



SBA COURSE PREVIEW 2010-2011



The Course Preview is intended to provide prospective students with more information about the SBA course. A detailed Course Overview and Syllabus will be distributed prior to class start to registered students.

SBA Course Logistics

- **Class Length:** October, 2010 – June, 2011 (9 months)
- **Class Meetings:** Once per month on a Friday/Saturday combination. Most Friday classes will run from 4:00 pm to 9:30 pm; most Saturday classes will run from 9 am to 5 pm. There will be a few exceptions to accommodate field trips and unit flow.
- **Class Location:** Integrated Design Lab (IDL), 108 N 6th St, Boise, ID, 83702
- **Lead Instructor:** Sharon Patterson, sharon@BuildingEcoEdge.com or 208.440.1946

Program Objectives

By the end of the SBA course, participants should be able to:

- Identify and discuss the key practices of sustainable building.
- Apply LEED™ and other relevant criteria or established guidelines.
- Analyze the costs and benefits of incorporating sustainable building measures.
- Work with architects, designers, builders, building operators, and utilities to improve a building's performance.
- Take advantage of financial incentives and technical assistance offered by governments, utilities and non-profit organizations.
- Establish sustainable design goals for project development.
- Assist in the education and training of staff in your facility or firm in sustainable building.



SBA Course Outline

Unit 1: Fundamentals of Sustainable Building and Design

- The “case” or rationale for green building
- A view of the current state of green building in the region and nationally
- The principles of sustainable design
- An introduction to the practicum project

Unit 2: The Importance of Place: Site, Transportation and Land Use Issues

- An introduction to sustainable site design
- An understanding of the site planning process
- Sustainable site analysis and conduct a site assessment
- Importance of transportation planning, siting, relationship to sustainability
- Strategies to achieve sustainable transportation patterns and site development

Unit 3: Energy Efficient Design

- How the design of building energy systems impacts the human experience and the global environment
- The value of contextual, holistic approach to building energy system design
- How a building dynamically interacts with its occupants and the local climate, including renewable energy flows
- Fundamental building energy systems, including HVAC and lighting

Unit 4: “Green” Materials Selection

- Factors in material selection and the issue of trade-offs
- Resources to assist in determining materials appropriateness
- Analytical process to evaluate materials for a project
- Material considerations when using the LEED rating program
- Material considerations when designing a green home

Unit 5: Indoor Environmental Quality & Health

- Benefits of improving indoor environmental quality
- Common indoor air pollutants



- Barriers and solutions to achieving good indoor air
- Implementation issues to help achieve good quality indoor air
- Ventilation system design strategies
- Linkages between health, well-being and productivity
- Physical, psychological and financial benefits of daylight and view

Unit 6: Water and Site Design

- Benefits of adopting a natural systems-based approach
- Sustainable site development patterns
- Impact reduction through landscape layout, plant selection and placement
- Outdoor water conservation strategies and practices
- On-site management methods for storm water and wastewater
- Indoor water conservation

Unit 7: Sustainable Job Site Operations

- Construction waste management, site protection and IAQ protection
- Incorporating green building materials
- Planning and practices for sustainable construction

Unit 8: Building Operations and Maintenance

- Facility management (FM) functions, duties of FM department, FM professionals, and FM position in sustainability
- Building Commission (Cx), what it is, how it is accomplished, and its critical importance to the performance of a building
- Effective operations and maintenance
- Effective training programs within a building

Presentation of Team Projects





Course Requirements

- **Class attendance:** No more than two days of class may be missed (regardless of class length). Please avoid missing whole units, especially in areas with which you are less familiar. When planning to be absent, please notify your Lead Instructor in advance.
- **Class participation:** In addition to participating in class discussions and activities, you will need to interact between sessions with your project team: This is primarily done by e-mail, but can include meetings organized around a class session.
- **Project Team:** Students will be assigned to a project team based on project interests and the need for creating teams with a balance of different professionals. They are expected to work effectively with their team to develop the content for their project-related papers and presentations.
- **Papers:** You will be required to write four 3-5 page papers during the year. These papers will relate to the work you are doing in your project team.
- **Presentation:** You will be required to work with your team to develop a 20-minute presentation on the project you have worked on during the year.
- **Homework:** You will be assigned homework to prepare for or synthesize your classroom learning. Some of this may be required, while some may be simply recommended. Since you are most aware of your learning needs, use your best judgment on the latter.
- **Registration:** All registration requirements (paperwork, financial arrangements) must be complete.

At Course Completion, you will be eligible for:

Certified Sustainable Building Advisor (CSBA) Exam: Students who successfully complete course requirements are eligible to take the CSBA on-line exam. If you pass it (with a 70% score), you will receive a certificate from The National Sustainable Building Advisor Program verifying that you have completed all requirements necessary for the CSBA designation. The exam is a three (3) hour, closed book exam, to be taken under proctored conditions set by NaSBAP. Students who do not pass the exam are eligible to retake the exam once free of charge.

SBA Certificate: At your final class, you will receive a certificate of competency to verify that you have completed all of the above course requirements.



Professional and Academic Credits:

- NaSBAP is a USGBC Approved Education Provider under the USGBC Education Provider Program (EPP). The SBA Course will count towards LEED Accredited Professional Maintenance Credits, required by the Green Building Certification Institute (GBCI), and is expected to count towards LEED AP Exam eligibility requirements. Please contact GBCI directly for more information.
- The SBA Course is approved through the American Institute of Architects (AIA) for 100 Learning Units (LUs). Members of other professional organizations are encouraged to contact a representative to learn if they accept AIA-approved courses for learning units.
- The SBA course does not provide academic course credits.

Required Reading

A detailed list of both reading and written assignments will be distributed to registered students, along with any special ordering instructions for the required resources.



NaSBAP Student Notes, a notebook is provided at the beginning of class with lecture outline notes, examples of green ratings systems and additional course details.



The Philosophy of Sustainable Design, by Jason McLennan



Sustainable Building Technical Manual. Chapter 5. Sustainable Site Design, by Nicholas T. Dines p. III.3 – III.12 - (PDF provided in Student Notebook).



The Northwest Green Home Primer, by Kathleen O'Brien.

Many additional recommended references and resources will be supplied throughout the year.

Types of Assignments

Individual Work

Students will be responsible for individual course preparation and synthesis work. These will include required and recommended reading, analysis/observation, and writing assignments. These assignments are due by the opening session of the unit for which you are preparing.



Team Work

Team work consists of ongoing project analysis that takes place over the course of several units. Early in the course, we will introduce a diverse set of project examples that will be assigned to groups for analysis throughout the remainder of the year.

Groups will evaluate projects and discuss possible strategies for improving sustainability in the course topic areas. Individual students will be responsible for completing research and preparing a paper summarizing results of this research. Finally, each of the project teams will make a 20-minute presentation on their project on the last day of class.

Graduates of the 2009/2010 Course

Claudia Day	Scott Larson	Helen Ubic
Lindsay Dofelmier	Ricci Myers	Brandon Victory
Lindsay Erb	Kathy O'Neill	Greg Neruda
Gunnar Gladics	Sharon Patterson	Susie Rogers
Gary Hanes	Tonja Phetmisay	Judi Kieffer
Katie Hergenrather	Justin Schwartz	
Linda Kelsey	Jane Suggs	

Student Testimonials

The information provided by the guest lecturers and course material is unparalleled in value.”
Justin Schwartz, Architect, Studio F3

“Almost everybody who wants to be useful in the future to their chosen profession should take a course like this!” – Susie Rogers, Architect

“The course content and depth of study is compelling. This is the only the ‘philosophy of sustainability’, but practical applications, now and especially for future generations.” – Greg Neruda, Idaho Green Audits

“I became a LEED AP a year ago just by self-studying. This course provided real examples of many of the concepts I had only read about. The class helped validate my LEED AP knowledge with more in-depth examples.” – Kathy O'Neill, E3 Business Solutions

“I loved coming to class each month for the interaction with like-minded folks and to listen to local area experts.” – Tonja Phetmisay, Idaho Power