

Food Science Honours Workshop

FOOD 4905

<p>Course Instructor: Dr. Véronic Bézaire</p> <p>How to address me: Véronic</p> <p>Gender Pronouns: (she/her/hers) (learn more)</p> <p>Email: veronic.bezaire@carleton.ca</p> <p>Note: If you have or question or would like to talk with me, you can send an email or approach me during class time.</p> <p>Phone: 613-520-2600 x 5012</p>	<p>Office Location: 319 Steacie Building Click here for visual directions.</p> <p>Class Location: 4040 Nicol Building Click here for visual directions.</p> <p>Class Times: Monday, 2:35pm-5:25pm</p> <p>Prerequisites: Fourth year standing and a minimum of 1.5 credits at the 3000 level.</p>
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Welcome to this Course!

Course description

Active learning in areas that include information literacy, critical evaluation of scientific literature, written and oral communication, evaluation and interpretation of results, statistics and data management. Emphasizes transferable skills that are most appropriate for non-research career paths.

Includes: Experiential Learning Activity

Course objectives

The Honours Workshop is for students who wish to fine-tune critical thinking and scientific communication skills that will be useful in the workplace. In this workshop, students will choose from a variety of controversial topics in food science. Each student will become the subject matter expert on their chosen topic. A variety of learning activities will guide students to writing a scoping review in the Fall term, and specific types of presentations in the Winter term.

The research topics are:

1. Organic food: Is organic food healthier or safer to consume than non-organic food? How does the science compare to public perception?
2. Food security: Value-added nutrition from underutilized crops and/or synthetic sources?
3. Genetically modified foods: Risk versus benefits? Its role in the future of food.
4. Food packaging and climate change: Impact of packaging material on the environment and food waste
5. Cannabis: Edible production, processing, and regulations
6. Veganism: Plant-based diet vs animal-based diet and their impact on climate change
7. Nutrition and your genome: From personalized nutrition to epigenetics, how the genome and nutrition interact.

The learning outcomes for the course are based on the Provincial Degree Level Expectations for Honors degrees.

LO1. Research methods	<ol style="list-style-type: none"> a. Carry out a scoping review of a research topic b. Identify gaps of knowledge in literature c. Postulate a reasonable research question and hypothesis d. Carry out hypothesis-driven research e. Interpret results and statistical analysis f. Explain principles, mechanisms, or results in sufficient depth g. Support arguments with primary literature
LO2. Information literacy	<ol style="list-style-type: none"> a. Critically evaluate literature for its ethical use b. Effectively use databases and reference managers
LO3. Communication skills	<ol style="list-style-type: none"> a. Apply principles of basic scientific writing and composition b. Adapt scientific communication to specific formats and audiences
LO4. Job readiness	<ol style="list-style-type: none"> a. Demonstrate autonomy, teamwork, and professionalism b. Write a resume and cover letter for a hypothetical job

Community Guidelines

In our course, we will seek to behave according to the International Center for Academic Integrity*.

	As students, we will...	As a teacher, I will...
Honesty	<ul style="list-style-type: none"> Honestly demonstrate our knowledge and abilities on assignments and exams Communicate openly without using deception, including citing appropriate sources 	<ul style="list-style-type: none"> Give you honest feedback on your demonstration of knowledge and abilities on assignments and exams Communicate openly and honestly the expectations and standards of the course through the syllabus
Responsibility	<ul style="list-style-type: none"> Complete assignments on time and in full preparation for class Show up to class on time, and be mentally/physically present Participate fully and contribute to team learning and activities 	<ul style="list-style-type: none"> Give you timely feedback on your assignments and exams Show up to class on time, and be mentally & physically present Create relevant assessments and activities
Respect	<ul style="list-style-type: none"> Speak openly with one another, while respecting diverse viewpoints and perspectives Provide sufficient space for others to voice their ideas 	<ul style="list-style-type: none"> Respect your perspectives even while we challenge you to think more deeply and critically Help facilitate respectful exchange of ideas
Fairness	<ul style="list-style-type: none"> Contribute fully to collaborative work, so that we are not freeloading off of others Not seek unfair advantage over fellow students in the course 	<ul style="list-style-type: none"> Create fair assignments and exams, and grade them in a fair, and timely manner Treat all students equitably
Trust	<ul style="list-style-type: none"> Be open and transparent about what we are doing in class Not distribute course materials to others without authorization 	<ul style="list-style-type: none"> Be available to all students when we say we will be Not modify the expectations without communicating with everyone in the course
Courage	<ul style="list-style-type: none"> Say or do something when we see actions that undermine values above Accept a lower or failing grade or other consequences of upholding and protecting the above values 	<ul style="list-style-type: none"> Say or do something when we see actions that undermine any of the above values Accept the consequences (e.g., lower teaching evaluations) of upholding and protecting the above values

² This class statement of values is adapted from Tricia Bertram Gallant, Ph.D.

Inclusive teaching statement

I will continually strive to create inclusive learning environments and would therefore appreciate your support and feedback.

Land Acknowledgement

Here at Carleton University, it is important that we acknowledge that the land on which we gather is the traditional and unceded territory of the Algonquin nation.

Learning Materials

Technology Checklist:

- An internet-enabled computer (laptop/desktop)

Options exist for students who do not have access to these resources. Options include financial aid from Carleton, inexpensive options for technology (Best Buy refurbished products, Kijiji), & single workspaces available for student use on campus.

Assessment in this Course

Research about learning strongly suggests that the most important factor in learning is doing the work of reading, writing, recalling, practicing, synthesizing, and analyzing. Learning happens best when people actively engage material on a consistent basis, and that is why I have high standards in this course. I am confident that, with appropriate effort, you **all** can meet those standards. I also reduce unintentional bias by grading anonymously and using rubrics.

Grade Breakdown

Learning activities (30%)	Attendance & Participation	10%
	Worksheets 1-3	10% (2/4/4% each)
	Annotated bibliography 1-2	10% (5% each)
Assignments (70%)	Draft: Scoping review	5%
	Scoping Review Final Draft	20%
	Video Recording	10%
	Draft: Infographics	5%
	Infographic	10%
	Draft: Presentation	5%
	Live Presentation	15%
		100%

Attendance and Participation

One of the objectives of this course is to increase your job readiness. This includes learning to be a team player. Attendance and active participation are therefore expected from all students and will account for 10% of your final grade. Active participation can be displayed as participation in class discussions and peer-review processes.

Worksheets 1-3

To encourage a systematic approach to researching your topic, you will complete three different scoping review worksheets. These worksheets will serve as steppingstones towards your scoping review.

1. Research question and search terms
2. Title and abstract screening
3. Full-text screening

Annotated Bibliography 1-2

To encourage frequent reading of the literature on your research topic, you will submit annotated bibliographies on two occasions, each including 1 review article and 5 original research papers. Similarly, to the scoping review worksheets, the annotated bibliographies will help you progress on your scoping review.

Scoping Review

The scoping review is the main assessment for the Fall term. For this task, you will choose a topic from the provided list of research topics in food science and nutrition. You will research this topic by applying the steps of a scoping review. This will help you remain as objective and unbiased as possible in your research. The worksheets and annotated bibliographies described above will help you stay on track throughout the Fall term. Prior to submitting your final scoping review, you will submit your best draft for feedback and partial grading.

Presentation 1- Video Recording

You will produce a video recording of your research topic targeting an 8th-grade audience. The video recording should be no longer than 5 minutes. Draft video recordings will be peer-reviewed by students before final submission for grading. Students will be graded on creativity, organization, appropriate language and engagement for the targeted audience.

Presentation 2- Infographic

You will develop an infographic of your research topic targeting non science University students. Draft infographics will be peer-reviewed by students and submitted for partial grading. With the feedback, you will create and submit a final version of your infographic for grading. With your permission, your infographic may be posted on the Food Science Program social media.

Presentation 3- Live Presentation

You will develop a live 20 min presentation of your research topic for a scientific audience of peers. Draft presentation slide decks will be peer-reviewed by students and submitted for partial grading. With the feedback, you will create and submit a final version of your presentation slide deck for grading. You will then deliver your presentation live to your classmates.

Course Outline (Fall)

Fall	Content	Learning Activities	Assignments
SEP 13-17	Choosing Topic How to: Searching	Topic Searching	
SEP 20-24		Topic Searching	Worksheet 1 – Search Terms
SEP 27-01	How to: Screening	Title and Abstract Screening	Worksheet 2- Title and Abstract Screening
OCT 04-08	How to: Annotated Bibliography	Annotated Bibliography	
OCT 11-15		Full-Text Screening	Annotated Bibliography 1
OCT 18-22	How to: Scoping Review	Methods: Scoping Review	Worksheet 3 – Full-Text Screening
OCT 25-29		READING WEEK	
NOV 01-05		Introduction: Scoping Review	Worksheet 3 - Data Abstraction
NOV 08-12		Results/Discussion: Scoping	Annotated Bibliography 2
NOV 15-19		Results/Discussion: Scoping Review	
NOV 22-26		Peer-Review: Scoping Review	Draft: Scoping Review
NOV 29-03		Editing: Scoping Review	
DEC 06-10			Final: Scoping Review

All assignments are due at 10:00 pm on designated due dates.

Course Outline (Winter)

Winter	Content	Learning Activity	Assignments
JAN 10-14	Resume, CV		
JAN 17-21	Networking		
JAN 24-28	How to: Video	Watch and Critique: Video Recording	
JAN 31-04		Construct: Video Recording	
FEB 07-11		Peer Review: Video Recording	Video Recording
FEB 14-18	How to: Infographic	Read and Critique: Infographic	
FEB 21-25	READING WEEK		
FEB 28-04		Construct: Infographic	
MAR 07-11		Peer Review: Infographic	Draft: Infographic
MAR 14-18		Finalize Infographic	Infographic
MAR 21-25	How to: Presentation	Watch and Critique: Presentation	
MAR 28-01		Construct: Presentation	
APR 04-08		Peer Review: Presentation	Draft: Presentation
APR 11-15			Presentation

All assignments are due at 10:00 pm on designated due dates.

Special Information Regarding COVID-19

For the most recent information about Carleton's COVID-19 response and required measures, please see the [University's COVID-19 webpage](#) and review the [Frequently Asked Questions \(FAQs\)](#). Should you have additional questions after reviewing, please contact covidinfo@carleton.ca.

Please note that failure to comply with University policies and mandatory public health requirements, and endangering the safety of others are considered misconduct under the [Student Rights and Responsibilities Policy](#). Failure to comply with Carleton's COVID-19 procedures may lead to supplementary action involving Campus Safety and/or Student Affairs.

Note About COVID-19 & Mental Health

The global pandemic has led to extra stress and uncertainty for everyone, and while we may all be experiencing the same storm, this does not mean that we are all in the same boat! If you are struggling, please do not hesitate to reach out. I am happy to listen, and/or direct you to resources that might help. In terms of class, if you need extra help or missed a lesson, don't stress! Email me and we will set a time to meet. I'll work with you, I promise. Remember that Carleton also offers an array of mental health and well-being resources, which can be found [here](#).

University Policies

In accordance with the Carleton University Undergraduate Calendar Regulations, the letter grades assigned in this course will have the following percentage equivalents:

A+ = 90-100	B+ = 77-79	C+ = 67-69	D+ = 57-59
A = 85-89	B = 73-76	C = 63-66	D = 53-56
A- = 80-84	B- = 70-72	C- = 60-62	D- = 50-52
F = <50			

WDN = Withdrawn from the course

ABS = Student absent from final exam

DEF = Deferred

FND = (Failed, no Deferred) = student could not pass even with 100% on final exam

Academic Accommodations, Regulations, Plagiarism, Etc.

Carleton University is committed to providing access to the educational experience in order to promote academic accessibility for all individuals.

Academic accommodation refers to educational practices, systems and support mechanisms designed to accommodate diversity and difference. The purpose of accommodation is to enable students to perform the essential requirements of their academic programs. At no time does academic accommodation undermine or compromise the learning objectives that are established by the academic authorities of the University.

More information can be found at: <https://students.carleton.ca/course-outline/>

University rules regarding registration, withdrawal, appealing marks, and most anything else you might need to know can be found on the university's website, here:

<https://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity/>

Academic Accommodations for Students with Disabilities

If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. For more details, visit the [Paul Menton Centre website](#).

Addressing Human Rights Concerns

The University and all members of the University community share responsibility for ensuring that the University's educational, work and living environments are free from discrimination and harassment. Should you have concerns about harassment or discrimination relating to your age, ancestry, citizenship, colour, creed (religion), disability, ethnic origin, family status, gender expression, gender identity, marital status, place of origin, race, sex (including pregnancy), or sexual orientation, please contact the Department of Equity and Inclusive Communities at equity@carleton.ca.

Religious Obligations

Please contact me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, please review the [Student Guide to Academic Accommodation \(PDF, 2.1 MB\)](#).

Survivors of Sexual Violence

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: <https://carleton.ca/sexual-violence-support/>

Accommodations for Missed Work

Carleton recognizes that these are unprecedented times during the COVID-19 pandemic, and that students may be experiencing greater stress and other life factors that are not in their control. As a result, Carleton has put into place a protocol for students to apply for accommodations using a self-declaration form in the event of missed work. The form can be found at: <https://carleton.ca/registrar/wp-content/uploads/self-declaration.pdf>

For Pregnancy

Please contact me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, please review [Student Guide to Academic Accommodation \(PDF, 2.1 MB\)](#).

Accommodation for Student Activities

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, see the [Senate Policy on Accommodation for Student Activities \(PDF, 25KB\)](#).

Academic Integrity

Academic misconduct undermines the values of honesty, trust, respect, fairness, and responsibility that we expect in this class. Carleton University provides supports such as academic integrity workshops to ensure, as far as possible, that all students understand the norms and standards of academic integrity that we expect you to uphold. Your teaching team has a responsibility to ensure that their application of the Academic Integrity Policy upholds the university's collective commitments to fairness, equity, and integrity.

(adapted from Carleton University's Academic Integrity Policy, 2021).

Examples of actions that do not adhere to Carleton's Academic Integrity Policy include:

- Plagiarism
- Accessing unauthorized sites for assignments or tests
- Unauthorized collaboration on assignment and exams

Sanctions for not abiding by Carleton's Academic Integrity Policy

A student who has not adhered to Carleton's Academic Integrity Policy may be subject to one of several sanctions:

1. If you take full responsibility for your actions, and it is the first time you have violated the policy, you will receive zero on the assessment. If you are found to have violated the policy but do not take responsibility, an additional grade deduction will be applied (e.g. an A- will become a B+)
2. Subsequent violations of the policy may result in more severe sanctions such as failing the course, suspension from all studies and/or expulsion.

Process of an Academic Misconduct Investigation

Step 1: The instructor believes misconduct has occurred and submits documentation to the Dean of the Faculty of Science.

Step 2: The Dean reviews documentation and can proceed with or dismiss the allegation.

Step 3: If sufficient evidence, the student receives an allegation statement by email. Ombuds services is copied on the email.

Step 4: The student provides a written response to the evidence provided.

Step 5: Either party may request a meeting between student, dean, and the ombudsperson.

Step 6: Dean informs the student of the decision.

Appeal: Student has the right to appeal the decision.

Additional details about this process can be found on the [Faculty of Science Academic Integrity website](#). Students are expected to familiarize themselves with and follow the Carleton University [Student Academic Integrity Policy](#). The Policy is strictly enforced and is binding on all students.

Plagiarism

Plagiarism is the passing off of someone else's work as your own and is a serious academic offence. For the details of what constitutes plagiarism, refer the [Faculty of Science Academic Integrity website](#). To further understand Academic Integrity, consider attending the [Learning and Support Academic Integrity Workshop](#).

What are the Penalties for Plagiarism?

A student found to have plagiarized an assignment may be subject to one of several penalties including: expulsion; suspension from all studies at Carleton; suspension from full-time studies; and/or a reprimand; a refusal of permission to continue or to register in a specific degree program; academic probation; award of an FNS, Fail, or an ABS.

What are the Procedures?

3. All allegations of plagiarism are reported to the Dean of Faculty of Science. Documentation is prepared by instructors and/or departmental chairs.
4. The Dean writes to the student and the University Ombudsperson about the alleged plagiarism.
5. The Dean reviews the allegation. If it is not resolved at this level then it is referred to a tribunal appointed by the Senate.

Students are expected to familiarize themselves with and follow the Carleton University [Student Academic Integrity Policy](#). The Policy is strictly enforced and is binding on all students.

Assistance for Students

Academic and Career Development Services: <http://carleton.ca/sacds/>

Writing Services: <http://www.carleton.ca/csas/writing-services/>

Peer Assisted Study Sessions (PASS): <https://carleton.ca/csas/group-support/pass/>

Math Tutorial Centre: <https://carleton.ca/math/math-tutorial-centre/>

Science Student Success Centre: <https://sssc.carleton.ca/>