What is SCIE 420?
Are you interested in sustainability? Are you curious how the courses you have taken during your education might be of use? This course is designed to help you make sense of the multitude of thoughts, approaches and solutions that you have been exposed to, encourage the development of your own understanding of sustainability, and facilitate the application of that understanding to a real problem in the community.

There are two components to this course: (1) lecture and discussion and (2) a community project. The concepts covered in the lecture and discussion component of this course include the principles of systems thinking, the uses and limitations of the three pillar model of sustainability (ecological, economic, and social), and the causes and implications of global environmental change.

During the community based experiential learning (CBEL) component of the course you will undertake a project with community partners. The intention of the CBEL project component is to bring people together to work on sustainability, enrich the learning experience by allowing you to explore sustainability theory in the real world, and allow you to contribute your knowledge and skills to address community-identified priorities and make a positive impact.

Who can take SCIE 420?
This course is open to Year 3 or Year 4 undergraduate students from any faculty. However, space is limited due to the project based nature of the course.

How will you be assessed?
Essays, projects, presentations and quizzes.

What will you learn?
You will work with students and professors to understand how systems thinking can further your current understanding of sustainability, how to think about the pillars of sustainability without losing sight of the interconnected whole, and how to communicate your ideas orally and in writing to diverse audiences. Students will also get hands-on experience working with a community partner on some aspects of sustainability.

Project Examples:
- Develop plans for green infrastructure projects in the False Creek Flats
- Engage the public on reducing red meat consumption for a more sustainable diet
- Help build a sustainability movement in Vancouver’s fashion industry
- Research and shape an emerging Biodiversity Strategy at UBC
- Create a public policy recommendation for more sustainable laundry practices.
- Work with the City of Vancouver to engage community leaders on the City of Vancouver’s Greenest City Initiative

Course topics:
- What do we mean by complex systems? If they’re so complex, how can we understand them?
- What does systems thinking have to do with sustainability?
- Does the “3 pillars” model of sustainability make sense? When does it work and when does it fail? How do we value things that are difficult to monetize?
- What does sustainability look like in a Canadian context? What can I do to help secure a more sustainable future?

For more information, please contact Dr. Gunilla Oberg (goberg@ires.ubc.ca)