Department of Biology Course Outline

WINTER 2023 BIOL 4005 3.0 The Scientific Method: Applications and Controversies

Course Instructors: We're co-teaching!

Dr. Carol Bucking Hear my name

Dr. Tamara Kelly Hear my name

How to address us:

Dr. Bucking

Dr. Kelly/Dr. K/Tamara

Personal Pronouns for both: she/her/hers

Email: biol4005@yorku.ca

Note: If you have a question or would like to talk with us, send us an email, visit us during student hours (see below), or approach us after class.

Student Hours: by appointment

What are 'Student Hours'?
Student hours are dedicated times through the week for the course instructor to meet with YOU. Pop in to introduce yourself, ask questions about the course, or discuss content from the course.

Prerequisites: must be in fourth year of a Biology program.

Office Location: Please use email to contact; we're rarely in our offices!

Class Location: 1005 Dahdaleh Building

Click here for visual directions.

Class Time: Wed. 8:30 – 11:30 am

Study Spaces on Campus:
https://currentstudents.yorku.ca/study-spaces

Course Format: BIOL 4005 is an in-person interactive course. Each class will have activities (mainly through groupwork), so attendance is strongly encouraged. We also understand that you might not be able to make it to every class and have accounted for this in the course assessment.

Classes (or portions thereof) may be recorded as it depends on what we're doing in class that day

Where to find stuff in this course outline!

Land Acknowledgement

York University recognizes that many Indigenous Nations have longstanding relationships with the territories upon which York University campuses are located that precede the establishment of York University. As

members of the York community, we acknowledge our presence on the traditional territory of many Indigenous Nations. The area known as Tkaronto has been care taken by the Anishinabek Nation, the Haudenosaunee Confederacy, and the Huron-Wendat. It is now home to many First Nation, Inuit, and Métis communities. We acknowledge the current treaty holders, the Mississaugas of the Credit First Nation. This territory is subject of the Dish with One Spoon Wampum Belt Covenant, an agreement to peaceably share and care for the Great Lakes region. As settlers on this land, and as biologists, we have a responsibility to respect and care for this land and its resources. You can find out more about the traditional homelands that you occupy by heading to https://native-land.ca.

We'll be using several technologies this term to help us connect and accomplish our goals. To consider the impact and implications of using these tools, we should also acknowledge where these tools "reside" in terms of their headquarters. *eClass* is powered by Moodle headquartered in West Perth, Australia. The Whadjuk people of the Noongar nation are the traditional custodians of this area for more than 45 000 years, and we acknowledge and respect their continuing contributions to the region that includes Perth. *Perusall* is in Austin, Texas and is part of the land that has been—and continues to be—shared and caretaken by several Indigenous groups, including the Alabama-Coushatta, Caddo, Carrizo/Comecrudo, Coahuiltecan, Comanche, Kikapoo, Lipan Apache, Tonkawa, and Ysleta Del Sur Pueblo. *Microsoft,* which connects us through email and slidedecks is in the traditionally occupied land of the Sammamish, Duwamish, Snoqualmie, Suquamish, Muckleshhoot, Snohamish, Tulalip, and other coastal Salish people since time immemorial.

Welcome to BIOL 4005!

What are the consequences if scientists don't act with integrity in their research? This course will focus on a thorough discussion of the principles of integrity that are required at each step of the scientific method and research, culminating in a discussion of what our responsibilities as scientists are to society and the public. We will build on our (yours and ours) personal experiences/knowledge of integrity to explore issues such as plagiarism and fraudulent data in scientific works and the impact of such transgressions. We'll also explore ethical dilemmas that may arise in professions that many of you might be considering.

While this class will include lecture material, it will focus primarily on critiques of the current literature and case studies and include discussions of experimental design and preparing papers for journal submission. We'll look at case studies of clear-cut cases, along with more ambiguous situations, and work towards identifying the issues, and why an action was unethical or lacking integrity, and ways this could have been avoided or corrected. In sum, we aim to provide you with the knowledge and skills to act ethically and responsibly as a scientist.

In examining these we'll also **help you develop transferable skills, such as critical thinking, writing, and presenting that will help you in whatever future schooling/career you pursue.** And we think it goes without saying—but we'll put a small reminder here—that a course about integrity requires that we all act with integrity, in our teaching and in completion of assignments.

Course Calendar Description: This course explores issues of integrity as associated with the scientific method and research, including our responsibilities as scientists within a framework of integrity and veracity. The importance of ethical conduct, particularly with respect to writing, data collection, presentation of results, and attribution will be discussed as well as the implications of violations (*e.g.,* plagiarism, results tampering). Lectures will provide background information and in-class case studies will be used for examples and in-depth exploration via problem-based learning.

Course level learning objectives

Upon successful completion of this course, you should be able to:

Course Content	Skills
1. Demonstrate knowledge of principles of integrity and ethical practice involved in the scientific method and research. 2. Critically evaluate case studies of ethical issues. 3. Propose potential ways to avoid/correct violations of ethical scientific conduct. 4. Apply a framework of integrity in science to personal experiences, as well as in a broader, societal context. 5. Demonstrate comprehension of how experimental design, execution, and analysis influences results and interpretations of data.	1. Form cogent arguments about issues of integrity as related to practicing science, demonstrating critical thinking and problem-solving. 2. Present arguments and evidence both orally and in writing to various levels and audiences. 3. Communicate and work effectively, responsibly, and collegially with your peers in and out of class. 4. Synthesize and summarize key points from literature or case studies to provide relevant information and support for an assignment, argument, etc. 5. Create new knowledge with academic integrity, acknowledging clearly which ideas are not your own.

Equity, Diversity, and Inclusion in BIOL 4005:

We want the course to be challenging but also to **foster an inclusive, equitable environment that supports your learning, growth, and success**. We are committed to providing and encouraging an environment of equity, diversity, and inclusion (EDI) within this course. In that spirit, we designed this course with a **commitment to the principles of Universal Design for Learning and evidence-based teaching practices**. As instructors who are guided by evidence, we believe that you can succeed! This class is a community, and we are here to learn and succeed together and support each other.

Although we don't delve into a lot of history in this course, **we should acknowledge that the context and application of science is subjective, influenced by cultural context, and has often been exclusionary in whose voices were allowed and amplified**. This means that there can often be biases in our materials, which we are working to reduce and ultimately eliminate. Our hope is to continue improving this course, integrating diverse scientists and experiences. Please contact us at biol4005@yorku.ca or let us know through our surveys if you have any suggestions to improve the course in terms of equity, diversity, and inclusion.

To help us create an environment where each one of us, and our identities, are respected we will have a survey where you can let us know if you have a name that differs from the York official records, your pronouns, and anything that you think might impact your ability to succeed in this course. Equity is not something that happens overnight, and we are still in the process of learning about diverse perspectives and identities, and inclusionary practices and we will make mistakes, and hopefully correct ourselves. **In the interest of improving though, if anything was said in class (by anyone, including Dr. Bucking or Dr. Kelly) that made you feel uncomfortable, please talk to us about it (anonymous feedback is an option).**

York U students come from far and wide and represent a diversity of cultures and backgrounds. To support students whose primary language is not English, services are available at York including individual appointments, and group events, such as ESL Café. See: https://www.yorku.ca/laps/eslolc for more information.

Community Guidelines

The following values are fundamental to academic integrity and are adapted from the International Center for Academic Integrity*. In our course, we will seek to behave with these values in mind:

	As students, we will…	As a teaching team, we will…
Honesty and Integrity	• Honestly demonstrate our knowledge and abilities on course work • Communicate openly without using deception, including citing appropriate sources	• Provide honest feedback on your demonstrations of knowledge and abilities on course work • Communicate openly and honestly about course expectations and standards via the syllabus, instructions, and rubrics
Responsibility	• Complete course work on time in preparation for class • Show up to class on time, and try to be mentally/physically present as possible • Participate fully and contribute to team learning and activities	• Provide timely feedback on your course work • Show up to class on time, and be mentally and physically present • Create relevant assessments and class activities
Respect	• Speak openly with one another, while respecting diverse viewpoints and perspectives • Provide sufficient space for others to voice their ideas	• Respect your perspectives even while we challenge you to think more deeply and critically • Help facilitate respectful exchange of ideas
Fairness	• Contribute fully and equally to collaborative work, so that we are not freeloading off others • Not seek unfair advantage over fellow students in the course	• Create fair assignments and assessments, and provide feedback in a fair and timely manner • Treat all students equitably
Trust	• Not engage in personal affairs while on class time. • Be open and transparent about what we are doing in class • Not distribute course materials to others without authorization	• Be available to you when we say we will be • Follow through on our promises • Not modify course expectations or standards without communicating with everyone in the course
Courage	• Say or do something when we see actions that undermine any of the above values • Accept a lower or failing grade or other consequences of upholding and protecting the above values	• 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.

Contacting Us

Please use biol4005@yorku.ca to contact us, **not** the eClass message system, nor our personal email addresses. This allows us to address your email in a timely fashion. In your email correspondence, please:

- Use your yorku.ca email address for course correspondence as emails from other addresses are likely to be filtered as spam/junk.

- Put a **relevant description** in the email **subject line**.
- **Include your section, name, and student number** at the end of your email.
- **Consider booking an appointment**, rather than sending a long email if you have a concern/question that will take a considerable amount of time to read or answer.
- **Allow 2 business days for a response.** To use our professional and personal time more effectively, we typically don't check email between 7 pm and 7 am, nor on the weekends.
    - If your email is urgent, please indicate that in your subject line.

Learning Materials

~~**Textbook:**~~ There is **NO** textbook for this course! Original and review journal articles, popular media articles, websites, prepared cases, and some lecture information will be used to examine scientific integrity. You are expected to read relevant work prior to class, as classes will build on this material. Individual and team assignments will require additional research, reading, and critical analysis of the various types of literature.

eClass site: On the course eClass site (https://eclass.yorku.ca), you'll find announcements, course materials, resources, discussion forums, etc. Check your email account associated with eClass regularly (at least three times per week) for course announcements.

Technology Checklist:

 An internet-enabled device	 Access to reliable internet for eClass access	 Zoom (or similar) software for meetings with partners	 Webcam for team meetings	 Microphone for team meetings

Assessment in this Course

What will I be doing in this class?

A lot of different things. **Most of this course involves learning from the scientific literature, scientific integrity cases, and discussions with your peers**; there is a limited component of this course that is a traditional lecture-based approach. Class time focuses on discussion and individual and group activities. This course will help you to develop your skills in thinking critically, writing, collaborating, and presenting—skills that are useful no matter what your career. Classes, or portions thereof, will be recorded *depending on what we're doing that day*. Your participation and presence are appreciated by us and other students in the class; you'll gain more from the course being part of the activities.

Since there's no textbook, are there assigned readings?

Yes! To help keep you on track and provide community, during the first seven weeks you may be asked to find papers or annotate assigned readings in *Perusall* before coming to class. You'll be digging through the literature for some assignments; this means not relying on the first piece of literature/information you happen across. You may need to draw to our attention concepts that you find confusing (it is likely that other students have the same questions)! If you are struggling with an idea talk to your fellow students (in class, on eClass, study groups), find and read additional references, and/or come see us. As well, we'll give you time in class to work

through ideas; please use this time to your advantage. The course is work-intensive, but we hope you find yourself well supported and your experiences here valuable!

Can I be a tourist, just listen, and not participate?

Participation is key in this course, and you won't succeed if you aren't willing to participate and collaborate. Every one of you has valuable input and perspectives to contribute. There are marks given for participation (as part of the engagement activities) to encourage you to stretch your mind and discuss material in (and hopefully out of) class. The rules are simple for earning engagement points: participation should be relevant and on-topic; you must participate to earn these marks as telepathy is not an effective form of communication, and a good faith effort must be shown. Please be respectful of your peers' thoughts and opinions; you can disagree, just do so politely.

There's some teamwork in this course. Do I have to work as a part of a team?

Most careers involve some work as part of a team (and you usually won't get to choose who you work with on those teams), thus it's incredibly valuable to gain experience and skills that help you work well in teams. This is also something you could potentially discuss in a job or professional school interview. You might be anxious about working in teams, as you may have had bad previous experiences. In this course, resources and time in class will be provided to help you and your team to be successful, including developing communication strategies, and planning effectively.

What topics will we cover in this course?

We're going to examine integrity at all stages of the scientific process. Please refer to the calendar at the end of this syllabus, and to the course eClass website for more detail on the course schedule.

Reducing unintentional bias

For most assignments, you'll submit your work to Crowdmark or eClass or similar. When possible, we try to reduce unintentional bias in grading by grading anonymously. **Therefore, it's important that when we ask you <u>not</u> to put your name on your assignment (particularly for Crowdmark), you follow this request.**

Can I hand in an assignment late?

Yes and No. Since life can suck rocks sometimes, we are offering flexibility in deadlines for *some* course assignments in the form of three (3) grace days. These three calendar days can be added onto **an applicable assignment deadline** (see below in the course components sections) and you do not have to request to use them. So, if an assignment that has grace days is due at 11:59 pm on Friday you would have until 11:59 pm on the Monday to hand in the assignment without penalty.

If you hand in the assignment after the end of the grace days, it will be subject to a 15% late penalty per calendar day for up to 3 days past the end of grace days. **Course assignments that don't have grace days are time sensitive and we have tried to allow for enough time within the schedule.** Please be cognizant of when materials need to be handed in for peer review.

Course Breakdown

COMPONENT	WEIGHTING & INFORMATION
1 ENGAGEMENT	10% (best 90%)
2 CASE STUDIES AND ANALYSES	55% (multiple assignments and elements)
3 SCIENCE RESEARCH CODE OF CONDUCT	15% (draft and final)
4 MAJOR REFLECTION	10% (initial and final)
5 ORAL EXAM	10% (last 2 classes)

Please note, this course does not have any midterms or final exams in the traditional sense. We have worked to ensure that major assignments are scaffolded (i.e., we build up to them) and have elements to help keep you on track.

Late policy: We understand that we all have a lot to balance, and we want to reduce the worry that comes with deadlines and things that can impact them. For engagement, we're offering to drop a few assignments. For other course elements, please see the appropriate sections below or in eClass for more information.

You are entitled to religious accommodation where necessary. **Please let us know of any potential religious conflicts within the first 3 weeks of term.** See 'University Policies' for more information. There will be a few days where your participation is absolutely required so that you and your peers get the full benefit of the exercise or event.

Turnitin: You will be asked to submit electronic copies of **any** written work (*e.g.,* article critique) first to Turnitin and then to Crowdmark or eClass. This is to ensure that your hard work, having been added to the database, can't be plagiarized in the future by students at any university.

Teamwork: Teams may be assigned by us, and some class time will be provided to work on your project, although additional time out of class will also be needed. To facilitate effective team behaviour and communication, you'll create/develop a team charter (i.e., a sort of contract) with your partner, which will both need to sign. Both partners will be expected to adhere to the team charter and contribute substantively and equitably to the Team Project.

1 Engagement (10%)

This class relies on the participation of all of us! While most will be earned during class time and will comprise individual and group activities, some engagement points will be earned for preparing for class (typically via Perusall; see below and/or completing surveys). Perusall is a collaborative annotation tool that helps you in your reading and analyses of the primary literature and case studies. Typically, preparation for each class will be worth 5 points, as will each class's engagement activities. Other engagement points will be awarded for completion of surveys within the course. All engagement points will be awarded for good faith effort. Understanding that you may not always be ready for class or may have to miss a class (please remember that this course has 3-hour class time!), **you need only 90% of the total engagement points to earn the full Engagement marks towards your grade.** If you earn less than 90% of the total engagement points, your mark out of 10 will be adjusted accordingly.

> For example if you earn 80% of the total engagement points, your mark will be (80/90)*10 = 8.89/10 for the Engagement component of the course.

2 Case Studies and Analyses (55%)

Critical analysis and oral/written communication are essential skills when it comes to discussing scientific integrity. In this course, you'll have an opportunity to practice these skills over several case study analyses.

A Case Study 1 (20%): In the first case study, we'll assign you a case for which you'll present your analysis in two formats—as a 3–5-minute video (it doesn't have to be fancy!) and in writing—to develop different types of communication skills. You'll evaluate and grade three peers' videos and in Week 6 contribute to an in-class discussion with peers who worked on the same and different cases as you did. During class you'll be given time to reflect on any changes in your opinion/analysis.

COMPONENT OF CASE STUDY 1 (20%)	WEIGHT OF FINAL GRADE	DUE	3 GRACE DAYS ALLOWED?
Video analysis (graded by peers via PeerScholar)	5%	Thurs. Feb. 2, 11:59 pm	YES
Written analysis	5%	Thurs. Feb. 2, 11:59 pm	YES
Peer Review of video	5%	Fri. Feb. 10, 11:59 pm	YES
Reflection	5%	Wed. Feb. 15, in-class	NO

B Case Study 2 (10%): For this assignment you'll be provided with a type of breach of academic integrity. You'll then create a case (i.e., 'make up') for this topic and submit it and an analysis of the case in written format to PeerScholar for review and grading by your peers. In turn you, you will peer review, grade, and provide feedback on case studies by three of your peers.

COMPONENT OF CASE STUDY 2 (10%)	WEIGHT OF FINAL GRADE	DUE	3 GRACE DAYS ALLOWED?
Case creation (graded by peers via PeerScholar)	5%	Fri. Mar. 3, 11:59 pm	YES
Peer Review	5%	Mon. Mar. 13, 11:59 pm	YES

C Case Study 3 (25%): For case 3, you'll work in pairs to find a case that hasn't been covered in the course. You'll then put together a 10-minute presentation (to be presented during weeks 8 to 10) and a written analysis. Your peers, as well as us, will evaluate your presentation and provide feedback. For each team that presents, another team will be assigned to ask questions about the presentation ('assigned questionners').

COMPONENT OF CASE STUDY 3 (25%)	WEIGHT OF FINAL GRADE	DUE	3 GRACE DAYS ALLOWED?
Presentation	9%	Wed. Mar. 8 – Wed. Mar. 22	NO
Written analysis	14%	Thurs. Mar. 9 – Thurs. Mar. 23	YES
Assigned Questionner	2%	Wed. Mar. 8 – Wed. Mar. 22	NO

3 Science Research Code of Conduct (15%)

Although a lot of ideas within scientific integrity seem to be common sense, we need to remember that scientific research is conducted by humans and that what is intuitive to one person may not be to another; as well, there may be differences in opinion as to how research should be conducted with integrity. As such, codes of conduct for scientific research are important in ensuring that everyone understands their obligations and how to act with integrity. In this project, you and a partner (the same one with whom you're working on Case Study 3) will create a code of conduct for scientific research for an institution lacking such a code. You'll not only read up on other codes of conduct and incorporate material from the course, but also need to understand the wide breadth of tasks that should be guided by such a code.

To facilitate effective team behaviour and communication, you'll create/develop a team charter (i.e., a sort of contract) with the members of your team, which all members will need to sign. All team members will be expected to adhere to the team charter and contribute substantively and equitably to the Team Project.

COMPONENT OF CODE OF CONDUCT (15%)	WEIGHT OF FINAL GRADE	DUE	3 GRACE DAYS ALLOWED?
Team Charter – Part 1	0.5%	Wed. Jan. 25, 11:59 pm	YES
Draft	4%	Fri. Feb. 17, 11:59 pm	YES
Final	10%	Mon. Apr. 10, 11:59 pm	YES
Team Charter – Part 2	0.5%	Mon. Apr. 10, 11:59 pm	YES

4 Reflection (10%)

Reflection is a form of personal response to experiences and helps us to process new information and changing mindsets, as well as develop self-awareness and metacognition (*i.e.,* thinking about your thinking). Much of what we'll discuss in this course has been touched on only superficially in other science courses and thus it won't be surprising if you find your opinions shifting over the course of the term. That's what this assignment is about, documenting and exploring those changes. What changes in mindset and opinion have you experienced? Why? You'll relate changes you've experienced to case studies, readings, and discussions within this course, as well as experiences you may have had outside the course.

COMPONENT OF REFLECTION	WEIGHT OF FINAL GRADE	DUE	3 GRACE DAYS ALLOWED?
Initial reflection	1%	Wed. Jan. 17, 11:59 pm	YES
Final Reflection	9%	Mon. Apr. 10, 11:59 pm	YES

5 Oral Exam (10%)

The oral exam is a short (10 minutes!) test in which you'll answer some questions that have been asked throughout the course about cases but applying them to a new case. For your answers you should be able to

relate information in the new case to cases studied across the term, showing how they're similar but different. Your test will be in one of the last two classes and will take place in the regular classroom.

COMPONENT OF ORAL EXAM	WEIGHT OF FINAL GRADE	DUE	3 GRACE DAYS ALLOWED?
Oral Exam (in-class)	10%	Wed. Mar. 29 or Wed. Apr. 5	NO

Regrading/Reappraisal Procedures

Both instructors will provide feedback on work, and where grades differ, the average of the two grades will be awarded for any work.

Reappraisal requests should be submitted to biol4005@yorku.ca within 5 business days of the work being returned or feedback being made available. The request must include a half-page written rationale providing academically valid reasons for the reappraisal requests and should refer directly to the assignment overview and rubric.

Note: **reappraisal can result in the mark being raised, lowered, or staying the same**. Reappraisal grades are considered final. We will strive to review all reappraisals within 2 weeks.

Please note that to be fair and consistent grades are not negotiable. We have designed this course to have no one heavily weighted element and there is considerable flexibility and buffer built into the course. Grades will not be "curved". There are no alternative assignments that can be completed as 'extra credit'.

University Policies and Other Useful Information

Important Dates

Drop Deadline: March 13, 2023 (*last day to drop without course on transcript*)
Course Withdrawal Deadline: April 10, 2023 (*course still appears on transcript with 'W'*)

Academic Honesty and Integrity

Academic misconduct undermines the values of honesty, trust, respect, fairness, and responsibility that we expect in this class. York University provides supports such as academic integrity workshops to ensure, as far as possible, that you understand the norms and standards of academic integrity that we expect you to uphold.

You are required to maintain the highest standards of academic honesty and are subject to the Senate Policy on Academic Honesty (http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/). The Policy affirms the responsibility of faculty members to foster acceptable standards of academic conduct and of you, as the student to abide by such standards. Please review and familiarize yourself with the policy.

There is also an academic integrity website (https://www.yorku.ca/unit/vpacad/academic-integrity/) with comprehensive information about academic honesty and how to find resources at York to help improve your research and writing skills, and cope with University life. You are expected to review the materials on the Academic Integrity website:

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

- Plagiarism (passing off someone else's work as your own)
- Accessing unauthorized sites for assignments or tests
- Unauthorized collaboration on assignment and exams
- Uploading work to third party repository sites (e.g., Course Hero, One Class, etc.)
- Scanning, sharing, uploading, or publishing exams, tests, or scholarly work

For more information on what academic integrity is and why it is important see: https://spark.library.yorku.ca/academic-integrity-what-is-academic-integrity/. Information on the process of investigations into breaches of academic honesty: https://spark.library.yorku.ca/academic-integrity-breach-of-policy-on-academic-honesty/

Important Note from the FSc Committee on Examinations & Academic Standards (CEAS): Numerous students in Faculty of Science courses have been charged with academic misconduct when materials they uploaded to third party repository sites (*e.g.,* Course Hero, One Class, etc.) were taken and used by unknown students in later offerings of the course. Whenever a student submits work obtained through an external site (*e.g.,* Course Hero, Chegg), the **submitting student will be charged with plagiarism** and the **uploading student will be charged with aiding and abetting**. To avoid this risk, students are urged not to upload their work to these sites.

Assistance for Students

Academic Advising: https://www.yorku.ca/science/academic-advising/ The Department of Biology also offers program-specific advising; email biology@yorku.ca to ask for assistance.

Centre for Human Rights, Equity, and Inclusion: https://rights.info.yorku.ca

Centre for Indigenous Students Services: https://aboriginal.info.yorku.ca/

Good2Talk 24-hour Ontario Student Helpline: 1-866-925-5454 /Text: GOOD2TALKON to 686868

Keep.meSAFE: https://myssp.app/keepmesafe/ca/home

Learning Commons (general academic learning supports including library research, time management, study skills, career planning, etc.): https://learningcommons.yorku.ca/

Sexual Violence Response and Support: https://thecentre.yorku.ca

Student Counselling, Health & Well-being: https://counselling.students.yorku.ca/

Support Services for International Students: https://yorkinternational.yorku.ca/international-student-support/

Writing Services: https://www.yorku.ca/colleges/bethune/get-help/writing/

York University Student Services: https://family.yorku.ca/student-services/#SCD

York University Student Well-being Resources: https://www.yorku.ca/well-being/resources/students/

York University Food Support Centre: http://www.yfs.ca/fsc

Accessibility

York University is committed to principles of respect, inclusion, and equality of all persons with accessibility needs across campus. The University provides services for students with accessibility needs (including physical, medical, learning, and psychiatric needs) needing accommodation related to teaching and evaluation

methods/materials. These services are made available to students in all Faculties and programs at York University.

Students in need of these services are asked to register with accessibility services as early as possible to ensure that appropriate academic accommodation can be provided with advance notice. You are encouraged to schedule a time early in the term to meet with each professor to discuss your accommodation needs. Please note that registering with accessibility services and discussing your needs with your professors is necessary to avoid any impediment to receiving the necessary academic accommodations to meet your needs.

Additional information is available at the following websites:

Student Accessibility Services: https://accessibility.students.yorku.ca
York Accessibility Hub: http://accessibilityhub.info.yorku.ca/

Religious Observance Accommodation

York University is committed to respecting the religious beliefs and practices of all members of the community and making accommodations for observances of special significance to adherents. Should any of the dates specified in this syllabus for an assignment or in-class engagement activity pose such a conflict for you, contact the Course Director within the first three weeks of class.

Student and Instructor Conduct in Academic Situations

Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect. Moreover, it is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom and other academic settings, and the responsibility of the student to cooperate in that endeavour. Further, the instructor is the best person to decide, in the first instance, whether such an atmosphere is present in the class. The policy and procedures governing disruptive and/or harassing behaviour by students in academic situations is available at http://secretariat-policies.info.yorku.ca/policies/disruptive-andor-harassing-behaviour-in-academic-situations-senate-policy/.

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.

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://calendars.students.yorku.ca/2021-2022/policies-and-regulations

Course Overview – *topic timeline subject to change*

Topic	Monday	Tuesday	Wednesday	Thursday	Friday
January					
1 Scientific integrity	*Term starts* 9	10	*First Day of Class* 11	12	*Team partner form due* 13
2 Collaboration & Conflict of Interest	16	*Initial reflection due* *Survey 1 & 2 due* 17	*Teams!* 18	19	20
3 Expt Design & Data Part I	23	*Collaboration & COI survey due* 24	*Team charter & presentation dates* 25	26	27
4 Expt Design & Data Part II	30	*Data survey due* 31	1	*Case 1 video & analysis due* 2	3
February					
5 Publishing & Replication	6	*Publication survey due* 7	*Check in* 8	9	*Case 1 peer review due* 10
6 Case Analysis 1	13	14	*Case 1 jigsaw; exam sign-up* *Case 1 reflection due* 15	16	*Draft code of conduct due* 17
No Classes!	20 **Reading Week**	21 **Reading Week**	22 **Reading Week**	23 **Reading Week**	24 **Reading Week**
7 Case Creations	27	28	*Case 2 discussion* 1	2	*Case 2 due* 3
March					
8 Case Presentations	6	7	*Case 3 Presentations (1-10)* 8	*Case 3 analysis due (1-10)* 9	10
9 Case Presentations	*Case 2 peer review due* 13	14	*Case 3 Presentations (11-20)* 15	*Case 3 analysis due (11-20)* 16	17
10 Case Presentations	20	21	*Case 3 Presentations (21-30)* 22	*Case 3 analysis due (21-30)* 23	24
11 Oral Exams	27	28	*Oral Exams* 29	30	31
April					
12 Oral Exams	3	4	*Oral Exams* 5	6	7
Wrap up of course items!	*Code of conduct due* *Final reflection due* *Team charter II due* *Term ends* 10				