Architects and urban designers increasingly are working to produce sustainable buildings and cities, focusing on renewable sources of building materials and energy in order to build for the future. This summer, 13 students with the Gerald D. Hines College of Architecture at the University of Houston spent a month travelling through Europe as part of the Pan-American Studio, studying the past in preparation for their final project - a building designed to reflect the environment and culture of one of the cities they visited.

By Alexandra Zubrick

The study abroad program is built around three classes: “Pan-American Studio,” Latin-American Architecture and Urban Morphology, the study of the evolution of form within a built environment. Combined, these classes inform students about the historical cultural influence of architecture throughout the centuries, expose them to modern architectural trends and ultimately equip UH students with the necessary tools to enter the design world, with an eye towards creating a sustainable living space in the urban environment.

The Pan-American Studio was conceived as a means for studying the architectural history of Latin America by tracing its roots and influence back to medieval and renaissance Spain. But over the last six years, the program has shifted towards something that Longoria says can be more accurately described as Ibero-American; the studio seeks to expand to include European influences.

“Sustainable design accounts for everyday functionality, including heating, ventilation, and cooling-system efficiency, as well as renewable energy generation, such as solar panels to generate electricity and heat water. It also places an emphasis on building materials, incorporating recycled and second hand materials into the building plan and using low-impact materials with lower volatile organic compounds wherever possible. A lot of the current interest in studying the shapes of cities is to really evaluate which cities are more sustainable, and to learn from that and emphasize a more sustainable aspect of cities.”

“A lot of the current interest in studying the shapes of cities is to really evaluate which cities are more sustainable, and to learn from that and emphasize a more sustainable aspect of cities.”

“A lot of the current interest in studying the shapes of cities is to really evaluate which cities are more sustainable, and to learn from that and emphasize a more sustainable aspect of cities. Architecture students track the flow of urban morphology from the age of antiquity to sustainable design in the 21st century.”

Urban morphology is especially relevant in architecture of the 21st century, as architects are increasingly concerned about sustainability. Because the goal of sustainable design is to minimize the negative environmental impact of buildings by efficiency and moderation in the use of materials, energy and developmental space, energy efficiency has become a key component in design. Sustainable design accounts for everyday functionality, including heating, ventilation, and cooling-system efficiency, as well as renewable energy generation, such as solar panels to generate electricity and heat water. It also places an emphasis on building materials, incorporating recycled and second hand materials into the building plan and using low-impact materials with lower volatile organic compounds wherever possible.