

CORE 547
Health Research Emerging Technologies and Marginalized Groups

Instructors:

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Office Hours/Policy on Answering Student Emails

No office hours
Student emails answered within 24 hours

Time and Location:

Online, asynchronous on D2L
Please consult course schedule to confirm location of individual sessions.

Prerequisite/Co-Requisite:

48 units (8 full-course equivalents)

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
- Concept of Ableism and transhumanism and transhumanization of health, disease, disability, impairment, medicine, rehabilitation
- Models of measuring health and impairment/disability (DALY, QALY, 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); Nanosensors, and privacy/What body functions to monitor?; EcoHealth; artificial intelligence and machine learning and social robotics
- Involvement of 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 global health research, the governance of science and technology, the impact of emerging technologies on a) disabled people and disability studies; b) the concept and field of rehabilitation and identity of rehabilitation professionals; c) the concept of health, d) health policy, health systems and health care assessment, e) healthcare deliverance, f) the identity of health professionals, g) Determinants of Health (social, political, ecological) and h) the 2030 Agenda for Sustainable Development
- 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

Learning Objectives

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
- Through a term paper students display knowledge of governance and evaluation of science, technology and health research issues related to disabled people, disability studies, rehabilitation and health policy, system and care

Required Textbooks

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

Recommended Textbooks/Readings

All readings will be available on D2L at the beginning of the course

A Note regarding readings

A list of required readings for all course sections will be outlined on D2L and links and documents will be made available, where possible. Required readings have been chosen carefully to inform you and enhance the lecture material. **Students are REQUIRED to complete assigned readings BEFORE each lecture.** Instructors will proceed in class on the assumption that students have read completely the assigned readings. Students should be aware that many of the readings they will be assigned may be of an unfamiliar nature and style. Students should allot sufficient time to allow for several reads of the assigned material.

Evaluation

The University policy on grading and related matters is described in section F of the 2019-2020 Calendar.

In determining the overall grade in the course, the following weights will be used:

Class Participation (determined through weekly posting)

1) in non-content graded week Value = 6 x 2.5% = 15 % total

2) Grading of online post content and participation
(five defined weeks; weeks 3, 4, 9, 10, 13) Value = 5 x 17% = 85% total

Students will read the weekly reading material. They will participate in the discussion board for all weeks. There will be questions posted to which students will respond (week 2-week 13), 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 Tuesday of that given week. Students then have the rest of the week (end of Sunday) to respond to two intro response postings of their fellow students. 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, 5, 7, 8, 11 and 12 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.

Participation in these weeks will be assessed (2.5% per week)

Total = 15%

2. For Weeks 3, 4, 9, 10 and 13, 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. So, 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 5 x 17% = 85%

Missed Components of Term Work

For participation only weeks (2, 5, 7, 8, 11 and 12):

Extensions will not be granted: Students are expected to post their intro responses and response towards their fellow students on time. Students failing to post either component 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. Please be advised that students should notify the instructor before the assignment deadline to discuss.

For content graded weeks (weeks 3, 4, 9, 10 and 13):

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 responses towards their fellow students, the mark achieved for the intro response will be cut in half. The only way to avoid the deductions is by alerting the instructor before the delay (whether by e-mail or phone) or, in very exceptional circumstances, after the delay has happened. However, it is expected that the student contacts the instructor. 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 a response to an intro 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 intro and other required responses at any given week. The Discussion Board is an ongoing part of the course and will continue for the duration of the course. 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. Please be advised that students should notify the instructor before the assignment deadline to discuss.

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

Quality of on-line postings: understands the concepts and integrates information, displays an understanding of different positions, incorporates reflection and critical thought	40%
Analysis of Content: contributes new ideas based on analysis or readings and prior discussion. It is expected that you provide at least five new sources that are NOT part of the course material 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. The sources have to be used in the argument you make in your initial posting. 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 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 17% 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 2019-20 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). 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	97-100
A	Excellent performance	90-96
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:

Please see details under the different assignments listed above.

Brightspace by Desire2Learn (D2L)

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.

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/>.

Policies Governing the Course:

Attendance

N/A

Conduct During Lectures and email exchange

Students are expected to conduct themselves in a mature and courteous manner during ALL course related email exchanges outside D2L and on postings on D2L. Students are expected to frame their comments and questions to the instructor and fellow students in respectful and appropriate language, always maintaining sensitivity towards the topic.

Electronic Devices

The Bachelor of Community Rehabilitation program aims to create a supportive and respectful learning environment for all students. The use of laptop and mobile devices is acceptable when used in a manner appropriate to the course and classroom activities.

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>.

Copyright

It is the responsibility of students and professors to ensure that materials they post or distribute to others comply with the Copyright Act and the University's Fair Dealing Guidance for Students (library.ucalgary.ca/files/library/guidance_for_students.pdf). Further information for students is available on the Copyright Office web page (<http://library.ucalgary.ca/copyright>)

A Note Regarding Instructor Intellectual Property

Generally speaking, course materials created by professor(s) (including course outlines, presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the professor(s). 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 Based on Disability or Medical Condition

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/.

Accommodations on Protected Grounds other than Disability

Students who require an accommodation in relation to their coursework based on a protected ground other than disability, should communicate this need, preferably in writing, to their instructor or to the designated BCR program contact, Mrs. Jennifer Logan (jljlogan@ucalgary.ca), or to Dr. Ebba Kurz, Associate Dean, Undergraduate Health and Science Education, Cumming School of Medicine. The full policy on Student Accommodations is available at <http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf>.

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. 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> Students are expected to be familiar with these

standards and to uphold the policies of the University in this respect. Please know that the University and the Cumming School of Medicine take these rules seriously. **All incidences of academic dishonesty in this course, such as cheating and plagiarism, will be reported to the Associate Dean for investigation;** infractions will be noted on the record of a student found to be guilty.

Recording of Lectures

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

Other Important Information

Freedom of Information and Protection of Privacy Act

Student information will be collected in accordance with typical 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>

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

Student Success Centre	http://www.ucalgary.ca/ssc/
Student Wellness Centre	http://www.ucalgary.ca/wellnesscentre/
Distress Centre	http://www.distresscentre.com/
Library Resources	http://library.ucalgary.ca

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 (Room 370 MacEwan Student 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/ or email ombuds@ucalgary.ca

Student Union (SU) Information

The SU Vice-President Academic can be reached at (403) 220-3911 or suvpaca@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. 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. The course has no exams.

Week	Dates	Topics
1	January 13 - 19	Introduction of yourself, expectations
2	January 20 - 26	Models and determinants of health, disease, disability, impairment, medicine, rehabilitation.
3*	January 27 – February 2	Concept of Ableism and transhumanism and transhumanization of the concepts of week 2
4*	February 3 – 9	Models of measuring health and disability DALY, QALY, HEALY
5	February 10 - 16	Geo-engineering/Climate Change Discourse: Adaption and Mitigation
6	February 17 - 23	Reading week, no class
7	February 24 – March 1	EcoHealth/ coverage of disabled people
8	March 2 - 8	Cognitive/neurosciences applications: Neurodiversity versus DSM-IV and V
9*	March 9 - 15	Robotics/artificial intelligence/machine learning/automatization/health and well being/ technical unemployment/being occupied
10*	March 16 – 22	Social Determinants of Health in the light of the content of this course
11	March 23 - 29	Global Health and disabled people
12	March 30 – April 5	Sustainability, Global Health within the Transforming our world: the 2030 Agenda for Sustainable Development
13*	April 6 - 12	Science and Technology Governance
14	April 13 – 15	Final thoughts on course content, what you have learned, insights...

* indicates a graded week