



UM | Faculty of Agricultural
and Food Sciences

Syllabus

HNSC 4320 Nutrition Management of Disease States
Winter 2021 (CRN, 51918)

Department of Food and Human Nutritional Sciences



**University
of Manitoba**



**University
of Manitoba**

We acknowledge with great respect that The University of Manitoba campuses are located on original lands of Anishinaabeg, Cree, Oji-Cree, Dakota, and Dene peoples, and on the homeland of the Metis Nation.

Instructor: Miyoung Suh, RD, PhD
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Office hours: By appointment (arranged by e-mail)

Teaching Assistant: Chelsey Walchuk, RD, MSc, PhD candidate
e-mail: umwalchu@myumanitoba.ca

Office hours: Immediately after class or by e-mail

Course Format:

Lecture and Guest Speakers:

	Tues & Thur	8:30-9:45am Online synchronous (Webex)*
Laboratory Section:	B01 (CRN, 51919), Thur	1:00-3:00pm Online synchronous (Webex)*
	B02 (CRN, 51920), Thur	3:00-5:00pm Online synchronous (Webex)*

* If Webex is down, Zoom will be used a back up system.

Description:

Nutritional assessment and dietary management of acute and chronic disease states.

Pre-requisites/co-requisites: HNSC 3300, HNSC 3310 and HNSC 3320.

This course is a mandatory requirement for students who are applying for dietetic internship.

Learning Objectives:

This course will enable students:

1. to gain clinical nutrition knowledge and the etiology, pathophysiology, signs and symptoms of clinical diseases;
2. to identify the role of nutrition in the prevention and management of various disease states;
3. to apply nutrition recommendations and guidelines to specific clinical disease states;
3. to apply clinical nutrition knowledge to develop nutritional care plan (NCP: Assessment, Diagnosis, Intervention, and Monitoring & Evaluation (ADIME)) for each patient with consideration of life style, socio-economical, cultural, and psychological factors, and
4. to understand the role of the clinical dietitian in patient care as a member of the health care team in the provision of nutritional care.

Textbook and Reference Materials:

1. Required textbook:

- Krause's Food and the Nutrition Care Process, 14th edition: or 15th edition
Mahan LK, Escott-Stump and Raymond JL, Elsevier Saunders, Philadelphia
- Any medical dictionary (eg. Tabler's Cyclopedic Medical Dictionary)
- Lab Manual for HNSC4320 (bookstore, [University of Manitoba Bookstore](#))

2. Recommended Reference Books:

- Textbooks from prerequisite courses.
- Compendium of Pharmaceuticals and Specialties (CPS 2019)
([University of Manitoba Libraries](#))

3. Important Web Sites:

Dietitians of Canada: www.dietitians.ca

Health Canada: www.hc-sc.gc.ca/fn-an/index_e.html

Canadian Diabetes Association: www.diabetes.ca

Public Health Agency of Canada: www.phac-aspc.gc.ca/index-eng.php

American Dietetics Association: www.eatright.org

American Heart Association: www.heart.org/HEARTORG/

4. Other readings, specific nutrition guidelines and useful websites will be made available throughout the term.

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:

UM Learn will be used for posting all lectures, assignment, and other content. It will also be used for evaluation such as exams and assignments.

Cisco Webex will be used for the deliberation of synchronous lectures and labs, and communications with instructor. Students are encouraged to take a look at the Webex features (eg. muting, sharing screen, raising hand, etc.)

Expectations:

- Regular attendance to lectures and labs is essential for success in this course.
- You are responsible for reviewing the relevant sections/chapters in the required textbook and lab manual prior to attending lectures and labs. Please bring your main resources and a calculator to each class and lab.
- You are not allowed arbitrarily moving between the two laboratory sections.
 - You are not allowed to leave a lab earlier and expected to participate a group and class discussion.
 - In case of leaving earlier, you will not be considered as a full attendance of the lab (the grading regulations will be applied as indicated below section).
- Do respect your fellow students and foster a cooperative learning environment where other's questions and comments are heard and discussed.
- I will be available for communication for any questions and comments you have via Cisco Webex communication and meetings.
- I will make an effort to reply to your questions/concerns within 72 hours-maximum 1 week, depending on the questions and time allowed.

- I value the diverse learning environment. Any lectures and discussions will be based in respect of diversity (culture, ethnicity, religion, gender identity, sexuality, disability, age, socioeconomic status and etc).
- I also expect you to follow some policies around Class Communication, Academic Integrity, and Recording Class Lectures as below.

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:

As an UM Faculty Association member, Dr. Miyoung Suh holds copyright to all of the course materials and lectures including lab manual and materials. Thus, no audio or video recording of lectures or presentations is allowed in any format, openly or surreptitiously, in whole or in part without her permission. Course materials (both paper and digital) are only for your private study and research, but not to share with others via posting in any media and online.

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

COURSE SCHEDULE AND EVALUATION

Grading and Evaluation:

Evaluation	Date	Grade (%)
Midterm Test	Mar 16, 2021 (in class)	30
Term Assignment	Mar 30, 2021 (by 4:00 pm)	35
Group member assessment on assignment & overall contribution	Mar 30, 2021 (by 4:00 pm)	5
Final Exam	Examination Period (April, 2021)	30

The last date to voluntarily withdraw without academic penalty is March 31, 2021.

Grading:

Final grades will be assigned as follows:

≥ 90.0%	A+	65.0 - 69.9	C+
85.0 - 89.9	A	60.0 - 64.9	C
75.0 - 84.9	B+	50.0 - 59.9	D
70.0 - 74.9	B	< 50%	F

1. Examinations are closed book. Students will be allowed to refer to nutritional product guides; reference data will be provided if required. The exam format will be mixture of multiple choices, fill in the blanks, short and long answers, including case studies. Final exam is cumulative.
2. Absenteeism from tests without appropriate prior notification will result in a grade of 'F' being assigned.
3. Late assignments will be accepted however, **10% per day** late will be deducted from total marks of each assignment. It will be counted immediately **after 4:00 p.m.** of the due date.
4. Students are responsible for attending classes for which they are responsible for work covered. However there are mandatory class attendances as follows:
 - i) For classes with guest speakers, **2 points per each absence** will be deducted from the final grade.
 - ii) For the laboratory section, **2 bonus points** will be given if **attending all virtual** synchronous labs.

LABs:

A lab manual will be used, which was developed by Dietitians in Dr. Suh's research group. Students will practice skills necessary for providing a patient-centered nutrition care plan by integrating knowledge learned in the lectures and previous courses. Students will become familiar with the four steps in the Nutrition Care Process including (1) Nutrition Assessment (5 domains); (2) Nutrition Diagnosis (composition of "PES" statements using 3 possible areas); (3) Nutrition Intervention (4 domains); and Nutrition Monitoring and Evaluation (4 domains). The lab will allow students to practice writing chart notes in the ADIME format and will also discuss other topics important in the practice of dietetics.

Before each lab, be familiar with the content by reading introductions as well as reviewing the appropriate sections of the lecture note and textbook.

Term Assignment:

Case study for nutrition care plan exercises: are written examinations in which the student uses the skills developed during the class and lecture to create a complete Nutrition Care Plan for a patient case. The assignment will require the student to do an assessment, determine a nutrition diagnosis, and create an intervention and evaluation using the appropriate documentation and NCP terminology. Written feedback is provided. For the purposes of this course, only one case (and a follow-up) will be given. The nutrition care plan exercise is designed to evaluate the student's comprehension of the underlying clinical issues and skills when designing patient-centered nutritional care plans.

*Detail instructions will be provided in the class.

To meet ICDEP performance indicators:

The Integrated Dietetic Competencies for Dietetic Education and Practice (ICDEP, 2013, Version 2.0) developed by the Partnership for Dietetic Education and Practice

3. Nutrition Care (Provide services to meet the nutrition care needs of individuals)

3.01. Assess the nutrition-related risks and needs (examples out of 21 academic indicators)

- Demonstrate knowledge of ways to identify relevant data to perform a nutrition assessment
- Demonstrate knowledge of principles for obtaining and interpreting food and nutrient intake data

- Identify signs and symptoms of nutrient deficiencies or excesses
- Demonstrate knowledge of selection and use of methods used to determine energy, protein, fluid, macronutrient, micronutrient, electrolyte and trace element requirements.

3.02. Develop nutrition care plans (examples out of 19 academic indicators)

- Demonstrate knowledge of principles for prioritization of nutrition care and available resources
- Demonstrate knowledge of ways to identify and select appropriate textural and therapeutic diet modifications.
- Demonstrate knowledge of strategies for monitoring and assessment of nutrition care plan outcomes

3.03. Manage implementation of nutrition care plans

- Identify ways to implement nutrition interventions
- Identify the roles of team members in supporting the implementation of a care plan.
- Identify strategies to communicate nutrition care plan with client, interprofessional team and relevant others.

3.04. Evaluate and modify nutrition care plans as appropriate

- Identify necessary changes to nutrition care plans

Foundational Knowledge Content Areas for Dietetics Education:

This dietetic education program is an accredited program recognized by the Partnership for Dietetic Education and Practice (PDEP) and prepares students for eligibility for registration with a provincial dietetics regulatory body.

To achieve the above competencies, this course provides the following content areas of the Foundational Knowledge in ICDEP:

Highest level achieved: 1= demonstrate broad knowledge; 2= demonstrate comprehension; 3 = analyze, interpret and apply knowledge

Content Area	Foundational Knowledge	Cognitive Complexity Level
Anatomy and Physiology	Role, function and regulation of the integumentary, musculo-skeletal, nervous, endocrine, cardio-respiratory, urinary, lymphatic and digestive systems in health and disease	1
Communication	Medical and dietetics-related terminology	2
Food	Food modification to address therapeutic, textural or other needs	2
Interprofessional	Patient/client/family/community-centred care	1

Collaboration	Interprofessional role clarification, including the role of the dietitian	1
Nutrition Assessment	Anthropometric data collection and interpretation	3
	Biochemical parameter interpretation	3
	Clinical data collection and interpretation	3
	Surveillance and monitoring data collection and interpretation	2
Nutrition Care Process and Medical Nutrition Therapy	Etiology and pathophysiology of nutrition-related diseases	2
	Nutrition-related disease management strategies	3
	Use of assessment, diagnosis, intervention, monitoring, evaluation (ADIME) in medical nutrition therapy	3
	Calculation of energy and nutrient requirements for conditions/diseases	3
	Goal setting and outcome measurement in nutrition therapy	2
	Oral, enteral, and parenteral nutrition support	2
	Feeding assessment, including identification of chewing, swallowing and feeding problems	2
Pharmacology	Common medication side effects and contraindications relevant to nutrition	1
	Drug-nutrient interactions	1
Professional Practice in Dietetics	Appropriate and secure documentation practices	2
	Strategies for assessing and enhancing approaches to practice	1
	Advocacy	1

TENTATIVE COURSE SCHEDULE (subject to modification):

Students are responsible for reviewing the relevant sections/chapters in the required text prior to attending lectures. Please bring your main resources and calculators to class daily.

Date	Content Area	Lecture Topics	Laboratory Topics (Thurs)
19-Jan	Introduction to Course	Introduction to Course Basic Medical Terminology	
21-Jan	Nutrition Care Process 1. Nutrition Assessment (vs Screening)	Introduction of NCP model Medical and Social History	No lab
26-Jan		Dietary Clinical/Physical Anthropometric	
28-Jan		Biochemical	Lab 1: Introduction to Clinical Charting * Introduction of PEN
2-Feb		Requirement Assessment * Subjective Global Assessment (SGA)	
4-Feb	2. Nutrition Diagnosis 3. Nutrition Intervention	Diagnosis with PES statement Nutritional Support: Therapeutic Diets	Lab 2: Calculating Energy Requirements
9-Feb		Feeding Methods Enteral Nutrition (EN) Parenteral Nutrition (PN)	
11-Feb	4. Nutrition monitoring & Evaluation		Lab 3: Writing a Nutrition Diagnosis and Intervention, PES statement
16-Feb 18-Feb		<i>Reading week</i>	<i>No classes/Lab</i>
23-Feb	Gastrointestinal (GI) Tract Disease 1. Upper GI diseases	(Dysphagia) Gastroesophageal Reflux Disease Peptic Ulcer	
26-Feb		Gastric Surgery * Refeeding syndrome * Dumping syndrome	Lab 4: Writing a Chart Note Case: Dysphasia ADIME format
2-Mar	2. Lower GI diseases	IBD (CD and UC) SBS and IBS	
4-Mar		Diverticular diseases * Ileostomy & Colostomy	Lab 5: Interpreting Laboratory Values Case: IBD PES and ADIME
9-Mar		Pancreatitis (Acute and Chronic)	

		Gallbladder	
11-Mar	Hepatobiliary and Pancreatic Disorders	Liver diseases	Lab 6: Using Nutrition Assessment & SGA Forms Case: Pancreatitis
16-Mar		*Midterm Test: Mar 16, Tues (in class)	
18-Mar	Pulmonary Disease:	Cystic Fibrosis	No lab
23-Mar 25-Mar	Obesity	Obesity/Metabolic Syndrome Bariatric	Lab 7: Introduction to Behaviour Change or flexible lab
30-Mar	Cancer	Cancer I *Assignment due (Mar 30, Tues, 4pm) *Group assessment due (Mar 30, Tues, 4pm)	
1-Apr		Cancer II: <i>Nutrition for Cancer Patients</i> <i>Speaker: Oncology Dietitian, Cancer Care MB (to be confirmed)</i>	Lab 8: Writing an Enteral Nutrition Order Case: Closed head injury
6-Apr 8-Apr	Renal Disorders	Renal Diseases I Renal Diseases II	Lab 9: Patient Interview Case: Out patient with metabolic syndrome
13-Apr	Food and Drug Interactions	Food and Drug Interactions <i>Speaker: Dr. Bill Diehl-Jones, RN, PhD (to be confirmed)</i>	
15-Apr	Last Class	Final Review	No Lab

- For the confirmation with guest speakers and any other changes in the schedule, the class will be notified at least 1-2 weeks in advance.

UNIVERSITY SUPPORT OFFICES & POLICIES

Schedule “A”:

Section (a) academic supports and resources:

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) mental health support and resources:

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 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 <http://umanitoba.ca/student/health-wellness/welcome.html>

Katie.Kutryk@umanitoba.ca, 469 University Centre, (204) 295-9032

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) a 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) university and unit policies, procedures, and supplemental information:

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 http://umanitoba.ca/admin/governance/media/Intellectual_Property_Policy_-_2013_10_01.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