COURSE DESCRIPTION

Students are introduced to the key principles of green building, including current standards and considerations for regional factors. They are also introduced to the five components of green building that include energy, water, sustainable sites, materials and resources, and indoor environmental quality. The hands-on audit provides students with an opportunity to gather basic information about their school building and grounds to prepare them to do more in-depth audits related to energy, water, and more.

Lesson 1: What is Sustainability?

In this lesson, students explore the concept of sustainability by participating in a game in which they act as condo development owners collectively drawing from the same reservoir. They learn about the sustainability of natural cycles, and how human activity designed to meet present-day needs can interfere with those cycles and be unsustainable.

Lesson 2: People, Planet, Profit

In this lesson, students learn about the economic, environmental, and social aspects of sustainability. They discuss case studies of everyday decisions made by consumers and evaluate the sustainability of the possible outcomes.

Lesson 3: Human Habitation Over Time

In this lesson, students learn how typical living conditions for humans have changed over time. They examine a specific area of human habitation, and then share what they learned with other students in a jigsaw group.

Lesson 4: Humans and the Environment: A Story of Change

In this lesson, students learn how the relationship between humans and the environment has changed over time. They view a timeline of this change that ends with the development of the green building movement and calculate their personal ecological footprint as a way to assess their own relationship with the environment.

Lesson 5: Introduction to Green Building
In this lesson, students explore the concept of green building by completing a “green values spectrum” examining their beliefs and practices related to energy use, water use, land use, materials and resources, and indoor environmental quality.

Lesson 6: Challenges to Making Sustainable Choices

In this lesson, students examine a case study involving the construction of an offshore wind farm. They identify and analyze the varying perspectives represented in the case study and debate the pros and cons of this renewable energy project.

Lesson 7: Regional Factors in Green Building

In this lesson, students learn about the importance of regional differences in relation to green building practices. Specifically, they learn more about their own region and what key factors play a role in green building.

Lesson 8: Introduction to School Audit

In this lesson, students are introduced to the five main components of green building that are explored in this course. They also conduct an observational audit and survey to begin gathering information about their school in preparation for subsequent unit audits.