NFS 490H1: International and Community Nutrition

Course Syllabus

January 9 to April 2, 2024

Lectures: Tuesdays 1:00-4:00pm EST (in-person)

Course Description: This course focuses on current issues in international and community nutrition and will consider relevant cultural and social determinants of health. Foundational concepts in nutrition will be introduced such as the role of micronutrients and macronutrients in health, food security, nutritional assessment methods and study design, followed by a selection of substantive topics including maternal and child health, communicable and noncommunicable diseases, climate change and epidemiological transition in Indigenous communities in Canada. Examples of both global and local approaches will highlight the complex considerations involved in addressing these issues. Students will be encouraged to think critically about major challenges to improving nutrition and health at a community and global level.

Learning Outcomes: By the end of this course, students should be able to:

- 1. Appreciate current issues in nutrition in the community and globally, with a focus on the role of nutrition in maternal and child health, communicable and noncommunicable diseases and the impact of diet on the environment through critical evaluation of the scientific literature and exploration of demographic, epidemiological, biological, social, political and economic factors.
- 2. Apply basic principles of nutrition and the role of nutrients in health to understand the nutritional status of specific populations and to asses nutritional status based on dietary, anthropometric, biochemical and clinical assessments.
- 3. Critically review the scientific literature on nutrition and health topics, examine the role of nutritional factors on health outcomes, and identify strengths and weaknesses of different types of study designs that can help combat nutrition misinformation.
- 4. Integrate nutritional research findings and consider practical issues in intervention or program design and implementation.

Instructor: Vasanti Malik, vasanti.malik@utoronto.ca

Office Hours: Tuesdays 4:00-5:00 pm, Medical Sciences Building, Room 5326B or by appointment.

Course Expectations: It is expected that students will attend lectures and actively participate in class activities and discussions. However, if a student is unable to attend lecture due to illness or other extenuating circumstances, please contact Dr. Malik via email.

Course Evaluation:

Assessments*	Due Date	% of Final
		Grade
Midterm test (in-class)	February 13	35
Individual assignment	March 8	35
Group presentations	March 19 to April 2	20
	(Topics due Jan 26)	
Participation: In-class activities (n=3)	See schedule below for due	10
and peer evaluations of group	dates.	
presentations		

^{*}For students with religious or cultural observances on assignment due dates or scheduled tests, please speak with Dr. Malik in advance to arrange an alternate date.

Midterm test (35%): This will be a closed book in-person test that will take place in class on Tuesday February 13 (1:00-4:00 pm). The test will be a combination of short and long answer and multiple-choice questions and cover lecture materials and required readings from the first 4 lectures (Jan 9 - Jan 30).

Individual assignment (35%): Students will write a mock memo to a Minister of Health of a country of their choice on specific actions to take following the announcement of an important nutritional research finding published in a prominent scientific article (5 pages, double spaced, 12 pt. font). A selection of articles will be provided from which students will select one for their memo. Submission of the assignment in Quercus and Ouriginal (plagiarism detection tool) is required by the due date, March 8. More details will be posted on Quercus.

Group Presentation (20%) (30 minutes): An anonymous philanthropic donor has launched a global competition to fund one ground-breaking proposal to improve nutrition and population health. Students will work in groups of 4-6 to identify a specific nutritional problem and a single intervention or solution in a global or local setting of their choice and present their case. A list of suggested topics will be provided. Groups must submit their topic by January 26 on Quercus.

Groups will be given time to work on their presentations during class from 3:00 - 4:00 pm in our classroom starting after reading week. Presentations will take place during the final 3 lectures of the course and presentation dates will be determined by lottery. If a group member is unable to attend class on the date of their presentation, they will be permitted to prerecord their section of the presentation. Each group will submit a one-page summary of their presentation, one background reading and three learning objectives for their presentation. In addition, each student will complete peer evaluations for all presentations except their own (they count towards participation). More details will be posted on Quercus.

In-class activities and participation (10%): To create an interactive learning environment, we will utilize a variety of tools including three in-class activities and class discussions that will count towards the participation grade. In-class activities, each worth 2.5% must be submitted to Quercus by the respective deadlines noted in the course schedule. The remaining 2.5% of the participation grade will be based on the peer evaluations for the group presentations.

Ouriginal: Students will be required to submit their individual assignment to Ouriginal for a review of textual similarity and detection of possible plagiarism. In so doing, students will allow their assignments to be included as source documents in the Ouriginal reference database, where they will be used solely for the purpose of detecting plagiarism. Ouriginal is accessed through the online submission of assignments on Quercus, where you can review and opt to agree to the terms of use. If a student is unable to use Ouriginal, please contact Dr. Malik. All students are expected to submit to Ouriginal, or provide an alternative. Failure to do so could result in a grade of zero. For those who do not submit to Ouriginal, as an alternative they will be expected to meet with Dr. Malik for a short **oral test** about the process of writing the assignment and knowledge of the content. Based on this oral test, the grade on the assignment may be modified.

Generative artificial intelligence (AI)/ChatGPT: The use generative AI tools or apps such as ChatGPT or other AI writing assistants for completing class assessments is not permitted. Copying or paraphrasing from any AI app for completing assessments or representing as ones' own an idea, or expression of an idea, that was AI-generated may be considered an academic offense in this course. However, these tools may be useful when gathering information from across sources and assimilating it for understanding. If an AI tool is used for gathering resources for any course assessment, this must be clearly indicated in an appendix to the assessment and it is the students' responsibility to ensure that the information obtained is accurate.

Re-read policy: If a student has substantial concerns about their grade on the test or assignment, they may submit a written request for a re-read within the allotted time period. Details on how to do this and deadlines will be described in class, and posted on Quercus.

Missed Work: If a student is unable to complete course work or the term test, please contact Dr. Malik as soon as possible, and no later than one week after the test/activity to discuss options. Students will be asked to provide a reason for missing the test/activity. This documentation can be an Absence Declaration (via ACORN) or the University's Verification of Student Illness or Injury (VOI) form. The VOI indicates the impact and severity of the illness, while protecting your privacy about the details of the nature of the illness. If you cannot submit a VOI due to limits on terms of use, you can submit a different form (like a letter from a doctor), as long as it is an original document, and it contains the same information as the VOI (including dates, academic impact, practitioner's signature, phone and registration number).

For more information on the VOI, please see http://www.illnessverification.utoronto.ca. For information on Absence Declaration Tool for A&S students, please see https://www.artsci.utoronto.ca/absence.

If you get a concussion, break your hand, or suffer some other acute injury, you should register with Accessibility Services as soon as possible. Students dealing with ongoing personal distress or chronic illness, who may need special and continuing accommodation, may be asked for additional documentation and are advised to discuss their situation with their college registrar.

Failure to write a supplemental test/activity will result in a mark of zero for that component. It is the student's responsibility to contact Dr. Malik to schedule a make-up test/activity.

Late work: Assignments submitted late, without satisfactory reasoning (e.g., illness, personal distress, family emergency), will be penalized by a 1-point deduction per day late, including weekend days. Lateness is defined by the digital time stamp on online submissions. Please contact Dr. Malik as soon as possible if an extension is required. Students will be asked to provide a reason for the extension as noted above under missed work.

It is the student's responsibility to contact Dr. Malik to arrange an extension.

Course Materials: Reference materials: There is no assigned textbook for this course. Prior to each lecture, recommended readings will be posted on Quercus.

<u>Course notes and lecture slides</u>: Class materials can be obtained through Quercus. This site will continue to be updated throughout the term.

<u>Lecture material</u>, <u>audio/visual recordings</u>, <u>and intellectual property</u>: Lecture presentations and course materials are the intellectual property of the instructor. All students enrolled in NFS490 are permitted to use the material, for personal study only. Re-posting of lecture material online is not permitted without permission of the instructor.

University of Toronto Policies:

Academic Integrity: Academic integrity is essential to the pursuit of learning and scholarship in a university. The University of Toronto's Code of Behaviour on Academic Matters outlines the behaviours that constitute academic misconduct. Plagiarism (the presentation or paraphrasing of another person's work as if it was one's own) is a form of academic fraud with potentially serious consequences. All university policies regarding plagiarism will be upheld in this course. Refer to - http://academicintegrity.utoronto.ca/

<u>Accessibility</u>: The University provides support and accommodations for students with disabilities to ensure equitable access to opportunities and achievement of students' full potential. Refer to - http://www.studentlife.utoronto.ca/as

Help with Academic Skills:

<u>Academic Success Centre:</u> 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: http://www.asc.utoronto.ca/

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

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

Student Mental Health Resource: https://mentalhealth.utoronto.ca/

Course Schedule:

Date	Topic	Facilitator(s)	Assessment
Jan. 9	 Course overview Introduction to nutrition and health Overview of micronutrients and macronutrients in health 	V. Malik	
Jan. 16	 Social determinants of health- The Last Straw Game Food security in the Canadian context Overview of assignments 	S. Jarvis M. Nguyen V. Malik	
Jan. 23	 Nutritional Assessment Anthropometric assessment Biochemical assessment Clinical assessment Dietary Assessment 	V. Malik / J. Hulst	In-class activity Due: Jan. 26, 11:59pm Group presentation topic Due: Jan .26, 11:59pm
Jan.30	 Study Design Epidemiological studies Interventions Meta-analysis 	V. Malik	
Feb. 6	 Global nutrition research on maternal and child health Graduate student presentations on their research projects Panel discussion on perspectives from the field and international collaborations in nutrition Review for mid-term (last hour) 	D. Roth V. Malik	In-class activity Due: Feb 9, 11:59pm
Feb 13.	Mid-term test (in-class)	V. Malik	In-class midterm
Feb. 19-23	Reading Week		
Feb 27.	 Epidemiological transition in low-and middle-income countries Global burden of chronic diseases Environmental sustainability Developmental Origins of Health and Disease (DOHaD) Group presentation work time (last hour) 	V. Malik	In-class activity Due: Mar. 1, 11:59 pm
Mar. 5	 Dietary interventions for risk factor management and chronic disease prevention Technological innovations including apps in risk factor and disease management Group presentation work time (last hour) 	L. Chiavaroli	Individual assignment Due: Mar 8, 11:59 pm

Mar. 12	Epidemiological transition among	A. Zack-	Group presentation
	Indigenous communities in Canada	Coneybeare	abstracts, readings and
	 Determinants of chronic diseases such 		learning objectives
	as diabetes in Indigenous communities		
	 Role of traditional foods, thinking and 		Due: Mar 15, 11:59 pm
	healing		
	Group presentation work time (last hour)		
Mar. 19	Group Presentations (slides due Monday Mar.	Students	Peer evaluations
	20, 5 pm)		
			Due: Mar. 22, 11:59 pm
Mar. 26	Group Presentations (slides due Monday Mar.	Students	Peer evaluations
	27, 5 pm)		
			Due: Mar. 29, 11:59 pm
Apr. 2	Group Presentations (slides due Monday Apr. 3,	Students	Peer evaluations
	5 pm)		
	Course Conclusion	V. Malik	Due: Apr. 5, 11:59 pm