

Syllabus

HNSC 2130 A01

Nutrition Through the Life Cycle
(Fall 2025)

University of Manitoba

The University of Manitoba campuses are located on original lands of Anishinaabeg, Ininiwak, Anisininewuk, Dakota Oyate and Dene, and on the National Homeland of the Red River Métis.

We respect the Treaties that were made on these territories, we acknowledge the harms and mistakes of the past, and we dedicate ourselves to move forward in partnership with Indigenous communities in a spirit of Reconciliation and collaboration.

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COURSE DETAILS

| | |
|---|--|
| Course Title & Number: | HNSC 2130 Nutrition Through the Life Cycle |
| Number of Credit Hours: | 3.0 |
| Class Times & Days of Week: | MWF, 8:30-9:20AM |
| Location for classes/labs/tutorials: | EITC E2 Room 105 |
| Pre-Requisites: | HNSC 1210 |

Instructor Contact Information

| | |
|--|--|
| Instructor(s) Name & Preferred Form of Address: | Mohammed Moghadasian |
| Office Location: | CCARM, St. Boniface Hospital Research Centre |
| Office Hours or Availability: | M/W/F 10-11AM by appointment only |
| Office Phone No. | 204-235-3934 |
| Email: | Mohammed.moghadasian@umanitoba.ca <i>Note:</i> All email communication must conform to the Communicating with Students university policy. |
| Contact: | Preferred email contact |

Course Description

U of M Course Calendar Description

Examination of nutritional needs throughout the life cycle, the nutritional concerns of different age groups and the development of healthy eating practices.

General Course Description

This course is designed to advance students' understanding of the importance of nutrition across the life cycle, from pre-conception through to an aging population. Drawing heavily from the required readings, this course is designed to advance critical thinking skills on the role of nutrition in growth and development, and in the maintenance of healthy aging. Case studies will be used to allow students the opportunity to engage with the course material in a manner that is relevant and accessible. All students should feel free to engage in open discussion during the lecture period.

Course Goals

The aim of this course is to provide students with information about the changes in nutritional needs as humans develop, from pre-conception through to aging adults. Students will advance their critical thinking skills through the use of case studies and classroom discussions as we reflect on the human condition and the role that nutrition plays across the life cycle.

Course Learning Objectives

The overall objective of this course is to develop an understanding of nutrition across the life cycle with following sub-objectives.

1. Identify the macro- and micronutrients critical for normal human growth and development
2. Develop an understanding for the biological basis of nutrient requirements, from conception through to older adults
3. Recognize the health consequences of under or excess nutrient intake at critical life stages
4. Understand the rationale behind major public health nutritional interventions, particular in Canada
5. Understand how additional lifestyle factors can affect nutrient requirements
6. Identify socioeconomic and cultural barriers to meeting nutrient needs
7. Integrate nutrition knowledge into assessment practices through the use of experiential case studies

The Undergraduate Dietetics program is designed to meet the Integrated Competencies for Dietetic Education and Practice (ICDEP). ICDEP provides outcome-based standards for entry-to-practice dietetic educations and entry-level dietetic practice. Outcome -based standards focus on abilities possessed as a result of learning. The ability to perform a task to a specified standard, and in a way that is observable to others, is typically called a *Practice Competency (PC)*. *Performance Indicators (PIs)* describe abilities that are intended to be demonstrated within the program (i.e., pre-practice). Below is a list of PIs that will be assessed throughout this course.

| PRACTICE COMPETENCIES | PERFORMANCE INDICATORS | Course Learning Objectives (CLOs) |
|---|--|-----------------------------------|
| 1. FOOD AND NUTRITION EXPERTISE: Dietitians integrate their food and nutrition expertise to support the health of individuals, communities and populations | | |
| 1.01 Apply understanding of food composition and food science | f. Identify sources of micronutrients and macronutrients in food | 1 |
| | g. Identify sources of non-nutrient functional components in food | 1 |
| 1.02 Apply understanding of food environments | d. Demonstrate understanding of factors affecting food security of Canadians | 6 |
| 1.03 Apply understanding of human nutrition and metabolism | a. Demonstrate understanding of the role of nutrients and other food components | 1, 2, 3, 4, 5, 6, 7 |
| | b. Demonstrate understanding of the processes of ingestion, digestion, absorption and excretion | 1, 2, 7 |
| | c. Demonstrate understanding of metabolism | 1, 2, 3, 7 |
| 1.04 Apply understanding of dietary requirements and guidelines | a. Demonstrate understanding of dietary requirements across the lifespan, in health and disease | 1, 2, 3, 4, 5, 6, 7 |
| | b. Demonstrate understanding of factors affecting energy balance in determining dietary requirements | 1, 2, 3, 4, 5, 6, 7 |
| | c. Demonstrate understanding of current nutrition recommendations and dietary guidelines | 1, 2, 3, 4, 5, 6, 7 |
| | d. Demonstrate understanding of how deficiencies and toxicities of nutrients affect health | 1, 2, 3, 4, 5, 6, 7 |
| | e. Demonstrate understanding of the role of dietary supplements | 1, 2, 3, 4, 5, 6, 7 |
| 1.05 Apply understanding of dietary practices | b. Demonstrate understanding of social aspects of food choice and eating | 4, 5, 6, 7 |
| | c. Demonstrate understanding of psychological aspects of food choice and eating | 4, 5, 6, 7 |
| | d. Demonstrate understanding of the impact of financial resources on food choice and eating | 5, 6 |

| | | |
|--|--|---------------------|
| | g. Demonstrate knowledge of trends in food consumption | 4, 6, 7 |
| 1.06 Integrate nutrition care principles and practices | a. Demonstrate knowledge of human physiological systems in health and disease | 1, 2, 3, 5, 7 |
| | b. Demonstrate knowledge of the etiology and pathophysiology of nutrition-related diseases | 1, 2, 3, 5, 7 |
| | c. Demonstrate understanding of nutrition-related disease management strategies | 1, 2, 3, 5, 7 |
| | d. Demonstrate understanding of the Nutrition Care Process | 1, 2, 3, 4, 5, 6, 7 |
| 1.07 Integrate population health promotion principles and practices | d. Demonstrate understanding of health promotion concepts and approaches | 3, 4, 6, 7 |
| 5. NUTRITION CARE: Dietitians use the Nutrition Care Process to provide individualized care | | |
| 5.01 Conduct nutrition assessment | a. Use appropriate nutrition risk screening strategies | 1, 2, 3, 5, 6, 7 |
| | b. Identify relevant information | 1, 2, 3, 5, 6, 7 |
| | c. Assess and interpret food- and nutrition-related history | 1, 2, 3, 5, 6, 7 |
| | f. Assess and interpret anthropometric parameters | 2, 3, 7 |
| 5.03 Plan nutrition intervention(s) | b. Determine nutrition requirements | 1, 2, 3, 5, 7 |

Textbook, Readings, and Course Materials

Textbook – Brown, Judith E. (2024). Nutrition through the Life Cycle (8th Ed.)

The textbook is available for purchase from the University of Manitoba Bookstore University of Manitoba Bookstore (<http://bookstore.umanitoba.ca/SelectTermDept>) in both paper and e-book format. Please order your materials immediately, if you have not already done so.

Please note: We will be using this textbook extensively during this course and readings will be expected to be completed in advance of all classes. Please ensure that you have an available copy.

Supplementary readings – All supplementary readings will be posted on UMLearn.

Using Copyrighted Material

Please respect copyright. We will use copyrighted content in this course. I have ensured that the content I use is appropriately acknowledged and is copied in accordance with copyright laws and university guidelines. Copyrighted works, including those created by me, are made available for private study and research and must not be distributed in any format without permission. Do not upload copyrighted works to a learning management system (such as UM Learn), or any website, unless an exception to the *Copyright Act* applies or written permission has been confirmed. For more information, see the University's Copyright Office website at <http://umanitoba.ca/copyright/> or contact um_copyright@umanitoba.ca.

Course Technology

If you are using an ebook version of the required textbook, please note that the classroom has limited power receptacles. Please ensure that your devices are fully charged before coming to class.

Students will be required to access UMLearn for course notes, supplementary readings and uploading assignments. You can access the course content for HNSC 2130 from the main access page of UMLearn,

Additionally, please recognize that it is the general University of Manitoba policy that all technology resources are to be used in a responsible, efficient, ethical and legal manner.

Expectations: I Expect You To

- Come to class having read the assigned readings. This course format will work best if you are prepared via the readings so that we can concentrate on the areas that may require further clarification and also so that we can delve into certain areas in more detail.
- Participate in the classroom discussions. We will have an open and accessible classroom environment. I encourage a diversity of opinions in relation to the subject material and expect students to engage with the lecture material. Participation will be further encouraged via a specific mark allocation.
- I will treat you with respect and would appreciate the same courtesy in return. See [Respectful Work and Learning Environment Policy](#).
- I expect you to follow these policies around Class Communication, Academic Integrity, and Recording Class Lectures.

Class Communication:

You are required to obtain and use your University of Manitoba email account for all communication between yourself and the university. All communication must comply with the Electronic Communication with Student Policy:

http://umanitoba.ca/admin/governance/governing_documents/community/electronic_communication_with_students_policy.html.

Academic Integrity:

Each student in this course is expected to abide by the University of Manitoba [Academic Integrity principles](#). Always remember to reference the work of others that you have used. Also be advised that you are required to complete your assignments independently unless otherwise specified. If you are encouraged to work in a team, ensure that your project complies with the academic integrity regulations. You must do your own work during exams. Inappropriate collaborative behavior and violation of other Academic Integrity principles, will lead to the serious [disciplinary action](#). Visit the [Academic Calendar](#), [Student Advocacy](#), and [Academic Integrity](#) web pages for more information and support.

Recording Class Lectures:

No audio or video recording of lectures or presentations is allowed in any format, openly or surreptitiously, in whole or in part without permission from Kathy Vagianos. Course materials (both paper and digital) are for the participant's private study and research.

Student Accessibility Services:

The University of Manitoba is committed to providing an accessible academic community. [Students Accessibility Services \(SAS\)](#) offers academic accommodation supports and services such as note-taking, interpreting, assistive technology and exam accommodations. Students who have, or think they may have, a disability (e.g. mental illness, learning, medical, hearing, injury-related, visual) are invited to contact SAS to arrange a confidential consultation.

Student Accessibility Services
520 University Centre
Phone: (204) 474-7423
Email: Student_accessibility@umanitoba.ca

Expectations: You Can Expect Me To

- Maintain a collegial and safe learning environment that fosters a diversity of opinions and perspectives
- Be available both before and after class for questions
- Be responsive to your emails related to course questions or to set up a meeting time (within 24 hours)
- Return assignments and examinations in a timely (7 day; next class) manner
- Be courteous and professional in my communications and lectures.

CLASS SCHEDULE AND COURSE EVALUATION

This schedule is subject to change at the discretion of the instructor and/or based on the learning needs of the students but such changes are subject to [Section 2.8 of ROASS](#).

| Date | Module | Required Readings | Activities | Marks | Remarks |
|---------------------------------|-------------------------------------|--------------------|--------------------------------------|------------------|---|
| Week 1 | Intro & Review; Nutrition Basics | Chapters 1 | | | |
| Week 2 | Pre-conception | Chapters 2 & 3 | | | |
| Week 3 | Pregnancy | Chapters 4 & 5 | | | |
| Week 4 | Lactation | Chapter 6 & 7 | | | |
| Week 5 | Infant Nutrition | Chapter 8 & 9 | | | |
| Week 6 | Toddler and Preschool | Chapter 10 & 11 | | | |
| 13/10/2025 | No Class | Thanksgiving | | | |
| Week 7 | Child and Preadolescence | Chapter 12 & 13 | TERM TEST #1 Oct 20, 2025 | 25 | Chapters 1 – 6 & Course Notes |
| Week 8 | Adolescence | Chapter 14 & 15 | | | |
| Week 9 | Adult Nutrition | Chapter 16 & 17 | | | |
| 11/11/2024 | No Class | Remembrance Day | | | |
| Week 10 | FALL TERM BREAK | | | | |
| Week 11 | Nutrition and Aging | Chapter 18 & 19 | TERM TEST #2 Nov 17, 2025 | 25 | Chapters 7 – 13 & Course notes |
| Week 12 | Recent Research | | | | |
| Week 13 | Course Review | | | | |
| December 4 | Case Study Available | | | | |
| December 5 | Case Study | | Case Study completion | 10 | Case Study Due 05/12 at 9:30AM |
| December 8 | Questions & Answers | | | | |
| EXAM PERIOD 10-20/12 | FINAL EXAM TBA | | FINAL EXAM | 40 | Chapters 14 – 19 & Course Notes plus overlapping materials |
| | | | Participation | See below | |
| | | | TOTAL | 100 | |

We will have class discussion and all students are encouraged to participate in class discussion. During the class discussion a maximum of 5 bonus marks may be given to each student for their satisfactory participation.

Grading

Indicate your grading scale. A sample is given below that you can adjust to your course expectations.

| Letter Grade | Percentage out of 100 | Grade Point Range | Final Grade Point |
|--------------|-----------------------|-------------------|-------------------|
| A+ | 90.0 - 100.0 | 4.25-4.5 | 4.5 |
| A | 80.0 - 89.9 | 3.75-4.24 | 4.0 |
| B+ | 75.0 - 79.9 | 3.25-3.74 | 3.5 |
| B | 70.0 - 74.9 | 2.75-3.24 | 3.0 |
| C+ | 65.0 – 69.9 | 2.25-2.74 | 2.5 |
| C | 60.0 – 64.9 | 2.0-2.24 | 2.0 |
| D | 50-59.9 | Less than 2.0 | 1.0 |
| F | Less than 50 | | 0 |

Important Dates for this course (please confirm with the university calander)

| Content | Date | Weight (%) |
|--|--------------------|----------------------|
| Withdraw date without financial charge | September 16, 2025 | --- |
| Term Test #1 | 20/10/2025 | 25 |
| Term Test #2 | 17/11/2025 | 25 |
| Voluntary Withdrawal deadline | 18/11/2025 | --- |
| Case Study | Due: 05/12/2025 | 10 |
| Final Exam | TBD | 40 |
| Participation | 3/9-8/12, 2025 | Possible Bonus marks |

Voluntary Withdrawal

The Volunteer Withdrawal (VW) deadline for Fall 2025 courses is **November 18, 2025**.

Students who did not drop the course by the deadline would be assigned a final grade. The withdrawal of courses will be recorded on your official transcript. Please refer to the [Registrar's Office](#) web page for more information. I am willing to discuss your progress at any time and to explore strategies for improvement prior the withdrawal date. Please consult with me before you decide to withdraw so that alternatives can be explored.

Case Study and Test Descriptions

Term Tests and Final Exam: Term Tests 1 and 2 and the Final Exam will be a combination of multiple choice, true and false, short answer and interpretive questions. Tests and the final exam will be based on the assigned readings and full class notes, as indicated in the table above. The Final Exam will be scheduled by the Registrar's Office.

Case Studies: Case Study will feature a description of the case with follow up questions and interpretation required. Case Study responses, in electronic format (Word Document; PDF; etc..) must be uploaded to UMLearn by the time indicated in the above Table on the assigned due date. **Late submissions will be penalized by 20% per day unless permission has been received.** Students will need to discuss all deadline challenges with the instructor. A rubric for the case studies will be discussed the class in advance of the first case study assignment.

The Case Study may include references, if applicable, and that **the usage of AI is not permitted for the the case study answers.**

Assignment Feedback

Feed back on case studies will include comments and grades according the case study rubric. Comments and marks will be available as sson as possible.

Class Participation

Class attendance and engagement will be encouraged by giving bonus marks per above Table. It is imperative that all students attend class to supplement course notes and also to integrate knowledge not provided in the text book. This relates particularly to the Canadian perspective.

UNIVERSITY SUPPORT OFFICES & POLICIES

Instructors shall provide to every student the information on university support offices and policies in [Schedule "A"](#) within the first week of classes, either through a paper copy and/or via the university's student information system (i.e., Aurora, UM Learn, or such other university information system as may be approved by the university from time to time).

Schedule "A"

Section A: Academic supports available to Students.

Writing and Learning Support

The Academic Learning Centre (ALC) offers services that may be helpful to you throughout your academic program. Through the ALC, you can meet with a learning specialist to discuss concerns such as time management, learning strategies, and test-taking strategies. The ALC also offers peer supported study groups called Supplemental Instruction (SI) for certain courses that students have typically found difficult. In these study groups, students have opportunities to ask questions, compare notes, discuss content, solve practice problems, and develop new study strategies in a group-learning format.

You can also meet one-to-one with a writing tutor who can give you feedback at any stage of the writing process, whether you are just beginning to work on a written assignment or already have a draft. If you are interested in meeting with a writing tutor, reserve your appointment two to three days in advance of the time you would like to meet. Also, plan to meet with a writing tutor a few days before your paper is due so that you have time to work with the tutor's feedback.

These Academic Learning Centre services are free for U of M students. For more information, please

visit the Academic Learning Centre website at: <http://umanitoba.ca/student/academiclearning/>

You can also contact the Academic Learning Centre by calling 204-480-1481 or by visiting 205 Tier Building.

University of Manitoba Libraries (UML)

As the primary contact for all research needs, your liaison librarian can play a vital role when completing academic papers and assignments. Liaisons can answer questions about managing citations, or locating appropriate resources, and will address any other concerns you may have, regarding the research process. Liaisons can be contacted by email or phone, and are also available to meet with you in-person. A complete list of liaison librarians can be found by subject: <http://bit.ly/WcEbA1> or name: <http://bit.ly/1tJ0bB4>. In addition, general library assistance is provided in person at 19 University Libraries, located on both the Fort Garry and Bannatyne campuses, as well as in many Winnipeg hospitals. For a listing of all libraries, please consult the following: <http://bit.ly/1sXe6RA>. When working remotely, students can also receive help online, via the Ask-a-Librarian chat found on the Libraries' homepage: www.umanitoba.ca/libraries.

Section B: Statement regarding mental health supports.

For 24/7 mental health support, contact the Mobile Crisis Service at 204-940-1781.

Student Counselling Centre

Contact SCC if you are concerned about any aspect of your mental health, including anxiety, stress, or depression, or for help with relationships or other life concerns. SCC offers crisis services as well as individual, couple, and group counselling. *Student Counselling Centre:* <http://umanitoba.ca/student/counselling/index.html>
474 University Centre or S207 Medical Services
(204) 474-8592

Student Support Case Management

Contact the Student Support Case Management team if you are concerned about yourself or another student and don't know where to turn. SSCM helps connect students with on and off campus resources, provides safety planning, and offers other supports, including consultation, educational workshops, and referral to the STATIS threat assessment team.
Student Support Intake Assistant <http://umanitoba.ca/student/case-manager/index.html>
520 University Centre
(204) 474-7423

University Health Service

Contact UHS for any medical concerns, including mental health problems. UHS offers a full range of medical services to students, including psychiatric consultation.
University Health Service <http://umanitoba.ca/student/health/>
104 University Centre, Fort Garry Campus
(204) 474-8411 (Business hours or after hours/urgent calls)

Health and Wellness

Contact our Health and Wellness Educator if you are interested in [peer support from Healthy U](#) or information on a broad range of health topics, including physical and mental health concerns, alcohol and substance use harms, and sexual assault.

Health and Wellness Educator <https://umanitoba.ca/student/health-wellness/welcome-about.html>
britt.harvey@umanitoba.ca

Live Well @ UofM

For comprehensive information about the full range of health and wellness resources available on campus, visit the Live Well @ UofM site:

<http://umanitoba.ca/student/livewell/index.html>

Section C: Notice with respect to copyright:

All students are required to respect copyright as per Canada's *Copyright Act*. Staff and students play a key role in the University's copyright compliance as we balance user rights for educational purposes with the rights of content creators from around the world. The Copyright Office provides copyright resources and support for all members of the University of Manitoba community. Visit <http://umanitoba.ca/copyright> for more information.

Section D: Statement related to University and Unit policies, procedures, and supplemental information available on-line:**Your rights and responsibilities**

As a student of the University of Manitoba you have rights and responsibilities. It is important for you to know what you can expect from the University as a student and to understand what the University expects from you. Become familiar with the policies and procedures of the University and the regulations that are specific to your faculty, college or school.

The [Academic Calendar](http://umanitoba.ca/student/records/academiccalendar.html) <http://umanitoba.ca/student/records/academiccalendar.html> is one important source of information. View the sections *University Policies and Procedures* and *General Academic Regulations*.

While all of the information contained in these two sections is important, the following information is highlighted.

- If you have questions about your grades, talk to your instructor. There is a process for term work and final **grade appeals**. Note that you have the right to access your final examination scripts. See the Registrar's Office website for more information including appeal deadline dates and the appeal form <http://umanitoba.ca/registrar/>
- You are expected to view the General Academic Regulation section within the Academic Calendar and specifically read the **Academic Integrity** regulation. Consult the course syllabus or ask your instructor for additional information about demonstrating academic

integrity in your academic work. Visit the Academic Integrity Site for tools and support <http://umanitoba.ca/academicintegrity/> View the **Student Academic Misconduct** procedure for more information.

- The University is committed to a respectful work and learning environment. You have the right to be treated with respect and you are expected to conduct yourself in an appropriate respectful manner. Policies governing behavior include the:

Respectful Work and Learning Environment

http://umanitoba.ca/admin/governance/governing_documents/community/230.html

Student Discipline

http://umanitoba.ca/admin/governance/governing_documents/students/student_discipline.html and,

Violent or Threatening Behaviour

http://umanitoba.ca/admin/governance/governing_documents/community/669.html

- If you experience **Sexual Assault** or know a member of the University community who has, it is important to know there is a policy that provides information about the supports available to those who disclose and outlines a process for reporting. The **Sexual Assault** policy may be found at:
http://umanitoba.ca/admin/governance/governing_documents/community/230.html
More information and resources can be found by reviewing the Sexual Assault site <http://umanitoba.ca/student/sexual-assault/>
- For information about rights and responsibilities regarding **Intellectual Property** view the policy https://umanitoba.ca/governance/sites/governance/files/2021-06/Intellectual_Property_Policy_-_2013_10_01_RF.pdf

For information on regulations that are specific to your academic program, read the section in the Academic Calendar and on the respective faculty/college/school web site

<http://umanitoba.ca/faculties/>

Contact an **Academic Advisor** within our faculty/college or school for questions about your academic program and regulations <http://umanitoba.ca/academic-advisors/>

Student Advocacy

Contact Student Advocacy if you want to know more about your rights and responsibilities as a student, have questions about policies and procedures, and/or want support in dealing with academic or discipline concerns.

<http://umanitoba.ca/student/advocacy/>

520 University Centre

204 474 7423

student_advocacy@umanitoba.ca