

### **IV Capital plan development**

- Identify goals, set standards to achieve the goals and utilize savings in energy and greenhouse gasses to finance projects

Sa 9am-5pm, 1 session Nov 7  
Tony Gelber, LEED® AP  
7 AIA/HSW LU's/SD's, 7 PDH's  
PMPD 604 \$295

## **Estimating Cooling Load on Excel (HVAC 1 & 2): Refrigeration Principles**

Most cooling load programs are complex and sophisticated. Hand calculations are time consuming and inflexible. This cooling load estimating program is aimed at the Designers, Design Reviewers and Project Managers who want the simplicity of hand estimation with the speed and flexibility of computer. The power of Microsoft Excel made it possible to present a comprehensive, simplified, editable and fast way to perform the cooling load estimates, using the self contained CD package. The seminar starts with describing the "Terms and Definitions," "Refrigeration Cycle," "Application of Psychrometric Chart" and finally the cooling load estimation. The first three (3) sections are for refreshing the memory of Mechanical Engineers and briefing the engineers of other disciplines.

Participants can generate a simple, formatted and detailed report to submit to their client or for personal use. You will also learn how to use the program as a control tool to compare with estimates using more complex programs.

Participants receive two (2) months of free technical support through support@chotkeh.com

### **Course Outline includes:**

- I The applied Terms and Definitions
- II The principles of Refrigeration Cycles describing the system's components, their tasks and demonstrating the graphical solution to a cooling system
- III The principles of Psychrometric Chart and its application to identify the moist air properties and solution to changes in cooling systems
- IV Introduction to Cooling Load Estimation (CLE)
- V How to fill out the Information Sheet
- VI How to fill out the Master Sheet
- VII How to fill out the Summary Sheet

M 9am–5pm, 1 session Oct 5  
Ali Badakhshan, PE  
7 AIA/CES LU's, 7 PDH's  
PMPD 909 \$295

## **Estimating Structural Steel Erection**

This course deals with the on-site erection of fabricated structural steel, bar joists and metal deck, and what the estimate must include in the way of equipment, man hours labor and overhead.

### **Course Outline includes:**

- I Contract compliance
- II Relations with other on-site contractors
- III Profit considerations

Sa 9am–5pm, 1 session Oct 24  
Abraham Kovner, CPE  
7 AIA/CES LU's, 7 PDH's  
PMCM 105 \$295

## **Estimating Structural Steel Fabrication**

This course deals with reading of Structural contract plans and specifications making a meaningful take-off of materials, evaluating man hours of labor and equipment required to fabricate, finish and deliver each piece of erection at the site.

### **Course Outline includes:**

- I Contract compliance
- II Overhead and profit considerations

Sa 9am–5pm, 1 session Oct 3  
Abraham Kovner, CPE  
7 AIA/HSW LU's, 7 PDH's  
PMCM 106 \$295

## **Ever Higher: The Quest to Touch the Sky**

"Ah, but a man's reach should exceed his grasp of what's a heaven for." With those poetic words, Robert Browning summed up humankind's eternal quest to reach high into the sky, literally to touch the face of God-starting with the biblical Tower of Babel and culminating in the towering skyscrapers of the Asian building-boom of the late 1990s and early 21st century. The Great Pyramid at Giza was the tallest structure in the world for 4,500 years until 1889, when the Eiffel Tower surpassed it at 300 meters (986 feet). It would only be 51 years later, in 1930, that the Chrysler Building would top Mr. Eiffel's tower in the famous Race for the Sky – the great skyscraper races of the 1920s, which the Empire State Building would ultimately win in 1931. Not until 1972, when Tower One of the World Trade Center was completed, would the title of "World's Tallest Building" be passed. Rather than serving as tombs or as a defense against a besieging enemy, nowadays, tall structures help to promote corporate entities and define a city and/or nation's place in the world. Thus, the quest to touch the sky remains an integral component of mankind's eternal ambition.

### **Course Outline includes:**

- I History of Tall Structures
- II The Great Pyramid
- III The Great Cathedrals
- IV Towers
- V Skyscrapers

W 8am–1:30pm, 1 session Oct 21  
Jeffrey Syken  
5 AIA/CES LU's  
PMPD 920 \$244

## **Far Horizon: The Architecture of the World's Fair**

If it's true that the future is where we spend the rest of our lives, then the World's Fair—begun in the mid-19th Century with London's Crystal Palace—has provided humanity with a sneak-preview of our probable future, as well as past and present times. With themes such as A World on Display, Monument to Man, Century of Progress and Peace through Understanding, the fairs serve as a venue for the free exchange of thoughts and ideas.

The architecture housing the exhibits and/or serving as the centerpiece of the fairs, with names like The Tower of the Sun, Unisphere, Trylon & Perisphere, etc., reflect the spirit of the fairs and the bold future they promise. Though the majority of structures built are temporary and dismantled at their conclusion, there are several notable exceptions still standing such as: The Eiffel Tower (Paris, 1889), The Palace of Fine Arts (San Francisco, 1915), The Space Needle (Seattle, 1962) as well as Moshe Safdie's Habitat.

### **Course Outline includes:**

- I London, 1851: The Great Exhibition of the Works of Industry of all Nations
- II Paris, 1889: Exhibition Universelle de 1889
- III Chicago, 1893: World's Columbian Exhibition
- IV St. Louis, 1904: The Louisiana Purchase Exhibition
- V San Francisco, 1915: Panama-Pacific International Exposition
- VI Paris, 1925: Exposition des Arts Decoratifs
- VII San Francisco, 1939-40: Golden Gate International Exposition
- VIII New York, 1939-40: New York World's Fair
- IX Seattle, 1962: Century 21 Exposition
- X New York, 1964-65: New York World's Fair
- XI Montreal, 1967: Expo '67

Sa 9am–5pm, 1 session Nov 14  
Jeffrey Syken  
7 AIA/CES LU's  
PMPD 921 \$295

# Course Descriptions

## Fire Protection Technology

The role and function of fire protection engineering systems are sometimes overlooked during the initial stages of a project. Instead of identifying fire protection as a separate discipline, the systems are often treated as sub-systems bundled into the mechanical and electrical engineering scope of services. As a result, key fire protection needs may be neglected at the critical planning stages of a construction project. Working the systems in at a later date may lead to such problems as a lack of properly sized shafts for fire protection risers, or a water supply that is inadequate to meet both the plumbing and fire protection needs of the building. The objective of this course will be to help participants take full advantage of current fire protection technology by demonstrating its impact on architectural design.

This seminar will provide an overview of fire protection system technologies and their implications on building design. The main focus will be on the state-of-the-art for fire suppression and fire alarm systems.

### Course Outline includes:

- I Fire suppression (water based and gaseous) system types, current materials, and methods
- II Architectural implications and integration of fire suppression
- III Fire alarm system types and “state of the art” device capabilities
- IV Architectural implications and integration of fire alarm systems

Registration Deadline: Oct 13

Tu 9am–12pm, 1 session Oct 27

Mario Antonetti, PE, Eric Babcock, PE,

Richard Thonnings, PE

3 AIA/HSW LU's, 3 PDH's

PMPD 876 \$145

## Forest Hills Gardens: A Modern Arcadia

Conceived by the Russell Sage Foundation in 1909 as an alternative to crowded city life, Forest Hills Gardens was intended to be both an experiment and an example of the new “science” of city planning applied to a suburban setting. The 142-acre development in Central Queens has long been recognized as the most influential planned community in the U.S. Landscape Architect Frederick Law Olmsted, Jr. and Architect Grosvenor Atterbury's masterpiece still retains its beauty, charm, and uniqueness. This seminar examines the influences, conditions and circumstances that led to the development of FHG and the successes and failures recognized nearly a century after its inception.

### Course Outline includes:

- I History of City Planning in the US
- II European Influences: the Garden City Movement
- III Emergence of Landscape Architecture
- IV Frederick Law Olmsted Jr.'s career, influence and legacy
- V Progressive Era's socioeconomic influences on FHG

Sa 9am–5pm, 1 session Oct 31

Jeffrey Syken

7 AIA/HSW LU's

PMPD 865 \$295

## Freshwater Wetlands

Freshwater wetlands are regulated by Article 24 of the New York State Environmental Conservation Law. This course will cover the law and how it affects freshwater wetlands in New York State. The definition of freshwater wetlands is defined by statute according to vegetation and vegetation types. The NYS DEC publishes official maps of the mapped freshwater wetlands. These wetlands are classified according to size and their ecological functioning. Permits are required for certain activities, including construction, on freshwater wetlands and within a 100 foot buffer zone. Issuance of permits is also subject to SEQRA. In New York City, substantial freshwater wetland areas are located on Staten Island. In Suffolk County, freshwater wetlands contain Black Tupelo trees up to about 700 years old.

### Course Outline includes:

- I Definition of Freshwater Wetlands
- II Mapping of Freshwater Wetlands and adjacent areas
- III Wetlands Classification
- IV Wetland Permits
- V Interaction with SEQRA

M 9am–12pm, 1 session Sept 14

Daniel Karpen

3 AIA/HSW LU's/SD's, 3 PDH's

PMPD 981 \$145

## Fuels Properties, Combustion, Heating Load Estimation on Excel (HVAC)

This seminar continues the HVAC series and expands participants practical knowledge in the subject field. Proper fuel and efficient combustion are the two major parameters impacting the economy and pollution of heating plants. The seminar starts with describing the “Fuel Properties,” “Combustion” and finally ends with the “Heating load calculation.” In the third section participants can use the, “EXCEL CD Package” program to estimate and generate a “Heating Load Estimation” report.

Participants receive two (2) months of free technical support through support@chotkeh.com.

### Course Outline includes:

- I Classification, grades of liquid fuel and types of gaseous fuel
- II Fuel analysis and calculation of fuels heating value
- III Fuel equivalent quantity, cost estimation
- IV Determining the seasonal fuel consumption and calculating the actual fuel storage tank
- V Describing the Natural Gas, LPG and LNG
- VI Demonstrating heating cost comparison, using different type of fuel
- VII Principles of combustion, complete and incomplete combustions

## VIII Describing the combustion pollutions and ways to reduce them

## IX Calculating the air required for combustion and excess air requirements

## X Determining the combustion efficiency

## XI Flue gas analysis and combustion efficiency

## XII Boiler and Steady State Efficiency

## XIII Increasing boilers Seasonal Efficiency

## XIV Installation Guidelines for gas/oil boilers

## XV Boiler Room Ventilation Requirements

## XVI Demonstration of EXCEL CD Package assisted, Heating Load. Simplified version of “Cooling Load Estimation”

M 1–5pm, 1 session Oct 26

Ali Badakhshan, PE

4 AIA/CES LU's, 4 PDH's

PMPD 906 \$195

## Full Spectrum Polarized Lighting Systems

Full-spectrum polarized lighting duplicates the spectral energy distribution and polarization characteristics of natural daylight. This seminar will show you how to design a lighting system that will solve the problems of glare, flicker, and poor color rendition typical of conventional lighting systems. Full-spectrum polarized lighting systems are more energy efficient than any other artificial lighting system, and will slash electrical usage for lighting by 60 to 85 percent. These lighting systems can be used for virtually all interior lighting applications, including offices, retail, commercial space, educational and institutional, and industrial facilities.

### Course Outline includes:

- I The problem
- II What to do about it:
  - Lamps, Ballasts, Fixtures, Glare control
  - Full spectrum polarized lighting
- III Lighting for the electronic office
- IV National energy savings potential

Tu 9am–4pm, 1 session Sept 15

Daniel Karpen, PE

6 AIA/HSW LU's/SD's, 6 PDH's

PMPD 973 \$295

## Fundamentals, Technologies and Safeguards of Nuclear Energy

There are 436 nuclear power plants worldwide generating approximately one sixth of the electrical power consumed. Approximately one quarter of all the nuclear power plants is located in the United States with one quarter of all U.S. plants located in the Northeast. The existing plants are aging and will require renovation.

The rates of fossil fuel consumption and carbon dioxide emission rise every year, seriously affecting the Earth's climate. The current difficulties with fossil fuel supply and its rising price along with nuclear powers half century of commercial operation have engendered renewed interest in nuclear power as a potential source of “clean energy.” See for example *The New York Times* “News of the Week in Review,” January 28, 2007.

With any industrial construction or renovation a large portion of the design effort is accomplished by professionals familiar with the industry but not expert in the design of the process equipment.

The intention and objectives of this course are to familiarize professionals with fundamentals, radiation, technologies, infrastructure, safety issues, advantages and disadvantages, and the safeguard of the industry.

### Course Outline and Objectives include:

- I Atom and Radiation
  - The structure of the atom
  - The fission reaction and its products
  - Fissionable materials
- II Uranium from exploration to conversion
  - Sources of uranium and the basics refinement of the raw material
- III Enrichment and Fuel Fabrication
  - Processing of the raw material into a product suitable for use in a reactor
- IV Nuclear Reactors, Fission and the Production of Electricity
  - The different types of reactor plants
  - How they are used for power generation
  - The supporting infrastructure
- V Storing, reprocessing and disposing of the spent fuel and other waste products
  - The waste products and spent fuel are physically hot and emit radiation.
  - The problems with handling the materials and the requirements for the structures and infrastructure will be addressed.
- VI Economy and Cost
- VII Chernobyl and 3 Mile Island accidents
  - What went wrong, what infrastructure improvements are needed to prevent future occurrences.
- VIII Future of Nuclear Energy
- IX International Atomic Energy Agency (IAEA) and Non-proliferation Treaty to Safeguard the Nuclear Power and Processing plants.

**Please note:** In NYS this course is only approved for Engineers for PDH credit. It is not approved for architect's in NYS for HSW LU credits.

M 9am–5pm, 1 session Sept 21

Ali Badakhshan, PE

7 AIA/HSW LU's, 7 PDH's

PMPD 968 \$295

### Registration Deadlines

Registration deadlines for all courses are one week prior to course start dates, unless otherwise noted. Exceptions will be allowed based on space availability. We recommend that you register early.

# Course Descriptions

## Geotechnical Engineering

This course is for Architects and Civil Engineers that want to obtain a basic understanding, or a refresher, of geotechnical engineering. You will also learn when you should seek the advice of a geotechnical engineer, what a geotechnical engineer will need from you, and how to interpret the information included in a geotechnical report. Case histories will be used to provide examples of the geotechnical process and building code requirements.

### Course Outline includes:

#### I Introduction

- What is geotechnical engineering?
- When do I need a geotechnical engineer and what should I expect?

#### II Soil and Rock Classification

- What are the different types of soils and rock?
- What is the NYC Building Code classification system?

#### III Subsurface Explorations

- Methods used and number of borings

#### IV Foundation Design

- How is a shallow versus a deep foundation system determined?
- How does a geotechnical engineer select a pile foundation type?

#### V Retaining Walls

- What types of walls are available and what do you need from a geotechnical engineer?

#### VI Construction

- What effect will construction have on adjacent structures?
- What type of inspection should be performed?

F 9am–5pm, 1 session Nov 20

Thomas G. Thomann, PhD, PE

7 AIA/HSW LU's, 7 PDH's

PMPD 851 \$295

## Gimme Shelter

Aside from food, mankind's most basic need is shelter. Nature provides the former, but for the latter, shelter, not since caveman-days nature provided us with protection from the elements. In this regard, the human race has been at its most innovative in creating shelter from the storm and a place to call "home."

Our dwellings provide us with more than just a place to stay dry, warm and safe; they also reflect our culture, values, technological achievements and make a statement about who we are as individuals and as a society. Housing remains a touchstone issue, in particular concerning the expected exponential growth of the human population in the 21st century. Post-WWII America saw the rise of suburbia or, what some have termed: The Geography of Nowhere. The lost sense of community endemic of suburban sprawl in the post-war years has been recognized by urban planners, architects, and developers and is being addressed. Places like Seaside and Celebration Florida are representative of the New Urbanism; they are trying to make right what went wrong.

### Course Outline includes:

- I Evolution of the private residence
- II Evolution of multiple dwelling housing
- III Prairie style of FLW and its influences
- IV Suburban Sprawl and the New Urbanism
- V A man's home is his castle (literally)
- VI Modern architecture & housing
- VII Trends in neo-traditional housing

Th 8am–1:30pm, 1 session Sept 10

Jeffrey Syken

5 AIA/CES LU's

PMPD 962 \$244

## Go Green Retrofits

This course is designed to help design professionals incorporate sustainability principles into the manufacturing and building renovation process of their facilities and go green. We will look at various businesses that have integrated green initiatives into their corporate structure to obtain environmental and employee health benefits while at the same time realizing the economic benefits of improving their bottom line by reducing costs and increasing profit.

### Course Outline includes:

#### FOR THE MANUFACTURING PROCESS:

- I Establishing a baseline – Assessing existing processes and conducting an audit to obtain the metrics to implement profitable green practices in the areas of:
  - Energy usage
  - Water usage
  - Waste water generated
  - Materials usage and waste minimization
- II Methods to be implemented to reduce resources consumed and waste generated and increasing efficiencies in the areas of:
  - Energy consumption
  - Water consumption
  - Waste water generated
  - Waste generation

#### FOR THE FACILITY RENOVATION:

- III Green Building Renovation-Facilities utilizing a USGBC Leadership in Energy and Environmental Design (LEED) certified retrofit using either the LEED – Existing Buildings or LEED – Commercial Interiors rating standard as a basis in performing an overhaul of existing facilities, even if certification is not the goal.
- IV Explore the competitive advantage, potential profit, and return on investment that can be realized from implementing the green initiatives.

Th 9am–5pm, 1 session Oct 1

Terese M. Kinsley, PE, LEED® AP

7 AIA/HSW LU's/SD's, 7 PDH's

PMPD 809 \$295

## Gray Water Heat Recovery

Hot water going down the drain is a largely untapped energy resource.

Until the invention of the falling film heat exchanger, it has been impossible to achieve high rates of heat recovery.

The gravity falling film heat exchanger consists of a coil of copper tubing wrapped around a vertical copper drain pipe. The coil of copper tubing pipes the cold water from the street around the drain pipe prior to feeding it, warmed up, to the hot water heater. Recovery rates of 85 percent are possible.

### Course Outline includes:

- I How much energy is used for domestic hot water
- II Proper piping for the installation
- III Residential case studies
- IV Commercial case studies

M 1–4pm, 1 session Sept 14

Daniel Karpen, PE

3 AIA/HSW LU's/SD's, 3 PDH's

PMPD 953 \$145

## Green by Design

What does a highway bridge over the Iowa River have in common with a hybrid, passive solar house in the New Mexico desert? Answer: they are both green, by design. Contemporary design and construction practices that prevent environmental disruption (a.k.a. eco-disruption) preserve and protect natural resources, encourage recycling and/or use recycled-content/alternative building materials, create healthier indoor environments and/or follow the U.S. Green Building Council's (USGBC) LEED (Leadership in Energy & Environmental Design) protocols are no longer the domain of a minority of "fringe" designers, developers and builders. This has created a profound change in the way we design and construct the built environment. The rise of the green building movement, starting in the early 1990s, has made designing and building along "green" guidelines mainstream in the 21st century. With this heightened awareness, sustainable design and construction practices are no longer looked upon as an oddity but, rather, as an expectation.

### Course Outline includes:

- I Ecological design practices
- II Preserving the Iowa Greenbelt: construction of the Iowa River Bridge
- III Alternative building designs, techniques and materials
- IV Feng Shui: an ancient art in modern design
- V Heightened awareness: constructing a passive solar hybrid home

Sa 9am–5pm, 1 session Oct 24

Jeffrey Syken

7 AIA/HSW LU's/SD's, 7 PDH's

PMPD 922 \$295

## Green Design Versus Historic Preservation

With global warming no longer a scientific guess and renewed attention to it drawing increased development in our inner city communities, an emerging conflict between preservation purists and new-age environmentalists has set the stage for potential battles to be played out at the local historic commission, city hall, and the local community board. This seminar addresses the emerging challenges and conflicts of joining historic preservation with sustainable guidelines and offers ways to resolve these two major forces affecting inner-city development. Class participants will learn what areas in the LEED for Homes sustainable guidelines and the U.S. Secretary of the Interior historic preservation standards are incompatible. The seminar goes further to demonstrate how these inconsistent guidelines can be resolved. Finally, this course shows how building performance can be enhanced in older historic structures and uses an actual historic landmark, a 19th century single-family residence, as a case study.

### Course Outline includes:

- I Identify sustainable design principles that are in conflict with historic preservation guidelines.
- II Analyze conflicting areas between sustainability and historic preservation and be able to compile a list of design alternatives.
- III Appraise an actual case study which demonstrates the integration of sustainable and historic preservation guidelines.

Registration Deadline: Oct 12

Th 9am–5pm, 1 session Oct 22

Roy Pachecano, AIA, David B. Reck, RA

7 AIA/HSW LU's/SD's, 7 PDH's

PMPD 963 \$295

## Greening Your Facilities — A Holistic Approach

Save the environment, and money as you *Green Your Facilities*. This cutting edge course will show you how to green your people, processes and the bricks and mortar as well as save money in facility operations and design and construction.

### Course Outline includes:

- I Green Design Fundamentals
    - solar, wind, and ground water
    - energy and water conservation
  - II LEED basics
  - III Solid and Hazardous Waste Management
- Su 9am–1pm, 1 session Nov 22
- Tony Gelber, LEED® AP
- 4 AIA/HSW LU's, 4 PDH's
- PMPD 829 \$195

# Course Descriptions

## Hazardous Waste Management

The management of hazardous waste in the past has been extremely harmful to the environment, and we are paying the price for improper management. The course will discuss the legal aspects of proper hazardous waste management.

### Course Outline includes:

- I Love Canal
- II Case Studies
- III Industrial Hazardous Waste Management
- IV Industrial Siting of Hazardous Waste Facilities
- V Inactive Hazardous Waste Disposal Sites
- VI Identification and Listing of Hazardous Waste

M 9am–12pm, 1 session Nov 2

Daniel Karpen, PE

3 AIA/HSW LU's/SD's, 3 PDH's

PMPD 954 \$145

## High Steel: The Legacy of Steel-Frame Construction

When Architect William LeBaron Jenney's wife moved a heavy book from her husband's favorite chair and placed it atop a wire birdcage so he could sit down, the world would be changed forever. Jenney, struggling with the structural design for the Chicago-based Home Insurance Company's new building, had inadvertently discovered "cage design," which he incorporated into the world's first skyscraper in 1883. Along with Mr. Otis' safety elevator the sky was, quite literally, now the limit. Modern high-rise construction still depends on these earlier developments, adapted to the needs of modern design and construction. Today, high-strength bolts have replaced rivets and sophisticated space-age technologies make buildings safer, easier to build, and more efficient to operate. Still, the courage, skill and resource-fulness of the people that design and build these modern edifices are as important today as they were in Mr. Jenney's day.

### Course Outline includes:

- I Ironworkers: Cowboys of the Sky
- II Constructing a 13-Story, 750K SF office building in downtown Los Angeles
- III History of tall buildings and the technology that makes them possible

W 8am–1:30pm, 1 session Nov 4

Jeffrey Syken

5 AIA/CES LU's, 5 PDH's

PMPD 923 \$244

## Registration Deadlines

Registration deadlines for all courses are one week prior to course start dates, unless otherwise noted. Exceptions will be allowed based on space availability. We recommend that you register early.

## Historic Preservation:

### Techniques & Methods

The National Register of Historic Places documents nearly 75,000 properties listed in the Register since its inception in 1966. With so many buildings declared historic, more and more, architects are discovering that many of their projects require preservation expertise.

This course provides you with the technical and theoretical information required for the examination, documentation, and analysis of historic structures and their materials. It will establish a background for the diagnosis and treatment of building pathology

This course provides the increased historical and technical knowledge needed by architects for the successful solution of design problems involving historic structures. It also enhances aesthetic sensitivity through exposure to problems of restoration, adaptive use, and infill design of differing scales.

### Course Outline includes:

- I Tools for Preserving Historic and Existing Buildings
  - preservation, restoration, rehabilitation, conservation
- II Commonly Used Historic Materials
  - masonry (limestone, marble, sandstone, brick, terra cotta), metals, wood
- III Identifying Materials and their Conditions
- IV Developing Methodology to Determine Repair Recommendations
- V Case Studies of Current Projects
  - analyzing the technical details

Th–F 9am–5pm, 2 sessions Nov 5–6

Lisa Easton, AIA, Kate Lemos McHale, AIA

14 AIA/HSW LU's, 14 PDH's

PMPD 844 \$595

## Improving Public Health by Greening Your Specifications

This course will discuss the history of green design including the research, studies and experiments that lead to the adoption of the LEED Rating System. Participants will learn how to correlate studies to green design, understand the LEED rating system, and learn how to implement LEED principles in specifications. The course will teach participants how to create and edit Division One General Requirements Sections to cover the procedural and administrative requirements necessary to make sustainable architectural practices a reality.

Participants will then learn what has to be done to individual specifications sections to make them green and sustainable. This course will prepare the general practitioner with the tools necessary to implement green design principles in contract documents, will cover the technical difficulties encountered with documenting compliance, and help the general practitioner to achieve LEED certification by creating enforceable specifications.

## Course Outline includes:

- I Correlation between Sustainable Design Practices and the Public Health
  - History of Green/Sustainable Design
  - Reports and Analyses
  - Productivity, Health and Well-Being
- II LEED Credit Point System
- III Procedural and Administrative requirements for LEED projects (Division 1 General Requirements for LEED Projects)
  - Section 01352 "LEED Requirements"
  - Section 01524 "Construction Waste Management"
  - Section 01810 "General Commissioning Requirements"
  - Modifications required to other Division One Sections
- IV What makes Materials Sustainable or Green
- V Greening Technical Sections of the Specifications

Sec 1: F 9am–5pm, 1 session Oct 23

Sec 2: Th 9am–5pm, 1 session Nov 19

Stephen Danielpour, AIA, CCS, LEED® AP  
(all sections)

7 AIA/HSW LU's/SD's, 7 PDH's

PMPD 955 \$295

## Improving the Energy Efficiency of Steam Systems

Energy costs continue to go up. This course will focus on improving the efficiency of one-pipe and two-pipe low pressure steam heating systems, typically found in thousands of New York City buildings. Whether a boiler is fired by fuel oil or natural gas, this course will show how to dramatically improve the efficiency of steam heating systems.

### Course Outline includes:

- I Pipe Insulation
- II Proper Water Treatment and Water Hammer
- III Sizing and Configuration of Steam Piping
- IV Venting of Low Pressure Steam Systems

M 9am–12pm, 1 session Nov 23

Daniel Karpen, PE

3 AIA/HSW LU's/SD's, 3 PDH's

PMPD 956 \$145

## Indoor Air Quality

Indoor air quality continues to be an important issue in the management of buildings. This course focuses on the prevention, identification, and remediation of indoor air quality problems in buildings. The emphasis is on proper engineering and architectural design. Since identification of indoor air quality problems usually starts with complaints from building occupants, students learn to implement the surveys needed to identify the source of problems. In many cases, problems may stem from multiple sources because of system neglect and poor design. Remediation, including cost estimating, is also covered.

## Course Outline includes:

- I Prevention
- II Identification
- III Remediation

M 1–4pm, 1 session Nov 23

Daniel Karpen, PE

3 AIA/HSW LU's/SD's, 3 PDH's

PMPD 951 \$145

## Inland Sea: The Bridging of San Francisco Bay

For the people of California's Bay Area, bridges provide the vital transportation link across the broad expanse of their vast Inland Sea. Collectively known and referred to as San Francisco Bay, in reality, the San Francisco Bay consists of three inter-connected bodies of water: San Francisco, San Pablo & Suisun Bay. The varied geography of the Bays themselves and the topography of the land around them have presented many challenges for engineers to overcome.

Built simultaneously and within sight of one another, the two "Great Bridges" of the Bay: San Francisco-Oakland Bay (1936) & Golden Gate (1937), opened within six months of one another and were then, and now, considered engineering marvels for their complexity, speed of construction, length of span, technological innovations, deep-water foundations and innovative safety measures. Straddling two major geological fault lines, the Bay Bridge's western tandem suspension span required a seismic retrofitting while the eastern cantilever span will be replaced entirely. The other bridges of the Bay: Antioch, Carquinez Strait, Dumbarton & Richmond-Rafael, employ a variety of bridge types. Schemes to turn the Bay into a fresh-water lake — by creating salt-water barriers, and bridges proposed but never built are fascinating for their boldness and engineering prowess.

### Course Outline includes:

- I Long-Span Suspension Bridges
- II Tandem Suspension Bridges
- III Cable-Stay Bridges
- IV Cantilever Bridges
- V Truss Bridges
- VI Vertical Lift Bridges
- VII Deep-Bore Tunnels

Sa 9am–5pm, 1 session Nov 21

Jeffrey Syken

7 AIA/HSW LU's, 7 PDH's

PMPD 905 \$295

# Course Descriptions

## Integrating Accessibility

Accessibility for the disabled is not just the law, it is also good practice. It also provides an opportunity to not marginalize those who need to use those facilities but to mainstream accessible components in a way that both the able and the not so able will use those elements together. This is often easily done in new buildings, but not always. It is more of a challenge in trying to retrofit an existing space or building. This course examines the ways in which the ADA and its variants can be used as a guide to accomplish universal accessibility, meeting the spirit of the law and not as a restriction to be met by simply meeting the letter of the law.

### Course Outline includes:

- I The Law: Existing, Proposed and Exceptions
- II Methods and Technology
- III New and Retrofit
- IV Case Studies

Tu 9am–5pm, 1 session Nov 10  
Steven Zalben, AIA, NCARB  
7 AIA/HSW LU's, 7 PDH's  
PMPD 895 \$295

## Integrating Landscape into Urban Architecture

This seminar is for design professionals looking to integrate landscape into urban architectural situations. Its emphasis is on planting on slabs and containers; exposures; and state of the art concepts dealing with wind, drainage, irrigation and environmental conditions. Architectural integration of play areas, sitting areas, special features (fountains, sculpture, etc.) and streetscapes are explored.

### Course Outline includes:

- I Products for waterproof membranes, soils, filler materials, drainage and irrigation reviewed
- II Design concepts explored for paving, site furnishing, lighting, play areas, etc.
- III Plant materials discussed with emphasis on environmental conditions, exposures, winds, and seasonal aspects
- IV Maintenance schedule for project follow up explored

F 9am–5pm, 1 session Nov 20  
Charles Turofsky, RLA  
7 AIA/HSW LU's/SD's  
PMPD 866 \$295

## Land Use Engineering

This land use-engineering course will follow the development of a site plan design for a commercial or industrial project. Three major areas will be explored: the site selection process, preliminary technical and survey work, and site design. In the site selection process the following factors are considered: the proposed use vs. the zoning of the property, the zoning analysis, environmental and government restrictions to development, available utilities, local support or opposition, and a cost analysis. Topics under preliminary survey and technical work topics

include property and topographic surveys, phase 1 environmental investigations, field assessments of environmental restrictions, and the development of concept plans. Finally, a step-by-step design procedure will be followed consisting of site layout, grading, drainage, utilities, lighting, and related design considerations.

### Course Outline includes:

- I The Project Team
  - Owner, Attorney, Architect, Engineer, Planner, Realtor, Special Consultants
- II Site Selection
  - Zoning Analysis
  - Environmental restrictions
  - Utilities
  - Government restrictions
  - Local support or opposition
- III Preliminary Technical Work
  - The property survey
  - Topographic survey
  - Phase 1 Environmental Assessment
  - Environmental surveys and delineations
  - Concept Plans
- IV Technical Design
  - Existing Conditions/Demolition
  - Site Layout
  - Grading
  - Stormwater & Drainage
  - Utilities
  - Lighting
  - Structural engineering
  - Construction Details
  - Soils Conservation

Sa 9am–5pm, 1 session Oct 31  
Dave Egarian  
7 AIA/HSW LU's/SD's, 7 PDH's  
PMPD 823 \$295

## Light Gauge Metal Framing (LGMF): Let's Get More Familiar

Long used for framing commercial interiors and curtain-walls, Light Gauge Metal Framing (LGMF) is fast becoming the framing method of choice for residential construction. Non-combustible, dimensionally stable, inorganic: insect/mold resistant, lightweight, recycled and wholly recyclable, stable prices etc. For these and other reasons, LGMF is widely recognized as the logical alternative to traditional wood frame construction. This seminar provides an in-depth overview of the Prescriptive Method for the design and construction of LGMF structures.

### Course Outline includes:

- I Safety precautions
- II Fasteners
- III Design & Standardization
- IV Foundations
- V Floor Joists
- VI Load and Non-Load Bearing Walls
- VII Specialty Framing
- VIII Utilities
- IX Thermal Factors
- X Exterior Finishes
- XI Roofs
- XII Design of Example House

Su 9am–5pm, 1 session Nov 8  
Jeffrey Syken  
7 AIA/HSW LU's, 7 PDH's  
PMPD 877 \$295

## Masters of Architecture I: Pei, Gehry & Kahn

Through documentary presentations, this first in a series, Masters of Architecture I, helps students to understand the life, work, and impact of three of the most prominent 20th century architects: I.M. Pei, Frank Gehry, and Louis Kahn.

Known for his innovative use of space and light, I.M. Pei designed such public buildings as the JFK Library in Boston; the East Wing of the National Gallery of Art in Washington, DC; The Miho Museum in Japan; the Pyramide du Louvre in Paris; and The Rock & Roll Hall of Fame in Cleveland, Ohio.

Canadian Frank Gehry, perhaps the best-known architect in the world today, creates structures that generate an emotional response, such as the Guggenheim Museum in Bilbao, Spain, and Disney Hall in downtown Los Angeles.

Louis Kahn, the child of Estonian immigrants, found his place in architecture late in life, yet designed the Kimbell Art Museum in Dallas, Texas, and the Capital Complex at Dhaka, Bangladesh.

Interviews with the architects illuminate how their personal backgrounds influenced their careers, which helps students to understand the philosophy behind their designs and how these principles have influenced other architects.

A seminar booklet further documenting the lives and work of these great architects is distributed and discussed.

**Please note:** Not accepted by NYS for LU or PDH credit.

W 8am–1:30pm, 1 session Nov 11  
Jeffrey Syken  
5 AIA/CES LU's  
PMPD 942 \$244

## Matrix Analysis for Continuous Spanned Beams and Multilevel Building Frames

The use of matrix analysis for the solution of a set of linear equations comprised of a number of unknown forces or displacements for continuous beams and multilevel building frames aids the architect/engineer with a direct approach and skillful way of solving these linear equations avoiding the repetitive manipulations of algebraic time consuming methods for determining the required unknowns mentioned above.

The applied mathematics of matrixes, iterative methods for the solution of linear equations and the determinants of matrices are discussed along with some theories of matrix mechanics that simplify the solutions for linear algebraic equations.

### Course Outline includes:

- I Matrix applications and theories for the solutions of linear equations

- II The use of determinants of matrices employing the Cramer's rule for the solution of  $n$  simultaneous linear equations with  $n$  unknowns
- III The Gauss-Seidel method, an iterative process that converges to the correct values even if arithmetic errors occur in the process
- IV Employment of inverse of a matrix to determine the solution for a set of linear algebraic equations; use of pivotal condensation method for the solution of a set of linear algebraic equations
- V Actual sets of linear equations from the analysis of a continuous spanned beam as well as a multilevel building frame will be used for the lecture

Th 9am–1:30pm, 1 session Oct 15  
Kenneth Wagner  
4 AIA/HSW LU's 4 PDH's  
PMPD 976 \$196

## Modern Architecture World Tour

Around the world, modern architecture makes a statement about the civilization and culture that created it, no less so than the Pyramids at Giza or the Parthenon in Athens did for the ancient Egyptians and Greeks. How does a nation tell the world it has arrived on the world stage? Answer: Construct the world's tallest buildings, as did Malaysia with the Petronas Towers in their capitol, Kuala Lumpur. When an event is to be commemorated for posterity, what should be done? Answer: Design and build a museum whose architecture alone epitomizes the event, such as The Jewish Museum in Berlin does for the Holocaust. In Missouri, an arch of gargantuan proportions, symbolizing St. Louis as the "Gateway to the West," was built to dominate that city's skyline. Modern architecture, at its best, provides not only places to live, work, play, and contemplate, but also three-dimensional spaces that make us aware of and part of the wider world around us.

### Course Outline includes:

- I Malaysia: Cesar Pelli's Petronas Towers
- II Japan: Toyo Ito's Multimedia Library
- III France: Jean Nouvel's Housing Project
- IV Spain: Frank Gehry's Guggenheim Museum
- V Portugal: Alvaro Siza's School of Architecture
- VI Sweden: Santiago Calatrava's "Turning Torso"
- VII Finland: Alvar Aalto's Municipal Center
- VIII Germany: Daniel Libeskind's Jewish Museum
- IX Switzerland: Peter Zumthor's Thermal Baths
- X America: Eero Saarinen's Gateway Arch

W 8am–1:30pm, 1 session Nov 18  
Jeffrey Syken  
5 AIA/CES LU's, 5 PDH's  
PMPD 943 \$244

# Course Descriptions

## Modern Drywall Construction Systems

Gypsum drywall construction systems have replaced plaster as the material of choice for interior construction. Gypsum board panel product's manufacture and sales levels are often used by industry observers and economists to determine relative health of the construction industry. Used for walls and ceilings, exterior enclosures, fire-resistance and sound control, it is a major component of new construction, renovations, restoration, rehab and retrofit projects. Recycling of waste gypsum board, synthetic gypsum and light gauge metal framing made from 100% post-consumer recycled steel, drywall construction is one of the "greenest" construction systems in use. This seminar includes an in-depth examination of this important-and often misunderstood element of design & construction.

### Course Outline includes:

- I History & Manufacturing Process
- II "Green" Aspects of Drywall Construction
- III Advantages
- IV Products & Accessories
- V Assemblies
- VI Fire Resistance & Sound Control
- VII Finish Levels
- VIII Gypsum Association:  
Purpose & Publications

Su 9am–5pm, 1 session Nov 15

Jeffrey Syken

7 AIA/HSW LU's, 7 PDH's

PMPD 864 \$295

## Mold Remediation: How to Detect Mold and Clean Mold

Mold is a growing concern. National media attention has alerted the public to the destructive and possibly toxic dangers of hidden mold spores that could affect their family's health and their homes, schools, and work places. Many people spend as much as 90% of their time indoors and are not aware of the health hazards created by this pollutant.

### Course Outline includes:

- I How to detect mold
- II Understanding the different types of mold spores
- III How to test for mold
- IV Interpretations of the guide lines
- V Mold cleanup and how to find hidden mold
- VI Mold remediation in our homes, schools and commercial buildings

Registration Deadline: Aug 19

W 6–9pm, 6 sessions Sept 2–Oct 7

Joseph P. Majewski, FCPE, PE

Alex MacKenzie, CPE

18 AIA/HSW LU's, 18 PDH's

PMERM 502 \$375

## Monumental Architecture:

### A Gift to the Ages

More than any other type of architecture, monumental architecture conveys both a statement about the civilization that created it and why it created it for posterity. Whether it is a tomb for a nation's leader-such as the Great Pyramid; the Eiffel Tower, a tower with no useful purpose initially other than to demonstrate technical prowess; or a statue on a pedestal at the entry to New York Harbor commemorating liberty and the friendship of two sister republics, monumental architecture is meant to transcend time and space with its very form. Mount Rushmore and the Presidential Memorials commemorate America's greatest leaders while the Gateway Arch in St. Louis memorializes America's westward expansion. As was the case for the Eiffel Tower, the Unisphere served as the centerpiece of a world's fair and remains a permanent symbol of man's achievement long after the fair has ended. Monumental architecture can be functional as well as serving, for example, as a high-speed TGV train station in Lyons, France. Monumental architecture is often at its best when commemorating great events in human history. Good monumental architecture always generates a strong emotional response from the multiple generations served. Most often, they are a source of pride in the community and the nation and evidence of the human will to achieve.

### Course Outline includes:

- I The Great Pyramid
- II The Eiffel Tower
- III Presidential Memorials
- IV The Statue of Liberty
- V Mount Rushmore
- VI The Gateway Arch
- VII Unisphere
- VIII TGV Station
- IX WWII Memorial

Su 9am–5pm, 1 sessions Nov 22

Jeffrey Syken

7 AIA/CES LU's, 7 PDH's

PMPD 932 \$295

## Museums: The Architecture of Art

Architecture is the "Mother of the Arts."

Perhaps no other aspect of architectural design expresses this maxim as much as museums do. Meant to house great collections of art-paintings, sculpture, furniture, and antiquities-these structures very often take on the mantle of works of art themselves, as do the spiral ramps and cubist facades of the Guggenheim Museums in New York City and Bilbao, Spain, respectively. Modern architecture is well represented in museum design-from the novel structural system of the Pompidou Center, which utilizes posts, fulcrums, and trusses, to the controversial glass space-frame pyramid addition to the most famous museum in the world, The Louvre, both in Paris. I.M. Pei's "Museum on the Mountain" at the Miho Museum, situated on a remote

mountainside near Kyoto, Japan, is a study in harmoniously blending a structure to its surroundings. Similarly, Richard Meier's Getty Center, atop a hillside overlooking Los Angeles, is a triumph of mastering not only a difficult site, a complex plan (including multiple structures), and a demanding construction schedule, but also, of satisfying the demands of a determined client. The best and the worst of modern architecture are most often found in the designs of these most public of public buildings.

### Course Outline includes:

- I The George Pompidou Center (Paris)
- II Musee D'Orsay (Paris)
- III The Louvre (Paris)
- IV The National Gallery of Art (Wash., D.C.)
- V The Rock & Roll Hall of Fame (Cleveland)
- VI Miho Museum (Japan)
- VII The Jewish Museum (Berlin)
- VIII The Guggenheim Museum (NYC)
- IX Vitra Furniture Museum (Germany)
- X Guggenheim Museum (Bilbao, Spain)

Tu 8am–1:30pm, 1 session Nov 10

Jeffrey Syken

5 AIA/CES LU's, 5 PDH's

PMPD 944 \$244

## New Accessibility Requirements for Commercial Occupancies

United Spinal Association provides technical assistance on the latest state and federal accessibility requirements throughout the country. The course focus is the accessibility requirements of the New York City Construction Code and the Revised ADA/ABA Accessibility Guidelines and their impact on commercial occupancies. The class curriculum was developed with the Mayor's Office for People with Disabilities (MOPD) and the New York City Department of Buildings.

### Course Outline includes:

- I Applicable federal accessibility requirements and when they are applicable.
- II Review of new requirements impacting access to commercial buildings, effective and phase in dates and how NYC's access requirements differ from federal guidelines.
- III Comparing new requirements to NYC's original accessibility requirements — Local Law 58
- IV Accessibility requirements pertaining to parking, exterior routes, entrances, vertical accessibility, plumbing fixtures, and Accessible Means of Egress.
- V Accessibility requirements impacting changes of occupancy, additions and alterations to primary function areas within a building.
- VI Participants should bring design sketches and questions to discuss with the presenter and share with the class during the discussion of each topic.
- VII Handouts will include applicable scoping and reference standard materials to support class topics.

Th 9am–5pm, 1 session Nov 12

Dominic Marinelli, *United Spinal Association*

7 AIA/HSW LU's, 7 PDH's

PMPD 964 \$295

## New Accessibility Requirements for Residential Occupancies

United Spinal Association contributes to the development of city, state and national accessibility requirements (including the International Codes Council's national accessibility standard ANSI A117.1). The focus of this course is the accessibility requirements of the New York City Construction Code and the Fair Housing Amendments Act's Accessibility Guidelines and their impact on residential occupancies. The class curriculum was developed with the Mayor's Office for People with Disabilities (MOPD) and the New York City Department of Buildings.

### Course Outline includes:

- I Review of new requirements impacting access to multi-family residential buildings, effective and phase in dates and how NYC's access requirements differ from federal guidelines.
- II Additional requirements impacting federal fund recipients.
- III Definitions and differences between Accessible, Adaptable, Type A and Type B dwelling units.
- IV Differences between city and federal accessibility requirements and how they each apply to site design, exterior routes, building entrances, public and common use areas.
- V Options for bathroom and kitchen design.
- VI Impact of these requirements on Transient and Institutional occupancies.
- VII Participants will be encouraged to bring design sketches and questions to discuss with the presenter and share with the class during the discussion of each topic.
- VIII Handouts andouts will include applicable scoping and reference standard materials to support class topics.

F 9am–5pm, 1 session Nov 13

Dominic Marinelli, *United Spinal Association*

7 AIA/HSW LU's, 7 PDH's

PMPD 965 \$295

# Course Descriptions

## NYC Building Code Using an Example

This course is intended to take attendees through the main design provisions of the current Building Code of NYC using a typical mid-rise mixed use building example. The agenda covers mixed occupancies, incidental use and accessory occupancies as well as building height and area as they pertain to a real example. Then passive and active fire protection requirements is covered, followed by means of egress provisions, elevator requirements and handicap accessibility. The course also covers fire apparatus and building access requirements from the Fire Code of NYC. Using the example will help attendees apply the code provisions and see how they relate to real project issues.

### Course Outline includes:

- I Review of any code updates, status, general overview
- II Basic Design Provisions
  - Building height and area along with construction type
  - Mixed occupancy provisions and special uses
  - Fire distance separation
- III Fire protection
  - Fire resistant rated construction
  - Fire protection systems
- IV Means of Egress & Elevators
- V Handicap Accessibility

**Registration Deadline:** Oct 9

F 9am–5pm, 1 session Oct 30

Laura Cooney

7 AIA/HSW LU's, 7 PDH's

PMPD 984 \$295

## New York Construction Law

The law influences all aspects of the construction process. Its reach extends far and wide; and its impact can be felt from the very beginning of a project, through completion, closeout and beyond. For over a decade this course has assisted those involved in construction in learning and understanding the rules. Attendees are sensitized to the problems, issues and concerns which can arise during major phases of a project and leave with a better understanding of how the law affects them.

### Course Outline includes:

- I Bidding
- II Contractor Claims & Owner Defenses & Related Contract Clauses
- III Subcontractor Claims
- IV Owner's Rights & Affirmative Claims
- V Bonds
- VI New York Lien Law: Public & Private Improvement Mechanics Lien

**Registration Deadline:** Nov 22

F–Sa 9am–4pm, 2 sessions Dec 11–12

Robert J. Miletsky, Esq.

12 AIA/HSW LU's, 12 PDH's

PMPD 802 \$575

## New York State Building Codes, Rules, and Regulations

This course consists of a series of lectures focusing on recent changes in the industry that affect the practice of Architecture and Engineering in The State of New York.

Commencing with the New York State adaptation of the International Building Code, i.e., the Building Code of New York State, the Energy Conservation Construction Code, the Fire Code, the Fuel Gas Code, the Mechanical Code, the Plumbing Code, the Property Maintenance Code, the Residential Code and their interpretation and application locally. In a seminar environment, students gain an understanding for the existing New York City Building Code, while recognizing the need for change.

### Course Outline includes:

- I New York State Building Code
- II Federal OSHA Labor Law Safety
- III Health Regulations for Construction
- IV New York City Building Code
- V Building Codes Effect on Construction Costs
  - Dictating type of materials used by developers
  - Detailing kind of buildings or structures which can be built
  - Establishing review process which must be followed to ensure code compliance
- VI Special emphasis is placed on the role of the Buildings Department and their authority

Tu 9am–5pm, 1 session Oct 27

Edward D. Re, Jr., AIA

7 AIA/HSW LU's, 7 PDH's

PMPD 816 \$295

## NYS Building Code Using an Example

This course is intended to take attendees through the main design provisions of the current Building Code of NYS using a typical mixed use multi-story building example. The agenda will cover mixed occupancies, incidental use and accessory occupancies as well as building height and area as they pertain to a real example. Then passive and active fire protection requirements will be covered, followed by means of egress provisions, elevator requirements and handicap accessibility. The course will also cover fire apparatus and fire hydrant requirements from the Fire Code of NYS.

Using the example will help attendees apply the code provisions and see how they relate to real project issues.

### Course Outline includes:

- I Review of any code updates, status, general overview
- II Basic Design Provisions
  - Mixed occupancy provisions and special uses
  - Building height and area along with construction type
  - Fire distance separation

## III Fire protection

- Fire resistant rated construction
- Fire protection systems

## IV Means of Egress & Elevators

## V Handicap Accessibility

**Registration Deadline:** Oct 22

M 9am–5pm, 1 session Nov 9

Laura Cooney

7 AIA/HSW LU's, 7 PDH's

PMPD 985 \$295

## NYS Existing Building Code Using an Example

This course is intended to take attendees through the main design provisions of the current Existing Building Code of NYS using a change of occupancy to a multi-story building process and evaluation of the existing building and the proposed changes and how to apply the Existing Building Code of NYS provisions to it. The agenda covers additions briefly, change of occupancy, alterations, and also the compliance alternative available in the Existing Building Code. Using the example will help attendees apply the code provisions and see how they relate to real project issues.

### Course Outline includes:

- I Review of any code updates, status, general overview of the Existing Building Code
- II Additions
- III Change of Occupancy
  - Partial vs. full change of occupancy
  - Change to higher or lesser/equal relative hazard and relative code triggers
  - Handicap accessibility and other building system upgrade requirements
  - Compliance with previous chapters of the code
- IV Alterations
  - Triggers for compliance & review of provisions to Level III, Level II, Level I

## V Compliance Alternative – Chapter 12 review

**Registration Deadline:** Oct 29

M 9am–5pm, 1 session Nov 16

Laura Cooney

7 AIA/HSW LU's, 7 PDH's

PMPD 986 \$295

## 9/11 and Beyond

To this generation of Americans, the events of September 11, 2001, are what Pearl Harbor was to the WWII generation. For New York City, that day of infamy marked a turning point in the lives of New Yorkers, as did the Triangle Shirt Waist Factory fire of 1911. In the wake of that calamitous event 90 years earlier, social welfare, child labor laws, and—most relevant to the built environment—the creation and implementation of comprehensive building codes, fire safety, and the protection of life, rather than property, became paramount. The terrorist acts caused the catastrophic collapse

of the twin towers, but the heroic clean-up and recovery efforts immediately thereafter made a triumph out of tragedy. Out of the ashes of 9/11, New York City would realize its finest hour. As controversial as the World Trade Center was to design and build, so too are the plans to build anew and memorialize the victims in a dignified way. Moreover, beyond the 16 acres that the Trade Center itself occupied, the future of all of Lower Manhattan is at stake. Will it prove to be an opportunity realized or an opportunity missed?

### Course Outline includes:

- I 9/11/01: Day of Infamy
- II Cleanup & Recovery
- III Memorializing the Victims
- IV Commercial Redevelopment
- V The Future of Lower Manhattan

Tu 8am–1:30pm, 1 session Nov 17

Jeffrey Syken

5 AIA/CES LU's, 5 PDH's

PMPD 939 \$244

## Offsite Fabrication for Housing

No one really knows when humans started to prefabricate buildings. Certainly nomadic herdsman have engaged in a form of pre-fabrication for thousands of years, in that their tents have been made in a single place while being assembled repeatedly at different locations. Prefab started to enter the architect's and engineer's consciousness right along with the dawn of the Industrial Revolution and reached an early highpoint in Sir Joseph Paxton's design for the Crystal Palace in London's Hyde Park. This 1,850' long iron, glass and wood structure with over 900,000 sq. ft. of glazing, was made in a factory and then erected on site in merely 17 weeks. But offsite fabrication in architecture in the 20th century had mostly a troublesome past, punctuated by some spectacular failures both financial and structural. And while buildings remain for the most part site-built adventures, where ungainly raw supplies are cut down to size in all kinds of weather, other industries such as airplane and auto manufacturing have leaped forward with modern procurement, contractual and fabrication methods and dry and predictable indoor conditions. Nevertheless, things look very bright for the future of offsite fabrication for housing and similar applications. Prefab dovetails nicely with the recent surge of concern for securing a green and sustainable future. This course will examine the various aspects of offsite fabrication with respect to how architects and developers can get involved.

### Course Outline includes:

#### PART 1

- I Images of offsite fabrication from around the world
- II Definition of terms and a short history of offsite fabrication
- III What is the nature of offsite fabrication in the UK vs. the USA?

# Course Descriptions

- IV Why do prefabrication and why not?
- V What are the components of a pre-fabricated building?
- VI What is the process of pre-fabricated construction?
- VII What makes offsite fabrication really sing?
- VIII Handoutsow is offsite fabrication a green way forward?
- IX Technical Constraints particular to offsite
- X The Nature of Innovation
- XI Case Studies

## PART 2

- I Hands-On Workshop where you will be asked to respond to a particular request from the public sector to solve a problem using offsite fabrication techniques.

**Registration Deadline:** Oct 29

Sa 9am–5pm, 1 session Nov 14

Michael Hardiman, AIA

7 AIA/HSW LU's/SD's, 7 PDH's

PMPD 966 \$295

## **Peace Through Understanding: The 1964-65 New York World's Fair**

Like World's Fairs before it, the 1964-65 New York World's Fair was to be a showcase of the past, present, and future of mankind. Dating back to the first World's Fair-London's Crystal Palace of 1851, which coincided with the advent of the industrial revolution, every fair sought to outdo the previous World's Fair in grandeur and in size. New York in 1964 would be no exception. Without official approval by the European-based organization that authorizes World's Fairs, Robert Moses, New York City's master builder, moved ahead, recruiting the federal government, corporate America, as well as representatives from the 50 states, nations from around the globe, and even the Vatican as participants. It would not be an easy task to surpass the World's Fair held just a generation earlier in the very same location: Flushing Meadow in Queens. The World of Tomorrow, the New York World's Fair of 1939-40, is still remembered and recognized as one of the greatest of all time. The 1964-65 World's Fair would be measured and judged in comparison to it and would garner mixed reviews, but for many, its architecture, exhibits, technology, and innovations, made a lasting impression.

### **Course Outline includes:**

- I Origins of World's Fairs
- II Planning, Designing & Construction of the Fair
- III Unisphere: The Centerpiece of the Fair
- IV The Architecture of the Fair
- V Exhibits at the Fair
- VI Touring the Fairgrounds
- VII Flushing Meadow after the Fair

W 8am–1:30pm, 1 session Nov 3

Jeffrey Syken

5 AIA/CES LU's, 5 PDH's

PMPD 945 \$244

## **Performance Modeling for Carbon Neutral Buildings**

This will show architects, engineers, interior and landscape designers how to design and renovate carbon neutral buildings using building performance modeling techniques. Carbon neutral buildings require low or net zero energy usage and designs need to be tailored to maximize energy gains from solar, wind and geothermal and to minimize losses from building components such as wall, windows and appliances. This course will show architects and engineers the software tools available to help in designing these low carbon buildings.

### **Course Outline includes:**

- I Review of the following:
  - causes and effects of climate change
  - procedures for measuring and mitigating greenhouse gas emissions
  - green design standards
  - energy and greenhouse gas calculations in reference to designing for carbon neutral buildings
  - LEED certified, silver, gold, platinum
  - New construction, renovations, existing buildings
- II Building Performance Modeling Basics
  - Energy load estimating -.lighting, heating, cooling, ventilation, plug
  - Solar, wind, geothermal estimating
- III Software tools available to measure and predict
  - Solar gain
  - PV production
  - Green roof performance–solar and water
  - Geothermal performance–energy
  - Whole building energy use
- IV Performance Modeling Case studies of leading carbon neutral buildings
  - So London, NYC
- V Performance Modeling Design charette for a carbon neutral building (in class) \* New Construction
  - Modeling of base design for building energy loads
  - Modeling of base design for solar, wind, geothermal
- VI Performance Modeling Design charette for a carbon neutral building (in class) \* Major Renovations
  - Modeling of base design for building energy loads
  - Modeling of base design for solar, wind, geothermal

Sa 9am-5pm, 1 session Nov 14

Tony Gelber, LEED® AP

7 AIA/HSW LU's/SD's, 7 PDH's

PMPD 602 \$295

## **Performance Rating of New Buildings: The Process**

Global warming is resulting from an increase in greenhouse gases in the atmosphere. It is caused by CO2 and other heat-trapping emissions. A new report by the Union of Concerned Scientists (UCS) illustrates the effects on health, natural resources and the economy caused by average temperatures. If the current trend continues, New York City will have 25 days above 100°F, by the year 2070. Nationally, residential and commercial buildings account for 38% of greenhouse gas emissions. In New York City, building-related emissions are almost double the national rate. Evaluating the environmental impact, saving energy and indoor air quality of new buildings are the focus of this course's attention.

There are a variety of standards for benchmarking how environmentally responsible (green) a building's design is, how the energy saving may be accomplished and how the indoor air quality may be improved. Meeting or exceeding benchmark levels rewards the builders and gives homeowners' confidence that their home is durable, healthy, and environmentally friendly.

### **Course Outline includes:**

- I Introduction to the overall concepts of sustainable buildings
  - procedures for earning specified pre-requisite and credit points for obtaining the certificate, as outlined by Leadership in Energy and Environment Design
- II Sustainable site, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality and innovation in design
- III A majority of required calculations are performed in an EXCEL Workbook

Th 9am–5pm, 1 session Sept 17

Ali Badakhshan, PE

7 AIA/HSW LU's/SD's, 7 PDH's

PMPD 982 \$295

## **Renewable/Green Energy**

Globally, wind power already generates electricity equal to that used by 19 million European households. In 2003, an estimated \$20.3 billion, about 16% of total global investment in power generation equipment, was invested in "new renewables," except large scale hydropower and traditional biomass.

Wind and solar power are the world's fastest-growing energy sources, with capacity expanding at double-digit every year over the past decade. The effects of this rapid growth include impressive technology, dramatic cost reduction and an increase in political support for renewable energy around the world.

The course describes the history and technological development of new renewable resources, including the solar (heat and photovoltaic), wind, geothermal, biomass/bio-diesel, and hydrogen.

### **Course Outline includes:**

- I Introduction to new renewable energies
- II Terms and definitions used in the industry
- III History of major resources and development of technology throughout the world
- IV How the systems work and how the Research and Developments opened the door to industry's future
- V Present status of different renewable energy systems
- VI How extensive R&D and governments policy towards the establishment of setting the standards, shall assist the industries, lower the world pollution and decrease the independency from the fossil fuels.

Th 9am–5pm, 1 session Oct 8

Ali Badakhshan, PE

7AIA/HSW LU's, 7PDH's

PMPD 915 \$295

## **Residential Landscape Architecture**

This seminar explores the design and construction of walkways, driveways, lighting, fencing, walls, patios, decks, swimming pools, tennis courts, sports courts, porticos, trellises, fire pits, outdoor kitchens, and other site features, with an eye toward climactic conditions and plant zones in the New York metropolitan area. Privacy screens, perennial gardens, foundation plantings, seashore planting, deer proofing, and planting on slopes will also be discussed.

### **Course Outline includes:**

- I Client interviews, site analysis, presentations
- II Zoning and planting considerations
- III Filings, planning boards, architectural review boards, building departments,
- IV Supervision, inspections, selection of contractors
- V Punch lists, certificates of completion, sketch problems

Th 9am–5pm, 1 session Nov 19

Charles Turofsky, RLA

7 AIA/HSW LU's

PMPD 946 \$295

### **Registration Deadlines**

Registration deadlines for all courses are one week prior to course start dates, unless otherwise noted. Exceptions will be allowed based on space availability. We recommend that you register early.

# Course Descriptions

## Rivers of Steel

Just as canals made transporting goods to the continent's interior practical and the invention of the elevator preceded the development of the skyscraper in the 19th century, so too have "Subway" (or "Underground") transportation systems made the modern city possible. Moving millions of people each day quickly and efficiently to points far and wide, such movement of the masses with relative ease was not possible until the first "tubes" were built in the mid-to-late 19th and early 20th centuries.

Urban centers such as Lower Manhattan were a maze of crowded, narrow streets with pedestrians, omnibuses, carriages, trolleys, and horses competing to move a few feet to get to their destination. It could take as long to travel a few blocks up Broadway as it did to get to Philadelphia. Not only was it difficult and time-consuming to get where you wanted to go, it was also dangerous and dirty; something had to be done.

Elevated trains were just too slow and noisy, so the answer lay beneath the city's streets. With tunneling technology advancing in the 19th century and the invention of the electrically driven subway car, the stage was set for subway systems to become the dominant means by which a city could move people from their homes in outlying areas to the city center, thereby growing their economies and their influence.

London became the first with its "Underground" in the 1860s and, starting in 1900 (and completed in 1940), New York City's subway system became the model other cities would follow when the time came for them to build their own subway system. Today, subways remain the best way to move people in an urban environment and their construction around the world continues into and beyond the 21st century.

### Course Outline includes:

- I Tunnels: Making Subways Possible
- II London's Underground
- III NYC's Subway: Innovation and Destination
- IV End of the Line: Rochester, NY's Subway System
- V Athens, Greece: A Subway through the Cradle of Civilization

Tu 8am–1:30pm, 1 session Dec 1

Jeffrey Syken

5 AIA/CES LU's, 5 PDH's

PMPD 977 \$244

### Registration Deadlines

Registration deadlines for all courses are one week prior to course start dates, unless otherwise noted. Exceptions will be allowed based on space availability. We recommend that you register early.

## Sacred Architecture

For millennia, humankind has established houses of worship to pay homage to their gods and to form a nucleus for the social order. In 1638, when the Puritans first established a town plan for the city of New Haven, Connecticut, they placed their church at the very center of their community to reflect the fact that their religious faith was, like their church, at the center of their lives. It is no coincidence, then, that the best-preserved buildings of the ancient world were constructed as temples to the ancient gods. The Pantheon was constructed as a pagan temple to worship the "pantheon" of Roman gods. With the adaptation of Christianity, it became a Catholic church as did many other pagan temples. Perhaps nothing in the built environment stirs the same kind of emotional response from human beings as do houses of worship: They are an integral part of our lives from cradle to grave. In their architecture, they reflect the "better angels of our nature," seeking to capture the spirituality of man while, at the same time, providing a sanctuary and refuge from the outside world. The architecture of temples, churches, mosques, and synagogues takes many forms, but the form is always subservient to their higher purpose: to touch the face of God.

### Course Outline includes:

- I Egyptian Temples
- II The Acropolis, Athens
- III The Pantheon, Rome
- IV Gothic Cathedrals
- V Romanesque Churches
- VI The Vatican
- VII Le Corbusier's Convent of La Tourette
- VIII America's Houses of Worship

Th 8am–1:30pm, 1 session Dec 10

Jeffrey Syken

5 AIA/CES LU's, 5 PDH's

PMPD 947 \$244

## Security Design through CPTED

Terrorism, crime and workplace violence are issues of everyday life for millions of Americans. CPTED (Crime Prevention Through Environmental Design) is a design strategy that can enable architects to use their skills to create safer facilities. Many city and county governments are adopting CPTED ordinances requiring site plan reviews with crime prevention in mind. The proper implementation of CPTED provides a security design that reduces crime and violence. It addresses site selection and balances the use of natural barriers with security technology to increase the perception of personal security

### Course Outline includes:

- I Natural Surveillance: The placement of physical features, activities and people in such a way to maximize visibility. This includes lighting of public spaces, alignment of walkways, raised entrances and effective placement of windows, doors and lobby areas.

- II Natural Access Control: The physical guidance of people coming and going from a space by judicious placement of entrances, exits, gates, barriers, landscaping and mechanical measures (e.g. doors, gates, locks, etc.).
- III Territorial Reinforcement: The use of physical attributes that express ownership, such as fences, pavement treatment, art, signage and landscaping.

Registration Deadline: Sept 22

Tu 9am–12pm, 1 session Oct 6

Robert Summers, CPP

3 AIA/HSW LU's, 3 PDH's

PMPD 857 \$145

## Small-Scale Real Estate Development

Economy has you feeling down? Now is the best time to examine your career. This seminar offers design professional insight into the lucrative yet high risk challenges of real estate development. Discover why this class is valuable in up/down real estate market cycles—discover when is the optimal buying environment. We cover five major components in development: market overview, finance, law, design, and construction. This course is targeted to seasoned professionals who seek to go beyond offering traditional design services and leverage their talent for greater profit.

### Course Outline includes

- I Introduction: Background, Content and Objectives
    - Objectives
    - Real Estate Market Overview
    - Definitions & Terms
  - II Real Estate Development: Historical Overview
    - Real Estate Development
    - Real Estate Finance Concepts
  - III Key Concepts: From Finance to Construction
    - The Market Analysis
    - The Development Strategy
    - Implementing Your Development Idea
    - Timing
    - Selling
    - Closing
  - IV Developing the Development Strategy
    - Getting off the Ground
    - The Developer's Role
    - Building the Team
    - Development Costs
    - Due Diligence
    - Refining Your Development Idea
  - V Development Project #1
  - VI Development Project #2
- Please note: Not accepted by NYS for LU's and PDH credit.
- Registration Deadline: Oct 12
- F 9am–5pm, 1 session Oct 23
- Roy R. Pachecano, AIA
- 7 AIA/HSW LU's
- PMPD 881 \$295

## Specifications Writing, Principles and Practice

This seminar discusses materials and products used in building construction; methods to research, evaluate and select products; and specifications writing. Learn to establish requirements; identify attributes and products; evaluate and select products; research products, and write biddable and binding specifications.

### Course Outline includes:

- I The Construction Specifications Institutes Manual of Practice
- II Organizational tools used by the industry to catalog
  - Data; Construction Costs
  - Research; Product information
- III Organization of a project manual
- IV Specifications writing techniques, structure, and language

F 9am–5pm, 1 session Nov 6

Steven Danielpour, AIA, CCS, LEED® AP

7 AIA/HSW LU's, 7 PDH's

PMPD 801 \$295

## Sustainability Approach to Engineering Design

As designers, engineers and architects are in the unique position in society of bringing ideas into form. This course challenges designers to reprioritize, rethink, and approach design opportunities from a sustainability perspective, so that nothing created adds to the environmental or health burden we are currently faced with. Designers must be reeducated, since the tunnel vision approach to design did not foresee the damaging interaction and compound effect of the one product or chemical invented in a vacuum approach. By taking a whole system design approach and integrating every aspect of the lifecycle of the product or system into the design criteria we can minimize environmental and health impacts and move forward to achieving sustainability without compromising the objective of design.

### Course Outline includes:

- I Overview
  - Concepts such as Sustainability, EPA's Design for the Environment, and Green Engineering
  - Background on innovators in the field
- II Whole System Design vs. Traditional Engineering Design Process
  - Whole Systems approach to product and process design where environmental elements are included in the initial design objectives, rather than dealt with as constraints.
- III Introduction to Sustainable Engineering Concepts
  - Whole Systems approaches, interdisciplinary teams, pollution prevention, waste minimization, life cycle analysis, industrial ecology
- IV Case Studies

# Course Descriptions

Tu 9am–5pm, 1 session Nov 17  
Terese M. Kinsley, PE  
7 AIA/HSW LU's/SD's, 7 PDH's  
PMPD 897 \$295

## Sustainable Habitats

Even in ancient times, builders knew instinctively how to orient their buildings to the south in order to provide maximum sunlight and radiant solar heat in the winter. In other words: They practiced passive solar design. In modern times, master architect Frank Lloyd Wright is credited with having designed the first model passive solar house featuring—as he termed it—a solar hemicycle. Putting sustainability at the forefront, Buckminster Fuller's Dymaxion House of 1947 sought to set the example of how the built environment could be self-sustaining in so far as energy use and material selection/resources were concerned yet inexpensive and efficient to reproduce on a mass scale.

Nowadays, passive and active solar design, adaptive reuse, natural and sustainable materials, sensible land use, incorporating thermal mass walls and floors, modular and pre-fabricated elements, radiant heat flooring, etc. are all part of the effort to create sustainable habitats.

### Course Outline includes:

- I Buckminster Fuller's Dymaxion House
- II Frank Lloyd Wright's Jacobs House
- III Jean Prouve's House: Modular & Pre-Fabricated Design
- IV Forerunner of things to come: The Brookhaven House
- V The Wilson Natural House
- VI Residential Solar Design Competition
- VII Creating Affordable Green Housing
- VIII Adaptive Reuse in the Netherlands
- IX BO 01: The Swedish Example of Town Planning
- X The New Urbanism
- XI Cordwood Masonry Design and Techniques

W 8am–1:30pm, 1 session Sept 23  
Jeffrey Syken  
5 AIA/HSW LU's/SD's, 5 PDH's  
PMPD 817 \$244

## Sustainable Remodeling

It's estimated that the residential remodeling business in the U.S. is worth about \$160 billion. Thus, it represents a significant portion of the design/construction industry and the overall GDP. It is in this sector of the industry, more so than in new construction, that old meets new and, very often, the old ways of thinking collide head-on with the new "sustainable" methods, materials, and practices. As such, it's critical that all concerned parties in residential remodeling including owners, contractors, architects, engineers, realtors, insurers, etc., know the dos and don'ts of residential remodeling. Such knowing can, quite literally, save lives.

### Course Outline includes:

- I Energy Conservation
- II The Building Envelope
- III Hot-Water Heating
- IV Lighting
- V HVAC
- VI Renewable Energy
- VII Resource Conservation
- VIII Landscaping
- IX Water Conservation
- X Construction Methods and Materials
- XI Indoor Air Quality (IAQ)
- XII Finishes
- XII HVAC and Appliances
- XIII IAQ During Construction
- VX Mold and Moisture

Su 9am–5pm, 1 session Sept 13  
Jeffrey Syken  
7 AIA/HSW LU's/SD's, 7 PDH's  
PMPD 980 \$295

### Sustainability Pioneers: Heroes of the Planet

*"There are no great men – only great tasks ordinary men are called upon to perform"*  
That may very well be the case for those men – and women, who have taken it upon themselves to be the founders and pioneers of the green building movement. Without such visionaries, the growing consciousness in recent years of the environmental impacts the built environment has on the planet as a whole may never have occurred. These "voices in the wilderness" have now become clarion calls to action by their having "lead from the front", and the earth is a better place because of them.

### Course Outline includes:

- I Such pioneers as R. Buckminster Fuller, William McDonough, Michael Baumgarten, Paolo Soleri, Thomas Mayne, Ed Mazria, Muhammed Yunis, and Werner Sobek
- II The evolution of the green building movement
- III Understand the connections and overlaps between the environmental and green building movements
- IV Consider the personalities involved in creating the green building movement and their motivations for doing so
- V Understand the past, present and future of the green building movement by way of those visionaries who created it

W 8am–1:30pm, 1 session Dec 16  
Jeffrey Syken  
5 AIA/CES LU's  
PMPD 987 \$244

### Tale of Two Towers: The Eiffel Tower and the Chrysler Building

Separated by 50 years and two centuries, the Eiffel Tower would hold the title of: "tallest man-made structure in the world" for more than half a century while the Chrysler Building would hold the same title for only a year. Bridge-builder Gustav Eiffel's masterwork, erected as a centerpiece for the 1889 Paris Exposition, demonstrated the potential of a lightweight iron frame and Elijah Otis' safety elevator to "scrape the sky" at 1,000 feet above terra-firma thus making very tall structures possible. With the structural steel frame perfected and high-speed elevator technology well established by the late 1920s, the stage was set for the title of tallest man-made structure to pass to Architect William Van Alen and his client—automobile mogul Walter P. Chrysler. Built at the height of the "Golden Age of Skyscrapers," the Chrysler Building remains an icon of the art deco era and the quintessential New York City skyscraper.

### Course Outline includes:

- I Gustav Eiffel—Man of Genius
- II Paris Exposition of 1889 and the design competition for its centerpiece
- III Technology involved in the design and construction of the Eiffel Tower
- IV Evolution of the skyscraper
- V Building Boom: NYC in the 1920s
- VI Irreconcilable differences: Van Alen v. Severance
- VII Walter Chrysler: Captain of Industry
- VIII Race for the Sky: Chrysler v. Bank of Manhattan
- IX Legacy of the Eiffel Tower and Chrysler Building

Su 9am–5pm, 1 session Dec 6  
Jeffrey Syken  
7 AIA/CES LU's, 7 PDH's  
PMPD 903 \$295

### That's Entertainment! The Architecture of Theaters: "An Acre of Seats in a Garden of Dreams"

Prior to 1900, not a single structure had been built specifically for use as a movie theater in the United States. In the period from 1915 to 1945, the height of Hollywood's "Golden Age," over 4,000 movie palaces were constructed, many still in use today as theaters or adapted for other uses. Perhaps the most public of public buildings, theaters provide an escape from everyday life. In addition, they highlight the very best of the architectural and structural design of the era in which they were built. The bloodlust spectacles of the Coliseum in ancient Rome are long gone, but the 2000-year-old architecture of this amphitheater—using the simplest of building materials such as brick, concrete and circular arches—still has the power to awe and amaze. The 19th century saw the construction of grandiloquent structures, such as the Paris Opera House, with the

same skill and care as the great medieval cathedrals. The art deco era saw some of the greatest deco theaters ever built, including the Wiltern in Los Angeles and others in places like Napier, New Zealand, and Bombay, India. In modern times, the Sydney Opera House is considered one of the greatest achievements of modern architecture for its design, setting, and structural innovations. Frank Gehry's Disney Hall in Los Angeles has the power to stir a variety of reactions, but, like all theater experiences, it leaves an everlasting impression on the collective imagination.

### Course Outline includes:

- I Roman Amphitheater: The Coliseum, Rome
- II Charles Garnier's Paris Opera House
- III Form Follows Function: Louis Sullivan's Auditorium Building, Chicago
- IV 42nd Street Revival: The New Amsterdam Theater
- V The Great Movie Palaces: 1900 to 1945
- VI Art-Deco Theaters Around the World
- VII Triumph of Design: The Sydney Opera House
- VIII Mickey Magic: Frank Gehry's Disney Hall, Los Angeles

W 8am–1:30pm, 1 session Dec 2  
Jeffrey Syken  
5 AIA/CES LU's, 5 PDH's  
PMPD 949 \$244

### The Architect's Role in Development: Preserving the Public's Welfare

#### One Day Course

The seminar examines how the architect, through implementation of land planning, building design, codes, and life-safety systems facilitates the preservation of the public's welfare in order to minimize adverse affects of uncontrolled development. We discuss how the design of buildings based on a developer's ideal model is, at times, in opposition to the public's interests. Using the history of adverse development in the housing sector as a backdrop, we will examine the parallels between social upheavals and design breakthroughs led by architects whose solutions helped protect the public's welfare. This course is ideal for professionals seeking a broader understanding of the architect's role in development. We examine the architect's fiduciary duties and discuss the tension exerted upon the architect during the planning process as seen through the lens of various stakeholders: the developer, the owner, the investor, the contractor/vendor, and the public.

### Course Outline includes:

- I Fire and hygiene: Legal underpinnings of change.
- II The Architect at the center of community planning controls.
- III Land use, zoning – How architecture responds to both.
- IV The architect's fiduciary duties.

# Course Descriptions

- V Private/Public Controls & Planning Regulations – How architecture contributes to both.
- VI Expansion of Environmental laws force architects to think on macro-scale: site, water, air, materials.
- VII The “Green” movement.

**Registration Deadline:** Oct 12  
W 9am–5pm, 1 session Oct 21  
Roy Pachecano, AIA, David B. Reck, RA  
7 AIA/HSW LU's  
PMPD 997 \$295

## The Architecture of Empire

Down through the ages, civilizations have used architecture as an expression of the power and glory of the empires they have created. Most often, all that remains of most of the great civilizations of the past are the ruins of their pyramids, temples, amphitheaters, palaces, bridges, roads, and government buildings. Many of the structures these empires created remain intact and are still used in modern times. Some find use for purposes other than those for which they were created, while many still serve their original intent. The medieval cathedrals remain the seat of Catholic bishops, while Roman temples—the Pantheon, for example, built to exalt all the Roman Gods—saw use as churches under Christendom.

With the rise and fall of empires, the architectural, engineering, and building skills, traditions, knowledge, and tools, were carried forward and advanced. Modern masons can thank the builders of the ancient pyramids for establishing masonry construction, while the crane and wheelbarrow made their first appearance in the Middle Ages during the construction of the great cathedrals. Even the Nazis under Hitler, an aspiring architect himself, considered architecture the crowning achievement and symbol of their “Thousand-Year Reich.” Hitler and his architects sought to emulate the classical architecture of the Roman and Greek empires, even mandating that their buildings look good when in ruins, much like the Roman Forum itself. Even the communists sought a “Stalinist” architectural style of their own, to the detriment of their state treasures but to the glory of the cult of personality their leaders endorsed.

### Course Outline includes:

- I The Master Builders of Egypt
- II The Acropolis & the Golden Age of Greece
- III World Empire: Rome and the Seven Hills
- IV Medieval Cathedrals: Christendom’s Crowning Glory
- V Berlin, Germany: Capitol of the Nazi World Empire
- VI Bucharest, Romania: Cosmopolitan to Communism

Tu 8am–1:30pm, 1 session Dec 8  
Jeffrey Syken  
5 AIA/CES LU's, 5 PDH's  
PMPD 950 \$244

## The Environment, SEQRA and the Engineered Project

The State Environmental Quality Review Act (SEQRA), regulates local and state agency approval of engineered projects. This course will cover Article 8 of the New York State Environmental Conservation Law, detailing the operational aspects of the law, particularly as it affects major civil construction and the construction of residential and non-residential structures. The course will also go into the details of 6 NYCRR 617, the regulatory regulations promulgated by the New York State Department of Environmental Conservation. The class will also cover the interaction of the Freshwater Wetlands Act, the Tidal Wetlands Act, and other major environmental laws as they interact with SEQRA.

### Course Outline includes:

- I Article 8 Text
- II 6 NYCRR 617
- III Selection and Role of Lead Agency
- IV Positive and Negative Declarations
- V The Environmental Assessment Form
- VI The Environmental Impact Statement
- VII Major Case Law Decisions

Tu 9am–4pm, 1 session Dec 1  
Daniel Karpen, PE  
6 AIA/HSW LU's/SD's, 6 PDH's  
PMPD 995 \$295

## The Path to Greater Architectural Freedom with Today's Structural Steel

This is a comprehensive program developed by the American Institute of Steel Construction (AISC) exploring the use of structural steel in a safe and cost-effective manner while achieving new freedom in architectural expression.

### Course Outline includes:

- I Qualities and Advantages of Structural Steel
- II Structural Engineering Concepts
- III Architectural Detailing with Structural Steel
- IV Fire Protection and Steel Coating Systems
- V Code of Standard Practice
  - New code highlighted
  - Architectural exposed structural steel (AESS)

Workshop participants receive AISC's *Designing with Structural Steel: A Guide for Architects*.

W 1–5pm, 1 session Oct 14  
Erleen Hatfield, PE  
4 AIA/HSW LU's, 4 PDH's  
PMPD 835 \$195

## This Hazardous House

Considering the fact that Americans spend 90% of their time indoors rather than outdoors, it should come as no surprise to anyone that the indoor environment is, quite literally, making us sick. Typically, the indoor environment is 3x more polluted than the outdoor environment—but can be up to 10x more polluted, at concentrations of up to 100x greater. One government study found that fully 50% of all diseases are directly related to pollutants and toxins in the built environment.

The advent of tighter building envelopes has exacerbated the problem by trapping these pollutants and toxins within the interior spaces of a home. Other dangers lurk in the form of respirable fibers, combustion particulates, invisible/deadly gases, asthmatic triggers, electro-magnetic hot spots, heavy metals etc. Knowing what these dangers are, where and why they occur and how to effectively deal with them is a critical factor in understanding and solving the problem of the hazardous home for you and your family.

### Course Outline includes:

- I Sick Building Syndrome (SBS)
- II Building Related Illness (BRI)
- III Multiple Chemical Sensitivity (MCI)
- IV Asbestos Dangers/Abatement
- V Lead Dangers
- VI Radon Dangers
- VII PolyVinylChloride (PVC) Dangers
- VIII Asthmatic Triggers
- IX Infestation Dangers

Sa 9am–5pm, 1 session Dec 5  
Jeffrey Syken  
7 AIA/HSW LU's/SD's, 7 PDH's  
PMPD 967 \$295

## “Visionary” Designing with Glass Block and High Performance Glass Block Systems covering LEED, Safety and Security

An interactive course on glass block products includes the manufacturing process, vision control, product performance, fire ratings, codes, and show inspiring application and designs as well as technical/installation information. This course will also cover safety and security. You will learn about government and military requirements for blast and hurricane resistance, and how recent advances in glass block panels and windows that have enabled high levels of safety and security. Ballistic resistant windows and other system panels will also be discussed.

### Course Outline includes:

- I Manufacturing of Glass Block (5 minute video)
- II Introduce product samples and discuss physical design data
- III Installation and Technical Data, including Fire rated blocks and installation criteria
- IV LEED and Sustainability
- V Designing commercial projects using High Performance Glass Block products

- VI Introduction to Government and Military requirements for Blast and Hurricane Resistance
- VII Ballistic System Panels

**Registration Deadline:** Sept 2  
Sa 9–11am, 1 session Sept 12  
Rena McDonnell  
2 AIA/HSW LU's/SD's, 2 PDH's  
PMPD 819 \$85

## Wind Energy Systems

Modern wind turbines, especially machines in the megawatt class, can generate electricity as a competitive cost compared with power from oil fired, gas fired, coal fired, or nuclear power without the resultant pollution problems. This seminar will look at currently available wind machine and their capabilities. Calculations will be provided to enable engineers to size wind turbines with the electric load.

### Course Outline includes:

- I History of Wind Energy Systems
- II Modern Wind Machines
- III Case Studies of Installations
- IV Economics of Wind Energy Systems

M 1–4pm, 1 session Nov 2  
Daniel Karpen  
3 AIA/HSW LU's/SD's, 3 PDH's  
PMPD 983 \$145

## Wooden Scaffolds

Wooden scaffolds, often referred to as temporary structures, have been in long term usage for the construction phases of many buildings through our architectural history. Still today these structural mechanisms are successfully aiding the implementations of improvements to the older buildings as well as extending themselves in construction stages of our brand new, modern day structures.

The seminar provides the engineer-architect with a basic overview of designing and field inspecting wooden scaffolds along with the required safety provisions set by OSHA for the design criteria of loads applied to these structural mechanisms as well as safety requirements for those who work with them in various construction phases.

### Course Outline includes:

- I Engineering properties of wood, beams, columns, plywood decks, planks, construction criteria standards for design and safety set by OSHA.
- II Design examples of 2 types of wooden scaffolds:
  - a) The design of an outrigger scaffold
  - b) The design of a one-, two-, and three-story wooden scaffold. A wooden model will be used to show that of the second case name B.

F 9am–1:30pm, 1 session Oct 16  
Kenneth Wagner, PE  
4 AIA/HSW LU's, 4 PDH's  
PMPD 961 \$196

# Course Descriptions

## **World of Tomorrow: The 1939-40 New York World's Fair**

The year was 1939: Gone With the Wind and The Wizard of Oz were in the movie theaters; FDR was in the White House; America was at peace and coming out of the Great Depression; and at Flushing Meadows—a former ash-dump in Queens—New York City was hosting the World's Fair.

The fair would be remembered by those in attendance as one of the most significant events in their lives. Where else could you see the future: The World of Tomorrow in life-like scale at General Motor's Futurama and appliances for the modern woman on display at the Westinghouse exhibit.

By the second year of the fair, 1940, world events were catching up with the fair and the festive spirit of 1939 was waning. Still, New Yorkers past and present hold a special place in their collective memory for the fair that showed them a potential future that promised to be better, even if only in their imaginations.

### **Course Outline includes:**

- I Planning and Creating the World's Fair
- II The Architecture of the World's Fair
- III Exhibits and Pavilions
- IV The Products of Tomorrow
- V Entertainment and Food at the Fair

Tu 8am–1:30pm, 1 session Dec 15

Jeffrey Syken

5 AIA/CES LU's

PMPD 818 \$244

## **World Trade Center: Magnificent Ambition**

The World Trade Center had two main goals: use the power and resources of The Port of New York Authority – a quasi-governmental agency, to revitalize Lower Manhattan and make NYC the center of international trade in the post-war era. First conceived in the mind of David Rockefeller in the 1940s, it would not be until the early '60s that the idea for an international trade center took root and became a reality by the early '70s. From almost every aspect, the design and construction of the WTC was so innovative and revolutionary that the "Twin Towers" were often referred to – at the time, as: "The first buildings of the 21st Century."

Prefabrication of major building components, slurry walls to create "The Bathtub" – the unique foundation of the WTC whose massive excavation "spoil" provided the landfill used to create Battery Park City and would also keep the Hudson River out, the first use of "Kangaroo Cranes" – Australian tower cranes with 50+ tons lifting capacity and the first application of a gypsum-drywall Shaftwall system to enclose the elevator shafts all served to make the WTC the standard-setter for the way high-rise buildings would be designed and built thereafter. Offering 50% more rentable space than a conventional skyscraper using steel "cage" design, the unique structural system of

the Twin Towers made use of the exterior wall for structural support freeing the interior spaces of support columns. Sadly, this innovative structural system would play a key role in the collapse of the towers on the day the towers died: September 11, 2001.

### **Course Outline includes:**

- I Skyscraper Evolution
- II The Site
- III WTC Conception
- IV Key Players
- V Port of NY Authority background (now the Port Authority of NY & NJ)
- VI Logistics & Infrastructure
- VII Foundation Excavation
- VIII Creation of Battery Park City
- IX "The Bathtub" – WTC Foundation
- X Prefabrication
- XI Steel Erection
- XII Tallest Buildings in the World
- XIII Day of Infamy

Su 9am–5pm, 1 session Dec 13

Jeffrey Syken

7 AIA/CES LU's, 7 PDH's

PMPD 928 \$295

## **Wright by Design: The Life and Architecture of America's Master Architect**

Frank Lloyd Wright's personal life was as dramatic as his architecture, starting before his birth with his mother literally willing that she would have a son and that he would grow-up to be a great architect. Spanning seven decades, his career had three distinct periods. Elements of his "Prairie School" of architecture, his first period in which he emphasized the horizontal, was exemplified by the private homes he built in the American Mid-West, and would be adopted by the Modernist architects of the 20th century. Counted out by the 1920s as a has-been – "the greatest architect of the 19th century" – according to a young Philip Johnson—two of his greatest buildings Fallingwater, a private house in the Pennsylvania woods and the Johnson Wax Building, a corporate headquarters in Racine, Wisconsin, would define the second period of his life—the comeback. The post-WWII era, Wright's most prolific, would see his Taliesin Fellowship carry on his legacy and, after years of delays, the realization of the Guggenheim Museum in New York City, though he would not live to see it completed. Although his life was mired in tragedy and controversy and his character was often compared to that of a con-man, his buildings were the most honest expression of the mother of the arts-Architecture—that will probably ever be achieved by an individual architect.

### **Course Outline includes:**

- I Born to build
- II Prairie School: The Oak Park years
- III Between the Wars: the fall and rise of FLW

- IV Post-War: the best is yet to come
- V Lasting legacy

W 8am–1:30pm, 1 session Sept 30

Jeffrey Syken

5 AIA/CES LU's

PMPD 925 \$244

## **Zoning and Its Impacts on Architecture and the Community (Part I)**

Analyze the various aspects of Zoning and its impacts on architecture and the community. All architecture projects impact Communities. Some build communities, some harm them. This course studies how zoning laws are created in order to minimize any negative aspect to the public health on architectural developments.

### **Course Outline includes:**

- I Bulk and Use zoning concepts
- II Technical aspects of zoning that are a part of all new developments and construction
  - Sky Exposure Plane ratios, set back requirements, and yard requirements help maintain ventilation and light/air for communities
- III Analyze the different infrastructure and light/air needs of residential and commercial developments and show how the zoning resolutions deal with these
- IV Discuss Shadow Analysis scenarios and the impact of community review on the construction process
- V Review variances and Zoning changes and how the community is able to respond to an architectural project and comment in public hearings and reviews.

Registration Deadline: Oct 12

M 9am–5pm, 1 session Oct 19

Roy Pachecano, AIA, David B. Reck, RA

7 AIA/HSW LU's, 7 PDH's

PMPD 900 \$295

### **Registration Deadlines**

Registration deadlines for all courses are one week prior to course start dates, unless otherwise noted. Exceptions will be allowed based on space availability. We recommend that you register early.

## **Zoning and Its Impacts on Architecture and the Community (Part II)**

All architecture forcibly impacts communities on every scale. Some build communities, some harm them. This seminar takes an in-depth look at the various aspects of zoning and its impact on architecture and the community. This course studies how zoning laws are created in order to minimize any negative aspect to the public health and examines scalar impacts on both small and large architectural plans. Areas of discussion include a detailed discussion on bulk, use, sky exposure plane, floor area ratios, and set-back requirements for rear and side yards that impact ventilation and light/air for communities. We will also analyze how the public interest is balanced with private interest to safe-guard infrastructure needs of residential and commercial projects; show how the governmental review process is an important factor in maintaining/preserving public safety; and review the variance and process and how the community is able to respond to an architectural project and comment in public hearings and reviews. This class is intended as a sequel to the introductory course, but can stand alone for attendees already familiar with the basic zoning concepts.

### **Course Outline includes:**

- I Brief overview of the history and evolution of Zoning
- II Technical aspects of zoning
- III Zoning Districts, Use Groups, Bulk rules, Floor Area Ratio, Sky Exposure Plane Set Backs, Yard requirements
- IV Analyze the Zoning requirements that preserve light and air
- V Special Zoning Districts
  - their relationship to the needs of specific communities
- VI City Planning Commission Authorizations and Special Permits
- VII How the Zoning is amended, Map and Text changes
- VIII Board of Standards and Appeals Variances and Special Permits
- IX Uniform Land Use Review Procedure
  - the governmental and community review process
- X City Environmental Quality Review Procedure
- XI Identifying and assessing the potential impacts of discretionary zoning actions

Registration Deadline: Oct 12

Tu 9am–5pm, 1 session Oct 20

Roy Pachecano, AIA, David B. Reck, RA

7 AIA/HSW LU's

PMPD 926 \$295

## Customer Testimonials

"I really enjoyed Roy Pachecano's and David Reck's class on 'Green Design vs Historic Preservation.' It was very informative and inspiring. With the economy the way that it is, I am trying find ways to reinvent myself as an Architect. Your class gave me much to consider.

My business partner and I are in contract to purchase a landmark house on Staten Island. The case study of the Nix House gave me a renewed appreciation of the restoration process.

I look forward to attending more of your seminars in the future.

Thank you."

*Michael A. Biagioli A.I.A., Architect*

"I enjoyed Jeffrey Syken's, Bridging Gotham lecture very much. It was exactly the kind of information and presentation I find interesting. I am a member of the 'Friends of the New Jersey Transportation Heritage Center' which is working toward constructing a transport museum in New Jersey. They publish an excellent semi-monthly newsletter and are looking for articles.

I plan to write a brief piece on what I learned about bridges between NJ and NY and credit your seminar for the information and even recommend your lectures.

Thanks again for the great day of interest and learning."

*Gene Graber*

## Program Announcements

### **Program Locations**

Please note that all sections are held at our Manhattan Center, 144 West 14th Street, unless otherwise noted.

If you have any questions please feel free to contact us.

### **Pratt AIA Online Partner Programs Expanded Engineered by CS Learning Solutions**

Pratt Institute is pleased to offer a select curriculum of web-based AIA/ CES courses at Pratt Online Center for Continuing and Professional Studies. Visit [ces.pratt.edu](http://ces.pratt.edu) now, and earn while you learn.

### **Earn While You Learn Sheathing: A Sustainable Product for the 21st Century**

This course, written by noted author and lecturer Jeffrey Syken, is the first in a new line of web-based courses written by Pratt CCPS faculty. The course takes a comprehensive look at the five major types of sheathing, examines manufacturing methods and composition, and provides a broad understanding of the best projects for each type.

After completing this course you will be able to:

- Discuss the importance of sustainability to the wood-based sheathing industry
- Describe environmental concerns the wood-based sheathing sector has addressed
- Name the five sheathing types and key features of each
- Identify the distinctions between different manufacturing methods for each sheathing type and their performance benefits

### **Course features**

- Course qualifies for 1 AIA/HSW LU credit
- Complete the course as your time permits-break, the system automatically bookmarks your place
- Your credit is automatically reported to the American Institute of Architects upon completion of the course
- Print a Certificate of Completion for your records
- System maintains a secure record of all your completed course work

**Tuition:** \$85. Register for this course now at [ces.pratt.edu](http://ces.pratt.edu) to bring new knowledge and insight to your work, and add value for your clients, partners and projects.

# Faculty

## **Mario A. Antonetti, PE**

Principal and senior fire protection engineer, Gage-Babcock and Assoc., Inc. BS, Fire Protection Engineering, University of Maryland. Projects include: Library of Congress, National Air and Space Museum and National Museum of Natural History at the Smithsonian Institution.

## **Eric J. Babcock**

Fire protection engineer with Gage-Babcock & Associates, Inc. Experienced in design and review of fire protection systems, and development of full building code analyses. Projects include: educational facilities, air traffic control towers, governmental offices, computer rooms, governmental laboratories and research facilities; and historic buildings. BS/Fire Protection Engineering/University of Maryland.

## **Laura M. Cooney, RA/AIA**

Educator, is a NYS registered architect with 12 years of experience in architecture, project management, and code training. As a NYS Certified Building Code Official, code trainer and plans examiner with FRA Code Services, she has successfully developed and presented many different code training programs for design professionals around NYS.

## **Brenda Cowan**

Chair of Graduate Exhibition Design at FIT/SUNY. Her background includes over 16 years experience working in museums and design firms. Co-founded Exhibit A Design Group, Inc. She has completed permanent and traveling exhibitions, and master-plans for clients including the National Park Service, civic and cultural institutions, and cultural, historical and children's museums. MEd in Museum Leadership, Bank Street College of Education; BFA, School of Visual Arts and a NYS teaching license in Visual Arts Education.

## **Steven Danielpour, AIA, CCS, LEED® AP**

Director of Specifications, Perkins + Will, New York Professional experience: specification construction technology and research, technical, design and project management. BArch/Syracuse Univ.

## **Timothy Davis**

Senior Security Manager at Gage-Babcock & Associates, Inc., specializes in the field of physical security. Experience includes evaluation of security systems and the design of improvements based on current threat levels for access control, intrusion detection, closed-circuit television, data transmission, and surveillance systems, and the integration of these systems. Projects include: government, healthcare, educational, and commercial facilities.

## **Lisa A. Easton, AIA**

Architect, Easton Architects. She has worked on restoration of some of the NY Metropolitan region's note-worthy landmarks and developed a reputation in the field as an expert architect, planner, lecturer and historian. BArch/Syracuse University, MS/Historic Preservation/Columbia University.

## **Tony Gelber, LEED® AP**

Director of Campus Operations, Pratt Institute. Extensive experience in facilities design, construction and environmental services. BS/Construction Management; MBA/ Management; completing a Masters in City and Regional Planning.

## **Leon Goodman PE, PTOE**

Consultant. Former Manager, Transportation Planning Division at the Port Authority of NY & NJ. Extensive experience in highway & transit planning and authored many technical publications, including highway entries in the *2005 NY State Encyclopedia*. Member of NYSSPE, and Fellow of ASCE & ITE, former ITE International President. BCE, City College of New York, Completed graduate programs at Yale (transportation) and Harvard (management).

## **Michael Hardiman, AIA**

Architect with NCARB certification. Moving to London in 1999, he became a director and part owner of The Forge Company London Ltd. that specialized in the design and delivery of offsite-fabricated solutions for the affordable housing market in England, Scotland and Wales. In 2004, he served as the president of the AIA chapter in the United Kingdom. He currently lives and works in Boston, Mass. BArch, Pratt Institute.

## **Erleen Hatfield, PE**

Architect, structural engineer, with fourteen years of design experience. Works extensively with structural steel in both conventional and exposed applications. BA/Arch; MS/Civil Engineering.

## **Kent Hikida, AIA**

Associate, Gensler, LLP, NYC. Architect/designer specializing in broadcast and media facilities. Projects: Rainbow Network Communications broadcast facility, Thirteen/WNET Broadcast Facility and Headquarters. MArch/Columbia University.

## **Daniel Karpen, PE**

Professional engineer and consultant. Recognized nationally for his innovations over a wide range of energy conservation areas. Member of the Association of Energy Engineers and is a certified Energy manager. MBA/Adelphi University; MA/Mathematics/ SUNY Stony Brook; BS/University of Washington, Seattle.

## **Terese M. Kinsley, PE, LEED AP**

Professional Engineer and LEED Accredited Professional, with 27 years of consulting and regulatory experience working as an environmental engineering compliance and sustainability specialist. Founder of gogreenretrofits.com, whose mission is to provide a "go to site – to go green" technical assistance forum to help facilitate the transformation to sustainable business. Chief Sustainability Officer for the Town of Huntington, NY. Member of USGBC, NSPE, NYSSPE, ASES, NE Sustainable Energy Assoc. BS/Environmental Engineering/ Univ. of Florida.

# Faculty

## **Jeffrey L. Kinzler, Esq.**

Specializes in professional liability defense, school construction, public contracting and commercial litigation. Special Counsel to the law office of Jones Hirsch Connors & Bull, P.C., where he heads up the firm's Architect-Engineer Professional Liability Defense department. Graduate, Benjamin N. Cardozo School of Law, Yeshiva University; Pratt Institute, School of Architecture.

## **Abraham Kovner**

CPE (ASPE), President, A. Kovner Associates, a construction consulting firm; author, *An Introduction to Construction Cost Estimating*; semi-retired construction practitioner and adjunct professor of building construction sciences.

## **Martin Kravitt, RA**

Specializing in restoration, adaptive reuse and historic preservation of residential, commercial and municipal projects. Awards: Vermont Preservation Trust Award, adaptive reuse of a rural schoolhouse; AIA Honors Awards, restoration and adaptive reuse; Ford Foundation grant, restoration and conversion of an aircraft carrier into a mobile high school for NYC. BArch, Pratt Institute; postgraduate, New School and NYU.

## **Robert D. Krouner**

Consulting Engineer, with over 50 years of experience in contracting, HVAC equipment sales, mechanical-electrical design, building analysis and M/E construction management. Former engineering partner in the Einhorn Yaffee Prescott Krouner (EYPK). BME, Clarkson University.

## **Lois Lazarus**

Principal Lazarus & Assoc., Sports/Entertainment/ Political Public Relations Marketing. Clients include: AmEx, Gillette, Universal, BMG, State Fairs. *Who's Who in American Women*; Permanent Collection: Archives Venice Biennale; author of *With These Hands They Built a Nation*. MA/Hofstra University.

## **Kate Lemos**

Preservationist and architectural historian at Beyer Blinder Belle. Former preservation consultant for architects Norman Foster, Jean Nouvel, Matthew Baird, Polshek Partnership, SOM, building owners, and reviewing authorities on rehabilitations and new design in historic settings. Co-author of a monograph on Carrere & Hastings, Acanthus Press. BA, Architectural Studies/Brown University; MS, Historic Preservation/Columbia University.

## **Joseph P. Majewski, FCPE, PE, CMI**

President and founder of JPM Construction Consultants. He has applied his expertise for major A/E corporations, general contractors, and owners on a wide variety of projects including nuclear power plants, petro-chemical process plants, food process plants, refinery improvements, schools, shopping centers, airports, hospitals and both federal and state correctional institutions. He has taught courses in the field of Construction Estimating in this country and overseas.

## **Dominic Marinelli**

Director, Accessibility Services, United Spinal Association (formerly the Eastern Paralyzed Veterans Association) Certified Accessibility Specialist by the International Codes Council (ICC) and as a Code Enforcement Official by the New York State Department of State.

## **Rena McDonnell**

Architectural Regional Manager for for Pittsburgh Corning Corporation. Prior to this appointment, Rena worked in the Electronic Security Industry for 13 years for Saflok, Inc, where she held positions as National Director of Customer Relations and Director of Sales Asia Pacific. Transnational MBA/Fordham University and a Bachelor's Degree in Family and Consumer Science/Herbert H. Lehman College. She has studied International Relations at NYU at the United Nations in Geneva.

## **Roy R. Pachecano, AIA**

Founder of Portico Residential LLC – a principal investor in green-sustainable residential, historic, commercial real estate development projects. He began his career offering advisory services for some of the world's best known commercial and institutional clients including law firms, investment banks, pension funds, conventional lenders on financial/property due diligence. Lecturer, columnist for the BuilderNews Magazine and author of over 50 professional articles. Member: ULI, APA, AIA, USGBC. Columbia University: MS Real Estate Development, MS Architecture. rp@porticoarei.com

## **David B. Reck, RA**

Architect. Owner of consulting firm that mostly specializes in Zoning and Building code issues, and public/governmental review processes. Lead a community based effort that resulted in the Hudson Square Rezoning. Chair of the Zoning Committee of Community Board 2 Manhattan. BArch/Pratt Institute.

## **Edward D. Re, Jr., AIA**

RA, Construction Manager, Architect, Educator. Certified Professional Constructor (AIC) Trustee, Certified Real Estate Appraiser (NAREAA), Certified Environmental Inspector (EAA), Arbitrator (AAA), Founder (CMAA), *Who's Who in America*, *Science and Engineering*, & *the World*, Inventor, United Inventor's. MS/Facilities Management/Pratt; BS/CM/Pratt.

## **Ben Scaglione, CPP**

A well known security design consultant, who has been Director of Security at some of the largest facilities in NYC. Featured speaker at many professional organizations, published articles in leading trade magazines and has taught security technology courses at several colleges including John Jay College of Criminal Justice. Masters Degree in Criminal Justice and is a Certified Protection Profession [CPP].

# Faculty

## Charles Schnabolk, PE

Lecturer and author *Physical Security: Practices and Technology*. Principal of consulting engineering firm specializing in designing security & fire alarm systems for public and private complexes. Projects include: the WTC, Museums, the NYC & Newark School Systems, Healthcare Centers and Commercial and Residential buildings. P.E. License and Master Electrical License Projects with EE degree, Stevens Institute; MBA, NYU.

## Stanley Stark, FAIA

VP and National Director for Life Sciences, HDR Architecture, Inc. Noted speaker and seminar leader: Tradeline Forums on Business, Technology and Building. Author of numerous articles, NSF/NIH Advisory Panel.

## Robert Summers, CPP

Director of Security Consulting for Hughes Associates, Inc. with over 27 years of experience in security management and law enforcement. Specializes in threat/vulnerability assessments, CPTED plan reviews and complete security design and engineering services for Government Agencies, Educational and Corporate sector clients. BS, Criminal Justice Administration, William Paterson University

## Jeffrey M. Syken

A construction professional for 20+ years, lecturer and author *Principles of Trade Estimating* (BNI Building News). He writes about environmentally sustainable design and construction for prominent industry publications.

## Thomas G. Thomann, PhD, PE

Senior Project Manager, URS Corporation. Manager of the GeoEngineering group for the NYC Metropolitan area. Extensive geotechnical engineering experience in the NYC area, including foundation design of high-rise buildings, major bridges, retaining walls, and landfills.

## Brian Trimble, PE

Director, Engineering Services & Architectural Outreach, Market Area I for the Brick Industry Association. Over 19 years of experience in the masonry industry, assisting design professionals in the design of brick and masonry structures. Lecturer to local and national construction industry groups. Authored many articles and papers on various masonry subjects

## Charles Turofsky, PC, RLA

Landscape architect and consultant to numerous architectural and engineering offices. Recent urban projects include: Independence Plaza, 330 E. 80th St., Hammer Library Plaza at Columbia University, Seward Park, New York, and 75 Henry St., Brooklyn. MLA University of Michigan; Post Graduate Harvard University.

## Kenneth Wagner, PE, MSCE

Professional Engineer with specialization in construction and design of concrete, reinforced masonry, and wood frame structures. Implemented the design and construction for decorative facades of residential buildings juxtaposed with designs of wooden scaffolds. Completed extensive design/fabrication courses for steel trusses spanning 30 ft. BECE, The City University of NY, The City College of Engineering; MSCE, Polytechnic Institute of NY.

## Arnie Weitzman, CPE

More than thirty years of construction experience, with twenty years as an estimator, bidding both Public and Private construction work. Estimator for a variety of projects, ranging from \$50,000 to \$75,000,000. Chief estimator for Arena Construction Co., Inc., a NYC general contractor, and is the President of the American Society of Professional Estimators, NYC Chapter 10.

## Alfred Yalaju, RA

Principal architect and acoustical consultant at CI Associated Architects & Consultants, PC, Albany, NY. Technical service experience in architectural acoustics and noise control, as well as, architecture service experience in commercial, industrial, institutional, transportation and healthcare facilities on several international and domestic projects in States of New York, Texas and Washington. Associate Member: Acoustical Society of America; BS/ Physics/TSU; March/Univ. of Houston.

## Steven Zalben, AIA, NCARB

Architect, Forensic Architect, Author/Artist. Thirty years of experience with historic structures, adaptive reuse, accessibility design. Design and construction management of residential, commercial, institutional projects. Investigation of building failures and defects. BArch/CCNY; BA/Math/ Queens College.

# Information

## Refunds

Students who for any reason find it impossible to complete the course for which they are registered should inform the Center for Continuing and Professional Studies in writing that they wish to withdraw. Failure to complete the course does not constitute official withdrawal, nor does notification to the instructor. The lack of attendance alone does not entitle a student to a refund. Pratt cannot be responsible for providing make-ups or issuing refunds for programs missed as a result of illness, emergencies or other events beyond our control. Withdrawals do not necessarily entitle the student to a refund of tuition and fees paid, or the cancellation of tuition still due. The postmark is considered the date of withdrawal for refund requests by mail. Withdrawal or refund requests cannot be made by telephone or through the instructor.

No requests for refunds will be handled by phone. There will be no refunds for any reason after the second class meeting.

**Please note:** Allow 60 days for refunds to be processed.

## Withdrawal Policy Seminars and 4-6 Day Courses

- Withdrawals 6 business days before start date 100% tuition
- No refunds after this date.

**Please note:** All requests for withdrawals must be done in writing. Please allow 60 days for processing of refunds.

## Fees

### Registration Fee

There is a \$10 registration fee charged for each non-credit course over \$95, for which you enroll. The fee is non-refundable, unless classes are cancelled due to lack of enrollment.

### Uncollectible Checks

\$15 surcharge is imposed for processing.

### Registration Deadlines

Registration deadlines for all courses are one week prior to course start dates, unless otherwise noted. Exceptions will be allowed based on space availability. We recommend that you register early.

### Transcripts

Students enrolled in AIA Professional Development courses will receive one transcript at no charge. The transcript will include Pratt's AIA Provider #. A fee of \$5 will be charged for each additional transcript, letter of completion, or any additional certificate requested. Requests for all additional transcripts relating to your record should be addressed to Pratt Manhattan, Center for Continuing and Professional Studies, Attention: AIA Continuing Education Transcripts, along with remittance. Request must state name while in attendance, dates of attendance and course(s) of study.

## OneKey Account Information

OneKey usernames and passwords are necessary for all students and faculty of Pratt Institute.

### To Get your OneKey username and password:

Register online for courses through Instant Enrollment:

- Visit [www.pratt.edu](http://www.pratt.edu)
- Click on [my.pratt.edu](http://my.pratt.edu) and click the [my.pratt.edu](http://my.pratt.edu) link again on the white fly-out box
- Click on the link – **Instant Enrollment, CCPS**
- Enter the course code in the **Course Code field** (PMPP 455 for example)
- You will be taken to the **Payment Screens**
- A **receipt** will be emailed to you upon successful registration.
- Your login and password is mailed to your street address. Allow 24 hours for processing, so register early to guarantee yourself a seat and start using your benefits.

### Privacy

Pratt Institute is a private educational institution and does not share email addresses or any personal data with external resources. Instant Enrollment is a secure server – use this with confidence to pay for classes.

For more information, see page 75 of the CCPS Summer 2009 catalog or visit our website for instructions: [www.pratt.edu/ccps/resources/OneKey\\_Instructions#](http://www.pratt.edu/ccps/resources/OneKey_Instructions#).

### Discounts

Discounts listed below apply to all continuing education courses, unless otherwise noted in the course description. The discount is computed on the actual tuition, minus the registration fee. Only one discount can apply, per semester. Note multiple types of discounts do not apply.

### Pratt Alumni Discount

Alumni of Pratt degree programs receive 10% discount, if stated at the time of registration.

### Senior Citizen Discount

Senior citizens sixty-five and older who present evidence of age at the time of registration will receive a 10% discount.

### Corporate Discounts

Corporate discounts apply to three or more registrants from a company in the same section of a course or seminar. For further information, contact Karen Miletsky at 212-647-7199 or email [kmiletsk@pratt.edu](mailto:kmiletsk@pratt.edu).

### Corporate Billing

Purchase Orders accepted. Please forward with registration.

### Customized Training

For further information on customized training for your facility, call 212-647-7299.

### Free catalog

To request a copy of the CCPS catalog, call 212-647-7199 or download a pdf at [www.pratt.edu/prostudies](http://www.pratt.edu/prostudies).

# How to Register

## In person

Pratt Institute  
144 West 14th Street, Room 209  
between Sixth and Seventh Avenues  
New York, NY  
M–Th 10am–6pm, F 10am–2pm

## By mail

Fill out the mail registration form or facsimile and mail with check or money order to:  
Pratt Institute  
Center for Continuing and Professional Studies  
144 West 14th Street, Room 209  
New York, NY 10011-2700

## By telephone

Call 212-647-7199 with your American Express, Discover, MasterCard or Visa credit card number.  
M–Th 10am–6pm, F 10am–2pm

## By facsimile

Dial 212-367-2489 with your mail registration form filled out and your American Express, Discover, MasterCard or Visa credit card number, along with the expiration date and security code.

## By email

Email us at: [prostudy@pratt.edu](mailto:prostudy@pratt.edu)

## Online/Instant Enrollment

<http://my.pratt.edu>  
Online registrations received through [my.pratt.edu](http://my.pratt.edu) will receive confirmation via email. American Express, Discover, MasterCard & VISA are accepted.

## Registration Deadlines

Registration deadlines for all courses are one week prior to course start dates, unless otherwise noted. Exceptions will be allowed based on space availability. We recommend that you register early.

# Course Location

Please note that all sections are held at our Manhattan Center, unless otherwise noted:  
Pratt Manhattan  
Center for Continuing and Professional Studies  
144 West 14th Street  
between Sixth and Seventh Avenues  
New York, NY 10011-2700

# Directions to Pratt

## Pratt Institute

Center for Continuing and Professional Studies  
144 West 14th Street  
between Sixth and Seventh Avenues  
New York, NY 10011-2700

## By Subway

Take the A, C, E to 14th Street/Eighth Avenue, the F, V to 14th Street/Sixth Avenue, the 1, 2, 3 to 14th Street/Seventh Avenue, or the 4, 5, 6, N, R, Q, W to 14th St/Union Square and switch to the crosstown L to 14th Street/Eighth Avenue.

## By Bus

**Uptown** take the M20, to 14th Street/Eighth Avenue. **Downtown** take the M20 to 14th Street/Seventh Avenue. **Uptown** take the M6 to 14th Street/Avenue of the Americas. **Downtown** take the M6 to 14th Street/Union Square, then take the M9 or M14 crosstown buses.

## By Car from Queens

Via 59th Street Bridge South on FDR Drive to 23rd Street exit. Make right turn on 23rd Street. Make a left turn on Second Avenue. Take Second Avenue to 14th Street make a right turn. Pratt is located between Sixth and Seventh Avenues on the south side of the block, closest to Seventh Avenue.

## By Car from New Jersey

Holland Tunnel Bear right to Eighth Avenue. Take Sixth Avenue to 14th Street make a left turn. Pratt is located between Sixth and Seventh Avenues on the south side of the block, closest to Seventh Avenue.

## By Car from Westchester

Westside Highway South Left turn on 14th Street. Pratt is located between Sixth and Seventh Avenues on the south side of the block, closest to Seventh Avenue.

## By Car from Brooklyn

Via Brooklyn Bridge North on FDR Drive to Houston Street exit. Left on Houston Street to Third Avenue make right. Take Third Avenue to 14th Street make a left turn. Pratt is located between Sixth and Seventh Avenues on the south side of the block, closest to Seventh Avenue.

## By Path from New Jersey

Take the Path to 14th Street Exit at Sixth Avenue and 14th Street.

## Parking in Manhattan

Limited street parking is available on weekdays and weekends. Weekday parking available after 6 pm. Parking is available for a fee in nearby parking lots.

# AIA Registration Form

## Please Print

Name \_\_\_\_\_

Company Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Daytime Telephone \_\_\_\_\_ Fax \_\_\_\_\_

Evening Telephone \_\_\_\_\_

E-mail \_\_\_\_\_ AIA membership #\* \_\_\_\_\_

SS# (last 4-6 digits mandatory) \_\_\_\_\_ Date of Birth (mandatory) \_\_\_\_\_

## Payment by

- Check/money order  Discover  
 Visa  MasterCard  American Express  
 I hereby authorize use of my credit card.

Signature \_\_\_\_\_

Card No. \_\_\_\_\_

Exp. Date: Month/Year \_\_\_\_\_ Security Code \_\_\_\_\_

or Purchase Order No. \_\_\_\_\_

Course number \_\_\_\_\_ Sec \_\_\_\_\_ Tuition \_\_\_\_\_

Registration fee: \$10 per course \$ .00 (non-refundable)

Total amount due \$ \_\_\_\_\_

## For Office Use Only

Log No. \_\_\_\_\_ Date Received \_\_\_\_\_

Tuition \_\_\_\_\_ Fees \_\_\_\_\_ Total \_\_\_\_\_

# Pratt

Center for Continuing  
and Professional Studies

# Pratt

*Pratt Institute  
144 West 14th Street, Room 209  
New York, NY 10011-2700  
Telephone: 212-647-7199*

*Center for Continuing  
and Professional Studies*

*<http://www.pratt.edu/prostudies>*

---

Fall 2009

**Classes begin August 31, 2009**

**AIA Continuing Education  
Professional Development Series For  
Architects and Professional Engineers**

NON-PROFIT  
U.S. POSTAGE  
**PAID**  
PRATT INSTITUTE

