**Course Syllabus**

**KIN 483A, EVIDENCE-BASED EXERCISE PRESCRIPTION IN HEALTH AND DISEASE (3 Credits)**

University of British Columbia – School of Kinesiology

Winter 2020 Term 1 (previously KIN 489D)

*UBC’s Vancouver campus is located on the traditional, ancestral, and unceded territory of the xwməθkwəy̓əm (Musqueam) people. The land it is situated on has always been a place of learning for the Musqueam people, who for millennia have passed on in their culture, history, and traditions from one generation to the next on this site.*

<table>
<thead>
<tr>
<th>Course Structure</th>
<th>This course will be conducted online using a blended format involving online learning modules and instructor facilitated tutorials. Attendance at the online instructor facilitated tutorials will be taken.</th>
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</thead>
</table>
| Time and Location | All components of this course will be completed online.  
Time: 12:30 PM to 2:00 PM  
Duration: 08 Sep 2020 to 3 Dec 3 2019 (No Class 08 Sep 2020 for Imagine Day) |
| Contacts         | Course Instructor: Dr. Darren Warburton  
E-mail: [darren.warburton@ubc.ca](mailto:darren.warburton@ubc.ca)  
Office Location: Indigenous Studies in Kinesiology | Rm 208, Lower Mall Research Station | 2259 Lower Mall  
Office Hours: Dr. Warburton is available online for questions during and following instructor-facilitated online tutorials. Appointments can also be made at alternative times. |
Course Description

This course is designed to determine effective, evidence-based best practice within high performance and clinical settings. This course will incorporate Indigenous ways of understanding and doing taking a strengths-based approach to health, wellness, and human performance. Key topics will elite endurance performance, healthy ageing, chronic disease prevention and treatment, and weight management.

Our course involves the latest advancements in blended, online learning. This includes online learning modules (and related resources) that are supplemented by a follow-up instructor facilitated online tutorial (conducted through Collaborate Ultra and/or Zoom sessions). Please note that for the first week we will use Collaborate Ultra; but, we envision making usage of Zoom group sessions for many of the instructor facilitated tutorials. Session details will be posted on Canvas.

RATIONALE

This course provides undergraduate and graduate students an opportunity to gain critical competencies for developing evidence-based, best practice exercise prescriptions within high performance and clinical settings. This course supports the School of Kinesiology's course offerings in Clinical Kinesiology, Exercise Physiology, and Indigenous Studies in Kinesiology. This course will appeal to students in the Exercise and Health Sciences and those interested in working in the fields of Indigenous studies, health promotion, exercise science, and/or exercise medicine.

AIMS AND OBJECTIVES

The ultimate goal of this course is to prepare students for a career in health promotion, exercise science, and/or exercise medicine. This course aims to develop a student body that has the critical competencies consistent with being considered a Qualified Exercise Professional including the core knowledge on how to develop evidence-based, best practice exercise prescriptions within high performance and clinical settings taking a strengths-based approach consistent with Indigenous ways of being and doing. At the end of this course students will be well prepared to work as a Qualified Exercise Professional with diverse clientele and eligible to apply for advanced health and fitness certifications. Students will also be able to incorporate Indigenous ways of being and doing related to exercise prescription in health and high performance settings.

Prerequisite(s): Third Year Standing
Corequisite(s):

Learning Outcomes
Each learning module has specific learning objectives, which are clearly outlined for the student. The general learning outcomes of the course are listed below. Upon completion of this course, successful students will be able to, at an advanced level: 1. Critically evaluate peer-reviewed literature to determine evidence-based best practice within high performance and clinical settings. 2. Develop evidence-based exercise prescriptions for use in high performance and clinical settings. 3. Demonstrate problem-solving and critical thinking skills in an applied manner. 4. Demonstrate the ability to work in a collaborative group setting.

Instructor Bio

Dr. Darren Warburton, Indigenous Studies in Kinesiology, Faculty of Education

Dr. Darren Warburton is a Full Professor at the University of British Columbia (UBC). He currently resides and works on the traditional, ancestral, unceded territory of the x̱wməθkwəy̓əm (Musqueam) First Nation. Further information can be found at: www.healthandphysicalactivity.com

For content related questions or concerns please contact Dr. Warburton via email at darren.warburton@ubc.ca.

Learning Materials

Our course utilizes Canvas, as an in-line learning management system. When permissible, resources will be posted directly to Canvas OR links provided, which allows students to access the required learning materials.

The following required texts are used in this course:


The estimated cost is $25 for this textbook. This textbook will be used extensively during the second month of our course. A link to purchase these readings will be provided early into term.

Stone, J.A. (Ed.) (2009). Guidelines for Cardiac Rehabilitation and Cardiovascular Disease Prevention: Translating Knowledge into Action. Third Edition, Canadian Association of Cardiac Rehabilitation, 2010. ISBN: 9780968585139 Available for direct purchase from CACPR (https://cacpr.ca/Guidelines-for-Students). With a student membership, students receive automatic access to the online guidelines. The guidelines are accessed through the website (from the drop-down ‘Guidelines’ tab). If you would like a print copy, please purchase this text as soon as possible from the CACPR, as shipment times can vary. The estimated cost of this textbook is $75 plus applicable
shipping and taxes. Please confirm with the CACPR the online and print options for purchasing this
textbook.

Learning Activities

This course relies heavily on self-directed learning; therefore, students must take responsibility for their
learning including (but not exclusive to) incorporating information not provided in the course texts. The
marks may be scaled to maintain the normal average and distribution for this course.

This course will involve extensive student centred-learning, similar to what is now currently employed in
many undergraduate medicine programs. Students who complete this course will be well prepared for
other programs that use problem-based learning. In this course we will follow the principals of Barrows
(1996) wherein student learning occurs in smaller student groups (4-6 students per group), and original
problems provide the basis for learning and the development of critical thinking and self-directed learning
skills. The role of the instructor is to help students learn through self-discovery. The instructor therefore
serves as the facilitator in each lecture rather than providing traditional lectures. Real-life problems will
be used as a stimulus for the development of problem solving and critical thinking skills. Generally, cases
will be presented and discussed over a one-week period. The first allocated time period will include the
introduction and general discussion of the topic. This will generally involve an online learning module that
students may complete on their own. To enhance the flexibility for student learning students may also
complete these online learning modules at their preferred location and time.

Students are asked to write down questions and submit these online through Canvas for the rest of the
class to consider prior to the next instructor facilitated discussion period. The second day will include the
synopsis of opinions regarding the case, and the re-analysis of the problem allowing for a better
understanding of the topic. Students are required to be active participants in the discovery of information
and the solution of the cases. Thus, unlike traditional lectures, in this course students will have an active
engagement with course content. Students must come to the online instructor facilitated tutorials
prepared including the completion of the recommended readings and online learning modules for the
course.

Students are expected to build upon the information from previous case studies and other courses in
their undergraduate education. The skills learned from various fields (such as the humanities, biological
sciences, etc.) can be used effectively in tackling the various problems presented. Students should
welcome individuals from diverse backgrounds as their experiences and expertise will bring a fresh
approach to each case study. In the past, the most successful students are those that are active
participants in each discussion and are able to develop the skills necessary for continual life long
learning. Importantly, the online instructor facilitated tutorial is meant to be an environment that is
welcoming to others, conducive to learning, challenges the learner, and encourages intellectual curiosity.
As such, students should feel comfortable, supported, and respected at all times. Any behaviours
compromising the environment and/or well-being of others will not be tolerated. Attendance to the
instructor facilitated tutorials will be recorded and considered in the participation marks for this course.
Full attendance and participation during the online instructor facilitated tutorials is a standard expectation and requirement.

Moreover, students are responsible for all material and information disseminated during the course (including any changes to course content), whether one is in attendance or not. Students who plan to be absent for varsity athletics, family obligations, and/or other similar commitments cannot assume they will be accommodated, and should discuss their commitments with the instructor before the withdrawal date of the course.

Online Communications

In this course, and throughout your program, you are expected to communicate in a respectful and professional manner. You may find it helpful to review UBC’s Distance Learning Communication Online: Netiquette [link](https://distancelearning.ubc.ca/learner-support/communicating-online-netiquette/) web page.

Blackboard Collaborate

This course will include Blackboard Collaborate Ultra sessions to conduct our instructor facilitated tutorials. These web conference sessions will give you opportunities to connect with your instructor(s) and other students in real-time online meetings. Be sure to use these sessions to ask any content related questions that you may have. If you are new to Collaborate Ultra watch this short orientation video [link](https://www.youtube.com/watch?v=1W4sGpVmJaY).

### Assessment

<table>
<thead>
<tr>
<th>Assessment</th>
<th>% of Course Grade</th>
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<tbody>
<tr>
<td>Modules 1-2 Quiz</td>
<td>4%</td>
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<tr>
<td>Modules 3-4 Quiz</td>
<td>4%</td>
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<tr>
<td>Modules 5-6 Quiz</td>
<td>4%</td>
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<tr>
<td>Modules 7-8 Quiz</td>
<td>4%</td>
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<tr>
<td>Modules 9-10 Quiz</td>
<td>4%</td>
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<tr>
<td>Group Presentation &amp; Final Report</td>
<td>40%</td>
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<tr>
<td>Virtual Learning Presentation (Video Vignette)</td>
<td>30%</td>
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<tr>
<td>Course Participation</td>
<td>10%</td>
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https://canvas.ubc.ca/courses/63174/assignments/syllabus
Schedule

The following contains a weekly schedule. The dates provided for the recommended readings and related learning modules are approximate and may change depending on the needs and pace of the class. *If changes occur to this schedule, students will be informed via Canvas.* The course is designed such that instructor facilitated tutorial discussions follow the online learning tutorials. Generally, the first day of classes each week (i.e., Tuesday) is used for the instructor facilitated tutorial sessions. The following day (i.e., Thursday) of classes is used for the completion of the online learning modules.

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<thead>
<tr>
<th>Module</th>
<th>Resource(s); Notable Dates</th>
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<tr>
<td><strong>Introduction: Introduction to the Course and Blended Learning Approach</strong></td>
<td>• No class; Sept 8, 2020  ○ Campus wide Imagine UBC day  ○ Instructor and Students Online Discussion - Sept 10, 2020  ○ Intro to Course  ○ What is <a href="#">Problem Based Learning</a>?</td>
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| • The first class on Sept 10 involves a Collaborate Ultra session led by Dr. Warburton. Attendance is recorded.  
• The course is designed such that instructor facilitated tutorial discussions are held after students have worked through the online learning modules.  
• Instructor facilitated tutorials occur on TUESDAYS and attendance is recorded. The online learning modules are can be completed throughout the week prior to the related followup instructor facilitated tutorials. Dedicated time is provided for the completion of these online learning modules on each THURSDAY. |
| **MODULE 1: VO₂max relationship with endurance performance in elite athletics and the Vancouver Marathon. Maximal Aerobic Power** | • [Online Learning Module 1 (Case Study 1)](#) - Sept 10, 2020  
• [Module 1: Instructor facilitated tutorial](#) - Sept 15, 2020 |
| • Recommended readings from scientific literature and related videos are provided. |
| **MODULE 2: Lactic Acidosis and Fatigue** | • [Online Learning Module 2 (Case Study 2)](#) - Sept 17, 2020  
• [Module 2: Instructor facilitated tutorial](#) - Sept 22, 2020 |
| • Recommended readings from scientific literature and related videos are provided. |
| **QUIZ NUMBER ONE: DUE SEPTEMBER 24 BY 10 PM (PST)** | • [Quiz Number One](#) - Sept 24, 2020 |
| MODULE 3: Aerobic Training for 200 and 400 m Runners | • **Online Learning Module 3 (Case Study 3)** - Sept 24, 2020  
• **Module 3: Instructor facilitated tutorial** - Sept 29, 2020 |
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<td>• Recommended readings from scientific literature and related videos are provided.</td>
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| MODULE 4: Intersex Athletes in the Olympics | • **Online Learning Module 4 (Case Study 4)** - Oct 1, 2020  
• **Module 4: Instructor facilitated tutorial** - Oct 6, 2020 |
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<tr>
<td>• Recommended readings from scientific literature and popular media and related videos are provided.</td>
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<tr>
<th>QUIZ NUMBER TWO: DUE OCTOBER 8 BY 10 PM (PST)</th>
<th>• <strong>Quiz Number Two</strong> - Oct 8, 2020</th>
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</table>

| MODULE 5: Physical Activity and Healthy Ageing | • **Online Learning Module 5 (Case Study 5)** - Oct 8, 2020  
• **Module 5: Instructor facilitated tutorial** - Oct 13, 2020 |
| --- | --- |
| • Physical Activity, Health, and Ageing (DuManoir Chapter 16)  
• Recommended readings from scientific literature and popular media and related videos are provided. | |

| MODULE 6: Health-related exercise prescription for chronic disease prevention. | • **Online Learning Module 6 (Case Study 6)** - Oct 15, 2020  
• **Module 6: Instructor facilitated tutorial** - Oct 20, 2020 |
| --- | --- |
| • General Principles of Exercise Testing and Prescription for Health (Warburton Chapter 8)  
• Recommended readings from scientific literature and popular media and related videos are provided. | |

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<tr>
<th>QUIZ NUMBER THREE: DUE OCTOBER 22 BY 10 PM (PST)</th>
<th>• <strong>Quiz Number Three</strong> - Oct 22, 2020</th>
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| MODULE 7: Clinical Exercise Rehabilitation for Cardiovascular Disease. | • **Online Learning Module 7 (Case Study 7)** - Oct 22, 2020  
• **Module 7: Instructor facilitated tutorial** - Oct 27, 2020 |
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<tbody>
<tr>
<td>• CACR Chapters 4, 5, 9, &amp; 10</td>
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</table>
- Recommended readings from scientific literature and popular media and related videos are provided.

**MODULE 8: Clinical Exercise Rehabilitation for Breast Cancer.**
- CACR Chapters 4, 5, 9, & 10
- Recommended readings from scientific literature and popular media and related videos are provided.

**QUIZ NUMBER FOUR: DUE NOVEMBER 5 BY 10 PM (PST)**

**MODULE 9: Clinical Exercise Rehabilitation for Type 1 Diabetes**
- CACR Chapters 8 & 14
- Recommended readings from scientific literature and popular media and related videos are provided.

**QUIZ NUMBER FIVE: DUE NOVEMBER 19 BY 10 PM (PST)**

**MODULE 10: Contemporary Issues in Indigenous Health (Reducing Cardiometabolic Disease Risk)**
- Indigenous Health & Wellness (Shellington and Bredin)
- Recommended readings from scientific literature and popular media and related videos are provided.

**GROUP PRESENTATIONS: DUE NOVEMBER 23 BY 10 PM (PST)**
GROUP PRESENTATIONS

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Group Presentations</td>
<td>Nov 24, 2020</td>
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<tr>
<td>Final Project Preparation</td>
<td>Nov 26, 2020 &amp;</td>
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<tr>
<td></td>
<td>Dec 1</td>
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<tr>
<td>Instructor Facilitated Tutorial</td>
<td>Dec 1</td>
</tr>
<tr>
<td>VIDEO VIGNETTES (INDIVIDUAL): DUE NOVEMBER</td>
<td>Nov 30, 2020</td>
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<tr>
<td>30 BY 10 PM (PST)</td>
<td></td>
</tr>
<tr>
<td>FINAL REPORT: DUE DECEMBER 3 BY 10 PM (PST)</td>
<td>Dec 3, 2020</td>
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Faculty Resources

The Faculty of Education has a number of resources to support learning (https://educ.ubc.ca/students/student-resources/).

University Policies

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available from the UBC Senate Website (https://senate.ubc.ca/policies-resources-support-student-success).

Course Policies

Please make sure you are familiar with the academic policies and procedures.

Academic Integrity

Students are expected to follow UBC policies for academic integrity and academic misconduct, which includes practices around plagiarism, referencing and citation, and copyright. For more see, UBC’s Learning Commons Academic Integrity resources (https://learningcommons.ubc.ca/academic-integrity).

Marking and Submission Policies
Papers/assignments may NOT be rewritten for a higher grade.

Concerns regarding grading are to be discussed with the instructor.

For the group assignments, a student representative from each group will be required to submit an electronic copy through the respective assignment portal via Canvas. Students MAY also be asked to upload assignments into the TurnItIn system.

Students are required to comply with the detailed instructions contained in this course syllabus on the respective assignment portals. The School of Kinesiology will retain a copy of all assignments submitted in electronic format in the School for future reference. Electronic copies of assignments must be virus free prior to submission (students are responsible for ensuring that their virus protection is effective and current). The standard format/style used for assignments in the School of Kinesiology is the American Psychological Association [APA] format.

**Submission Deadlines**

Students (and groups) are required to make every effort to complete assignments on time. Assignments are submitted electronically and must be submitted prior to the established deadline. If an extension is necessary, students must make a formal written request up to 48 hours prior to the assignment deadline. In exceptional situations, extension requests within the 48 hour period may be considered.

Late papers will have 5% of total marks for the assignment deducted for each day/partial day (including weekend days) beyond the due time. This mark reduction continues until the assignment is submitted; however, after 5 days the maximum mark that may be awarded for a late submission is capped at 60%.

Here are the key points related to submissions:

- Assignments are submitted electronically and must be submitted prior to the established deadline.
- Late assignments will have 5% deducted per day/partial day (including weekends and weekdays).
- Please contact Dr. Warburton as soon as possible (at least 48 hr prior to deadline) if you are not able to meet a deadline owing to a permissible reason (e.g., a physician’s note).

**Academic Honesty**

- All students will be required to complete the *Honesty Pledge* prior to the submission of the first Quiz. We will follow the UBC guidelines related to academic honesty. Examples of unacceptable behaviour include:
  - Handing in assignments that are not 100% your own work without proper acknowledgement (citation).
  - Using the work of another.
  - Submitting work that has been submitted before, for any course at any institution.
  - Using answers from previous courses to assist in the completion of online quizzes.
  - Working with another person (including a classmate) in the completion of online quizzes.
If you are unclear on what academic honesty is, see UBC’s policies for academic integrity and academic misconduct. For more information see UBC’s Learning Commons Academic Integrity resources (https://learningcommons.ubc.ca/academic-integrity/). Other important documents include:

1. The Student Declaration (http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,285,0,0)
2. The Academic Honesty and Standards (http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,286,0,0)
3. The Student Conduct During Examinations (http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,41,90,0)

In general, minimum requested penalties for issues related to academic dishonesty will be as follows:
   - For assignments and quizzes: a mark of -100% on the assignment or quiz. Therefore, in instances of academic dishonesty, a student would receive a mark of zero (0) on an assignment or quiz.

Please note that these are minimum penalties.

Accessibility

If you have any challenges accessing materials that will impact your success in this course, UBC’s Centre for Accessibility can support your needs by providing appropriate accommodations to support you.

- Web: UBC’s Centre for Accessibility website (https://students.ubc.ca/about-student-services/centre-for-accessibility)
- Email: accessibility@ubc.ca

Learning Analytics

Some of the learning technologies used for this course collect data to support the improvement of teaching and learning. This includes the collection of data related to overall class progress to provide personalized feedback, engagement in discussion forums to support the fostering of community within the course, and how resources are being accessed to support improvements to the course design. To learn more about learning analytics at the Faculty of Education and at UBC, see the What is Learning Analytics? (https://ets.educ.ubc.ca/learning-analytics/students/) page.

Copyright

All materials of this course (e.g., course study guides, lecture slides, workbooks, assessments, course readings, etc.) are the intellectual property of the Course Instructor or licensed to be used in this course by the copyright owner. Redistribution of these materials by any means without permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline. Recording and/or use of photography during class lectures is not permitted except in extenuating circumstances, which must be discussed and pre-arranged with the Course instructor.
Correspondence

When corresponding with the course instructor and/or teaching assistant(s) over e-mail, please use your UBC e-mail account and include "KIN 483A" in the subject heading. Use appropriate salutations and professional grammar in all e-mail correspondence. During the school week, it is our aim as your course teaching unit to respond to your e-mail within 24 hours; however, please be aware that e-mails may not be checked and/or responded to over the weekend (i.e., from 5:00 pm Friday until 9:00 am Monday) or after business hours on weekdays (i.e., before 9:00 am or after 5:00 pm). Asking course content questions through email are welcome; however, question quantity should be limited in nature. In fact, many questions are better discussed during the instructor facilitated tutorials. Therefore, please manage your time appropriately throughout the semester and keep abreast of course content and approaching course deadlines.

Technology

Recording of instructor facilitated tutorials (via video and/or audio methods) or photographing class materials is prohibited except in extenuating circumstances, which must be discussed and pre-arranged with the course instructor.

Students Learning Outside of Canada

During this pandemic, the shift to online learning has greatly altered teaching and studying at UBC, including changes to health and safety considerations. Keep in mind that some UBC courses might cover topics that are censored or considered illegal by non-Canadian governments. This may include, but is not limited to, human rights, representative government, defamation, obscenity, gender or sexuality, and historical or current geopolitical controversies. If you are a student living abroad, you will be subject to the laws of your local jurisdiction, and your local authorities might limit your access to course material or take punitive action against you. UBC is strongly committed to academic freedom, but has no control over foreign authorities (please visit http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,33,86,0 for an articulation of the values of the University conveyed in the Senate Statement on Academic Freedom). Thus, we recognize that students will have legitimate reason to exercise caution in studying certain subjects. If you have concerns regarding your personal situation, consider postponing taking a course with manifest risks, until you are back on campus or reach out to your academic advisor to find substitute courses. For further information and support, please visit: https://academic.ubc.ca/supportresources/freedom-expression.

Help Resources

- If you are new to online learning or Canvas please review eLearning Help & Resources.