

Integrating Sustainability into ARCH 270 *Design in Practice*

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Learning objectives

As a result of participating in the course, students will be able to:

- articulate how this course has invited them to think in new ways about their lives, the objects they utilize in daily life, the environments they inhabit, their role as users of designed environments, **their place in an ecosystem, their responsibilities as an occupant of our planet**, their potential future roles as clients, and, perhaps, the possibility of a career in architecture.
- recognize how the architectural design process affects or is affected by social, cultural, environmental, economic, and ethical dimensions, with a particular focus on **sustainability**.

Project

Project #2 is the design of a Sustainable Dormitory for the University of Maryland. A speaker will introduce students to the many ways that the University of Maryland addresses sustainability on campus. Students will research various aspects of sustainability, present their findings to the class as a whole, and apply their new knowledge to a design project, a dormitory for the University of Maryland campus.

Assignment

- In the Sustainability Research assignment, student teams research the major issues in dormitory design through one of the following “sustainability lenses” – 1) ecosystems and biodiversity, 2) renewable and non-renewable resources, 3) biomimicry, 4) social justice, 5) water quality and quantity, 6) global warming and climate change, 7) environmental stewardship, 8) cradle-to-cradle, and 9) triple bottom line.
- Student teams present their research to the class.
- Student teams create Design Proposals that incorporate sustainable concepts learned in the lecture, in their own research, and from their classmates' presentations. Students present these concepts in a Sustainability Diagram (see example illustrated in syllabus.)

Assessment of Student Learning

Student learning in both the Sustainability Research assignment and the Design Proposal will be assessed with rubrics. In the Sustainability Research assignment, the rubric will assess the students' understanding of their assigned “sustainability lens,” the breadth of their research in this area, the depth of their understanding of the relevant concepts, and their understanding of the concepts within the particular context. In the Design Proposal, the assessment will focus upon the Sustainability Diagram, assessing students' ability to apply their knowledge they gained in the research phase to a new context.