2025-9-NFS310H Clinical Nutrition I

Course Description: The course will help students learn the etiology and pathophysiology of major non-communicable chronic diseases including obesity, hypertension, diabetes and cardiovascular disease, understand guidelines-based nutritional management approaches, and critically evaluate scenarios and apply nutritional approaches within case-based settings. *Prerequisite:* NFS284H1

Learning Objectives:

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

- recognize the clinical presentation of major non-communicable chronic diseases
- understand guidelines-based nutritional management approaches
- critically evaluate scenarios, perform nutritional assessments and apply nutrition interventions
- examine how to integrate individuals' values and preferences and relationships with health conditions with guidelines-based nutritional therapies and available supports/resources to propose achievable nutrition care

Instructor:

Dr. Laura Chiavaroli

Email: laura.chiavaroli@utoronto.ca

Office Hours: Thursdays 12-2 pm September 5 - November 27, 2025.

Exceptions include: Sep 18, Oct 9, Oct 16, Nov 20

Office location and additional office hours or modifications should they arise will be posted on Quercus.

Please post questions on the Discussion board on Quercus.

Only email Dr. Chiavaroli for personal reasons.

Course time, location, and notifications:

Time: Students meet in-person on Fridays: 1:10 pm to 4:00pm for lecture.

Course location: available on Quercus

Notifications: Announcements are posted on the course website (Quercus) and it is the student's responsibility to read these regularly and to regularly check the course website for new content, upcoming due dates, and the release of grades. It is strongly recommended that students **leave their Quercus notifications on**, to be automatically advised of important course information.

Textbook: There is no required textbook for this course. Readings are included below in the Reading list and available on Quercus.

Course Schedule:

Week	Date	Topic	Before next class
1	Sept 5	Review of Syllabus Non-communicable chronic diseases & nutrition risk factors Clinical Practice Guidelines on Nutrition Therapy & Practice-based Evidence in Nutrition (PEN) The importance of nutrients & the shift to foods and dietary patterns Personal values, preferences, and treatment goals Transculturalization	Complete pre-class readings and quiz 1: due online Sept 11 at 9 AM See Reading List Below for link to papers
2	Sept 12	Obesity 1 Epidemiology, complications, etiology (4Ms), pathophysiology, and evidence for nutritional approaches to prevention and management Diagnosis and classification Obesity Canada Guidelines Health at any size Case Studies	Complete pre-class readings and quiz 2: due online Sept 18 at 9 AM. See Reading List Below for link to papers
3	Sept 19	Obesity 2 Fatty liver and metabolic syndrome The role of ultraprocessed foods, sugars and fats Case Studies Discussion of Case Study Assignments #1 & 2 (Group Presentations)	Complete pre-class readings and quiz 3: due online Sep 25 at 9 AM See Reading List Below for link to papers
4	Sep 26	Diabetes 1 Epidemiology, etiology, pathophysiology, and evidence for nutritional approaches to prevention and management Type 2 diabetes Low GI dietary pattern Case Studies	Complete pre-class readings and quiz 4: due online Oct 2 at 9 AM See Reading List Below for link to papers
5	Oct 3	Diabetes 2 Diabetes remission Weight and non-weight-based approaches Case Studies	Complete pre-class readings and quiz 5: due online Oct 9 at 9 AM See Reading List Below for link to papers
6	Oct 10	Hypertension Epidemiology, etiology, pathophysiology, and evidence for nutritional approaches to prevention and management DASH Diet Case Studies	

7	Oct 17	MID-TERM EXAM- Room HA 401 (Haultain Building, 170 College St (rear of)): On course content from Sept 5 to Oct 3 inclusive	Complete pre-class readings and quiz 6: due online Oct 23 at 9 AM See Reading List Below for link to papers
8	Oct 24	Dyslipidemia Epidemiology, etiology, pathophysiology, and evidence for nutritional approaches to prevention and management Portfolio Diet Case Studies	
9	Oct 31	NO CLASS – FALL READING WEEK	Complete pre-class readings and quiz 7: due online Nov 6 at 9 AM See Reading List Below for link to papers
10	Nov 7 Nov 11-last day to drop	CVD Epidemiology, etiology, pathophysiology, and evidence for nutritional approaches to prevention and management Mediterranean Diet Case Studies	
11	Nov 14	Resources to tackle the complexity of chronic diseases Nutritional approaches to multi-morbidity Case Studies Guest lecture Case Study Assignment #1 Due	
12	Nov 21	Group Case Study Presentations	
13	Nov 28	Group Case Study Presentations	
	Final Assessment Period	Cumulative Final Examination (scheduled by Arts & Science)	

Grading:

Assignment	Due Date	Weight
Pre-class Quizzes	Sept 11, 18, 25, Oct 2, 9, 23, Nov 6 NOTE: Quizzes are DUE Online at 9 AM THURSDAY BEFORE CLASS	14 = (7 X 2%)
Case Study Assignment #1 – personal self-reflection	Nov 14	10
Case Study Assignment #2 – group presentation	Nov 21 and Nov 28	16
Mid-term test	Oct 17	25
Final exam	Dec exam period: Cumulative (scheduled by Arts & Science)	35
TOTAL		100

Reading List:

Lecture	Readings
	(To read after the noted lecture. Most are to prepare for the following week's
	lecture.)
Lecture 1	1. Wharton S, et al. Obesity in adults: a clinical practice guideline. CMAJ 2020 August 4;192:E875-91. https://doi.org/10.1503/cmaj.191707
	*Appendix 1: The Edmonton Obesity Staging System
	*Appendix 2: 2020 Clinical Practice Guidelines: 5As Framework for Obesity Management in Adults
	2. Pedersen SD, Manjoo P, Wharton S. Canadian Adult Obesity Clinical Practice Guidelines: Pharmacotherapy for Obesity Management. Available from: https://obesitycanada.ca/guidelines/pharmacotherapy
	3. Brown J, Clarke C, Johnson Stoklossa C, Sievenpiper J. Canadian Adult Obesity Clinical Practice Guidelines: Medical Nutrition Therapy in Obesity Management. Available from:
	https://obesitycanada.ca/guidelines/nutrition
	4. Ball et al. Managing obesity in children: a clinical practice guideline. CMAJ 2025 April 14;197:E372-89. https://doi.org/10.1503/cmaj.241456
	5. PEN: practice-based Evidence in Nutrition. What is the effectiveness of
	behavioural interventions for the treatment of overweight and obesity in children and adolescents?
	https://www.pennutrition.com/KnowledgePathway.aspx?kpid=8325&pqcatid=146&pqid=27950
	6. Johnston BC, et al. Comparison of Weight Loss Among Named Diet Programs in Overweight and Obese Adults A Meta-analysis. JAMA.
	2014;312(9):923-933. https://doi.org/10.1001/jama.2014.10397
	7. Becerra-Tomas N, et al. Mediterranean diet, cardiovascular disease and mortality in diabetes: A systematic review and meta-analysis of prospective

	cohort studies and randomized clinical trials. Critical Reviews in Food
	Science and Nutrition. 2020, 60, 7, 1207–1227.
	https://doi.org/10.1080/10408398.2019.1565281
	8. Chiavaroli L, et al. Portfolio Dietary Pattern and Cardiovascular Disease: A
	Systematic Review and Meta-analysis of Controlled Trials. Prog Cardiovasc
	,
	Dis. 2018;61(1):43-53. https://doi.org/10.1016/j.pcad.2018.05.004
	9. Chiavaroli L, et al. DASH Dietary Pattern and Cardiometabolic Outcomes: An
	Umbrella Review of Systematic Reviews and Meta-Analyses. Nutrients.
	2019;11(2):338. https://doi.org/10.3390/nu11020338
	10. Chiavaroli L, et al. Effect of low glycaemic index or load dietary patterns on
	glycaemic control and cardiometabolic risk factors in diabetes: systematic
	review and meta-analysis of randomised controlled trials. BMJ
	2021;374:n1651. https://doi.org/10.1136/bmj.n1651
	11. Viguiliouk E, et al. Effect of vegetarian dietary patterns on cardiometabolic
	risk factors in diabetes: A systematic review and meta-analysis of
	randomized controlled trials. Clinical Nutrition 38 (2019) 1133e1145.
	https://doi.org/10.1016/j.clnu.2018.05.032
Lecture 2	
Lecture 2	Alberti et al. Harmonizing the Metabolic Syndrome A Joint Interim
	Statement of the International Diabetes Federation Task Force on
	Epidemiology and Prevention; National Heart, Lung, and Blood Institute;
	American Heart Association; World Heart Federation; International
	Atherosclerosis Society; and International Association for the Study of
	Obesity. Circulation. 2009;120:1640-1645.
	https://doi.org/10.1161/CIRCULATIONAHA.109.192644
	2. Rinella et al. A multisociety Delphi consensus statement on new fatty liver
	disease nomenclature. Hepatology. 2023;78:1966–1986.
	https://doi.org/10.1097/hep.00000000000520
	3. Rinella et al. AASLD Practice Guidance on the clinical assessment and
	management of nonalcoholic fatty liver disease. Hepatology. 2023;77:1797–
	1835. https://doi.org/10.1097/hep.000000000000323
Lecture 3	1. IDF Diabetes Atlas 11th edition 2025.
Lecture 5	
	https://diabetesatlas.org/resources/idf-diabetes-atlas-2025/
	2. Sievenpiper et al. 2018 Clinical Practice Guidelines Nutrition Therapy. Can J
	Diabetes 42 (2018) S64–S79. https://doi.org/10.1016/j.jcjd.2017.10.009
	3. Jenkins DJA et al. Effect of a Low–Glycemic Index or a High–Cereal Fiber Diet
	on Type 2 Diabetes. JAMA 2008; ;300;(23):2742-2753.
	https://doi.org/10.1001/jama.2008.808
Lecture 4	McKay et al. Remission of Type 2 Diabetes. Can J Diabetes 46 (2022) 753-
Lecture 7	
	761. https://doi.org/10.1016/j.jcjd.2022.10.004
	2. Lean M, et al. Primary care-led weight management for remission of type 2
	diabetes (DiRECT): an open-label, cluster-randomised trial. Lancet 201; 391,
	10120, 541-551. https://doi.org/10.1016/S0140-6736(17)33102-1
	3. Dasgupta K, et al. Remission of type 2 diabetes and improved diastolic
	function by combining structured exercise with meal replacement and food
	reintroduction among young adults: the RESET for REMISSION randomised
	controlled trial protocol. BMJ Open 2022;12:e063888.
	https://doi.org/10.1136/bmjopen-2022-063888

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Lecture 5	 Rabi et al. Hypertension Canada's 2020 Comprehensive Guidelines for the Prevention, Diagnosis, Risk Assessment, and Treatment of Hypertension in Adults and Children. Canadian Journal of Cardiology 36 (2020) 596e624. https://doi.org/10.1016/j.cjca.2020.02.086 Goupil et al. Hypertension Canada guideline for the diagnosis and treatment of hypertension in adults in primary care. CMAJ 2025 May 26;197:Exxx-x. https://doi.org/10.1503/cmaj.241770 Appel LJ et al. A Clinical Trial of the Effects of Dietary Patterns on Blood Pressure. N Engl J Med 1997;336:1117-1124. https://doi.org/10.1056/nejm199704173361601 Sacks F et al. DASH-Sodium Collaborative Research Group. Effects on blood pressure of reduced dietary sodium and the Dietary Approaches to Stop
	Hypertension (DASH) diet. DASH-Sodium Collaborative Research Group. N
	Engl J Med. 2001 Jan 4;344(1):3-10.
	https://doi.org/10.1056/nejm200101043440101
Lecture 6	Mid-term next week
Lecture 7	1. Pearson et al. 2021 Canadian Cardiovascular Society Guidelines for the
	Management of Dyslipidemia for the Prevention of Cardiovascular Disease
	in Adults. Canadian Journal of Cardiology 37 (2021) 1129–1150.
	https://doi.org/10.1016/j.cjca.2021.03.016
	2. Anderson TJ, Gregoire J, Pearson GJ, et al. 2016 Canadian Cardiovascular
	Society Guidelines for the management of dyslipidemia for the prevention
	of cardiovascular disease in the adult. Can J Cardiol 2016;32:1263–82. https://doi.org/10.1016/j.cjca.2016.07.510
Lecture 8	Jenkins DJA et al. Effects of a Dietary Portfolio of Cholesterol-Lowering
Lecture o	Foods vs Lovastatin on Serum Lipids and C-Reactive Protein. JAMA
	2003;290;(4):502-510. https://doi.org/10.1001/jama.290.4.502
	2. Jenkins DJA et al. Effect of a dietary portfolio of cholesterol-lowering foods
	given at 2 levels of intensity of dietary advice on serum lipids in
	hyperlipidemia: a randomized controlled trial. JAMA. 2011 Aug
	24;306(8):831-9. https://doi.org/10.1001/jama.2011.1202
Lecture 9	Same as lecture 7!
Lecture 10	1. Estruch et al. Primary Prevention of Cardiovascular Disease with a
	Mediterranean Diet Supplemented with Extra-Virgin Olive Oil or Nuts. N
	Engl J Med 2018;378:e34. https://doi.org/10.1056/nejmoa1800389
Lecture 11	1. CCS Companion Resources (e.g. Portfolio Diet resources) -
	https://ccs.ca/companion-resources/
	2. Diabetes Canada Tools & Resources (e.g. low glycemic index diet resources)
	- https://www.diabetes.ca/resources/tools-
	resources?Categories=&ResourceToolType=&SearchText=&Sort=alwaysont
	op&Page=1
	3. Heart & Stroke Foundation (e.g. DASH diet resources) -
	https://www.heartandstroke.ca/healthy-living/healthy-eating

Pre-class quiz articles:

Pre-class quiz due online, THURSDAYS at 9 AM	Readings
Thurs, Sept 11	1. Wharton S, et al. Obesity in adults: a clinical practice guideline. CMAJ 2020 August 4;192:E875-91. doi: 10.1503/cmaj.191707 https://www.cmaj.ca/content/192/31/e875 *Appendix 1: The Edmonton Obesity Staging System *Appendix 2: 2020 Clinical Practice Guidelines: 5As Framework for Obesity Management in Adults
	2. Brown J, Clarke C, Johnson Stoklossa C, Sievenpiper J. Canadian Adult Obesity Clinical Practice Guidelines: Medical Nutrition Therapy in Obesity Management. Available from: https://obesitycanada.ca/guidelines/nutrition
Thurs, Sept 18	 Alberti et al. Harmonizing the Metabolic Syndrome A Joint Interim Statement of the International Diabetes Federation Task Force on Epidemiology and Prevention; National Heart, Lung, and Blood Institute; American Heart Association; World Heart Federation; International Atherosclerosis Society; and International Association for the Study of Obesity. Circulation. 2009;120:1640-1645. https://doi.org/10.1161/CIRCULATIONAHA.109.192644 Rinella et al. A multisociety Delphi consensus statement on new fatty liver disease nomenclature. Hepatology. 2023;78:1966–1986. https://doi.org/10.1097/hep.0000000000000520
Thurs, Sept 25	1. Sievenpiper et al. 2018 Clinical Practice Guidelines Nutrition Therapy. Can J Diabetes 42 (2018) S64–S79. https://doi.org/10.1016/j.jcjd.2017.10.009
Thurs, Oct 2	 McKay et al. Remission of Type 2 Diabetes. Can J Diabetes 46 (2022) 753-761. https://doi.org/10.1016/j.jcjd.2022.10.004
Thurs, Oct 9	 Rabi et al. Hypertension Canada's 2020 Comprehensive Guidelines for the Prevention, Diagnosis, Risk Assessment, and Treatment of Hypertension in Adults and Children. Canadian Journal of Cardiology 36 (2020) 596e624. https://doi.org/10.1016/j.cjca.2020.02.086 Goupil et al. Hypertension Canada guideline for the diagnosis and treatment of hypertension in adults in primary care. CMAJ 2025 May 26;197:Exxx-x. https://doi.org/10.1503/cmaj.241770
Thurs, Oct 23	 Pearson et al. 2021 Canadian Cardiovascular Society Guidelines for the Management of Dyslipidemia for the Prevention of Cardiovascular Disease in Adults. Canadian Journal of Cardiology 37 (2021) 1129–1150. https://doi.org/10.1016/j.cjca.2021.03.016 Anderson TJ, Gregoire J, Pearson GJ, et al. 2016 Canadian Cardiovascular Society Guidelines for the management of dyslipidemia for the prevention of cardiovascular disease in the adult. Can J Cardiol 2016;32:1263–82. https://doi.org/10.1016/j.cjca.2016.07.510
Thurs, Nov 6	Pearson et al. 2021 Canadian Cardiovascular Society Guidelines for the Management of Dyslipidemia for the Prevention of Cardiovascular Disease in Adults. Canadian Journal of Cardiology 37 (2021) 1129–1150. https://doi.org/10.1016/j.cjca.2021.03.016 https://doi.org/10.1016/j.cjca.2021.03.016

 Anderson TJ, Gregoire J, Pearson GJ, et al. 2016 Canadian Cardiovascular Society Guidelines for the management of dyslipidemia for the prevention of cardiovascular disease in the adult. Can J Cardiol 2016;32:1263–82. https://doi.org/10.1016/j.cjca.2016.07.510

Important Course Policies:

Assignment Submissions:

The assignment in this course **requires both an online submission AND a hard copy**. The hard copy is being requested to facilitate reading your assignments from paper. All feedback to students will be provided online. The hard copy is not returned to students; instead, it is shredded shortly after final marks are submitted. **Students should download their marked assignments and associated feedback from Quercus** for their personal files so they have a complete record of their assignment and its grading.

Please see the "Policy for Documented Absences" in the syllabus which reflects how students should declare absences on ACORN. Such a declaration will be considered a compelling reason for assignment extensions and for adjustments for missed tests, as described below.

Late submission of assignments:

NO ASSIGNMENT WILL BE ACCEPTED after the due date and time for online submission except for compelling reasons such as illness, personal distress, family emergency or other unforeseen circumstance. Please contact Dr. Chiavaroli by e-mail (laura.chiavaroli@utoronto.ca) to request an extension, prior to the due date. A very brief explanation of why you are requesting an extension is required. This can be a written explanation from you or completion of the Absence Declaration through ACORN (see "Absence Declaration" below for important information). All information is treated as confidential. Students dealing with intense or ongoing personal distress or chronic illness, who may need special and continuing accommodation, are advised to discuss their situation with their college registrar and consider contacting Accessibility Services (See Accessibility Services below).

Please note that poor time management, having several assignments due at the same time, having to study for term tests, etc. are generally NOT compelling reasons for an extension. Extensions, for such reasons, are granted only in rare situations. Students are expected to complete their assignments as best they can, hand them in on time, even if incomplete, and accept that they may not get as high a grade as they would like.

If you feel you have a compelling reason that cannot be easily documented or are uncertain if your reasons are compelling, you should ideally discuss this with Dr. Chiavaroli before the assignment due date. If this is not possible, then **FIRST**, hand-in as much of the assignment as you possibly can on the due date and **THEN** contact Dr. Chiavaroli to discuss your situation. All discussions are kept confidential.

Accessibility Services: If you are registered with Accessibility Services (see "Accessibility Needs" below on how to register), extensions are provided in accordance with the terms of your letter of

accommodation. Once registered, you can request accommodation through ACORN: <u>Accommodated Testing Services (utoronto.ca)</u>.

Re-reads:

If you have concerns about your grading (term test, assignment), a re-read can be requested. Re-read requests must be made **within 2-weeks** of receiving your graded test or assignment. Further instructions on re-read requests may be provided during the term; check Quercus.

Policy for missed tests/exams:

Except for compelling reasons such as those described in the policy regarding late assignments, all students will be given a grade of ZERO if they miss the midterm or final exam. When compelling reasons are provided, a make-up test may be arranged if you contact Dr. Chiavaroli as soon as possible, to arrange a make-up test NO LATER than 1 week after the missed test. If you miss your term test (worth 25%), for compelling reasons and a make-up test is not scheduled, your final exam will be worth 60% of your final grade (25% + 35%).

Policy regarding missed final exam:

Policy regarding missed final exam is determined by the Faculty of Arts and Science. If you have compelling reasons for missing your final exam, contact your college registrar to file a petition; do this quickly as there are deadlines. You must provide documentation to support your petition. If your petition is accepted, you will be permitted to write a deferred exam. A deferred exam fee must be paid.

Lecture material and intellectual property:

Lecture presentations and course materials are the intellectual property of the instructors. All students enrolled in this course are permitted to use the material for personal study. The distribution, transmission, reproduction, or re-posting of the course materials, in whole or part, is NOT permitted without the consent of the instructor.

Academic Integrity:

Students are expected to conduct themselves with academic integrity. Consult the Code of Behaviour on Academic Matters for a complete outline of the University's policy and expectations: http://www.governingcouncil.utoronto.ca/policies/behaveac.htm. For more information, also see http://www.artsci.utoronto.ca/osai and http://academicintegrity.utoronto.ca.

Conduct Expectations & Equity, Diversity & Inclusion:

The University welcomes and includes students, staff, and faculty from a wide range of backgrounds, cultural traditions, and spiritual beliefs. All students share the responsibility of maintaining a positive environment for the academic and personal growth of all U of T community members, whether in person or online. These expectations are described in the Code of Student Conduct (https://governingcouncil.utoronto.ca/secretariat/policies/code-student-conduct-december-13-2019).

The University of Toronto is committed to equity, human rights, and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

Help with Academic Skills:

Academic Success Centre: The Academic Success Centre provides workshops, peer mentoring, and other resources to help all students improve their academic skills. Check out the available services at: https://studentlife.utoronto.ca/department/academic-success/

English Language Learning: Provides support to students for whom English is a second language. It also supports native speakers who would like to improve their language skills. Check out available services at: http://www.artsci.utoronto.ca/current/advising/ell

Writing Centres: Writing Centres provide assistance with writing assignments for all students. Check out available services at: http://www.writing.utoronto.ca/writing-centres

Use of generative artificial intelligence (AI) tools:

Students may <u>not</u> use artificial intelligence tools for taking tests/quizzes or completing course assignments. However, these tools may be useful when gathering information from across sources and assimilating it for understanding.

Note that any content produced by an artificial intelligence tool must be cited appropriately. Many organizations that publish standard citation formats are now providing information on citing generative AI (view the U of T Libraries Citation Guide for Artificial Intelligence Generative Tools).

Accessibility Needs:

Students with diverse learning styles and needs are welcome in this course. If you have an acute or ongoing disability issue or accommodation need, you should register with Accessibility Services (AS) at the beginning of the academic year by visiting http://www.studentlife.utoronto.ca/as/new-registration. Without registration, you will not be able to verify your situation with your instructors, and instructors will not be advised about your accommodation needs. AS will assess your situation, develop an accommodation plan with you, and support you in requesting accommodation for your course work. Remember that the process of accommodation is private: AS will not share details of your needs or condition with any instructor, and your instructors will not reveal that you are registered with AS.

Policy for Documented Absences:

Students may use the ACORN Absence Declaration Tool to declare an absence **once per academic term** (e.g., the fall term) for a maximum period of seven (7) consecutive calendar days. The seven-day declaration period can be retroactive for up to six (6) days in the past, or proactive, up to six (6) days in the future. The ACORN Absence Declaration Tool cannot be used to seek academic consideration for any matters that requires a petition such as missing a final exam or final assessment. For more information: Absence Declaration - University Registrar's Office (utoronto.ca)

Students who are absent from class for any reason (e.g., health condition (e.g., COVID) or injury, family emergency, bereavement) and who require consideration for missed academic work should report their absence through the online absence declaration. **Absence Declaration** is available on <u>ACORN</u> under the <u>Profile and Settings menu</u>. Please review the <u>ACORN how-to</u> for a step-by-step guide on how to submit an Absence Declaration (see "How do I declare an absence?"). If for any reason you are unable to submit your declaration, reach out to your <u>College Registrar's Office</u> to ask for their advice and help. **Students should also advise their instructor of their absence and attach your receipt for the absence declaration. This will be sent to your U of T email address as well as to email addresses you provided in the declaration.

Resources & supports:

If you or someone you know is in distress and there is an immediate risk, call 911. The following includes supports available to students on all three campuses:

- U of T St. George (Downtown Toronto)
- U of T Scarborough
- U of T Mississauga

Additionally, students have access to <u>U of T My Student Support Program</u> (My SSP) | 1-844-451-9700 24/7. Outside of North America, call 001-416-380-6578.

Culturally competent mental health and counseling services in 146 languages for all U of T students. Further supports for students may be found on the **Mental Health Portal**.

More information on resources available to support students is available at <u>UTogether: Safe and supportive</u> <u>campus | University of Toronto</u>