#### NFS 490H1: International and Community Nutrition

#### **Course Syllabus**

#### January 10 to April 4, 2023

Lectures: Tuesdays 1:00-4:00pm EST, Medical Sciences Building, Room 4279.

**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 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 and health outcomes, and identify strengths and weaknesses of studies. Discuss the latest findings from epidemiologic studies on the role of nutrition in the prevention and treatment of key communicable, perinatal, and noncommunicable disease outcomes and consider the impact of diet on the environment and vice versa.

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: Thursdays 12:00-1:00 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	February 7	35
Individual assignment	March 7	35
Group presentations and peer evaluations	March 21 to April 4	20
	(Topics due Jan 24)	
In-class activities (n=3) and participation	See schedule for in-class	10
	activities	

\*For students with religious 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 an online test, and will be posted on Quercus and available to students at 1:10pm on the day of the test (February 7). Within 24 hours (i.e. by 1:10 pm on February 8), students must submit test responses on the Quercus test template and upload a document with all their responses to Ouriginal (plagiarism detection tool). The test will be a combination of short and long answer and multiple-choice questions. Students may use course materials including lecture notes and readings when preparing their responses.

**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 is required by the due date, March 7. 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 24 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. Students will complete peer evaluations for all presentations except their own and submit these to Quercus (they count as participation). More details will be 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 midterm test and individual assignment to Ouriginal for a review of textual similarity and detection of possible plagiarism. In so doing, students will allow their term tests and 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 the test or assignment. 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 term test or assignment and knowledge of the content. Based on this oral test, the grade on the assignment or test may be modified.

**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 within 48 hours, ideally prior to the test/class date, 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 and this can be a written explanation from the student or a medical certificate. http://www.illnessverification.utoronto.ca/index.php. Verbal discussions can also be arranged. All discussions are treated as confidential. 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 10% of the final mark each day, 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 and this can be a written explanation from the student or a medical certificate. <u>http://www.illnessverification.utoronto.ca/index.php</u>. Verbal discussions can also be arranged. All discussions are treated as confidential. It is the student's responsibility to contact Dr. Malik to arrange an extension.

**Course Materials:** <u>Reference materials:</u> 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.

Lecture material, audio/visual recordings, and intellectual property: 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.

# **Course Schedule:**

Date	Торіс	Facilitator(s)	Assessment
Jan. 10	Course overview	V. Malik	
	Introduction to nutrition and health		
	Overview of micronutrients and		
	macronutrients in health		
Jan. 17	Social determinants of health	V. Malik	The Last Straw
	Food security in the Canadian context		in-class activity
	Overview of assignments		
			Due: Feb. 20, 5pm
Jan. 24	Nutritional Assessment	V. Malik /	Group presentation
	Dietary assessment	J. Hulst	topic
	Anthropometric assessment		
	Biochemical assessment		Due: Jan 24, 5pm
	Clinical assessment		
Jan.31	Study Design	V. Malik	
	Epidemiological studies		
	Interventions		
	Meta-analysis		
	Overview of midterm test		
Feb. 7	Term Test - Online		Due: Feb 8, 1:10 pm
Feb. 14	<ul> <li>Global nutrition research on maternal and child health</li> </ul>	D. Roth	In-class activity
	Graduate student presentations on		Due: Feb 17, 5pm
	their research projects		
	Panel discussion on perspectives from		
	the field and international		
	collaborations in nutrition		
Feb. 20-24	Reading Week	Reading Week	
Feb 28.	Epidemiological transition in low-and	V. Malik	In-class activity
	middle-income countries		
	Global burden of chronic diseases		Due: Mar. 1, 5 pm
	Environmental sustainability		
	Developmental Origins of Health and		
	Disease (DOHaD)		
	Group presentation work time (last hour)		
Mar. 7	Dietary interventions for risk factor	L. Chiavaroli	Individual
	management and chronic disease		assignment
	prevention		
	Technological innovations including apps in		Due: Mar 7, 5pm
	risk factor and disease management		
	Group presentation work time (last hour)		
Mar. 14	Epidemiological transition among	A. Shawanda	Group presentation
	Indigenous communities in Canada		abstracts, readings

	<ul> <li>Determinants of chronic diseases such as diabetes in Indigenous communities</li> <li>Role of traditional foods, thinking and healing</li> </ul>		and learning objectives Due: Mar 17, 5 pm
	Group presentation work time (last hour)		
Mar. 21	Group Presentations (slides due Monday Mar. 20, 5 pm)	Students	Peer evaluations
			Due: Mar. 22, 5 pm
Mar. 28	Group Presentations (slides due Monday Mar. 27, 5 pm)	Students	Peer evaluations
			Due: Mar. 29, 5 pm
Apr. 4	Group Presentations (slides due Monday Apr. 3, 5 pm)	Students	Peer evaluations
	Course Conclusion	V. Malik	Due: Apr. 5, 5 pm

## **University of Toronto Policies:**

<u>Academic Integrity</u>: 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 - <u>http://academicintegrity.utoronto.ca/</u>

<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/

<u>English Language Learning</u>: 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