

**CORE 547**  
**Health Research Emerging Technologies**  
**and Marginalized Groups**

**Instructors:**

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**Office Hours/Policy on Answering Student Emails**

No office hours. Please note that all course communications must occur through your @ucalgary email, and I will respond to emails sent via student's @ucalgary emails within 24 hours.

**Time and Location:**

Online, asynchronous on D2L. Please consult course schedule for weekly topics. This class has no Zoom or Yuja sessions. Students complete reading of weekly material on their own time and fulfill assignments by a given deadline.

**Prerequisite/Co-Requisite:**

48 units (8 full-course equivalents)

**Antirequisite(s):**

Credit for Community Rehabilitation 547 and 591.28 will not be allowed

**Course Description:**

Provides an in-depth global outlook on new, envisioned and emerging sciences and technologies and their global impact on (a) disabled people and disability studies; (b) the concept and field of rehabilitation and identity of rehabilitation professionals; (c) the concept of health professionals. Also provides an understanding of how disability studies scholars and rehabilitation and health policy, systems and care delivery scholars and professionals can enrich the new, envisioned and emerging science and technology and governance of science and technology discourse.

**Overarching Theme**

Content to be covered includes:

- Models of health, disease, disability, impairment, medicine, rehabilitation; determinants of health (social, ecological, political); index of wellbeing; indigenous model of health;
- Concept of Ableism and transhumanism and transhumanization of health, disease, disability, impairment, medicine, rehabilitation
- Models of measuring health and impairment/disability DALY, QUALY, HEALY, HUI)
- Selected topics related to the governance of science and technology and global health research; geo-engineering/Climate Change Discourse: Adaptation and Mitigation; Cognitive/neuro sciences applications: Neurodiversity versus DSM-IV and V (the dynamics of medicalization and 'transhumanization of medicalization'; augmentative/enhancement medicine). EcoHealth; Robotics/artificial intelligence/machine learning/ automatization Health and well being/technical unemployment/being occupied;

- The issue of health wellbeing, disabled people including indigenous disabled people and intersectional disabled people and marginalized groups including indigenous people and Covid
- Involvement of disabled people including indigenous disabled people and marginalized groups in the governance of science, technology and health research
- The interconnectedness of the governance of science and technology and health research with debates on human rights, disabled people's rights and the rights of other marginalized groups
- The interconnectedness of the governance of science and technology and determinants of health (social, political, ecological)
- The interconnectedness of the governance of science and technology and the 2030 Agenda for Sustainable Development

### Global Objectives

- to give an introduction into
  - **Health Research Emerging Technologies and Marginalized Groups,**
  - the governance of science and technology,
  - the impact of emerging technologies on the health and wellbeing of a) disabled people including indigenous disabled people; b) the concept and field of rehabilitation and identity of rehabilitation professionals; c) the concept of health, d) healthcare deliverance, e) Determinants of Health (social, political, ecological) and h) the 2030 Agenda for Sustainable Development
  - The issue of intersectionality in relation to the topics of the class
- to highlight engagement opportunities for disability studies, rehabilitation and health policy, systems and care students in the area of new and emerging science and technology and their governance
- to expose the students to the existing literature of the topics in relation to indigenous people

### Course Learning Outcomes

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

- Through on-line postings, demonstrate an understanding of the vision and state of the art of science and technology. Students will gain a deeper appreciation of international dynamics related to this field of study
- Through participation in on-line dialogue with peers and instructor, demonstrate an ability to analyze the impact of science and technology on disabled people, disability studies, rehabilitation and health policy, systems and care

### Learning Resources

No textbook required. All readings will be available on D2L at the beginning of the course

### Learning Technology Requirements

Brightspace (by D2L) is located on the University of Calgary server and will be used extensively for communication with students. **It is the student's responsibility to ensure that they receive all posted communications and documents and that they receive emails sent by instructors or fellow students through D2L.** Only your @ucalgary.ca email address may be linked to D2L. Please ensure that you are regularly checking your @ucalgary.ca account.

In order to successfully engage in learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology:

- A computer with a supported operating system, as well as the latest security and malware updates;
- A current and updated web browser;
- Webcam (built-in or external);
- Microphone and speaker (built-in or external), or headset with microphone;
- Current antivirus and/or firewall software enabled;
- Broadband internet connection

Most current laptops will have a built-in webcam, speaker and microphone.

A laptop, desktop, tablet or mobile device is required for D2L access. If you need help accessing or using D2L, please visit the Desire2Learn resource page for students: <http://elearn.ucalgary.ca/d2l-student/>.

### Evaluation

The University policy on grading and related matters is described in section F of the 2021-2022 Calendar. In determining the overall grade in the course, the following weights will be used:

- 1) Grading of non-content graded weeks 2, 3, 5, 6, 7, 9, 11, and 13 (graded whether assignment was done or not): Value =  $8 \times 3\% = 24\%$  total
- 2) Grading of quality of online post content (three defined weeks; weeks 4, 8, 12,):  $2 \times 25\%$  (week 4 and 8) and  $1 \times 26\%$  on week 12 = 76%

### ASSIGNMENTS

Students will read the weekly reading material. They will participate in the discussion board for all weeks. There will be questions posted for students to respond to, to facilitate dialogues regarding the weekly topics. Active and thoughtful participation in the discussion board is a critical component of this course. Students are expected to give their thoughts on the intro questions by midnight of Wednesday of that given week. Students then have the rest of the week (Sunday midnight) to respond to two intro response postings of their fellow students.

For week 3, which is a survey, you have till Wednesday midnight of week 3 to fill out the survey and I will send out the results of what all posted on Thursday morning of week 3 and you have till Sunday to critically reflect on that finding.

Students are expected to use the material from the reading list as part of their reasoning and follow the marking rubric for all weeks (graded and non-graded).

1. **For Weeks 2, 3, 5, 6, 7, 9, 11 and 13 students are expected to read and post as described above**

The instructor will read the posts and give general comments back online but will not post individual comments. Students are encouraged to treat these weeks as preparation for the marked weeks. The more students engage with each other and with the general comments of the instructor, the better they are prepared for the marked weeks.

For weeks with surveys I will post the result of the survey online after the deadline and you

**Participation in these weeks will be assessed (3% per week 2, 3, 5, 6, 7, 9, 11, and 13)**  
 $8 \times 3 = \text{Total} = 24\%$

2. **For Weeks 4, 8, and 12 where students will be graded on the quality of their posts**

The instructor will read all posts and comment as follows: The instructor will generate one PDF of all postings per week for each of the D2L groups the instructor will set up and add sticky notes into the PDF's reflecting comments to students. Students who post their intro post late will not be part of the PDF and as such receive no feedback. But for the ones who posted in time every student will be able to see all the comments of the instructor. This is done to increase the learning from each other and takes into account that student postings are already visible to fellow students and not private like a term paper assignment.

**Value** **2x 25% (week 4 and 8) and 1x 26% week 12= 76%**

Grading criteria for the quality of the initial response to questions in the four graded weeks

Quality of online postings: understands the concepts and integrates information, displays an understanding of different positions, incorporates reflection and <b>critical thought</b>	40%
Analysis of Content: contributes new ideas based on analysis of readings and prior discussion. It is expected that <b>you provide at least five new sources that are NOT part of the course material</b> in your initial response to the questions every week. However, it is not enough to list 5 new sources at the end of your post. <b>The sources have to be used in the argument you make in your initial posting.</b> You lose all 30 marks if you do NOT provide 5 new sources and engage with them.	30%
Application to professional practice: demonstrates the ability to apply concepts to practice. Expected to be ALL THE TIME and clearly marked so I know what you see as professional practice. This reflection should deal with all questions of a given week's assignment. Best to add that section at the end of your answer to each question. If you feel you cannot apply it to a certain question say why. You lose all 30 points if you do not have a clearly marked section on professional practice.	30%
Total	100% for a given week (which reflects 21% of total course mark)

\*\* There is no Registrar-scheduled final exam for this course.

\*\* A student's final grade for the course is the sum of the separate assignments. It is not necessary to pass each assignment separately in order to pass the course.

**A Note regarding Writing Assignments:**

Writing skills are important to academic study in all disciplines. In keeping with the University of Calgary's emphasis on the importance of academic writing in student assignments (section E.2 of 2021-22 Calendar), writing is emphasized, and the grading thereof in determining a student's mark in this

course. The Bachelor of Community Rehabilitation values excellence in writing. Competence in writing entails skills in crafting logical, clear, coherent, non-redundant sentences, paragraphs and broader arguments, as well as skills with the mechanics of writing (grammar, spelling, punctuation). Sources used in research papers must be properly documented. The University of Calgary offers a number of instructional services through the Students' Success Centre's Writing Support Services (<http://www.ucalgary.ca/writingsupport/>) for students seeking feedback on assignments or seeking to improve their general writing skills. Students are **strongly encouraged** to take advantage of these programs.

### Grading Scheme:

Letter Grade	Description	Percentage
A+	Outstanding performance	96-100
A	Excellent performance	90-95
A-	Approaching excellent performance	85-89
B+	Exceeding good performance	80-84
B	Good performance	75-79
B-	Approaching good performance	70-74
C+	Exceeding satisfactory performance	65-69
C	Satisfactory performance	60-64
C-	Approaching satisfactory performance	57-59
D+	Marginal pass	54-56
D	Minimal pass	50-53
F	Did not meet course requirements	0-49

### Missed Components of Term Work:

#### For participation only weeks (2, 3, 5, 6, 7, 9, 11 and 13):

**Extensions will not be granted:** Students are expected to post their intro responses and two responses towards their fellow students on time. For week three you have to answer the survey and reflect on the survey results. Students failing to post either of the two components at the stated deadline will receive a mark of zero for that week.

The only exceptions to this are those in keeping with the University Calendar (debilitating illness, religious conviction, or severe domestic affliction) that are received in writing and with supporting documentation. However, the student has to alert the instructor before the delay (by e-mail) or, in very exceptional circumstances, after the delay has happened. It is not the role of the instructor to inquire why a student missed a deadline. If students become aware at the time the instructor gives the end mark that they missed an assignment somewhere during the course, it cannot be fixed at the end of the course. Therefore, the student should make sure that they have sent in their assignments at any given week.

#### For content graded weeks (weeks 4, 8 and 12):

For each day a student is late in posting their intro response, their mark will be deducted by 10%. If nothing is sent in by midnight Sunday of a given week, the mark for that given week is 0. If a student only provides a response to the intro but does not send in the two responses towards their fellow students, the mark achieved for the intro response will be cut in half. The only exceptions to this are those in keeping with the University Calendar (debilitating illness, religious conviction, or severe domestic affliction) that are received in writing and with supporting documentation. However, the student has to alert the instructor before the delay (by e-mail) or, in very exceptional circumstances, after the delay has happened. It is not the role of the instructor to inquire why a student missed a deadline. If students become aware at the time the instructor gives the end mark that they missed an assignment somewhere during the course, it cannot be fixed at the end of the course. Therefore, the student should make sure that they have sent in their assignments at any given week.

### **Course Evaluations and Student Feedback**

Student feedback will be sought at the end of the course through the Universal Student Rating of Instruction (USRI) and a qualitative student evaluation. Students are welcome to discuss the process and content of the course at any time with the instructor. Students may also address any concerns they may have with Dr. Ebba Kurz, Associate Dean (Undergraduate Health and Science Education) in the Cumming School of Medicine ([kurz@ucalgary.ca](mailto:kurz@ucalgary.ca)).

### **Conduct**

As members of the University community, students, employees and academic staff are expected to demonstrate conduct that is consistent with the University of Calgary Calendar, the Code of Conduct and Non-Academic Misconduct policy and procedures, which can be found at <https://www.ucalgary.ca/policies/>.

### **Use of Internet and Electronic Communication Devices in Class**

Students are responsible for being aware of the University's Internet and email use policy, which can be found at <https://www.ucalgary.ca/policies/files/policies/electronic-communications-policy.pdf>.

## **UNIVERSITY OF CALGARY POLICIES AND SUPPORTS**

### **Copyright**

All students are required to reach the University of Calgary policy on Acceptable Use of Material Protected by Copyright (<https://www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright-policy.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 unauthorized 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 <https://www.ucalgary.ca/pubs/calendar/current/k.html>.

### **Instructor Intellectual Property**

Course materials created by instructors (including course outlines, 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 professor. **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.

### **Academic Accommodations**

It is the student's responsibility to request academic accommodations according to the University policies and procedures listed below. The Student Accommodations policy is available at <https://ucalgary.ca/student-services/access/prospective-students/academic-accommodations>. Students needing an accommodation based on disability or medical concerns should contact Student Accessibility Services (SAS) in accordance with the Procedure for Accommodations for Students with Disabilities (<https://www.ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities.pdf>). SAS will process the request and issue letters of accommodations to instructors. For additional information on support services and accommodations for students with disabilities, visit [www.ucalgary.ca/access/](http://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 Dr. Ebba Kurz ([kurz@ucalgary.ca](mailto:kurz@ucalgary.ca)), Associate Dean (Undergraduate Health and Science Education).

### **Academic Misconduct**

The University of Calgary is committed to the highest standards of academic integrity and honesty. The University of Calgary has created rules to govern all its members regarding the creation of knowledge and the demonstration of knowledge having been learned.

Academic Misconduct refers to student behaviour that compromises proper assessment of a student's academic activities and includes (but is not limited to): 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. **It also includes using of third-party websites/services to access past/current course material, essay/assignment writing services, or real-time assistance in completing assessments, seeking answers to assessment questions and similar, whether paid, bartered or unpaid.**

For information of the Student Academic Misconduct Policy and Procedures, please visit; <https://ucalgary.ca/policies/files/policies/student-academic-misconduct-policy.pdf>  
<https://ucalgary.ca/policies/files/policies/student-academic-misconduct-procedure.pdf>

Additional information is available on the Academic Integrity website at: <https://ucalgary.ca/student-services/student-success/learning/academic-integrity>.

### **Recording of Lectures**

Audio or video recording of lectures is prohibited except where explicit permission has been received from the instructor.

### **Freedom of Information and Protection of Privacy Act**

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

### **Appeals**

If there is a concern with the course, academic matter or a grade, first communicate with the instructor. If these concerns cannot be resolved, students can proceed with an academic appeal, as per Section I of the University Calendar. Students must follow the official reappraisal/appeal process and may contact the Student Ombuds' Office (<http://www.ucalgary.ca/ombuds>) for assistance with this and with any

other academic concerns, including academic and non-academic misconduct. Students should be aware that concerns about graded term work may only be initiated **within 10 business days** of first being notified of the grade. <https://www.ucalgary.ca/pubs/calendar/current/i-2.html>

### **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 <https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf>

### **Resources for Support of Student Learning, Success, Safety and Wellness**

Student Success Centre	<a href="http://www.ucalgary.ca/ssc/">http://www.ucalgary.ca/ssc/</a>
Student Wellness Centre	<a href="http://www.ucalgary.ca/wellnesscentre/">http://www.ucalgary.ca/wellnesscentre/</a>
Distress Centre	<a href="http://www.distresscentre.com/">http://www.distresscentre.com/</a>
Library Resources	<a href="http://library.ucalgary.ca">http://library.ucalgary.ca</a>

### **Wellness and Mental Health Resources**

The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the excellent mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (<https://www.ucalgary.ca/wellnesscentre/services/mental-health-services>) and the Campus Mental Health Strategy (<http://www.ucalgary.ca/mentalhealth/>).

### **Student Ombuds' Office**

The Student Ombuds' Office supports and provides a safe, neutral space for students. For more information, please visit [www.ucalgary.ca/ombuds/](http://www.ucalgary.ca/ombuds/) or email [ombuds@ucalgary.ca](mailto:ombuds@ucalgary.ca)

### **Student Union (SU) Information**

The SU Vice-President Academic can be reached at (403) 220-3911 or [suvpaca@ucalgary.ca](mailto:suvpaca@ucalgary.ca); the SU representatives for the Cumming School of Medicine can be reached at [medrep1@su.ucalgary.ca](mailto:medrep1@su.ucalgary.ca) or [medrep2@su.ucalgary.ca](mailto:medrep2@su.ucalgary.ca).

### **Student Success Centre**

The Student Success Centre provides services and programs to ensure students can make the most of their time at the University of Calgary. Our advisors, learning support staff, and writing support staff assist students in enhancing their skills and achieving their academic goals. They provide tailored learning support and advising programs, as well as one-on-one services, free of charge to all undergraduate and graduate students. For more information visit: <https://www.ucalgary.ca/student-services/student-success>

### **Emergency Evacuation/Assembly Points**

As part of the University of Calgary Emergency Evacuation plan, students, faculty, and staff should locate the closest Assembly Point in case of Fire Alarm. Safety signage is posted throughout the campus



showing the locations and the possible route to these locations. All students, faculty, and staff are expected to promptly make their way to the nearest Assembly Point if the Fire Alarm is activated. No one is to return into campus facilities until an all clear is given to the warden in charge of the Assembly Area. For more information, see <https://www.ucalgary.ca/emergencyplan/building-evacuation/assembly-points>

### Safewalk

Campus security will escort individuals, day or night, anywhere on campus (including McMahon Stadium, Health Sciences Centre, Student Family Housing, the Alberta Children's Hospital and the University LRT station). Call 403-220-5333 or visit <http://www.ucalgary.ca/security/safewalk>. Use any campus phone, emergency phone or the yellow phone located at most parking lot pay booths. Please ensure your personal safety by taking advantage of this service.

### Class Schedule

The following is a list of topics for class, associated readings, and assignment for a given week are listed on D2L. There are no exams. Please note that unforeseen circumstances may cause changes to the schedule with respect to the timing of topics and readings. Students will be notified of all changes in a timely manner by way of email and D2L announcements.

Date	Topic
Week 1: September 7-12	Introduction of yourself, expectations
Week 2: September 13-19	Disabled people and intersectionality and indigenous disabled people
Week 3: September 20-26	Health equity/social/ political/cultural determinants of health
<b>Week 4: content marked; September 27-October 3</b>	Models and determinants of health, disability and rehabilitation
Week 5: October 4 – 10	The Issue of Evidence, Quality of life and measurement
Week 6: October 11-17	Geo-engineering/Climate Change Discourse: Adaptation and Mitigation
Week 7: October 18-24	EcoHealth/ coverage of disabled people
<b>Week 8: content marked; October 25-October 31</b>	Robotics/artificial intelligence/machine learning/ automatization Health and well-being/technical unemployment/being occupied
Week 9: November 1-7	Neurotechnologies/neurodiversity/neuroethics
Week 10: November 8-14	Reading week
Week 11: November 15- 21	Sustainability, Transforming our world: the 2030 Agenda for Sustainable Development
<b>Week 12: content marked; November 22-28</b>	Global Health and disabled people

Week 13: November 29- December 5	Covid
Week 14: December 6-9	Final thoughts on course content, what you have learned, insights...