

# Syllabus

# FOOD 4010: Food Process 2

# (Fall 2020)

Department of Food and Human Nutritional Sciences



# TABLE OF CONTENTS

# **COURSE DETAILS**

Course Title & Number:	FOOD 4010
Number of Credit Hours:	3
Class Times & Days of Week:	Tuesdays and Thursdays 1:00 – 2:15 PM
Location for classes/labs/tutorials:	All lectures will be delivered via UM Learn WebEx (Remote Online Teaching) and handouts will be uploaded in advance. Due to COVID19 Pandemic, in person lab sessions and industry tours are not allowed. Therefore, the lab handouts and teaching materials will be provided as pdf and video files. In addition, virtual lab sessions (UM Learn WebEx) will be held on Wednesdays (Group 1 at 1:30–2:30 PM, Group 2 at 2:45: 3:45 PM) as stated in Lab and Tour Schedule (Please see pages 7-8).
Pre-requisites:	FOOD 3010 or equivalent

# **INSTRUCTOR CONTACT INFORMATION**

Instructor(s) Name & Preferred Form of Address:	Soleiman Abbasi <u>(Dr Abbasi)</u>	
Office Location:	Room 266, Ellis Bldg	
Office Hours or Availability: Office Phone No.	Available for individual student consultation by appointment at any mutually agreeable time (via WebEx). Please send an e-mail to: <u>soleiman.abbasi@umanitoba.ca</u>	
Email:	All communications must comply with the Electronic Communication with Student Policy.	
Contact:	E-mail is preferred. E Mails will be returned within 48 hrs in weekdays (Mon–Fri).	

# **COURSE DESCRIPTION**

# **U** of M Course Calendar Description

The basic principles and practices of the major techniques used in food processing and preservation are covered. Emphasis is placed on new technologies including novel thermal/non-thermal processing, extrusion, and other advanced processing methods.

# **General Course Description**

The fundamentals of current food processing techniques particularly novel thermal/non-thermal processing, extrusion, minimal processing and other advanced methods will be discussed. This course is a foundational course for Food Science discipline. However, it fits into the broader program of studies such as Nutrition Science, Bio-system Engineering, Agriculture Engineering, Animal Science, Plant Science, Agronomy and most of agricultural disciplines in particular agro-food programs.

# **Class Topics**

- ➢ INTRODUCTION & HISTORY OF FOOD PROCESSING
- > FOOD PRESERVATION: Traditional Techniques
- MOMENTUM PROCESSES:
  - ✓ Mixing & Size Reduction
  - ✓ Milling
  - ✓ Extrusion
- MASS TRANSFER PROCESSES:
  - ✓ Extraction Techniques
  - ✓ Solids Separation Techniques
  - ✓ Particle Filtration
  - ✓ Membrane Concentration
  - ✓ Freeze Concentration
  - ✓ Osmotic Concentration (Dehydration)
- > NOVEL THERMAL & NON-THERMAL PROCESSES:
  - ✓ PULSED LIGHT (PL): A Radiative Non-Thermal Process
  - ✓ INFRARED MICRONIZATION: A Radiative Thermal Process
  - ✓ MICROWAVE: A Radiative Thermal Process
  - ✓ RADIO FREQUENCY or MACROWAVE: A Radiative Thermal Process
  - ✓ OHMIC HEATING: An Electric Thermal Process
  - ✓ PULSED ELECTRIC FIELD (PEF): An Electric Non-Thermal Process
  - ✓ HIGH HYDROSTATIC PRESSURE: A Physical & Non-Thermal Process
  - ✓ ULTRASOUND: A Physical & Non-Thermal Process

# **COURSE LEARNING OBJECTIVES**

By the end of the course, the student should:

Summarize the effect of various processes employed in food processing on the chemistry of various food components, particularly high molecular weight components such as starch and proteins as well as microorganisms.

- State the principles of food preservation by fermentation processes. Quantify the extent to which certain processes, e.g, electromagnetic, electric, physical or thermal energy, affect the survival of microorganisms.
- Distinguish the source and variability of raw food material and how it affects various food processing operations.
- Point out the principles that permit various advanced food technologies to make a food product safe for consumption.
- Differentiate the principles and practices in advanced processing techniques and distinguish the effects of processing parameters on product quality.
- > Apply food processing principles to control and assure the quality of food products.
- Construct process flow diagrams from visits to food processing facilities and critique the flow for critical control points related to product safety and quality.
- Demonstrate effective written communication skills. Organize critical thinking skills to solve issues arising from new situations, especially new processes.
- > Improve upon information acquisition skills and organizational skills.

# **TEXTBOOK, READINGS, & COURSE MATERIALS**

- > **Required textbooks**: No primary textbook is required.
- Supplementary Books (which provide appropriate background material for the course):
- Fellows, P. (2000). Food Processing Technology, 2nd ed. CRC Press.
- > Cheryan, M. (1998). Ultrafiltration and Microfiltration Handbook. CRC Press. ISBN 9781566765985.
- > Earle, R.L. (1989). Unit Operations in Food Processing. Pergamon Press: Oxford. Online (2<sup>nd</sup> ed)
- Lewis, M.J. (1990). Physical Properties of Foods and Food Processing Systems. Ellis-Horwood: New York.

# USING COPYRIGHTED MATERIAL

Please respect copyright. We may 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 Dr Abbasi, 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 <a href="http://umanitoba.ca/copyright@u

# **EXPECTATIONS: I EXPECT YOU TO**

- Participate actively in the discussions and answer questions I may ask. I do not expect you to get the correct answer, but your participation would be very beneficial for the interests of all of us.
- > Attend regularly at all classes (1% Final Grade!). Virtual Lab Sessions attendance is compulsory.
- > Treat you with respect and would appreciate the same courtesy in return.

- Follow the policies around Class Communication, Academic Integrity, and Recording Class Lectures.
- Not to leave the virtual class before it ends unless there is an emergence to which you must attend. Leaving a class before the end is disrespectful to your instructor.

#### **Class Communication:**

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

<u>You can contact me by a U of M email account with the subject heading Food 4010</u>. I would respond email queries within 24-48 hours during the weekdays not the weekends or holidays. For any concerns regarding your course It is best to make an appointment.

#### Academic Integrity:

Each student in this course is expected to abide by the University of Manitoba <u>Academic Integrity</u> <u>principles</u>. 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 <u>disciplinary action</u>. Visit the <u>Academic Calendar</u>, <u>Student Advocacy</u>, and <u>Academic Integrity</u> web pages for more information and support.

Refer to specific course requirements for academic integrity for individual and group work such as:

- I. Group projects are subject to the rules of academic dishonesty;
- II. Group members must ensure that a group project adheres to the principles of academic integrity;
- III. Students should also be made aware of any specific instructions concerning study groups and individual assignments;
- IV. The limits of collaboration on assignments should be defined as explicitly as possible; and
- V. All work should be completed independently unless otherwise specified.

#### **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 of Dr Abbasi. Course materials (both paper and digital) are for the participant's private study and research. <u>All lectures will be recorded and will be available on WEBEX recordings.</u>

#### **Student Accessibility Services:**

The University of Manitoba is committed to providing an accessible academic community. <u>Students</u> <u>Accessibility Services (SAS)</u> 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: <u>Student accessibility@umanitoba.ca</u>

# **EXPECTATIONS: YOU EXPECT ME TO**

- ✓ Treat you fairly and with respect. Give everyone a chance to participate in class discussions.
- ✓ Be available for regular consultation. I will be in virtual class 5 minutes prior to and after the class time to discuss any immediate questions or comments you may have. For individual student consultation you can meet me by appointment at any mutually agreeable time.
- ✓ Raise your questions or concerns anytime during lecture by raising your hand or unmuting your microphone. I will do my best to address your concerns.
- ✓ Provide a clarification or explanation for any doubts related to teaching subjects.
- ✓ Grade and return the assignments, lab reports and exams within 2 weeks of the due date; late assignments will be graded as time permits.

# **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 <u>Section 2.8 of ROASS</u>.

Month	Week day	Date	Topics, Assignments, Exams (1:00–2:15PM)	Assignments
	Thursday	10	INTRODUCTION & HISTORY OF FOOD PROCESSING	
-	Tuesday	15	FOOD PRESERVATION: Traditional Techniques	
	Thursday	17	MOMENTUM PROCESSES: Mixing & Size Reduction	Assignment 1
September	Tuesday	22	MOMENTUM PROCESSES: Milling	Assignment 2
	Thursday	24	MOMENTUM PROCESSES: Extrusion	
	Tuesday	29	MASS TRANSFER PROCESSES: Extraction Techniques	
	Thursday	1	MASS TRANSFER PROCESSES: Extraction Techniques (continued)	
	Tuesday	6	MASS TRANSFER PROCESSES: Solids Separation Techniques	Assignment 3
	Thursday	8	CONCENTRATION PROCESSES: Particle Filtration	
	Tuesday	13	MASS TRANSFER PROCESSES: Membrane Concentration	
October	Thursday	15	MASS TRANSFER PROCESSES: Freeze Concentration	
	Tuesday	20	MASS TRANSFER PROCESSES: Osmotic Concentration	
	Thursday	22	Mid Term Exam	
	Tuesday	27	THERMAL PROCESSES: Novel Thermal & Non-Thermal	
	Thursday	29	PULSED LIGHT (PL): A Radiative Non-Thermal Process	
Tuesday 3 INFRARED MICRONIZATION: A Radiative Thermal Process		INFRARED MICRONIZATION: A Radiative Thermal Process		
	Thursday	5	INFRARED MICRONIZATION: A Radiative Thermal Process (continued)	
	Tuesday	10	Fall Term Break	
	Thursday	12	Fall Term Break	
November	Tuesday	17	MICROWAVE: A Radiative Thermal Process	
	Thursday	19	IR or MACROWAVE: A Radiative Thermal Process	
	Tuesday	24	IR or MACROWAVE: A Radiative Thermal Process (continued)	
	Thursday	26	OHMIC HEATING: An Electric Thermal Process	Assignment 4
	Tuesday	1	OHMIC HEATING: An Electric Thermal Process (continued)	
December	Thursday	3	PULSED ELECTRIC FIELD (PEF): An Electric Non-Thermal Process	
	Tuesday	8	HIGH HYDROSTATIC PRESSURE: A Physical & Non-Thermal Process	
	Thursday	10	ULTRASOUND: A Physical & Non-Thermal Process	
		TBA	Final Exam	

Lab and tour reports	26.0%
Short presentations	5.0%
Assignments	4.0%
Mid term exam	32.0%
Final exam	32.0%
Attendance	1.0%

# LAB & TOUR SCHEDULE

This schedule is subject to change at the discretion of the instructor and/or based on the learning needs of the students. Remember: Group 1 starts at 1:30–2:30 PM, Group 2 at 2:45: 3:45 PM on Wednesdays at the indicated dates.

Date		Virtual Lab Session	Assessment	Value of Final
Month	Day			Grade
September	16	No Lab		
	23	CIGI Milling Tour	Tour Report	4%
	30	No Lab		
October	7	FFDC's Signature Bread At-Home	Lab Report	6%
	14	No Lab		
	21	Yellow Pea Flour Processing Using Single Screw Extruder	Lab Report	6%
	28	No Lab		
November	4	IR Micronization Process: Soybeans	Lab Report	6%
	11	Fall Term Break		
	18	No Lab		
	25	Brewery	Tour Report	4%
December	2	No Lab		
	9	No Lab		
				26%

# LAB & TOUR EXPECTATIONS

Virtual Laboratory Sessions attendance is compulsory. Your group will be assigned by September 22, 2020. Your lab handouts and videos will be available prior to lab session date.

Lab coats, safety glasses or goggles and gloves must be worn while baking at home. You are expected to bake under your own full responsibility therefore please make sure to follow all safety instructions!

Lab reports should be about 3 to 5 pages long (excluding cover page), typewritten double-spaced with 2.5 cm margins and justified (left and right aligned) in a short research paper format (Introduction and Objectives, Materials and Methods, Results and Brief Discussion as well as References). Tables and figures should be attached with table title (above) and figure captions (below). Rubrics and further information about what should be included in each lab report can be found at the last page of lab manual. Lab reports must be uploaded to UM Learn in word format by 4:00 PM on day 14 after lab session. Grades for the reports are returned within 2 weeks at the latest.

Tour reports should also include the followings:

Introduction (max ½ page): Introduce the organization/company being visited (Virtual visits). Introduce the current production in Manitoba, Canada and the world.

Flow diagram (max 1 page): Include all process operations covered in the tour. The flow diagram must consist of sequential boxes connected to each other by arrows representing the workflow of events observed during the tour. Include explanation of each process operation (one or two sentence each).

Discussion (max ½ page): Include example of one large and one small-scale Canadian processor of the product. Include example of one large non-Canadian (e.g., European) processor of the product. Quantify the capacity (If possible) of your examples. Provide suggestions for improving the process flow or efficiency.

References: Follow the referencing style

FOOD 4010

FOOD PROCESS 2

### GRADING

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

Letter Grade	Percentage out of 100	Final Grade Point
A+	95-100	4.5
A	86-94.9	4.0
B+	80-85.9	3.5
В	72-79.9	3.0
C+	65-71.9	2.5
С	60-64.9	2.0
D	50-59.9	1.0
F	Less than 50	0

### **VOLUNTARY WITHDRAWAL**

The last day to drop the class (VW) and receive 100% refund is **September, 22<sup>nd</sup>, 2020**. Moreover, the Voluntary Withdrawal deadline with no refund will be **November, 23<sup>rd</sup>, 2020**. Students who did not drop the course by the deadline would be assigned a final grade. The withdrawal courses will be recorded on official transcript, refer to the <u>Registrar's Office</u> web page for more information. Dr Abbasi will be happy to discuss student's progress and strategies for improvement prior the withdrawal date.

# **ASSIGNMENT DESCRIPTIONS**

The course syllabus contains full detail for all of the activities and assignments. The mid term and final exams include all materials covered in class, lab sessions and tours. However, the final exam will not be comprehensive but will only cover the materials presented after mid term exam!

# **REFERENCING STYLE**

Lab and tour reports should use the APA reference style as outlined in the following Table.

Source	Template	Example
Journal article	Author, A., & Author, B. (year). Title of article. <i>Journal Title, Volume</i> (Issue), page range. DOI	Schmidt, F. L., & Oh, IS. (2016). The crisis of confidence in research findings in psychology: Is lack of replication the real problem? Or is it something else? <i>Archives of Scientific Psychology</i> , 4(1), 32–37. <u>https://doi.org/10.1037/arc0000029</u>
Whole book	Author, A., & Author, B. (year). <i>Title of book</i> . DOI/URL/Publisher Name.	Brown, B. (2010). The gifts of imperfection: Let go of who you think you're supposed to be and embrace who you are. Hazelden.
Edited book chapter	Author, A., & Author, B. (year). Title of chapter. In E. Editor & A. Editor (Eds.), <i>Title of book</i> (pp. xx-xx). DOI/URL/Publisher Name.	Singh, A. A., Hwahng, S. J., Chang, S. C., & White, B. (2017). Affirmative counseling with trans/gender-variant people of color. In A. Singh & L. M. Dickey (Eds.), <i>Affirmative counseling and psychological practice with transgender and gender nonconforming clients</i> (pp. 41–68). <u>https://doi.org/10.1037/14957-003</u>
Website	Author. (year). Title of page. Retrieved Date, from http://xxxxxxx	American Psychological Association. (n.d.). Divisions. Retrieved October 28, 2018, from <a href="http://www.apa.org/about/division/">http://www.apa.org/about/division/</a>

Anonymous (2019). APA style. Retrieved on Dec., 12, 2019, from : https://en.wikipedia.org/wiki/APA\_style.

# **ASSIGNMENT FEEDBACK**

The feedback to assignments (class assignments, lab and tour reports) will be mostly summative (grades) and formative (comments). All lab and tour reports which were handed in on-time will be graded and returned within 2 weeks of the due date. Late assignments will be graded as time permits. Late class assignments will not be graded. It is recommended that students receive a sufficient percentage of their final grade prior to the Voluntary Withdrawal date, which will allow students to make a decision about completing or withdrawing from the course. Marks of the mid-term, lab reports, and assignments will be available prior to the voluntary withdrawal date.

# **ASSIGNEMENT EXTENSION & LATE SUBMISSION POLICY**

Lab reports are due two weeks after lab session (not later than 4:00PM of the day 14). Late reports and assignments will lose 10% of marks for submission after the due date, and 10% for each additional day late. If there are compelling reasons why you will have a late submission, an alternate due date must be arranged with Dr Abbasi prior to the scheduled due date.

# **UNIVERSITY SUPPORT OFFICES & POLICIES**

#### Section (a)

#### 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: <u>http://umanitoba.ca/student/academiclearning/</u>

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 inperson. A complete list of liaison librarians can be found by subject: <u>http://bit.ly/WcEbA1</u> or name: <u>http://bit.ly/ltJ0bB4</u>. In addition, general library assistance is provided in person at 19 University

#### FOOD PROCESS 2

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: <u>http://bit.ly/1sXe6RA</u>. When working remotely, students can also receive help online, via the Ask-a-Librarian chat found on the Libraries' homepage:<u>www.umanitoba.ca/libraries</u>.

#### Section (b)

#### 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:* <u>http://umanitoba.ca/student/counselling/index.html</u> 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 <u>http://umanitoba.ca/student/case-manager/index.html</u> 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 <a href="http://umanitoba.ca/student/health/">http://umanitoba.ca/student/health/</a>

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

#### FOOD 4010 Section (c)

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 <a href="http://umanitoba.ca/copyright">http://umanitoba.ca/copyright</a> for more information.

#### Section (d)

#### 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 <u>Academic Calendar http://umanitoba.ca/student/records/academiccalendar.html</u> 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 <u>http://umanitoba.ca/registrar/</u>
- ✓ 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 <a href="http://umanitoba.ca/academicintegrity/">http://umanitoba.ca/academicintegrity/</a> 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 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

FOOD 4010

FOOD PROCESS 2

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: <a href="http://umanitoba.ca/admin/governance/governing\_documents/community/230.html">http://umanitoba.ca/admin/governance/governing\_documents/community/230.html</a> More information and resources can be found by reviewing the Sexual Assault site <a href="http://umanitoba.ca/student/sexual-assault/">http://umanitoba.ca/student/sexual-assault/</a>
- ✓ For information about rights and responsibilities regarding Intellectual Property view the policy <u>http://umanitoba.ca/admin/governance/media/Intellectual Property Policy - 2013 10 01.pdf</u>

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 <a href="http://umanitoba.ca/faculties/">http://umanitoba.ca/faculties/</a>

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

#### 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