

SUST401: Sustainability Research Methods Winter 2020

Course Title: SUST401 Sustainability Research Methods				
Course Number	Sust 401			
Pre/Co-	Sust 201			
Requisites				
Instructor Name	Getachew Assefa	Instructor	gassefa@ucalgary.ca	
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Office Location	PF 3191			
	PF 3165			
Class Dates	Thursdays			
Class Times	15:30 – 18:20			
Class Location	PF 3160			

Course Information / Description of the Course

Global challenges such as climate change result in global sustainability externalities that are best addressed by global actions. The alternative to 'think globally and act locally' has thus been propagated as 'think globally, act globally'. The transition from the millennium development goals (MDGs) that focused on developing countries to the sustainable development goals (SDGs) that target all countries recognizes the fact that when it comes to sustainability, all countries are developing countries.

Local lives rely daily on global resources and services, and the stresses and impacts of local consumptions are felt disproportionately around the world. Our measure of progress in sustainability should, thus, go beyond localized incremental changes. It should be seen against the environmental limits of the planet and aim at unlocking long term systemic changes and globally act away from trajectories that lead to dramatically overshoot the planetary limits.

This course will therefore have a global and long-term view of sustainability.

It gives a deeper understanding of global sustainability focusing on three main parts:



(1) understanding sustainability: where we explore the foundations of global sustainability covering models, theories and related concepts; (2) measuring and researching sustainability: where we look at global sustainability benchmarks and assessment tools and frameworks in addition to understanding the process of sustainability research (3) doing sustainability: where we look at sustainability cases of global significance at a nation, industry and company level.

The course delivery includes Lectures, group discussions, guest lectures, individual reflections and group project work

i) Lectures

The lectures will provide a theoretical background on global sustainability covering, among others, the following: Capitals/models of sustainability, theoretical concepts, perspectives and views, planetary boundaries, natural step, resilience, industrial ecology, circular economy, global sustainability assessment reports, tools and frameworks, SDGs and related indicators, sustainability research process and challenges, cases on doing sustainability, Sustainability and policy, sustainability and businesses

ii) Group discussions and presentations

The class will be divided into groups where in most classes, students will spend the second part of the class on group discussions and presentations. Students will be given an in-class activity with specific questions related to the lecture given to work on in groups. Instructors will assign readings for each lecture. Students are expected to use these readings in their discussions and to actively participate in discussions and presentations.

iii) Guest lectures

There will be one to two guest lectures along the course. These lectures will provide perspectives on sustainability.

iv) Individual reflections

Classes are designed to be as engaging as possible with the use of Top Hat platform for anonymous individual reflections that will prepare them for the in-class activity. Students are asked to submit individually a summary of reflections for each block of the course. These individual reflections present their opinion on the questions and all class answers while building connections with lecture content and discussions (criticizing, analyzing when possible).

v) Group project submission of a global sustainability challenge

Using the same groups in class, students will be asked to pick a global sustainability challenge and analyze in a systematic way. Specific guidelines are given in a separate document. Students will be given time during class to work on project parts. Students are supposed to present their work orally first which will give them the opportunity to receive feedback from instructors that will help them to improve the final document submission.

Learning Resources

Required readings, textbooks and learning materials:

peer-review journal articles relevant for each component will be provided (refer to a separate **reading list**)

Technology requirements: D2L and Top Hat will be used as course platforms

Course Learning Outcomes

At the end of this course, students will be able to:

- 1. Explain and critique the **foundations of sustainability** as well as the different existing perspectives and views on sustainability
- 2. Learn to apply **concepts of sustainability** in global challenges and opportunities of sustainable development
- 3. Describe and explain the different **methods**, tools and frameworks available to **measure and research global sustainability** in relation to foundations of sustainability
- 4. Demonstrate an understanding of **sustainability research processes** including data collection and analysis
- 5. Analyze sustainability problems at different scales using a **systematic perspective** and apply a variety of methods on real world cases

Assessment Components				
Assessment	Description	Weight	Aligned	Changes
Method			Course	
			Learning	
			Outcome	
Summary of	Individual	15%	All	No change
reflections	submission of			
	three summaries			
	of reflections.			
	A summary of			
	reflections			
	questions and all			
	class answers we			
	had in class			
	while building			
	connections with			
	lecture content			

	and discussion in			
Group discussion participation and presentations	class This is an opportunity for students to explain, analyze, criticize and/or apply sustainability concepts, models, tools, methods introduced in lectures (in the second part of	20%	All	No change
	most lectures)			
Global sustainability challenge	Individual			Replaced with individual assignments
project	Each group will analyze a sustainability problem in a systematic way (please refer to project guidelines for details)	35% (oral presentations 15%, final project submission 20%)	All	Weight: 35% on written Or 20% on written and 15% on Zoom presentation
Test 1	Test 1 will cover the first block of	10%	All	No change: already done
Test 2	lectures: "Understanding sustainability" Test 2 will cover the second block of lectures "Measuring and researching sustainability" The tests will provide the opportunity for students to review their understanding and learning of	20%		Replaced by take- home exam

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Assessment and Evaluation Information

Attendance and Participation Expectations: all students are expected to attend and participate in group discussions and working on group project.

Guidelines for Submitting Assignments: assignment should be submitted before the end of the day (before midnight) of the deadline date through D2L Dropbox.

Final Examinations: There is no final examination while there will be two quizzes that make up 30% of the overall evaluation of the course.

Expectations for Writing (https://www.ucalgary.ca/pubs/calendar/current/e-2.html): written submissions should have a clear structure using headings, citation of sources when appropriate, clearly showing the names of group members written in single spaced 12pts times new roman or equivalents.

Late Assignments: 1 mark per day late will deducted for each late submission of assignment.

Criteria that must be met to pass: Students are required to pass all course components to successfully pass the course.

Grading Scale

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Grade	Grade Point Value	Percent	Description
A+	4.00	92.5-100	Outstanding
A	4.00	85-92.49	Excellent - superior performance showing comprehensive understanding of the subject matter
A-	3.70	80-84.99	Very good performance
B+	3.30	76-79.99	
В	3.00	73-75.99	Good – clearly above average performance with knowledge of subject matter generally complete
B-	2.70	70-72.99	
C+	2.30	66-69.99	

С	2.00	63-65.99	Satisfactory – basic understanding of the subject matter
C-	1.70	60-62.99	Receipt of a grade point average of 1.70 may not be sufficient for promotion or graduation (see individual undergraduate faculty regulations)
D+	1.30	56-59.99	
D	1.00	50-55.99	Minimal pass – marginal performance
F	0.00	0-49.99	Fail – unsatisfactory performance or failure to meet course requirements

	Topic Areas & Detailed Class Schedule			
Course Schedule Date	Topic	Activity	Assignments/Due Dates/Location	
January 16	Introduction of course Sustainability: different types of capitals, models, theoretical concepts and perspectives	Reflection question 1 + Group activity 1		
January 23	Planetary boundaries, natural step + Sustainability and related concepts	Reflection question 2 + Group activity 2 + Project time		
January 30	Global sustainability assessment: indicator systems	Reflection question 3 + Group activity 3	Submission of summary reflection 1	
February 6	Careers in Sustainability event	Required attendance		
February 13	SDGs and related indicators and assessment	Reflection question 4 + Group activity 4		
February 20	Mid-term break			
February 27	Test 1 + Sustainability research: process, challenges and data collection	Project time		
March 5	Sustainability speaker series event	Required attendance	Submission of summary reflection 2	

March 12	Guest lecture: Donald Jantz (Sustainable Finance)	Project time	
March 19		Group	ZOOM
		discussions +	
		Q&A	
March 26	Cases of doing	Reflection	ZOOM
	sustainability (at	question 5 +	
	nation, city and	Group activity 5	
	industry level)		
April 2	Sustainability and	Reflection	ZOOM
	businesses + policy	question 6 +	
		Group activity 6	
April 9	Projects' oral	Project time	Submission of summary
	presentations		reflection 3

Media and Recording in Learning Environments

Part 1

University Calendar: https://www.ucalgary.ca/pubs/calendar/current/e-6.html
Recording of lectures (other than audio recordings that are pre-arranged as part of an authorized accommodation) is not permitted.

Students may not record any portion of a lecture, class discussion or course-related learning activity without the prior and explicit written permission of the course instructor or authorization from Student Accessibility Services. For any other use, whether by duplication, transcription, publication, sale or transfer of recordings, written approval must be obtained from the instructor for the specific use proposed. Any use other than that described above constitutes academic misconduct and may result in suspension or expulsion.

Part 2

The instructor may use media recordings to capture the delivery of a lecture.

The instructor will notify all students and guests in the class that the event is being recorded. If a student or guest wants to take steps to protect privacy, and does not want to be recorded, the instructor will provide the individual (s) with an alternative means of participating and asking questions (e.g., passing written notes with questions). Students cannot be penalized for choosing not to be recorded in situations where participation is part of the course. Students must be offered other ways of earning participation credit that do not involve recording.

Any video-recording would be intended to only capture the instructor and the front of the classroom. Students/other participants would not necessarily be visible on video recordings.

University of Calgary Policies and Supports

ACADEMIC ACCOMMODATION

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor. The full policy on Student Accommodations is available at

http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf.

ACADEMIC MISCONDUCT

Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Most commonly plagiarism exists when: (a) the work submitted or presented was done, in whole or in part, by an individual other than the one submitting or presenting the work, (b) parts of the work are taken from another source without reference to the original author, (c) the whole work (e.g., an essay) is copied from another source, and/or, (d) a student submits or presents work in one course which has also been submitted in another course (although it may be completely original with that student) without the knowledge of or prior agreement of the instructor involved. While it is recognized that scholarly work often involves reference to the ideas, data and conclusions of other scholars, intellectual honesty requires that such references be explicitly and clearly noted. Plagiarism is an extremely serious academic offence. Any suspicion of plagiarism will be reported to the Dean, and dealt with as per the regulations in the University of Calgary Graduate Calendar.

For information on academic misconduct and its consequences, please see the University of Calgary Calendar at http://www.ucalgary.ca/pubs/calendar/current/k.html

COPYRIGHT LEGISLATION:

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf) and requirements of the copyright act (https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY

Student information will be collected in accordance with typical (or usual) classroom practice. Students' assignments will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary.

UNIVERSITY STUDENT APPEALS OFFICE: If a student has a concern about the course, academic matter, or a grade that they have been assigned, they must first communicate this concern with the instructor. If the concern cannot be resolved with the instructor, the

student can proceed with an academic appeal, which normally begins with the Faculty. https://ucalgary.ca/student-appeals/	
More student support and resources (e.g. safety and wellness) can be found here: https://www.ucalgary.ca/registrar/registration/course-outlines	