

Honors in Sustainability Seminar

The Honors in Sustainability Seminar is for upper class students who have demonstrated exceptional ability and interest in sustainability -- the academic intersection of the sciences, humanities (particularly economics), and leadership -- and who are willing to pursue a higher level of achievement. Students must demonstrate their abilities by performing well in key courses (A- average or a B in an AP). Exceptions to a key course requirement may be made if the student demonstrates particular interest through involvement in relevant extra-curricular activities. Alternatively, students may write a short essay describing their interest in sustainability for enrollment consideration.

Key Courses

1. Physics
2. Chemistry
3. Biology
4. Other Lab Science
5. One of the following:
 - a. Economics
 - b. Entrepreneurial Studies 1
 - c. Engineering 1 or Explorations in Engineering
 - d. Behavioral Economics
 - e. Statistics 2

Course Description

Honors in Sustainability students will learn about sustainability principles and apply this thinking to real world challenges. Students will independently use their learning to improve the sustainability of an energy/food/natural resource system in our community. More specifically, after exploring how these systems currently function in our community, students will:

- 1) select a specific aspect of one of these systems (for example, how might the new dorm sustainably manage its storm water);
- 2) explore alternatives to the status quo (green infrastructure options green roofs, pervious pavement, cisterns, bioswales, rain gardens, etc);
- 3) develop a preferred alternative (incorporating economic, human and environmental data);
- 4) present and communicate the proposal to a panel of reviewers and receive feedback;
- 5) build a working model (design and build a rain garden; install a modular green roof);
- 6) test, evaluate, refine;
- 7) make final presentation to faculty/student/staff panel with recommendations for study/action.

Examples of recent student projects include: 1) managing Culver's \$130k Green Revolving Fund; 2) analyzing Culver's campus for locating solar panels and green roofs; 3) evaluating effectiveness of various pervious pavement systems; 4) evaluating the environmental footprint of a Dining Hall meal; 5) creating a sustainability curricular unit for Leadership courses; and 6) evaluating and influencing water use in Culver dorms.