



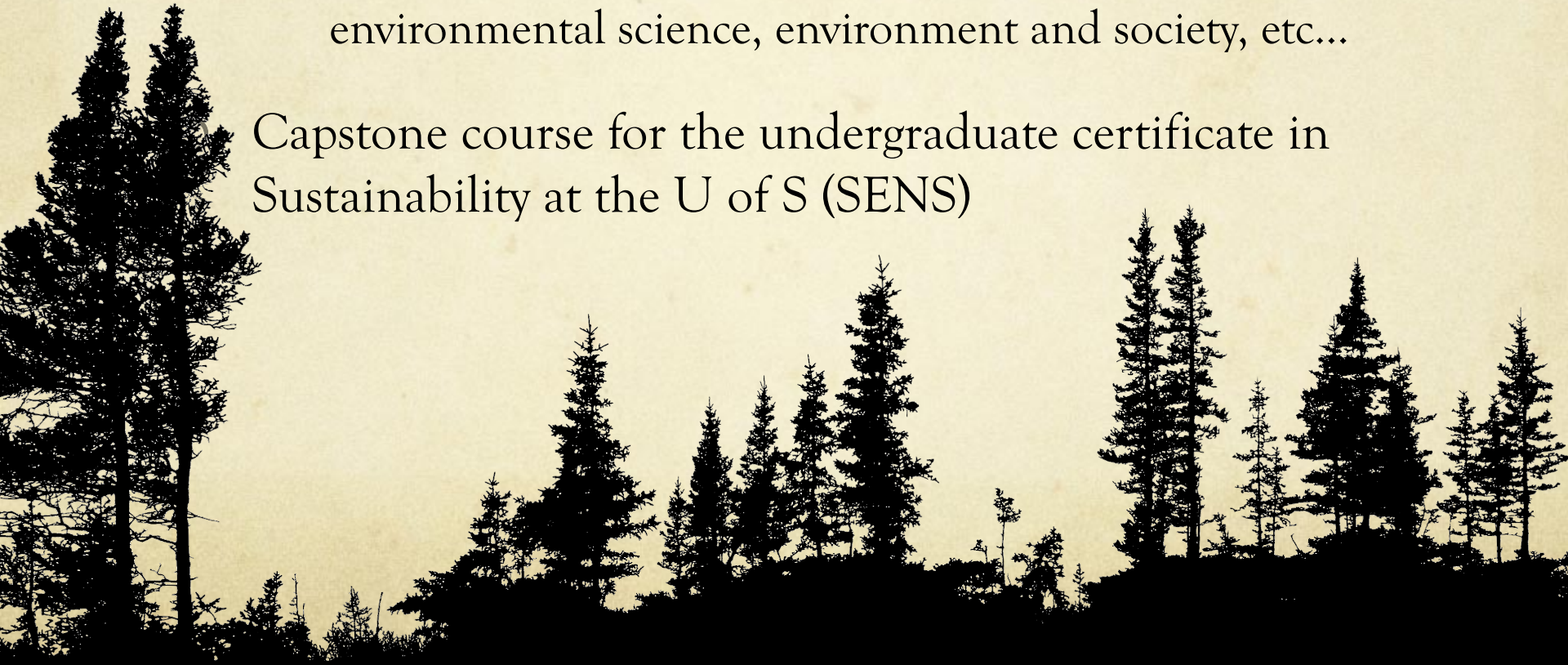
An Overview of ENVIS 401: Sustainability in Action

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Intro

- ENVS 401: Sustainability in Action
 - 3rd and 4th year students
 - Pursuing degrees in renewable resource management, environmental science, environment and society, etc...

Capstone course for the undergraduate certificate in Sustainability at the U of S (SENS)



Learning Outcomes

- Upon completing this class, students will be able to:
 - Critically assess information, pertaining to sustainability, from multiple, sometimes conflicting sources.
 - Formulate a definition of sustainability and articulate their own views on topics pertaining to sustainability.
 - Demonstrate skills in team-based research and problem-solving.
 - Design and implement a practical solution to current sustainability issues in Saskatoon or within our campus community.
 - Effectively communicate and disseminate knowledge in group, and in the community.
 - Build on past developments and initiatives.
 - Demonstrate an understanding of research ethics as it pertains to human subjects.

The Challenge

- In this class, we issue a simple challenge to the students:
 - To make our campus, or greater community more sustainable.



Course Structure

- First two and a half weeks (5 lectures) are devoted to...
 - Mini lectures, activities, and assignments allowing students to:
 - Develop a common language surrounding sustainability
 - Reflect on sustainability issues of concern to them
 - Formalize their own definition of sustainability
 - Additionally, students are introduced to concepts relating to ethics, systems thinking, and project planning.
 - We also discuss past projects, some of which carry a longer legacy.

Course Structure

Continued...

- Students ultimately identify a sustainability issue that they are to address in groups or as individuals.
- By week two, we start to play around with some early groupings. Students begin to share their ideas with their peers on day two (the earlier the better).
- By week three they are working in their groups
 - Group sizes have ranged from 1 – 28
 - This year, the largest groups were 7 strong
 - More on group dynamics a bit later

Our Approach

- Completely Open-Inquiry
 - It is important that student initiatives are all their own.
 - Students take ownership over their initiatives. They gain vested interest and often take their work to the next level.
 - Very early on in the term, we take on the role of facilitators rather than instructors.
 - It was important to us to ensure the students regarded us as a part of their team. We encouraged them to invite us to stakeholder meetings, include us in email threads, and reach out to us for help with anything and everything.

The Struggle: For Students

- Lack of Structure
 - Conditioned in the way they learn, often taken by the hand and told exactly what is expected of them.
- Careful of Rabbit Holes (Depending on the initiative)
 - May be necessary for some students (learning styles)
- Group Dynamics
- Group Size
 - Can be both a strength and weakness
 - Important for larger groups to divide and conquer

The Struggle: For Instructors

- Relinquish Control
- Tempting to set boundaries or construct a sandbox
 - Less strings attached = more freedom for the students to explore and tackle their issue of concern.
- Tempting to over plan
 - The beginning of term is a bit more structured. Beyond that, we deliver brief mini-lectures, based on student need.
- When in doubt, get out of the students way.

Requirements For Instructors

- Large Teaching Team:
 - Personality Traits:
 - Approachable
 - Supportive / Constructive
 - Flexible
- The Room: Traditional lecture hall will not suffice.
 - Having a second “Breakout Room” is also an asset
- Ready to take it as far as the students are willing.
 - We are still engaged with groups from this year and from years past, as their initiatives continue to progress, evolve, and bear fruit.

Our (Hidden Agenda) Goals

- That the students forget about the grade
- That the project reaches beyond the bounds of the classroom (far reaching impact).
- That the students engage with a diverse set of stakeholders.
- That the students leave with a diverse set interpersonal and life skills.

The Results

- Snackbelt for Sustainability (2019)
 - <https://globalnews.ca/news/5191264/edible-shelterbelt-saskatoon/>
 - <https://www.cbc.ca/listen/live-radio/1-88-saskatoon-morning/clip/15691663-university-students-raise-funds-to-plant-fruit-trees-along-meewasin-trail>
- Farm the Sun with US (2018)
 - <http://www.ecofriendlysask.ca/2018/03/here-comes-sun.html?fbclid=IwAR3-Ce8hozo5GALBh5McqKpc8KXz3lAtU14bL-MCz9w5IdW5Ot4YHlZbMUI>
 - <https://www.youtube.com/watch?v=awvaYkfGVNU>
 - <https://thesheaf.com/2019/04/09/student-group-to-start-a-solar-farm-on-the-memorial-union-building-roof/>

The Result

- “I have never had a class like his, and I definitely recommend it to anyone throughout the University.”
- “I found this class to be one of my favorites. I really enjoyed the freedom of being able to learn some valuable points in the lectures but being able to go out and do our project hands on was great.”
- “This was my favorite class I have taken at the U of S.”
- “Best course I've taken in my 4 years here at the U of S. The instructors really work with the students to get the most out of this course and it shows! All of the students are engaged in the class and I know that I have taken away a lot of learned materials directly from this class that will help me in my future endeavors.”
- “This was the best class ever! It helped teach students how to use their skills and try and work towards figuring out a problem on campus or elsewhere and try and make a difference for it. Not only that by Colin was hugely enthusiastic about the projects and making them the best they could ever be. He really encouraged students to take things to the next level to try and amp up their projects also. There was never a moment that he was unavailable to help someone if they needed it.”

Thank You!

- From the ENVS 401 (2019) Teaching Team
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 - Dr. James Robson
 - Dr. Vladimir Kricsfalussy
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