

Course Number	SUST 401	JST 401 Classroom		ZOOM
Course Name	Sustainability Research Methods			
Pre/Co-Requisites				
Instructor	Dr. Getachew Assefa Dr. Marwa Hannouf	Office Hours/Location		By appointment
	Email: gassefa@ucalgary.ca mhannouf@ucalgary.ca		Phone: 403 616 1527 587 969 6440	
Class Dates	Mandatory real-time Zoom classes: Fridays, January 10 – April 12, 11:00am to 1:50pm			
Instructor Email Policy	Please note that all course communications must occur through your @ucalgary email, and we will respond to emails sent via student's @ucalgary emails within 48 hours.			
Name and Email of Teaching Assistant(s)				

# Course Description

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. For guidance in discussions, students will be provided with a Word document or PowerPoint presentation with guidelines for use and submission through D2L.

### iii) Guest lectures

There will be two guest lectures in the course. These lectures will provide perspectives on sustainability: one in relation to sustainable finance and another in relation to social aspects of sustainability.

#### iv) Individual reflections

Classes are designed to be as engaging as possible with the use of Menti platform for anonymous individual reflections that will prepare student for the break-out group activity. Students are asked to submit individually a summary of reflections for each

block of the course. These individual reflections provide an opportunity for students to present their opinion on the questions and all class answers building on connections to lecture content and discussions. Critical analysis is an important aspect of this exercise.

## v) Group project submission of a global sustainability challenge

Using the same groups used for break-out discussions, students will be assigned randomly a global sustainability challenge for a systematic analysis that reflects the understanding, measuring and doing elements necessary to tackle the challenge. Specific guidelines are given in a separate document. Students will be given time during class to work on different aspects of the project. 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 report submission.

**Course Hours:** 3 units; (2-1Tutorial)

Calendar description: <a href="https://www.ucalgary.ca/pubs/calendar/current/sustainability-studies-sust.html#42744">https://www.ucalgary.ca/pubs/calendar/current/sustainability-studies-sust.html#42744</a>)

# Online Delivery (If applicable)

This course will take place **online** via Desire2Learn (D2L) and Zoom. Learning in this course will occur synchronous on Zoom as per the scheduled time included in this course outline during the dates and times already timetabled for this course. Asynchronous learning includes watching reviewing resources that will be posted on the D2L site of the course. Students are required to take part in both synchronous and asynchronous learning. If unable to participate live due to unforeseen circumstances, inform the instructor in advance to work out an alternative participation activity.

# **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

# **Learning Resources**

Required readings, textbooks and learning materials:

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

# Technology requirements (D2L etc.):

- D2L and Menti will be used as course platforms
- Most current laptops will have a built-in or external webcam, built-in or external speaker and microphone.
- Broadband internet connection

# Additional Classroom Conduct and Related Information

### Guidelines for Zoom Sessions in Online Classes

Students are expected to participate actively in all Zoom sessions and to turn on their webcam. Please join our class in a quiet space that will allow you to be fully present and engaged in the Zoom sessions. Students must behave in a professional manner during the session. Students, employees, and academic staff are also expected to demonstrate behaviour in class that promotes and maintains a positive and productive learning environment.

**Assessment Components** 

Assessment Method	Description	Weight	Aligned Course Learning Outcome
Quizzes	6 quizzes: 5 best for each student will be taken for the final grade	20%	All
Summary of reflections	Individual 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	15%	All

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	and discussion in		
	class		
Group discussion	This is an	20%	All
participation and	opportunity for		
presentations	students to explain,		
	analyze, criticize		
	and/or apply		
	sustainability		
	concepts, models,		
	tools, methods		
	introduced in		
	lectures (in the		
	second part of most		
	lectures)		
Global sustainability	Each group will	35% (oral	All
challenge group	analyze a	presentations 10%,	
project	sustainability	final project report	
	problem in a	submission 25%)	
	systematic way		
	(please refer to		
	project guidelines for		
	details)		
Test – covering		10%	All
whole course – Fill in			
the blanks (short			
answers)			

**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 quizzes and a test.

**Expectations for Writing** (<a href="https://www.ucalgary.ca/pubs/calendar/current/e-2.html">https://www.ucalgary.ca/pubs/calendar/current/e-2.html</a>): 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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	<b>Grade Point</b>		
Grade	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
В-	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 undergraduat 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

Course	Topic	Activity	Assignments/Due
Schedule Date			Dates
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January 14  Understanding Sustainability	Introduction of course  Lecture 1: Sustainability: different types of capitals, models, theoretical concepts and perspectives	Reflection question 1 + Group activity 1	
January 21  Understanding Sustainability	Lecture 2: Planetary boundaries, natural step + Sustainability and related concepts	Reflection question 2 + Group activity 2	• Quiz 1 – Lecture 1
January 28	Sustainability research lecture: process, challenges and data collection	Project time	<ul> <li>Submission of summary reflection 1 – Lectures 1-2</li> <li>Quiz 2 – Lecture 2</li> </ul>
February 4  Measuring & Researching Sustainability	Lecture 3: Global sustainability assessment: indicator systems	Reflection question 3 + Group activity 3	
February 11  Measuring & Researching Sustainability	Lecture 4: SDGs and related indicators and assessment: measuring progress	Project time Reflection question 4 + Group activity 4	• Quiz 3 – Lecture 3
February 18	Guest lecture 1: TBD		• Quiz 4 – Lecture 4
February 25	Mid-term break		
March 4	Projects' oral presentations	Project time	

March 11  Doing Sustainability	Lecture 5: Doing sustainability: nation, city and company level	Reflection question 5 + Group activity 5	• Submission of summary reflection 2 – Lectures 3-4
March 18	Guest lecture 2: Donald Jantz (Sustainable Finance)	Project time	• Quiz 5 – Lecture 5
March 25  Doing Sustainability	Lecture 6: Doing sustainability: policy level	Reflection question 6 + Group activity 6	
April 1	Guest lecture 3: TBD		<ul> <li>Submission of summary reflection 3 –         Lectures 5-6</li> <li>Quiz 6 – Lecture 6</li> </ul>
April 8	Guest lecture 4: TBD Test	Project time	

# **Guidelines for Zoom Sessions**

Zoom is a video conferencing program that will allow us to meet at specific times for a "live" video conference, so that we can have the opportunity to meet each other virtually and discuss relevant course topics as a learning community.

To help ensure Zoom sessions are private, do not share the Zoom link or password with others, or on any social media platforms. Zoom links and passwords are only intended for students registered in the course. Zoom recordings and materials presented in Zoom, including any teaching materials, must not be shared, distributed or published without the instructor's permission.

The use of video conferencing programs relies on participants to act ethically, honestly and with integrity; and in accordance with the principles of fairness, good faith, and respect (as per the <a href="Code of Conduct">Code of Conduct</a>). When entering Zoom or other video conferencing sessions (such as MS Teams), you play a role in helping create an effective, safe and respectful learning environment. Please be mindful of how your behaviour in these sessions may affect others. Participants are required to use names officially associated with their UCID (legal or preferred names listed in the Student Centre) when engaging in these activities.

Instructors/moderators can remove those whose names do not appear on class rosters. Non-compliance may be investigated under relevant University of Calgary conduct policies (e.g <a href="Student Non-Academic Misconduct Policy">Student Non-Academic Misconduct Policy</a>). If participants have difficulties complying with this requirement, they should email the instructor of the class explaining why, so the instructor may consider whether to grant an exception, and on what terms. For more information on how to get the most out of your zoom sessions visit: <a href="https://elearn.ucalgary.ca/guidelines-for-zoom/">https://elearn.ucalgary.ca/guidelines-for-zoom/</a>

If you are unable to attend a Zoom session, please contact your instructor in advance to arrange an alternative activity for the missed session (e.g., to review the recorded session). Please be prepared, as best as you are able, to join class in a quiet space that will allow you to be fully present and engaged in Zoom sessions. Students will be advised by their instructor when they are expected to turn on their webcam (for group work, presentations, etc.).

The instructor may record online Zoom class sessions for the purposes of supporting student learning in this class – such as making the recording available for review of the session or for students who miss a session. Students will be advised before the instructor initiates a recording of a Zoom session. These recordings will be used to support student learning only and will not be shared or used for any other purpose.

# **University of Calgary Policies and Supports**

**COVID-19 PROCEDURE FOR SICK STUDENTS:** <a href="https://ucalgary.ca/risk/sites/default/files/Covid-19%20Folder/COVID-19-Procedure-for-Sick-Students.pdf">https://ucalgary.ca/risk/sites/default/files/Covid-19%20Folder/COVID-19-Procedure-for-Sick-Students.pdf</a>

### **ACADEMIC ACCOMMODATION**

It is the student's responsibility to request academic accommodations according to the University policies and procedures listed below. The student accommodation policy can be found at: <a href="https://www.ucalgary.ca/legal-services/university-policies-procedures/student-accommodation-policy">https://www.ucalgary.ca/legal-services/university-policies-procedures/student-accommodation-policy</a>

Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities: <a href="https://www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure">https://www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure</a>
Students needing an accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to their instructor (contact information on first page above).

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 <a href="https://www.ucalgary.ca/access/">www.ucalgary.ca/access/</a>.

#### **ACADEMIC MISCONDUCT**

Academic Misconduct refers to student behavior which compromises proper assessment of a student's academic activities and includes: cheating; fabrication; falsification; plagiarism;

unauthorized assistance; failure to comply with an instructor's expectations regarding conduct required of students completing academic assessments in their courses; and failure to comply with exam regulations applied by the Registrar.

For information on the Student Academic Misconduct Policy and Procedure please visit: <a href="https://ucalgary.ca/policies/files/policies/student-academic-misconduct-policy.pdf">https://ucalgary.ca/policies/files/policies/student-academic-misconduct-procedure.pdf</a> Additional information is available on the Academic Integrity Website at <a href="https://ucalgary.ca/student-services/student-success/learning/academic-integrity">https://ucalgary.ca/student-services/student-success/learning/academic-integrity</a>.

### **COPYRIGHT LEGISLATION:**

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (<a href="www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf">www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf</a>) and requirements of the copyright act (<a href="https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html">https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html</a>) 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 (<a href="https://www.ucalgary.ca/pubs/calendar/current/k.html">https://www.ucalgary.ca/pubs/calendar/current/k.html</a>).

#### **INSTRUCTOR INTELLECTUAL PROPERTY**

Course materials created by instructors (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the instructor. These materials may NOT be reproduced, redistributed or copied without the explicit consent of the instructor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

### 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.

### **SEXUAL VIOLENCE POLICY**

The University recognizes that all members of the University Community should be able to learn, work, teach and live in an environment where they are free from harassment, discrimination, and violence. The University of Calgary's sexual violence policy guides us in how we respond to incidents of sexual violence, including supports available to those who have experienced or witnessed sexual violence, or those who are alleged to have committed sexual violence. It provides clear response procedures and timelines, defines complex concepts, and addresses incidents that occur off-campus in certain circumstances. Please see the policy available at <a href="https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf">https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf</a>

**UNIVERSITY STUDENT APPEALS OFFICE:** If a student has a concern about a grade that they have received, they should refer to Section I of the Undergraduate Calendar (<a href="https://www.ucalgary.ca/pubs/calendar/current/i-3.html">https://www.ucalgary.ca/pubs/calendar/current/i-3.html</a>) which describes how to have a grade reappraised. In addition, the student should refer to the SAPL's Procedure for reappraisal of grades

### OTHER IMPORTANT INFORMATION

Please visit the Registrar's website at:

<u>https://www.ucalgary.ca/registrar/registration/course-outlines</u> for additional important information on the following:

- Wellness and Mental Health Resources
- Student Success
- Student Ombuds Office
- Student Union (SU) Information
- Graduate Students' Association (GSA) Information
- Emergency Evacuation/Assembly Points
- Safewalk