

ENVIRONMENTAL SUSTAINABILITY/ LEED

Green Buildings

SEMINAR/ WORKSHOP

A five day seminar for people who are concerned about the environment

Date: To Be Determined

Location: To Be determined

Seminar Leader: Stephen J. Kirk, Ph.D., FAIA, LEED, CVS



Seminar Description

The built environment has profound impact on the natural environment, economy, health and productivity. Breakthroughs in building science, technology and operations are now available to designers, builders and owners who want to build green and maximize both economic and environmental performance. **The goal of this course is to assist participants in creating facilities that meet the needs of current building occupants while being mindful of the needs of future generations.** (This is the definition of sustainability.)

In this seminar participants learn to use a valuable, analytical tool called LEED (Leadership in Energy and Environmental Design) developed by the U.S. Green Building Council to improve the sustainability of new facilities. This tool is used to both set objectives and to serve as a creativity tool in the design of buildings. Innovative solutions are then evaluated using the technique of life cycle costing (LCC) to assess the long term economic performance. Life cycle costing takes into account the significant costs associated with the project (e.g., energy usage, raw materials, cost of money and labor), the useful life and replacement costs of the equipment and materials and the salvage value of the project. This holistic view requires descriptive project data and reasonable cost estimates. Participants will participate in a "LEED design charrette" for a building project and apply the principles of green design to explore ways to make it more sustainable. Team members will also analyze the ideas generated and prepare life cycle cost analyses.

By the end of the seminar/ workshop, attendees will be able to:

- Prepare a LEED model for a building project
- Explore green ideas for improved sustainability
- Perform life cycle cost analyses
- Assist decision-makers in the selection of sustainable and cost effective solutions
- Use a computer software program developed by Dr. Kirk to calculate the life cycle costs.
- Create green solutions that meet current needs while preserving resources for future generations

Certificate

Each participant will be awarded a certificate of completion.

5-DAY WORKSHOP AGENDA

Introduction to Sustainability/ Green Buildings

- Definition/ Objectives
- Formalized Process
- LEED (Leadership in Energy & Environmental Design)
- LEED Checklist

Case Studies of Sustainable Projects

- Commercial Buildings
- Government Facilities

LEED Model for Green Buildings

- Sustainable Sites (SS)
- Water Efficiency (WE)
- Energy & Atmosphere (EA)
- Materials & Resources (MR)
- Indoor Environmental Quality (EQ)
- Innovation & Design Process (ID)

LEED Design Charrettes (Workshop)

- Project application
- Team formation

Sustainability & Innovation (Workshop)

- Sustainability idea checklist
- The creativity process; team dynamics
- Group creativity techniques

Green Building Idea Evaluation (Workshop)

- Sustainability Idea Evaluation
- Non-monetary Criteria/ Weighted Evaluation

Life Cycle Cost Analysis (Workshop)

- Green Building Historical Cost Database
- LCC Cost Elements: construction cost, energy, maintenance, repair, custodial, alteration, replacement and salvage values
- Economic Assessment using Present Worth Analysis
- Ranking/ Sustainability Proposals

LEED Certification

- Project Documentation
- Individual Certification Requirements
- Summary/ Next Steps

REGISTRATION FORM: ENVIRONMENTAL SUSTAINABILITY/ LEED

Check the appropriate boxes:

Individual: \$1200

Location: TBD

Send more information about environmental sustainability/ LEED, life cycle costing, value management

Send this form with your check to:
KIRK Associates, LLC
1177 Berkshire Road, Suite 100
Grosse Pointe Park, MI 48230

Tel. 313.823.7330
Fax 313.823.7332
E-mail: kirkassociates@aol.com

Name (Will be used on certificate)

Name of Company, Agency or Institution

Preferred Mailing Address

City/State/Zip

Phone during office hours

Fax Number

E-mail

The Instructor

Stephen J. Kirk, PhD, FAIA, CVS has a diversified background in sustainability/ LEED, facility economics, and value management. He routinely applies the principles of green buildings to projects. Dr. Kirk has over 20 years of experience devoted exclusively enhancing the value of projects. The American Institute of Architects recognized Steve for his contributions to architecture and LCC by electing him to the prestigious College of Fellows. Dr. Kirk, a life certified value specialist and a registered architect, currently serves as immediate past president of SAVE International (VE society). He received his doctorate in architecture from the University of Michigan specializing in life cycle costing and computer simulation.

Author of 7 books on LCC and VM, including the text for this course, Dr. Kirk has also taught courses at Catholic University, University of Michigan, Lawrence Technological University, King Saud University in Saudi Arabia and Yamouk University as a Senior Fulbright Scholar.

He has personally led over 400 LCC/VM studies of corporate office and research facilities, retail stores, hospitals, manufacturing plants, military installations and projects involving environmental, transportation and civil engineering issues.

Examples of Dr. Kirk's experience include:
LCC/VM study: Bronx criminal courthouse complex,
VM program: United Technologies Corporation
VM program: Kmart Corporation
LCC/VM study: Casino and hotel complex, Sydney, Aus.
LCC studies: General Motors Corporation
LCC/VM study: Corrections facility, Los Angeles, CA
LCC/VM study: FBI computer offices, West Virginia
LCC/VM study: Alternate solids project, Louisville, KY
VM study: Facilities master planning, NASA, MD

Registration

Advance registration is required and must be accompanied with payment. Fee includes LCC text (\$50 value), LCC software, refreshment breaks, lunch and certificate.

Cancellation Policy

Full refund is notice is received more than 15 business days before classes; \$50 fee if received 5-15 business days before classes, and no refund if received any closer to the beginning of the seminar.

Text: *Sustainability For Design Professionals*, by Dr. Stephen Kirk

Time: 8:00 - 2:00

KIRK Associates, LLC, is a leader in value management project applications and training and specializes in:

- Strategic Value Planning/ PRECiSE
- Life Cycle Cost Analysis
- Value Management Workshops
- Budget Cost Modeling and Cost Management
- Risk Modeling and Mitigation Analysis
- Program Value Management