

### LEED-CI Case Study Presentation Project

Due: Final PowerPoint Slide Presentation in PDF format, sent via e-mail to hikidak@newschool.edu by 11:59 PM, Sunday, May 14, 2017. You will receive zero ("0") points if it is submitted after this date and time.

100 Points (30% of your total grade for this class)

#### Assignment:

For this assignment you must put yourself in the role of a Sustainable Design Consultant for an Interior Design Project, and present your recommendations for sustainable design initiatives to implement for the project. You will apply the sustainable design knowledge that you have gained through the semester's readings, lectures and discussions.

Select a case study project to provide LEED-CI sustainable design initiatives consultation. The project can be from a previous or current studio, your current house or apartment, or a published project of your choice. If it is a published project the project should not have sustainability as its focus.

Note: this is not intended to be a redesign of the original project, this is meant to maintain the same design aesthetic and enrich the project by providing a more sustainable option. For example if the project has wood flooring, what type of wood flooring can you recommend to make the project as sustainable as it can be? What information do you need to provide to support your case? What initiatives are relevant and most impactful for the project you have selected? Is it more impactful to use certified wood or to pursue water efficiency for a project in the desert of Arizona?

Step 1: Print out the LEED-CI 2009 check list and select 4-6 initiatives that you would like to research and provide documentation towards. Please select at least one initiative from each of the following: Sustainable Sites; Water Efficiency; Energy & Atmosphere; Materials & Resources; and Indoor Environmental Quality. Review the relevant USGBC LEED worksheets for the initiatives you selected, and use them in developing your presentation.

Step 2: Research the initiatives that you have selected by reading the full-text version of the USGBC LEED for Commercial Interiors 2009 from the Blackboard. Download the LEED Submittal forms and use them to help document the LEED initiatives you are recommending. Provide baseline comparisons between the original design and your sustainable design recommendation if required. Provide a lifecycle cost analysis if relevant. What is the first cost of the original design? What is the first cost of your sustainable design recommendation? What are the lifecycle costs of the original design versus your sustainable design recommendation? Is there a cost savings, if so how much and when?

Step 3: Create a PowerPoint slide show describing the existing conditions or original design; and compare that to your sustainable design recommendation. Example: an existing refrigerator that is not Energy Star-rated replaced by an Energy Star-rated refrigerator. In this case, show the annual electrical savings in both kilowatts and dollars.

#### Credits for Review:

The following LEED-CI 2009 credits are recommended for consideration (select 4-6 from the following):

- Sustainable Sites, Credit 1, Option 1E, Heat-Island Reduction: Roof
- Sustainable Sites, Credit 2, Development Density and Community Connectivity

- Sustainable Sites, Credit 3.1, Alternative Transportation – Public Transportation Access
- Sustainable Sites, Credit 3.2, Alternative Transportation: Bicycle Storage & Changing Rooms
- Water Efficiency, Credit 1, Water Use Reduction
  - For Water Efficiency, please download and use the USGBC LEED Water Efficiency Template.
- Energy & Atmosphere, Credit 1.2 Optimize Energy Performance – Lighting Controls
- Energy & Atmosphere, Credit 1.4, Optimize Energy Performance – Equipment & Appliances
- Materials & Resources, Prerequisite 1, Storage and Collection of Recyclables
- Materials & Resources, Credit 3.1, Materials Reuse
- Materials & Resources, Credit 3.2, Materials Reuse – Furniture and Furnishings
- Materials & Resources, Credit 4, Recycled Content
- Materials & Resources, Credit 5, Regional Materials
- Materials & Resources, Credit 6, Rapidly Renewable Materials
- Materials & Resources, Credit 7, Certified Wood
- Indoor Environmental Quality, Credit 4.1, Low-Emitting Materials, Adhesives and Sealants
- Indoor Environmental Quality, Credit 4.2, Low-Emitting Materials, Paints and Coatings
- Indoor Environmental Quality, Credit 4.3, Low-Emitting Materials, Flooring Systems
- Indoor Environmental Quality, Credit 4.4, Low-Emitting Materials, Composite Wood and Agrifiber Product
- Indoor Environmental Quality, Credit 4.5, Low-Emitting Materials, Systems Furniture and Seating
- Indoor Environmental Quality, Credit 5, Indoor Chemical and Pollutant Source Control
- Indoor Environmental Quality, Credit 6.1, Controllability of Systems, Lighting
- Indoor Environmental Quality, Credit 6.2, Controllability of Systems, Thermal Control
- Indoor Environmental Quality, Credit 8.1, Daylight & Views – Daylight
- Indoor Environmental Quality, Credit 8.2, Daylight & Views – Views for Seated Spaces
- Innovation and Design Process Credit 1.1
- Regional Priority Credit 1.1