



MACDONALD CAMPUS
FARM MANAGEMENT AND TECHNOLOGY PROGRAM/152.B0
FMT COURSE OUTLINE VERIFICATION DOCUMENT

Land Acknowledgement: McGill University is located on land, which has long served as a site of meeting and exchange amongst Indigenous peoples, including the Haudenosaunee and Anishinabeg nations. McGill honours, recognises, and respects these nations as the traditional stewards of the lands and waters on which we meet today.

PRESENTATION AND GENERAL INFORMATION

Institution: Macdonald Campus of McGill University

Program: Farm Management and Technology (152.B0)

Course number and title: FMTP 074/365-VTQ-MC The Science of Food

Scheduling hours and Classroom number: Wednesday 2:00 – 5:00 CC2-215 and Food Lab

Ponderation: 3-0-3 (3 hours lecture + 0 hours lab + 3 hours personal work per week)

Number of credits: 2.00 credits

Competency (ies) and code(s): Consider contemporary issues from a transdisciplinary perspective (021L)

Prerequisite (s): None

Indicate if the course is a prerequisite for subsequent course(s): No

Semester/Year: Winter 2024

Name of instructor: Mary Hendrickson MSc, R.D.

Office, telephone number, local, email address: mary.hendrickson@mcgill.ca

Instructor availability to students: Hours to be determined with the class

TA:

INTRODUCTION and COURSE CONTENT (PROGRAM RELATED INFORMATION)

Through this course, students will become familiar with the structure and composition of foods and the scientific principles underlying physical, chemical, and nutrient content changes during food preparation. The role of ingredients and nutrients, and their interaction in food preparation will be discussed and applied during workshops. Throughout, food literacy, sustainable food systems, culinary and food safety skills will be learned and applied.

Summary

Learning methods will include displays, demonstrations, interaction with guest speakers, "hands-on" experience, and review of the experiences - all relating culinary, nutritional, behavioral, marketing and food safety theory to practical applications. Food tasting will be part of all sessions, as will discussion and debunking of common nutrition myths. Additional topics will be added according to student interests.

MINISTERIAL OBJECTIVES AND COMPETENCIES

The Science of Food is a complementary course, not an agricultural course. It is therefore intended to broaden your education. In order to successfully complete this course you must consider contemporary issues from a transdisciplinary perspective individually or in groups, drawing on different fields of knowledge, and using documents and data from various disciplines. You must meet these objectives:

Elements of the Competency 021L	Performance Criteria
1. Identify major contemporary issues.	<ul style="list-style-type: none"> • Exploration of various contemporary issues • Description of the main perspectives concerning these issues • Clear formulation of objects to study related to these issues
2. Recognize the specific role of several disciplines in the understanding of an issue.	<ul style="list-style-type: none"> • Identification of some of the theories used in analyzing the issue • Clear description of the concepts and methods used
3. Demonstrate the contribution of several disciplines to the understanding of an issue.	<ul style="list-style-type: none"> • Clear formulation of the perspectives of the issue • Precise description of the main contributions of the disciplines • Pertinent explanation of the interaction among various disciplines • Appropriate use of language and concepts from the disciplines

REQUIRED TEXTBOOK(S) AND ASSOCIATED COSTS

There is no textbook. Readings and resources will be posted on MyCourses. It is essential to check “MyCourses” (www.mcgill.ca/lms/) at least every week and ideally more often for announcements and other important information.

BIBLIOGRAPHY

As indicated above.

TEACHING METHODS

Methods to be used in teaching this course will be mainly in-person (with class activities, multi-media presentations, readings, written assignments and class presentations by students. The food lab will involve recipe preparation and product evaluation (note: allergy clause), and group work. There is no final exam.

EVALUATION PLAN/GRADING SCHEME

Evaluation Methods	%	Due date
In class activities and lab activities	20	Throughout
MyCourses Quizzes (open note)	10	Jan. 24 and April 10
Assignment 1: *1a: Family food history written (500-800 word paper) 1b: Presentation of project and participation in small group discussion	20 5	Feb. 7
*Assignment 2: Analysis of food and nutrient intake and food waste	15	March 20
*Assignment 3: Grocery store assignment	10	Feb.28
Assignment 4: *4a Farmer/Chef Meal Challenge: Video and Written work 4b Video presentation in class	15 5	April 17
Group work- Same grade for each member		

Summative evaluation task (s):

The four assignments and lab and class activities constitute the summative evaluation for this course.



Some in class quizzes will be completed on the Quiz tab on MyCourses during the class period.

MANDATORY FOR ALL FMT Course outlines: The grading for the course is as indicated. The FMT Program does not offer supplemental exams and does not allow students to submit supplemental work to improve their final grades.

In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

ASSIGNMENTS SUBMISSION AND PENALTY FOR LATE SUBMISSION

*Assignments will be due on "MyCourses" by 11:00 pm on the date indicated. Remember that late assignments will lose 20% per day late.

MISCELLANEOUS COSTS

Food will need to be purchased to create a video for Assignment #4. A folder is needed to organize course materials.

SAFETY and SECURITY

Students are required to bring clean, closed toed (fully covered), non-slip shoes to each class to change into prior to entering the food lab. Jewelry is not permitted in the Food Lab. They are also required to cover their legs, but no tight materials (i.e. leggings, tights). This is for burn prevention. The instructor will provide hairnets, gloves and chef coats for labs. Students must abide by the Food Lab protocols to ensure safe food handling and safe use of equipment.

Allergy Information: In this course, we will be making and tasting a variety of foods. If you have allergies or dietary constraints, it is your responsibility to inform teaching staff and carry any required medication/epi-pens.

COVID-19: link to McGill's up-to-date information regarding the prevention of transmission of COVID-19 and the protocols for individuals who may have symptoms ([Return to campus - McGill University](#))

BEHAVIOUR STANDARDS

Expected behaviour in class, and in accordance with the standards outlined in the Student Rights and Responsibilities Green book. Student Rights and Responsibilities Inside and Outside the Classroom: www.mcgill.ca/students/srr/

POLICY ON MOBILE COMPUTING AND COMMUNICATION DEVICES/ MCGILL MC2 POLICY:

For more details, please visit: <https://www.mcgill.ca/secretariat/files/secretariat/Mobile-Computing-Commun-devices-MC2-guidelines-11June2010.pdf>

POLICY ON E-MAIL COMMUNICATION WITH STUDENTS:

McGill email address is the only acceptable email address to communicate with students. For more details, please visit: https://www.mcgill.ca/secretariat/files/secretariat/e-mail-communications-with-students-policy-on_3.pdf

ATTENDANCE POLICY

The Farm Management and Technology program has an Attendance Policy. Students are expected to attend all lectures, laboratories, seminars, conferences and presentations. They are also expected to participate in all field trips and other activities associated with every course they are taking. It is however; understood that students may have valid reasons to miss some classes. Such reasons might be:

- Medical reasons.
- Participation in intercollegiate competitions sponsored by the Campus.
- Attendance at funerals of members of their immediate family.
- Any other activities approved (prior to missing classes) by the Director.

Depending on the individual course, students who miss more than 20 % of classes may be required to leave the course and be prevented from attending or submitting the final summative course assessment; this leads to automatic failure since the maximum final grade allowed in such a case is 59%. This rule is applied to every course in the first year of the program and according to individual instructor requirements in other courses.

It is the student's responsibility to inform their instructors and to obtain lecture notes and catch-up missing material through their classmates, material available on MyCourses or other sources.

CAMPUS POLICY ON CHEATING AND PLAGIARISM

All students need to be familiar with the McGill policies regarding integrity, cheating, and plagiarism. Visit: [Plagiarism and Cheating | Student Rights and Responsibilities - McGill University](#)

Academic Integrity:

"McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures" (see www.mcgill.ca/students/srr/honest/ for more information).

ACADEMIC INTEGRITY and COPYRIGHT: By submitting this work, I certify that the work represents solely my own efforts. I confirm that I understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures and am aware of my responsibilities under the Student Assessment Policy.

CHEATING: Cheating means any dishonest or deceptive practice related to examinations, tests, quizzes, lab assignments, research papers or other forms of evaluation tasks. Cheating includes, but is not restricted to, making use of unauthorized material or devices and/or obtaining or providing unauthorized assistance in writing examinations, papers or any other evaluation task.

PLAGIARISM: Plagiarism is the intentional copying, paraphrasing or other use of another person's work or ideas without acknowledgment. Plagiarism can be from any source including books, magazines, newspapers, the Internet, or another student's paperwork.

LANGUAGE:

"In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded."

1. At English universities in Quebec, students can write exams and tests in French or English, whereas in French universities and Cegeps in Quebec institutional policy promotes French only. However, this is a Cegep level course, not a university level course, and also this does not involve exams, or tests in limited time where one is penalized for grammatical errors. However, students are required to pass the Ministerial English College Examination to graduate from the FMT Program.
2. In order to promote oral and written English and the ability of students to pass the Ministerial English College Examination, the “participation mark” in this course requires students speak and write in English. Papers not written in English will not be accepted.
3. This course is designed to “foster the development of communication skills in a bilingual contact” (Educational Goals of the Program).

ACCOMODATIONS

Student Accessibility & Achievement Office (SAA, formerly known as OSD, Office for Students with Disabilities): As the instructor of this course I endeavor to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me and the **SAA** at [Student Accessibility & Achievement - McGill University](#), or to contact the Students Service Office at: stuserv.macdonald@mcgill.ca or <https://www.mcgill.ca/macdonald-studentservices/>, or by telephone at 514-398-7992. Students already registered with SAA do need to contact them, using the web form, to make arrangements for accommodations for any assessments (midterms, lab exams, in-class essays/finals) that fall outside the official final examination period.

ACCOMODATIONS FOR MISSED ASSESSMENTS and ASSIGNMENTS DURING THE TERM

If you need to seek accommodations for missing in-course exams, assessments, or assignments, for medical reasons please inform your instructor that you will be missing and bring medical or other documentation to the **Student Affairs Office (106 Laird Hall)**. They will authorize your instructor to accommodate.

If you need to seek accommodation for missing in-course exams, assessments, or assignments for non-medical or other emergencies or for religious holy days, please discuss the situation directly with your instructor.

Sickness/illness during the term: Please visit Student Services (Centennial Center- C1-124) at Macdonald Campus if you are suffering from any mental or physical health-related issues during the term.

Students currently in the province of Quebec seeking the support of a Local Wellness Advisor (LWA) can now secure an intake appointment by filling out the appropriate webform at <http://mcgill.ca/lwa>. Because clinical agreements limit our 1:1 sessions to students who are physically located in the province of Quebec at the time of their appointments, we continue to invite all students to refer to [How To Access Hub Clinical Services | Student Wellness Hub - McGill University](#) for an updated list of virtual support services which they can access from anywhere in the world.



If you need to seek accommodation for in-course assignments, for medical or other health emergencies, please send medical documentation along with the filled out form for medical accommodation (<https://www.mcgill.ca/macdonald/studentinfo/undergrads/forms>) by email to the Macdonald Campus Student Affairs Office (meline.chatoyan@mcgill.ca). When approved, the professor(s) will be notified by SAO and by email to accommodate the student.

a. Non-medical:

It is at the **discretion of the instructor** to arrange accommodation for students who have missed in-term exams or due dates for non-medical reasons (e.g. travel constraints, slept in, etc.). Complicated cases can be directed to SAO.

b. Religious:

The Policy for the Accommodation of Religious Holy Days (https://www.mcgill.ca/secretariat/files/secretariat/religious_holy_days_policy_on_accomodation_of.pdf) applies to these situations. **“Students are not to be penalized** if they cannot write examinations or be otherwise evaluated on their religious holy days where such activities conflict with their religious observances.” A student seeking accommodation must contact the instructor at least 14 days in advance so that arrangements can be made.

EXAMS AND ASSESSMENT POLICY

Policy: https://www.mcgill.ca/secretariat/files/secretariat/2016-04_student_assessment_policy.pdf

MISSED/DEFERRED FINAL EXAMS

If a student misses a final exam, for a valid reason, they may apply to defer a final exam that has been missed via Minerva at: <https://mcgill.ca/students/exams/dates/supdefer>

The deferred fall-term exams are written during the March study break. Deferred winter-term exams are written in August. A missed deferred exam is considered to be course failure. Exams are normally deferred for medical reasons.

The Faculty recognizes a first-deferral for non-medical while all others must be justified with medical reasons. Some students elect to defer for non-medical reasons (e.g. undesirable exam schedule, travel conflict, etc.) but should be aware of the difficulties involved in getting a good grade in an exam written months after the course is finished.

TENTATIVE SCHEDULE

Tentative schedule in accordance with the FMT calendar. Mandatory for all FMT course outlines: In the event of extraordinary circumstances beyond the University’s control, the content and/or evaluation scheme in this course is subject to change.

<i>Week of</i>	<i>Wednesday 2024</i> 2:00-5:00 pm
Jan 10	Course expectations. The basics of food composition and nutrition: What are the components of food? Nutrient needs. Mindful vs Mindless eating: Do attitudes, eating

	<p>environment and behaviors impact health? Social Determinants of Health.</p> <ul style="list-style-type: none"> • Assignment 1 due Feb. 7 instructions for family interviews, presentation and paper • Food lab safety and tour • Video to watch on MyCourses: Food safety to complete Quiz 1 due Jan. 24 • Online Quiz 1 due Jan. 24: CFG and Food Safety
Jan 17	<p>Why the focus on veggies and fruits? Which are the best of the best? Nutrition and preparation. Introduction to sustainable food systems. Guest Chef: Cooking methods and skills.</p> <ul style="list-style-type: none"> • Food Lab #1: Veg and Fruits and cooking methods
Jan 24	<p>Great grains: Variety of grains, old and new; Science of grain preparation (bread, pastries, cookies, cakes); Gluten-free eating. Cooking methods. Introduction to label reading and food claims.</p> <ul style="list-style-type: none"> • Assignment 2 due March 20: instructions to analyze of food and nutrient intake and food waste • Food Lab #2: Whole grains
Jan 31	<p>Protein Meats and so many alternatives: Protein- what's the fuss? Sources, Cooking methods and health.</p> <ul style="list-style-type: none"> • Food Lab #3: Meat and plant based alternatives
Feb 7	<p>Assignment #1: Family food history presentations</p> <ul style="list-style-type: none"> • Group discussions and MyCourses submission • Assignment 4 due April 17: Farmer/ chef video challenge guidelines
Feb 14	No Class – Canada Ag Day Conference
Feb. 21	<p>Protein: Milk, other dairy and plant based alternatives: What is a milk product? Nutrition and health considerations. Cooking methods.</p> <ul style="list-style-type: none"> • Food Lab #4: Milks and plant based alternatives
Feb 28	<p>Grocery store fieldtrip (transport will be arranged). Assignment 3 due Feb. 29</p>
Mar 6	No class – EM3 week
Mar 13	<p>Beverages: Water, soft drinks, energy drinks, sports drinks, fancy waters, tea, coffee; Help or harm characteristics of different beverages and impacts of marketing. Canadian guidelines for reducing packaging waste.</p> <ul style="list-style-type: none"> • Food Lab #5: Beverages
Mar 20	<p>Demons of the day? Setting the record straight on fats and oils, salt and sugar.</p> <ul style="list-style-type: none"> • Food Lab #6: Healthy and sustainable cooking swaps
Mar 27	<p>Fermentation: What is fermentation; properties and processes? Are there health benefits?</p> <ul style="list-style-type: none"> • Assignment 2 due on MyCourses. • Food Lab #7: Fermentation
April 3	<p>Eating on a budget: Get the most bang for your buck. Quick and easy meals and snacks.</p> <ul style="list-style-type: none"> • Food Lab # 8: Budget saving recipes swaps, reducing food waste • Quiz 2: Due April 10 covering class topics: Grains, Proteins, Beverages, Fermentation and Budget eating

<i>Week of</i>	Wednesday 2:00-5:00 pm
Apr 10	<p>Marketing and Innovations in food: What's new out there and what is in development, and is it sustainable? Foods of the future.</p> <ul style="list-style-type: none"> • Food Lab # 9: Innovative foods
Apr 17	<p>Assignment 4: Farmer/Chef cooking challenge video presentations and MyCourses submission due</p> <p>Last Class: Meal Prep Farmer/Chef cooking challenge</p> <ul style="list-style-type: none"> • Food Lab # 10