

## Honors in Sustainability Seminar

The Honors in Sustainability Seminar is for students who have demonstrated exceptional ability and interest in environmental 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 the prerequisite courses (A- average or a B in an AP). Exceptions to a prerequisite 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.

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. *The course is a two term solid.*

### Prerequisites

- Physics – Two Terms
- Chemistry – One Term
- Biology – One Term
- Other Lab Science – Two Terms
- At least one of the following:
  - Economics
  - Entrepreneurial Studies 1
  - Engineering 1 or Explorations in Engineering
  - Behavioral Economics
  - Statistics 2

### Honors Project

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.
- Other possible areas of exploration could include: evaluate carbon pricing mechanisms for Culver; develop microgrid options for our campus; examine food systems at Culver; implement and manage a Green Revolving Fund; using principles of natural resource economics, develop an estimate of the value of Lake Maxinkuckee and explore implications.