DESCRIPTION

This course is organized around the question: How can we best leverage our skills as designers and artists to create a better future?

To answer the above question students will develop exemplary projects that challenge assumptions, push the boundaries of design practice, tackle complex problems with effective solutions, and leverage their resources and skills for the greatest impact. The semester will culminate in a public exhibition of objects, events, performances, or experiences. We will work in groups throughout the semester to build a common base of knowledge from which final projects will emerge. Final projects can be done independently or as the product of small groups.

To help you in the design process we will conduct several workshops in the studio and introduce (or reinforce) different design methodologies. We will also research the work of designers and artists who have built practices to answer the core question above.

EXAMPLE PROJECT: AG-Sustainopoly
DEWANYE GOLDMON,
LANDSCAPE ARCHITECTURE

When I started conducting research topic, “Finding Sustainable Opportunities and Bridging Communication for All Farmers,” at the beginning of the semester, I did not expect to come up with the idea of creating an interactive game that would reveal the complexities of sustainable agriculture. While doing the research, I found that agriculture is a mixture of decision-making and chance. It reminded me of the game Monopoly. The game, “AG-Sustainopoly,” is designed to show the barriers that farmers face in the field, the frustrations that result from failures to communicate new developments with landowners, and available resources that farmers can use for a raining day. Some of the factors that can be attributed to luck (or bad luck) are shown in the cards (benefit/not, chance) because that is the nature of farming. The cards ended up being one of the hardest parts because the information is very specific and can be difficult to understand. All in all, I thought the game idea was the best way to convey the message to people with varying levels of familiarity with agriculture.
EXAMPLE PROJECT: The Power Scale
DEWANYE GOLDMON,
LANDSCAPE ARCHITECTURE

The Power Scale is a project that consists of a bicycle-powered generator and a scale. As you pedal the bicycle, the generator outputs a certain amount Watts that will vary depending on how hard you pedal. The scale is then a way to visualize that power, similar to the hammer game at a carnival that shows how “strong” a person is (ignoring the system rigging to make it harder to win). The scale has 4 ranges that can power different electronics: Range 1 (0-50 W) covers charging phones, tablets, clocks, and most light bulbs; Range 2 (50-100W) powers most laptops, and small TVs; Range 3 (100-150W) is capable of powering ceiling fans, printers, and game consoles; Range 4 (150-200W) covers standard desktop computers and large TVs. This project is focused on the scale of energy consumption. In the typical household, this 0-200W range covers the low end of the scale, as things like coffee makers (1000W), hair dryers (1500W), and electric water heaters (4500W) are much higher on the scale. All of these items and systems in a household add up, making the typical household’s consumption about 900kWh/month. To simply produce power as fast as that typical household consumes it, you would have to be at ~1250 W on the scale. This is how the project gets people thinking about the scale of their own energy consumption: it is very hard to even maintain 200W production with the bicycle generator, so trying to even momentarily keep up with the typical household consumption seems impossible. The next thought then is trying to keep up with the entire city’s consumption, which is exactly what power plants have to do. Perhaps we should focus less on complaining about the negative environmental consequences of inefficient power plants (although, that is an important issue), but instead focus more on reducing our own power consumption.