

Welcome to FNH 455: Applied International Nutrition!

I am thrilled to be teaching this course as it relates directly to my specialization in malnutrition research and practice. I have experience in clinical nutrition research, program implementation, and guideline development related to prevention and treatment of malnutrition in infants and children. My goal with teaching this course is to stimulate your interest in nutrition in the context of global health and to consider solutions to nutritional problems through your own disciplinary perspectives. I encourage you to reach out to me to discuss anything related to the course and how I can best support your learning.

– Dr. Allison Daniel, Course Instructor

Land Acknowledgement

UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the xwməθkwəyəm (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 their culture, history, and traditions from one generation to the next on this site.

Course Information

Course Title	Course Code Number	Credit Value
Applied International Nutrition	FNH 455 001	3 credits

Prerequisite

FNH 355: International Nutrition

Course Instructor	Contact Details	Office Location	Office Hours
Dr. Allison Daniel (she/her)	allison.daniel@ubc.ca You can typically expect a response within two working days of receiving your emails. Please remember to review the syllabus before reaching out.	2205 East Mall (FNH Building), Room 275* *if/when in-person activities are permitted	I will be available during weekly office hours on Tuesdays between 2:00 and 4:00pm. I will hold all office hours over Zoom (see Canvas for details) for the start of the term at least. If you would like to arrange a meeting outside of office hours, please reach out by email and I will do my best to accommodate.

Teaching Assistants

Nasime Sarbar and Kerri Scherbinsky

Course Description and Format

This course aims to encourage you to critically examine and design nutrition interventions in the global health context. You are required to actively participate in discussions and to work in groups to apply learned knowledge and complete an international nutrition proposal.

Course content will be delivered via lectures, guest speakers, and required readings. Evaluation is based on assignments (individual and group-based) and a midterm exam. The midterm (March 1) will be based on all content (lectures, guest speakers, readings) covered from January 11 to February 17 (inclusive). The group project will focus on application of learned knowledge of nutrition interventions to complete a proposal. Groups of 5-6 students have been assigned randomly by the instructor.

Given the rapidly evolving challenges associated with COVID-19, UBC will approach the start of this term with most classes, including FNH 455, beginning online. Classes will be streamed live over Zoom and recordings of each class will be uploaded to Canvas (Media Gallery) shortly after. I will share details, including the Zoom link, in Canvas through an announcement and calendar entries. I strongly encourage you to attend the live classes to have the opportunity to engage, ask questions, and participate in discussions.

Learning Outcomes

Upon completion of this course, you should/should be able to:

- 1) Gain substantive knowledge of current issues related to nutrition in the context of global health.
- 2) Demonstrate an understanding how different disciplinary approaches can be important to address these issues.
- 3) Critically examine research on nutrition and global health topics, including gaps and limitations of the evidence.
- 4) Comprehend the challenges and ethical considerations around research and practice in global health.
- 5) Integrate and apply this knowledge to develop a proposal for an intervention to address a global health nutrition problem.

Learning Activities, Materials, and Expectations

You must complete the required readings before each class, all of which are linked in this syllabus. Note that there is no textbook for this class. Slides will be shared on Canvas just before each lecture.

There will be discussion boards on Canvas for you to use if you choose to do so, including one for each group for the nutrition intervention proposal and another for all students to access which will be monitored weekly by the instructor or TAs. There will also be an opportunity to submit

topics that you would like the instructor to cover for the summary and discussion lectures on February 17 and March 29.

For any in-person lectures, please show up on time, refrain from talking and messaging when others are speaking during in-person lectures, and turn mobile devices to silent mode unless required for accessibility or medical purposes.

You are expected to treat your fellow students, your instructor, and guest speakers with respect. Communications with your instructor and classmates, be they in-person, over email, or on Canvas, should be courteous and professional.

Please avoid making assumptions about other people's background or identities. For example, do not use gendered language unless you know how the person identifies (e.g. "I agree with what was just said" instead of "I agree with her").

Schedule of Topics

Classes are held on Tuesdays and Thursdays from 12:30 until 2:00PM. The below class schedule is tentative; if changes occur, I will inform you and provide an updated schedule on Canvas.

Date	Topics and Guest Speakers	Required Readings (and Listening)
1) Jan 11	Introduction to FNH 455	This syllabus!
2) Jan 13	Nutrition in the Global Health Context	Global action plan on child wasting All children surviving and thriving: re-envisioning UNICEF's conceptual framework of malnutrition A conversation with Saul Guerrero, Senior Nutrition Advisor on Emergency Nutrition at UNICEF
3) Jan 18	Malnutrition	Perspective: What Does Stunting Really Mean? A Critical Review of the Evidence Joint statement on the community-based management of severe acute malnutrition ‘Severe malnutrition’: thinking deeply, communicating simply
4) Jan 20	Wasting and Oedema <i>Guest speaker:</i> Isabel Potani, Queen Elizabeth Central Hospital, Malawi	Severe childhood malnutrition Kwashiorkor: still an enigma – the search must go on
5) Jan 25	Clinical Treatment of Acute Illness <i>Guest speaker:</i> Dr. Fiona Muttalib,	None

	BC Children's Hospital Research Institute, Canada & Malawi	
6) Jan 27	<p>Lasting Effects of Malnutrition</p> <p><i>Guest speaker:</i> Dr. Debbie Thompson, University of the West Indies, Jamaica</p>	<p>Childhood severe acute malnutrition is associated with metabolic changes in adulthood</p> <p>Can Children Catch up from the Consequences of Undernourishment? Evidence from Child Linear Growth, Developmental Epigenetics, and Brain and Neurocognitive Development</p>
7) Feb 1	Designated Time for Groupwork	None
8) Feb 3	Micronutrient Deficiencies and Interventions	<p>Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost?</p> <p>Making programmes worth their salt: Assessing the context, fidelity and outcomes of implementation of the double fortified salt programme in Uttar Pradesh, India</p>
9) Feb 8	<p>Iron Deficiency and Anemia Interventions</p> <p><i>Guest speaker:</i> Afreen Khan, University of Toronto, Canada & Bangladesh</p>	<p>Is untargeted iron supplementation harmful when iron deficiency is not the major cause of anaemia? Study protocol for a double-blind, randomised controlled trial among non-pregnant Cambodian women</p> <p>The effects of iron fortification on the gut microbiota in African children: a randomized controlled trial in Côte d'Ivoire</p>
10) Feb 10	Breastfeeding and Maternal-Directed Interventions	<p>PAHO/WHO Guiding principles for Complementary Feeding of the Breastfed Child</p> <p>Effectiveness of Breastfeeding Support Packages in Low- and Middle-Income Countries for Infants under Six Months: A Systematic Review</p>
11) Feb 15	WASH Interventions	The WASH Benefits and SHINE trials: interpretation of WASH intervention

	<i>Guest speaker:</i> Dr. Elizabeth Tilley, ETH Zurich, Switzerland & Malawi	effects on linear growth and diarrhoea Looking beyond Technology: An Integrated Approach to Water, Sanitation and Hygiene in Low Income Countries
12) Feb 17	Summary and Discussion of Course Content to Date	None
<i>Feb 21 – 25</i>	Midterm Break	None
13) Mar 1	Midterm Exam	None
14) Mar 3	Designated Time for Groupwork	None
15) Mar 8	Quantitative Research Methods	Childhood Acute Illness and Nutrition (CHAIN) Network: a protocol for a multi-site prospective cohort study to identify modifiable risk factors for mortality among acutely ill children in Africa and Asia
16) Mar 10	Qualitative and Mixed-Methods Research	A Mixed-Methods Cluster-Randomized Controlled Trial of a Hospital-Based Psychosocial Stimulation and Counseling Program for Caregivers and Children with Severe Acute Malnutrition
17) Mar 15	Meta-Analysis and Guideline Development	Ready-to-Use Therapeutic Food (RUTF) Containing Low or No Dairy Compared to Standard RUTF for Children with Severe Acute Malnutrition: A Systematic Review and Meta-Analysis Despite pressure, WHO review keeps status quo malnutrition treatment
18) Mar 17	Designated Time for Groupwork	None
19) Mar 22	International Fieldwork <i>Guest speaker:</i> Dr. Corey McAuliffe, University of British Columbia, Canada	The Lived Experience of Global Public Health Practice “My Flight Arrives at 5 am, Can You Pick Me Up?”: The Gatekeeping Burden of the African Academic
20) Mar 24	Decolonization of Global Health	Addressing power asymmetries in global health: Imperatives in the wake of the COVID-19 pandemic

		10 fixes for global health consulting malpractice How (not) to write about global health
21) Mar 29	Summary and Discussion of Course Content	None
22) Mar 31	Nutrition intervention presentations (Groups 1, 2, 3, & 4)	None
23) Apr 5	Nutrition intervention presentations (Groups 5, 6, 7, & 8)	None
24) Apr 7	Nutrition intervention presentations (Groups 9, 10, 11, & 12)	None

Assessments of Learning

All assignments are to be submitted as PDF files through Canvas by 11:59pm on the deadline (apart from the midterm exam which will be held during class). Rubrics for each assignment and the presentation can be found on Canvas. Late assignments will be eligible for up to 90% of the percentage value, with 10% deducted for each day late up until five days after the deadline.

There will be no make-up midterm exam; if students miss this with a valid excuse (e.g. medical absence) then a written assignment will be required in place of the midterm.

Assignment Title	Group or Individual	Dates/Deadlines	Percentage Value
Participation Assignment #1	Individual	Jan 13	5%
Critique of Research	Individual	Jan 25	20%
Midterm Exam	Individual	Mar 1	25%
Nutrition Intervention Proposal	Group	Feb 15	10%
Part 1: Concept Note		Mar 31, Apr 5, or Apr 7	10%
Part 2: Presentation		Apr 14	25%
Part 3: Final Proposal			
Participation Assignment #2	Individual	Apr 12	5%

Participation Assignment #1

In just 300-500 words, answer this: why are you taking this class and what do you hope to get out of it? Feel free to share how your disciplinary perspective might influence your approach to the course in alignment with the Learning Outcome 2.

Critique of Research

Your tasks are to: briefly summarize the study described in the two papers below, including the objective, methods, and results; and to critique the study and explain why you think the study resulted in these outcomes. The word count must be within 1200-1500 words excluding references. This assignment aligns with Learning Outcome 3 in particular.

- 1) Stewart et al. (2019). *The effect of eggs on early child growth in rural Malawi: the Mazira Project randomized controlled trial*. The American Journal of Clinical Nutrition, 110(4), 1026–1033. <https://doi.org/10.1093/ajcn/nqz163>
- 2) Prado et al. (2020). *Early Child Development Outcomes of a Randomized Trial Providing 1 Egg Per Day to Children Age 6 to 15 Months in Malawi*. The Journal of Nutrition, 150(7), 1933–1942. <https://doi.org/10.1093/jn/nxaa088>

Midterm Exam

The midterm will be in-class or on Canvas (depending on the COVID-19 situation), and will consist of multiple-choice, matching, short-answer, and long-answer questions focused on content up to February 17 (inclusive). Examinable content includes lecture presentations and discussions (instructor and guest speakers) and required readings. The midterm will be 90 minutes and must be completed independently. This exam is related to Learning Outcome 1.

Nutrition Intervention Proposal

Students will be randomly assigned to a group of 5-6 students to work together on developing a proposal for a nutrition intervention. It is expected that all members of the group will contribute equally. You will have three opportunities during class time to meet and work on your proposal but may need to meet outside of class time as well. This series of assignments is most linked to Learning Outcomes 2, 4, and 5.

Part 1: Concept Note

In this assignment, you will first identify and explain an important nutritional problem that affects a specific population of interest. You will then pitch a nutrition intervention to address the problem with hypotheses/research evidence supporting the potential effectiveness of this intervention. The range for this written piece is 800-1000 words excluding references.

Part 2: Presentation

Each group will present their proposal to the class on one of the three presentation dates at the end of the term, assigned by the instructor. Presentations should be prepared as PowerPoint or PDF files and must be 15 minutes in duration with 5 minutes for questions and discussion.

Part 3: Final Proposal

The final proposal on the nutrition intervention should include the background and rationale, including identifying a priority area to address, a detailed description of the proposed nutrition

intervention, the methods of the research study, potential challenges to be considered/addressed, and implications and potential for impact. The proposal must be 2500-3000 words, in addition to tables, figures, and references.

Participation Assignment #2

After attending the nutrition intervention presentations, choose one presentation from each of the three days to describe in 100-150 words each. These brief descriptions should summarize the interventions and implications.

Assignment Formatting

- Times New Roman font size 12
- 1.5 line spacing
- 2-cm margins on all sides
- References in APA style
- Submitted as PDF files

Please follow these formatting guidelines, as well as word limits, to receive full marks; if not followed you may have marks taken off at the discretion of the instructor or TAs.

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 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 on [the UBC Senate website](#).

Academic Integrity

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are

imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply when the matter is referred to the Office of the Dean. Careful records are kept in order to monitor and prevent recurrences. A more detailed description of academic integrity, including the University's policies and procedures, may be found in the [UBC Calendar: Student Conduct and Discipline](#).

Academic Accommodation for Students with Disabilities

Academic accommodations help students with a disability or ongoing medical condition overcome challenges that may affect their academic success. Students requiring academic accommodations must register with the [Centre for Accessibility](#). They will determine the student's eligibility for accommodations in accordance with [Policy 73: Academic Accommodation for Students with Disabilities](#). Academic accommodations are not determined by your instructors, and instructors should not ask you about the nature of your disability or ongoing medical condition, or request copies of your disability documentation. However, your instructor may consult with the Centre for Accessibility should the accommodations affect the essential learning outcomes of a course.

Support with Online Learning

Online learning can be overwhelming at times. I expect that you will have questions, and I want to help. Please don't hesitate to reach out. I encourage you to go to the Keep Learning website at <https://keeplearning.ubc.ca/>. This site provides comprehensive material on setting up for online learning, specific learning platforms, and resources for self-care and other support.

I also understand that many students might be absent from class (in-person or online) for a period of time during the term due to the current circumstances. Please reach out to me about how I can support you. See below for further guidance related to COVID-19.

COVID-19 Statements

Provincial Health Orders and UBC policy now mandate masks in all indoor public spaces on campus. These spaces include classrooms, residence halls, libraries, and common areas. Students who wish to request an exemption to the indoor mask mandate must do so based on one of the grounds for exemption detailed in [the PHO Order on Face Coverings \(COVID-19\)](#). Such requests must be made through the Center for Accessibility (Vancouver campus). After review, students that are approved for this accommodation will be provided with a letter of accommodation to share with faculty members teaching courses in which they are registered. In the intervening time, these students are welcome in the class. Mask wearing protects you as well as others in your environment. Let's do everything we can as a community to stop the spread of this virus.

Vaccination

If you have not yet had a chance to get vaccinated against COVID-19, [vaccines are available to you, free, and on campus](#). The higher the rate of vaccination in our community overall, the lower the chance of spreading this virus. You are an important part of the UBC community. Please arrange to get vaccinated if you have not already done so.

Seating in Class

To reduce the risk of COVID-19 transmission, for any in-person classes please sit in a consistent area of the classroom each day. This will minimize your contacts and will still allow for the pedagogical methods planned for this class to help your learning.

Your Personal Health

If you're sick, it's important that you stay home – no matter what you think you may be sick with (e.g., cold, flu, other). A daily self-health assessment is required before attending campus. Every day, before coming to in-person classes, complete the self-assessment for COVID-19 symptoms using this tool: <https://bc.thrive.health/covid19/en>. Do not come to class if you have COVID-19 symptoms, have recently tested positive for COVID-19, or are required to quarantine. You can check this website to find out if you should self-isolate or self-monitor: <http://www.bccdc.ca/health-info/diseases-conditions/covid-19/self-isolation#Who>.

If you are sick on a midterm exam day, please email the instructor as soon as you are confident you should not come to the scheduled exam. We would strongly prefer that you contact us to make an alternate arrangement than for you to come to the exam while you are ill. If you do show up for an exam and you are clearly ill, you will not be able to write the exam and we will make alternate arrangements with you. It is much better for you to email ahead of time (even if it is last-minute) and not attend. Remember to include your full name and student number in your message. For additional information about academic concessions, see the UBC policy here: <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,329,0,0>

As stated previously, I encourage you to reach out about how I can support you during this time.

Instructor Health

If I am ill, develop COVID-19 symptoms, or test positive for COVID-19, then I will not come to any in-person classes. If I am well enough to teach, but am taking precautions to avoid infecting others, I will try my best to have online classes. If this happens, you will receive an email or notification in Canvas about this.

Copyright

All materials of this course (course handouts, lecture slides, assessments, course readings, etc.) are the intellectual property of the 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.

Online Class Recordings

Note that all online classes will be recorded so that they can be shared on Canvas with students enrolled in this course only. Recordings must not be distributed beyond the course or reposted elsewhere, without the explicit permission of the instructor (and/or others who own the copyright in the recording). During the online classes, you may turn off your camera if you do not wish to have your video recorded and shared with other students in the class through Canvas. Furthermore, Zoom servers are located outside Canada, and you can maintain your privacy by logging in using only your first name or a nickname, turning off your camera, and muting your microphone if you would like.

Acknowledgements

I would like to thank Dr. Crystal Karakochuk and Larisse Melo for sharing their course materials from previous iterations of FNH 455 and for their guidance. Thank you as well to all the wonderful guest speakers who made the time to present for us.
