Syllabus

Advanced Food Microbiology. FOOD 7200

(2022-2023)
TABLE OF CONTENTS

COURSE DETAILS ................................................................................................................................................ 2
INSTRUCTOR CONTACT INFORMATION............................................................................................................... 3
COURSE DESCRIPTION ........................................................................................................................................ 3
COURSE GOALS .................................................................................................................................................. 3
COURSE LEARNING OBJECTIVES .......................................................................................................................... 4
TEXTBOOK, READINGS, AND COURSE MATERIALS ............................................................................................... 4
USING COPYRIGHTED MATERIAL ........................................................................................................................ 5
COURSE TECHNOLOGY ....................................................................................................................................... 5
EXPECTATIONS: I EXPECT YOU TO ....................................................................................................................... 5
EXPECTATIONS: YOU CAN EXPECT ME TO ........................................................................................................... 7
CLASS SCHEDULE AND COURSE EVALUATION ..................................................................................................... 7
LAB EXPECTATIONS ............................................................................................................................................ 9
LAB SCHEDULE ................................................................................................................................................... 9
GRADING ........................................................................................................................................................... 9
VOLUNTARY WITHDRAWAL ............................................................................................................................... 9
ASSIGNMENT DESCRIPTIONS ............................................................................................................................. 10
REFERENCING STYLE .......................................................................................................................................... 11
ASSIGNMENT FEEDBACK ................................................................................................................................... 12
ASSIGNMENT EXTENSION AND LATE SUBMISSION POLICY ................................................................................. 12
UNIVERSITY SUPPORT OFFICES & POLICIES ........................................................................................................ 12

COURSE DETAILS

Course Title & Number: Advanced Food Microbiology. FOOD7200

Number of Credit Hours: 3

Class Times & Days of Week: Tuesday and Thursday 2:30 – 3:45 pm.

Location for classes/labs/tutorials: Classess: Tier building room 504.

Pre-Requisites: MBIO 2100, FOOD 4150 or consent of instructor
Instructor Contact Information

Instructor(s) Name & Preferred Form of Address: Claudia Narvaez-Bravo. Please call me professor or Dr. Narvaez.

Office Location: 238 Ellis Building.

Office Hours or Availability: Make an appointment or email the instructor.

Office Phone No.: 204-474-6658

Email: Claudia.narvaezbravo@umanitoba.ca. I will return your call within 24 h during business days. I might not answer your emails during the weekend.

Contact: Email, Phone or in person

Course Description

U of M Course Calendar Description
Detection and quantitation of foodborne microorganisms and related toxins using developing methodology, including rapid microbiological assays with a comprehensive account of basic principles and advanced techniques.

General Course Description
FOOD7200 focuses on the significance of the presence and/or growth of microorganisms in foods and their importance in the production and safety of foods. Contents include beneficial microorganisms in food systems, pathogenic and spoilage microorganisms, virulence factors, pathogenesis, microbes within the food system of the growth and survival of microorganisms and contaminants that may occur in a food-processing environment. Pathogen reduction interventions, antimicrobial resistance, and conventional and rapid techniques used in the food industry to measure food safety and food quality, including molecular techniques to study microbes will be discussed.
This course has a laboratory section mainly discussing lab techniques and bioinformatics, where students will have the opportunity to have hands-on experience in different techniques. We will be using BLAST, the bacterial and Viral Bioinformatics Resource Centre (BV_BRC) and other tools to study bacterial genomes. This course is ideal for students that want to dive deeper in the field of food microbiology.

Course Goals

Food microbiology is an exciting field, technologically dynamic and essential for food development, food production, food safety and public health. The science of food microbiology provides important information essential to assist us in answering questions arising from food production and food technology disciplines. The production of food under food safety parameters and regulations requires critical thinking, integration of knowledge, and innovative approaches to problem-solving. This course will
help students to foster these skills throughout, using a variety of teaching methods, including lecturing, group discussion, short paper presentations and other activities in the classroom.

**Course Learning Objectives**

- Analyze the role of intrinsic/extrinsic factors on microbial growth and survival
- Discuss food preservation and bacterial adaptation
- Explain the use of indicators and surrogate microorganisms on food quality and safety
- Discuss foodborne pathogens and their virulence mechanism
- Discuss the role of starter cultures & probiotic bacteria for enhanced food product quality and health
- Understand classical approaches for foodborne pathogens control at pre and post harvest levels
- Discuss antimicrobial resistance and one health approach
- Discuss the use of foodborne pathogens detection methods
- Explain the mechanisms of microbial biofilm formation and resistance to environmental stress
- Discuss the role of biofilms in the food industry
- Discuss the application of PCR in the field of food microbiology
- Examine the role of molecular and genomic techniques in the food industry related to food safety
- Apply rapid microbiology techniques to assess food safety and quality
- Apply genomic techniques to study genomes of interest
- Work effectively as a team during in-class activities

**Textbook, Readings, and Course Materials**

Identify for the students what they need to read for class and where they can find it. Be aware of copyright laws when using readings.

**Required textbook** – No textbook is required

**Supplementary readings**

**Recommended or required materials**

- The Physiology and Biochemistry of Parakaryotes. David White.
- Laptop
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 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

I will be using the iClicker student response system in class. Please make sure you install iClicker referring to your smartphone. iClicker helps me to understand what you know and gives everyone a chance to participate in class. I will check for attendance using iClicker. You will also get bonus marks for your class participation using iClicker.

For course management, I will be using UM Learn.

You will need a laptop to access BV-BRC. Please make sure that you request access to the bioinformatics resource service https://www.bv-brc.org/. In addition, the use of other technology (i.e., tablets, cell phones, laptops, etc.) is allowed in the classroom. 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

The student is expected to participate actively in the course. Active participation means: actively listening and responding to questions in class (I do not expect perfection!); staying on top of lecture material and assignments, and seeking help on course material that is not clear.

PowerPoint presentations summarise only a portion of the knowledge content that needs to be covered in class. For the rest of the contents, you are expected to read the required textbook.

I expect students to connect on time and to be prepared to learn.

If you experience connection issues and arrive late, I expect you to make sure that you mute yourself, that way you won’t disrupt the class. I expect that you will appreciate the diversity of our campus and respect the rights of each member of the class.

Attendance and participation are essential elements to the student’s success in this course. Attendance is not mandatory; however, you will not get credit for an in-class assignment if you are absent on the day it is given.

I will be in the classroom or connected for class at least 5 minutes before starting with the lecture content if you need to ask a quick question or talk to me about any issue related to the class. At the end of the lecture, If you have a question, you can ask, and the rest of the students who are not interested or have
other classes can leave the meeting. I will treat you with respect and will appreciate the same courtesy in return. For more information regarding a respectful work and learning environment, please visit the following link:

Please See the Respectful Work and Learning Environment Policy.

I expect you to follow these policies around Class Communication, Academic Integrity, and Recording Class Lectures. Example: I will treat you with respect and would appreciate the same courtesy in return. See Respectful Work and Learning Environment Policy.

At the end of this section, the policies and services students are expected to follow/utilize need to be included (Section 2.5 ROASS).

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 serious disciplinary action. Visit the Academic Calendar, Student Advocacy, and Academic Integrity 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 Claudia Narvaez-Bravo. 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.
Expectations: You Can Expect Me To

You can expect me to be on time and prepared for class.

You can expect me to be available for consultation regularly.

Email is my preferred method of communication; you can expect to receive a response to any email within 24 hours on weekdays.

If you have a question please send an email or make an appointment. I will be happy to answer it, however, make sure you are asking a relevant question (i.e. you could not find the answer or get an understanding of the material after reviewing the course syllabus, class notes, videos or textbook). Each assignment or class material will be discussed in class. However, I will be glad to offer brief advice when needed about the class material or an assignment.

All assignments handed in on time will be graded and returned within two weeks of the due date; late assignments will be graded as my time permits.

You can expect me to treat all of your questions and comments with respect and to take your concerns seriously. If you are having a problem, don't hesitate to talk to me about it. Don't wait until the last moment to realize that you need some marks to pass the course! I won't be able to help you at this point.

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.

Course Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Topics, Readings, Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 10</td>
<td>Introduction</td>
</tr>
<tr>
<td>Jan 12</td>
<td>Indicator microorganisms. Standards, guideline and specifications Part 1</td>
</tr>
<tr>
<td>Jan 17</td>
<td>Indicator microorganisms. Standards, guideline and specifications Part 2</td>
</tr>
<tr>
<td>Jan 19</td>
<td>Methods to detect coliforms, fecal coliforms and E. coli</td>
</tr>
<tr>
<td>Jan 24</td>
<td>Control of microorganism in food – Int/ext factors</td>
</tr>
<tr>
<td>Jan 26</td>
<td>Lactic acid bacteria</td>
</tr>
<tr>
<td>Jan 31</td>
<td>Yeast and molds</td>
</tr>
</tbody>
</table>
Course Name Course No.: Course Title

Feb 2  Mirobes and disease
Feb 7  Time for students to work on exercises (dilutions, enumeration techniques) – No classes
Feb 9  Foodborne pathogens and virulence factors
Feb 14 Foodborne pathogens and virulence factors
Feb 16 Antimicrobial compounds
Feb 21 -24 Winter break
Feb 28 Paper presentations
March 2 Paper presentations
March 7 Molecular biology Essentials Part 1
March 9 Molecular biology Essentials Part 2
March 14 Introduction to PCR and primer design – practice in-silico
March 16 Midterm exam
March 21 Whole genome sequence – bioinformatics tools
March 23 Bioinformatics
March 28 Bioinformatics
March 30 Bioinformatics – NCBI
April 4 Bioinformatics project presentations. 20 min.
April 6 Bioinformatics project presentations . 20 min
April 11 Bioinformatics project presentations . 20 min

Note: Calendar can be subjected to changes.

<table>
<thead>
<tr>
<th>Date</th>
<th>Class Content &amp; Teaching Strategies</th>
<th>Required Readings or any Pre-class Preparation</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Type of Assessment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mid-Term exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Paper presentation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Excercises:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Dilutions and interpretation report (10%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>b) Primer design and PCR conditions design report (10%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Bioinformatics project</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Final exam – open book</td>
</tr>
</tbody>
</table>

100%
# Lab Expectations

## Lab Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Lab Content &amp; Teaching Strategies</th>
<th>Required Readings or Pre-Class Preparations</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dilutions and plating</td>
<td>Lecture material and supplementary readings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indicator microorganisms</td>
<td>Lecture material and supplementary readings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conventional PCR and gel electrophoresis</td>
<td>Lecture material and supplementary readings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rapid molecular detection system</td>
<td>Lecture material and supplementary reading</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Antimicrobial susceptibility test</td>
<td>Lecture material and supplementary readings</td>
<td></td>
</tr>
</tbody>
</table>

Note: Labs will take place Thursday morning 9-10 am, since this will be out of the lecture schedule time, the class will consulted for availability before the lab sessions. Results can be check on students own time (before noon).

## Grading

*Grades will not be curved.* To assign the letter grade, grades that end with a decimal point of 0.5 or above will be rounded to the next higher whole number, and grades that end with a decimal point below 0.5 will be rounded to the next lower whole number. For example, if a final percentage grade is 89.5 – 89.9, the grade should be rounded to 90, this is an A. If a final percentage grade is 70.4, the grade should be rounded to 70, and the letter grade is C+.

This rule applies to all students, no exceptions.

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percentage out of 100</th>
<th>Grade Point Range</th>
<th>Final Grade Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>95-100</td>
<td>4.25-4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>A</td>
<td>86-94</td>
<td>3.75-4.24</td>
<td>4.0</td>
</tr>
<tr>
<td>B+</td>
<td>80-85</td>
<td>3.25-3.74</td>
<td>3.5</td>
</tr>
<tr>
<td>B</td>
<td>72-79</td>
<td>2.75-3.24</td>
<td>3.0</td>
</tr>
<tr>
<td>C+</td>
<td>65-71</td>
<td>2.25-2.74</td>
<td>2.5</td>
</tr>
<tr>
<td>C</td>
<td>60-64</td>
<td>2.0-2.24</td>
<td>2.0</td>
</tr>
<tr>
<td>D</td>
<td>50-59</td>
<td>Less than 2.0</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>Less than 50</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

## Voluntary Withdrawal
The last date to drop Fall term and Fall/Winter term spanning courses with refunds: Fall/Winter Term spanning course before Jan. 20, you will receive a VW for the course, but you will not be charged the Winter Term portion of the fees

Voluntary Withdrawal (VW) deadline Winter term classes: March 22, 2023

Please refer to the Ask the Registrar’s Office web page for more information.

ASSIGNMENT DESCRIPTIONS

It is recommended that the syllabus contain the details for all of the assignments in your course. However, if the details are not provided, a statement must be included in the syllabus of whether assignment instructions, grading rules, or rubrics will be provided (Section 2.5 ROASS).

Assignments

**TITLE:** Paper presentation

**GOAL:** Students will be presenting a paper covering one of the topics listed under the course learning objectives.

**PROCEDURE:** The students will be assigned a research paper and they will prepare a presentation (20 min). The presentation must include an introduction, objectives, material and methods, results, discussion and conclusions. Citation style: International Journal of Food Microbiology.

**SUBMISSION GUIDELINES:** all assignments are individual and papers will be uploaded to UM Learn. The PP slides should be submitted.

**EVALUATION CRITERIA:** a rubric is available (UML) for this assignment.

**TITLE:** Bioinformatics project

**GOAL:** Apply genomics techniques to study genomes (virulence factors, physiology, etc.)

**PROCEDURE:** This assignment will consist of an introduction where students must define the project objectives, and show a lit review where important and relevant sources of information are consulted. All written assignments in this course shall include an in-text citation. Citation style: International Journal of Food Microbiology.

**SUBMISSION GUIDELINES:** all assignments are individual and papers will be uploaded to UM Learn.

**EVALUATION CRITERIA:** a rubric will be available (UML) for this assignment.

*Note: please register at the BV-BRC [https://www.bv-brc.org/](https://www.bv-brc.org/)*

**TITLE:** Dilutions and interpretation

**GOAL:** The student will obtain raw data on a particular food item, the data consist on microbial indicators numbers.

**PROCEDURE:** This assignment will consist of use of raw data to calculate food item final counts for each indicator. A report must be submitted, which must include: an introduction where students must define the report objectives, methods, results & discussion. Relevant sources of information should be consulted and cited. All written assignments in this course shall include an in-text citation. Citation style: International Journal of Food Microbiology.

**SUBMISSION GUIDELINES:** all assignments are individual and papers will be uploaded to UM Learn.

**EVALUATION CRITERIA:** a rubric is available (UML) for this assignment.
**TITLE:** Primer design and PCR conditions report

**GOAL:** The student will select a bacteria of interest, design the primers to be targeted and define the PCR conditions including visualization of the PCR reaction.

**PROCEDURE:** The student will use the BV-BCR or NCBI platforms for primer design. The student should test the primers in-silico. PCR conditions for the specific primers will be calculated and reported. A report must be submitted, which must include: an introduction where students must define the report objectives, methods, results & discussion. Relevant sources of information should be consulted and cited. All written assignments in this course shall include an in-text citation. Citation style: International Journal of Food Microbiology.

**SUBMISSION GUIDELINES:** all assignments are individual and papers will be uploaded to UM Learn.

**EVALUATION CRITERIA:** a rubric is available (UML) for this assignment.

---

**Referencing Style**

All written assignments (group activities summary) and lab reports in this course shall include an in-text citation. Reference Style: International Journal Food Microbiology:

[https://www.elsevier.com/journals/international-journal-of-food-microbiology/0168-1605/guide-for-authors](https://www.elsevier.com/journals/international-journal-of-food-microbiology/0168-1605/guide-for-authors)

All publications cited in the text should be presented in a list of references following the text of the manuscript.

All citations in the text should refer to:

1. Single author: the author's name (without initials, unless there is ambiguity) and the year of publication;
2. Two authors: both authors' names and the year of publication;
3. Three or more authors: first author's name followed by 'et al.' and the year of publication.

Citations may be made directly (or parenthetically). Groups of references should be listed first alphabetically, then chronologically.

Examples: "as demonstrated (Allan, 1996a, 1996b, 1999; Allan and Jones, 1995). Kramer et al. (2000) have recently shown "

List: References should be arranged alphabetically by authors' names and should be as full as possible, listing all authors, the full title of articles and journals, publisher and year. Note that journal names are to be abbreviated. The manuscript should be carefully checked to ensure that the spelling of authors' names and dates are the same in the text as in the reference list.

Examples:

Reference to a journal publication:


Reference to a book:


**Assignment Feedback**

Feedback on students' performance will be provided to students: formative (i.e., comments) and summative (i.e., grade) will be delivered electronically through UML.

**Assignment Extension and Late Submission Policy**

1. **Late Assignments**: Assignments (electronic papers and hard copies) are considered late if they are not submitted by the day they are due. For each day, the assignment is late (excluding weekends) a 10% deduction to the grade will be applied.

2. **Makeup exams or absence**: Attendance is essential to student success in this course. Class roll will be taken each class and lab period. Makeup exams, assignments, or absences on required days will be given only with the professor's permission.

**Important Note on submissions**: Be aware of the folders assigned for each assignment in UML; if you use a different folder by mistake that will be your responsibility to load the assignment in the right folder and it will be marked as late. **Please notice that I won’t accept assignments through email.**

In the case of final exams, be advised that only the Dean's Office, not individual instructors or Departments, are in a position to grant deferred examinations.

**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) sample** re: A list of academic supports available to Students, such as the Academic Learning
Centre, Libraries, and other supports as may be appropriate:

**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/](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](http://bit.ly/WcEbA1) or name: [http://bit.ly/1tJ0bB4](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](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](http://www.umanitoba.ca/libraries).

**Section (b) sample:** re: A statement regarding mental health that includes referral information:

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](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.

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/](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](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:

**Section (c) sample:** re: 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](http://umanitoba.ca/copyright) for more information.

**Section (d) sample:** re: A statement directing the student 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/](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/](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 conduct yourself in an appropriate respectful manner. Policies governing behavior include the:

  **Respectful Work and Learning Environment**

  **Student Discipline**
  [http://umanitoba.ca/admin/governance/governing_documents/students/student_discipline.html](http://umanitoba.ca/admin/governance/governing_documents/students/student_discipline.html) and,

  **Violent or Threatening Behaviour**

- 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](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/](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_-_](http://umanitoba.ca/admin/governance/media/Intellectual_Property_Policy_-)
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

Catalyst program
Collaboration grant – agaction@gov.mb.ca AG ACTION SCAP PROGRAM