Opened in 2018, the new Science Center is a state-of-the-art facility for student and faculty learning and research. The Science Center was designed with sustainability as a top priority; science buildings are often among the most energy- and resource-intensive facilities on college and university campuses. Amherst’s old science center, Merrill, accounted for one-third of the campus’ energy use! The new Science Center is intended to use about 75% less energy than the average science building.

The Science Center was constructed with the principles of biophilic design in mind; the building is meant to integrate with the surrounding natural environment. Features such as a four-story wall of energy-efficient windows provide views of campus, natural ventilation, and abundant natural light. The Science Center also features a green roof, a solar array, rainwater capture, and stormwater filtration.

Much of the campus’ water runs through the Science Center, where energy from heating and cooling can be reclaimed to heat campus water supplies. The Science Center was designed with the college’s Climate Action Plan in mind, and all of the heating and cooling systems are ready to be converted to low-temperature hot water.

The Science Center also prioritizes social sustainability; it is meant to serve as an open, inviting hub for the campus community, with a cafe, social spaces, and lots of glass.

Ideas for Class

- Analyze the Science Center’s energy and water use.
- Take a tour of the underbelly of the center to see how the building works! You will be amazed.
- Discuss and evaluate the college’s efforts to make STEM more accessible through programs like HSTEM
- Study the campus’s water and energy systems and assess how they will need to change under the Climate Action Plan
- Study ways to make scientific research more sustainable - why are science buildings so energy intensive? What is the work that drives this?
- Study the lifecycle of lab materials - how many are single use? How many are hazardous? Where do they go? Are there alternatives?

Who to contact:
Jess Martin, Administrative Director of the Science Center, jemartin@amherst.edu