

Department of Biology Course Outline

SC/BIOL 4400 3.00 Behavioural Genetics Winter 2022

Course Description

Differences in behaviour are analyzed through evolutionary and mechanistic approaches. Hypotheses, models, experimental and field data are used to address the importance of heredity and environment in the development of individual differences, social systems, communication, habitat and sexual selection. Three lecture hours. One term. Three credits.

Prerequisites

Prerequisites: SC/BIOL 2040 3.00; SC/BIOL 2050 4.00; SC/BIOL 2060 3.00; SC/BIOL 3200 3.00.

Technology Requirements

- **All elements of the course will be conducted remotely. There are no on-campus activities.**
- **The course will run in Toronto time** (i.e. all deadlines, synchronous sessions etc. will be in Toronto time).
- You may be asked to submit some assessments to Turnitin and/or Crowdmark.
- Students must have a **laptop or desktop computer** with a microphone (camera recommended).
- If you do not have a computer and are within reach of York University you may be able to borrow one: <https://laptops.uit.yorku.ca/>
- Access to reliable high-speed internet is required.
- Some aspects of the course (synchronous) will involve **Zoom** video conferencing software.

Course Instructor(s) and Contact Information

Course director: Dr. Birgit Schwarz



bsteach@yorku.ca *, please read email policy below before emailing.

*Please don't use the eClass messenger/email function or email my personal email address. This will delay response time or may result in your email being missed.

Office / Drop-in hours:

- Online drop-in hours (for one-on-one meetings): TBA*
- Most Thursdays will have some time set aside to answer questions, and I will normally also stay on Zoom immediately after class on Thursday to answer course-related questions.

**If you need a one-on-one meeting and cannot make this time please contact me so we can find a different time.*

Email policy/requests:

Please remember to exercise email etiquette and be professional in your correspondence:

- Please check if your question has been addressed in class or on eClass before emailing.
- Use your **@my.yorku.ca email address** - email from other sources may be filtered out as spam.
- Please briefly indicate the **topic in your subject line**
- **Please include your name and student ID in your email text, and sign with the name you would like me to use when addressing you**
- If your question is about course material, please post in the forum on eClass instead of sending an email as others may have the same/similar questions, or ask it during a synchronous class session!
- **Response time:** I will do my best to respond within 72 hours (3 work days, not including weekends), but this may not always be possible. If you have an urgent question please try reaching me during the online drop-in hours or after class.

- Consider attending a drop-in session or 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. It will save both time and potential confusion.

Schedule

Synchronous sessions (live on Zoom): Tu./Th. 5:30-7pm (access through Zoom link on eClass).

- **Most weeks, reading assignments that need to be completed before class will be provided ahead of time. Please complete these pre-class assignments prior to the synchronous session.** Normally these will be posted by Friday for the Tuesday class and by Monday for the Thursday class.
- You are expected to attend the synchronous sessions. The course is not designed to be taken asynchronously.
- The synchronous Zoom sessions will be dedicated to active discussions and other forms of active learning (this is not a lecture-based course!). Please be prepared to actively engage. Some classes will dedicate time to develop specific skills or work on your team project. Student-led presentations and discussions will also be an important component of the synchronous sessions.
- **Most classes will have activities and teamwork (for Engagement marks), and a strong focus of the course are discussions of the literature, so attendance is required.**
- Recordings and slides will be posted (when possible), but are not a suitable replacement for attending the synchronous sessions. Note: recordings can take several days to process so may not be posted immediately after class.
- It is crucial that you check your email for course announcements regularly (daily on weekdays).
- As with any course, you are expected to spend time outside class time to prepare for class, read, work on assignments etc.. In total (i.e. including the synchronous sessions and the out of class time), you should expect to dedicate 6 to 10 hours most weeks of this course.

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.

Given that this course is remote some of the time is spent away from campus and conducted from your own home. To identify the traditional homelands that you are occupying within Canada, use <https://native-land.ca>. Reflect on what this means as you move through these spaces. A Land Acknowledgement is just one step in the reconciliation process and I encourage you how to reflect you can contribute to that process.

Course Statement on Equity, Diversity, and Inclusion

I am committed to providing and encouraging an environment of equity, diversity, and inclusion (EDI) within this course. I designed this course with a commitment to the principles of Universal Design for Learning and evidence-based teaching practices. As an instructor who is guided by evidence, I believe that you can all succeed! This class is a community and we are here to learn and succeed together and support each other. I am still in the process of learning about diverse perspectives and identities and inclusionary practices, and will make mistakes and hopefully correct myself.

Science is done by humans and as a consequence 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 the course materials, which I am working to reduce and ultimately eliminate. My hope is to continue improving this course, integrating diverse scientists and experiences. Please contact me bsteach@yorku.ca or let me know through my survey if you have any suggestions to improve the course in terms of equity, diversity, and inclusion.

YorkU 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.

Evaluation

| Assessment | Percent of total course grade | Deadlines |
|---|---|---|
| Engagement and Activities (collaborative/individual) | 25% | Throughout the term |
| Article Presentation Team Project (collaborative) | 40% (comprises several elements) | Team sign-up due: Tue. Jan. 25 Team charter & selected article due: Thu. Feb. 3 Other due dates depend on presentation date. Most teams will present in March. |
| Communicating Science Project (individual) | 35% total, with <ul style="list-style-type: none"> • News article critique – 10% • Proposal – 5% • Final product – 20% | News article critique due: Fri. Feb. 11 Proposal due: Fri. Feb. 18 Science communication piece (final product) due: Fri. Apr. 8 |

Note: there are no midterms or final exam in this course.

Engagement and Activities:

- Some of these tasks will be completed during synchronous classes, some asynchronously.
- These will include opportunities for practice/feedback in the synchronous classes or asynchronously.
- Some will be marked for completion (with reasonable effort), while others may be scored (thoughtful approaches/arguments, considering evidence, etc.). Maximum points will be listed with most of these, with some assignments worth more points than others. For collaborative submissions you must have made substantial contributions. Deductions or no points may be given if insufficient effort was made.
- When I calculate your engagement and activities grade, **I will drop 20% of points (i.e. you only have to reach 80% to get the full activity points)**. This is to account for missed activities for any reason, including missing the deadline, technological/internet problems, illness etc.. This means I cannot grant additional exemptions as participation is a crucial component of this course.
- Because a lot of the elements are either in class or need to be completed on time because they prepare you for in-class discussions or timely feedback is needed by your peers, there are **no grace days for the activities** (but remember that you can miss up to 20% of them, so missing one or two will not impact your grade).

Article presentation Team project

- This is a team project that will be completed in teams of 4 students (a 3-person team may be considered under certain circumstances). Sign-up for teams and time slots will be provided in week 2.
- You get to choose your own topic within your team. You will be presenting a research article in class (during one of the synchronous sessions), provide some background as well as answer questions and lead a class discussion. More detailed assignment instructions will be posted on eClass.
- Being able to communicate and work with others are important skills that are very much sought-after by employers. Working collaboratively is an official learning outcome for this course.
- Since you will be presenting during a specific time slot in class, no grace days can be provided for this assignment.

Communicating Science Project

- This is an individual assignment that consists of several parts.
- The main element involves conveying scientific information about behavioural genetics to a general audience in a format of your choice. You will also be critiquing a news article and submit a proposal for your communication piece.

- **Grace days** for the Communicating Science Project: You can submit up to two of the three different elements late. Each of these two elements can be submitted up to 4 days late. After that, a penalty of 15% per day late applies.

While I try to avoid this as much as possible, final course grades may be adjusted to conform to Program or Faculty grades distribution profiles should this become necessary

Important Dates

- **Classes start:** Monday Jan. 10
- **Winter Reading Week:** Feb. 19 – 25
- **Last Day to drop course without receiving a grade:** Mar. 18
- **Course Withdrawal Period (withdraw and receive a grade of “W” on transcript):** Mar. 19 – Apr. 10

For additional important dates such as holidays, refer to the “[Important Dates](#)” section of the Registrar’s Website.

Resources

Optional Textbook:

Flint et al. 2020. How Genes Influence Behavior. 2nd edition. Oxford University Press.

The textbook is optional. It may be helpful as a secondary resource and to help you find and research a topic for your projects, but we will not be following the chapters. The course will be primarily focused on scientific journal articles. The book is available through the York University Bookstore or as an eBook rental (cheaper) through the link on the course eClass page (top part of the page, just above the different tabs, trial access for 7 days).

Other readings:

Original and review journal articles or other readings (and potentially other types of media) will be used to examine various aspects of behavioural genetics in a diverse array of organisms. **You are expected to read relevant/assigned papers prior to class.** Some assignments will also require additional research and reading of the scientific literature.

Course eClass Site (<https://eclass.yorku.ca/>)

- Please check the course eClass site often for important information and updates (daily on weekdays).
- **Make sure you receive course announcements to your email & check your email often** (daily on weekdays).
- Readings, assignment instructions, recordings, other course materials, discussion forums etc. will be posted on the eClass sites (unless otherwise indicated).
- Issues with eClass should be directed to ithelp@yorku.ca.

Please note: **ALL course materials are copyrighted.** This includes but is not limited to readings, slides, videos, assignment instructions, in-class activities etc.. **You do NOT have the right to post these anywhere or share them with anyone outside of this course.**

Zoom software: To attend the virtual synchronous lectures, student hours, and one-on-one meetings, you must use Zoom. Please download the software and ensure that it’s up to date. You can log into Zoom by opening it and choosing SSO or go to <https://yorku.zoom.us/>; you’ll be prompted to sign-in using your Passport York credentials. <https://currentstudents.yorku.ca/technology-protocol-for-students>. Learning Technology Services (LTS) has [instructions for joining Zoom sessions](#). See eClass for Zoom etiquette.

Other software that may be needed/useful in the course:

- I recommend downloading Office so you can use word, powerpoint (freely available to students, see: <https://uit.yorku.ca/faculty-staff-services/free-microsoft-office-365-education-software/>), alternatively you can use google docs and slides.
- PDF X-change PRO is available for free through myApps: <https://uit.yorku.ca/student-services/computer-labs/myapps/#squelch-taas-tab-content-0-0>

Learning Outcomes

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

Course Content

- Explain concepts, methodologies, and issues in behavioural genetics and address common misconceptions.
- Critically evaluate information (e.g., experiments and data) about behavioural genetics from a variety of sources.
- Evaluate experiments that test various hypotheses related to behavioural genetics.
- Discuss some of the ethical issues and considerations applicable to the field of behavioural genetics.

Skills

- Effectively communicate behavioural genetics concepts and results from behavioural genetics studies to science and general (i.e., non-science) audiences using different communication formats.
- Work effectively, responsibly, and collegially with your peers in and out of class.
- Find, critically analyze and discuss scientific articles (primary and review articles).
- Synthesize and summarize key points from a primary or review article, or other type of text to provide relevant information and support for an assignment, argument, etc.

Course Content

How and to what extent do genes influence the behaviour of animals (including us humans)? What does this even mean? How do researchers study this? In this course, we will explore many fascinating aspects of animal and human behaviour and the role that genes play in this context. Behaviour represents a complex trait that is subject to genetic, environmental and epigenetic effects. Over the course of the term, we will use the scientific literature to examine how genetic differences and differences in environment contribute to differences among individuals in various types of behaviour, including social behaviours. We will discuss how genetic influences on behaviour are measured and what methodologies are used, as well as scrutinize some of the limitations and controversies that arise within this field. This field is huge, so the course will not (and can not) provide comprehensive coverage. Rather we will focus on some key aspects of behavioural genetics, as well as some of the areas you are most interested in. The course is also not specifically about the genetics of human behaviour, though some aspects of human behaviour will be discussed.

The individual and team projects provide you with the opportunity to explore in greater depth areas that are of particular interest to you, as well as help you develop skills in planning, writing, teamwork, and oral presentation. A strong focus of the course is to work on the development of critical skills, such as reading, interpreting and critically analyzing scientific papers, working effectively as a team, and communication skills (including communicating science to the general public).

Please be aware, that this is not a lecture-based course. It more closely resembles a seminar course in style. This is a 4th year course, so please be prepared to actively engage and take active charge of your learning. This course assumes that you have fundamental knowledge and understanding of basic biological processes, including DNA structure, transcription, translation, heredity, natural selection, etc. . A solid background in genetics, including on a molecular level is especially important.

As in all courses, you are expected to spend time beyond the regular course hours in preparation/readings, review, completing assignments, etc., related to the course. You should plan to spend 6-10 hours per week on this course, including class time.

We are still online, which is not optimal, but I will do my best to teach, communicate with, challenge, and support you. I know that you will also be doing your best. We need to remember to offer each other some grace, as we will inevitably make mistakes and be challenged by the ongoing situation affecting our lives. As well, please remember that your health and well-being are more important than this (or any) course.

Participation is absolutely key in this course, and you won't succeed if you aren't willing to participate and collaborate. 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 pretty simple for earning participation marks: participation should be relevant and on-topic, you must actually participate to earn marks, and a good faith effort must be shown. Please be respectful of your peers' thoughts and opinions; you can disagree, just do so politely.

Everyone of you will have valuable input and perspectives to contribute. This doesn't mean that every student is expected to speak up in every discussion, but I want everyone's voice to be heard in this course. Contributions can take the form of discussion board posts, using chat in Zoom, and participating in spoken discussions during class, etc..

There's a lot of team work 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), therefore 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 (it's one of the things typically asked about on referee forms). You might be anxious about working in teams, as you might have had bad previous experiences. In many classes, team projects are done in less than optimal conditions, with little time and resources provided to help the team in their planning and interaction. 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.

Experiential Education and E-Learning

- **Experiential learning:** This course promotes active learning and will involve extensive discussion/debate surrounding complex topics, as well as reflection. You will create different media to present for different audiences, both scientific and non-scientific. Furthermore, you will develop teamwork skills throughout the course.
- **E-learning:** Online activities and resources will be posted on eClass.

Course Policies

Academic Integrity:

- **Use of services (including but not limited to essay writing/editing or file-sharing websites, private tutoring companies or private services) that complete your assignments for you or provide "model answers" is strictly forbidden.** Some private tutoring companies claim an affiliation with York University, but this is not true and York University takes any resulting breaches of copyright and/or academic honesty very seriously with serious consequences for the involved individuals – see the official York University statement by the Provost and Vice-President Academic <https://vpap.info.yorku.ca/2020/07/statement-regarding-private-tutoring-companies-that-claim-an-affiliation-with-york-university/>
- **Your work must be your own and in your own words.** Go to the Spark Academic Integrity site if you need a reminder on what is ok and what is not: <https://spark.library.yorku.ca/academic-integrity-what-is-academic-integrity/> and <https://spark.library.yorku.ca/creating-bibliographies-plagiarism/>

Copyright and Intellectual Property:

- **Lectures and other course materials are designed for use as part of this course at York University only and are the intellectual property of the instructor. They cannot be distributed without explicit written permission. ALL course materials are copyrighted.** Third party copyrighted materials (such as book chapters, journal articles, music, videos, photos etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law or permission for their use in this course has been obtained from the copyright holder.
- Copying this material for distribution (e.g. uploading material to a commercial third-party website) is a violation of Copyright law and may lead to a charge of misconduct under [York's Code of Student Rights and Responsibilities](#) and the [Senate Policy on Academic Honesty](#) and/or legal consequences for violation of copyright law.

Accommodations

- **Please upload your CDS Accommodation letters to the new student portal by Jan. 28.**
- If you feel that there are extenuating circumstances that may interfere with your ability to successfully complete the course requirements, I encourage you to discuss the matter with me **as soon as possible**.

- **Please note:** "Senate policy states that students are expected to monitor their progress in courses, taking into account their personal and academic circumstances, and to make the necessary adjustments to their workload to meet the requirements and deadlines." (from Senate Policy of Students' Responsibilities in the Petition/Appeal Processes). **The drop deadline is March 18, 2022.**
- Students who require reasonable accommodations in resources or evaluation methods are encouraged to consult with the [Student Accessibility Services](#) & ensure that requests for appropriate accommodations are arranged with me early in the term.
- **Due to the nature of the team project, this can not be handed in late (i.e. individual extensions for the due date of the presentation are not possible).**

Grading and Grace days:

- In order to be fair and consistent to the entire class, individual grades and grading schemes are not negotiable and **individual "extra credit" assignments are not provided at any point during or after the course.** Please only contact me about a grade if there is a clear error (calculation, clerical, etc.) within two weeks of the grade being made available to you.
- If you think an assignment was marked incorrectly you must submit a written paragraph detailing your rationale (based on academic grounds*), using the appropriate form posted on eClass to me **no sooner than two days and no later than two weeks** after receiving your mark for the assessment in question. Emails without the proper form or requests that are not based on academic grounds*, or early/late requests will not receive a response. **NOTE: re-marking can result in the mark being raised, confirmed, or lowered, and marking rubrics are not negotiable.**
- Grace days are only available for the individual Communicating Science Project. You can submit up to two of the three different elements late. Each of these two elements can be submitted up to 4 days late. After that, a penalty of 15% per day late applies.
- Due to the nature of the activities and the team project, these can not be handed in late (but for the activities you only need to complete 80%).

**Academic grounds means you make an academic argument for why your answer is correct – statements such as "this grade does not reflect my knowledge" or "I really studied hard and I deserve a better grade" are not academic grounds*

Online Netiquette and code of conduct:

- I strongly encourage you to participate actively in the course and engage with your peers, and me in various ways throughout the course, e.g. in synchronous sessions, in the online eClass discussion forums, etc.. I expect you to keep your discussions polite and respectful. Please follow the rules:
 - First and foremost **remember that it is a human being your messages are going to**, even if all you are seeing is a computer screen.
 - Please be respectful and professional: We provide space for you to discuss course material with your classmates. Posts containing personal insults/attacks/intimidation/inappropriate language/profanity will be removed. **Everyone has a right to be in this course, to feel welcome and to be treated with respect.**
 - Please post only material relevant to BIOL 4400. Other posts are likely to be deleted. Exceptions apply to forums specifically dedicated to socializing.
 - Be kind, even if someone has made a mistake. If you want to give feedback, do it nicely and constructively.
 - While it is appropriate to engage in debate/discourse on biological topics, such discussions should be respectful and evidence-based. Evidence should be from trusted sources—consult with the library or with me if you are not sure. (See: <http://www.yorku.ca/webclass/module4a.html>)
 - Any posts that appear to violate our code of conduct may be edited, moved to a hidden forum, or deleted at the discretion of instructors/moderators. If posts give indications of violations of academic honesty or the York University Student Code of Conduct (<http://www.yorku.ca/oscr/codeofrr.html>) further action will be taken.
 - If you notice any inappropriate threads/posts please contact me as soon as possible.
 - You cannot share any materials from the course outside the course without explicit, written permission, this includes posts or other work by your peers.

Disclaimer: While I will attempt to remove/edit objectionable/inappropriate material as soon as it comes to my attention, I may not be able to review every post in a timely manner (remember there is only one of me). Forum

posts express the views and opinions of the post's author and not the moderators/instructors (except for posts by these people) and they cannot be held liable.

STUDENT CODE OF CONDUCT RULES FOR ZOOM CHATS – ZERO TOLERANCE POLICY FOR ONLINE VERBAL ABUSE OR HARASSMENT

All students at York are governed by York's Code of Student Rights and Responsibilities (<https://oscr.students.yorku.ca/student-conduct>). This code allows all students the right to pursue all academic activities without "harassment, intimidation, discrimination (or) disruption."

In addition, students also have the responsibility to obey all public laws and cannot disrupt or interfere with the academic activity of others. This includes this Zoom class and all other online forums for this course. Students who engage in any type of online abuse (e.g. threats, harassment, inappropriate behaviours, and racist and/or sexist language) against their instructor and/or other students may be subject to punishment under York's Code of Conduct, the rules of the appropriate Department/Faculty, Ontario Laws and/or the Canadian Human Rights Code as required.

Please note that it doesn't matter if you decide to drop a class after engaging in inappropriate behavior. All incidents will be investigated regardless of student standing in a course.

University Policies

Academic Honesty and Integrity

York students are required to maintain the highest standards of academic honesty and they are subject to the Senate Policy on Academic Honesty (<https://www.yorku.ca/secretariat/policies/policies/academic-honesty-senate-policy-on/>). The Policy affirms the responsibility of faculty members to foster acceptable standards of academic conduct and of the student to abide by such standards.

There is also an academic integrity website with comprehensive information about academic honesty and how to find resources at York to help improve students' research and writing skills, and cope with University life. Students are expected to review the materials on the Academic Integrity website at - <http://www.yorku.ca/academicintegrity/>

Important A note from the Faculty of Science Committee on Examinations and Academic Standards:

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. The Faculty's Committee on Examinations and Academic Standards (CEAS) found in these cases that the burden of proof in a charge of aiding and abetting had been met, since the uploading students had been found in all cases to be willfully blind to the reasonable likelihood of supporting plagiarism in this manner. Accordingly, to avoid this risk, students are urged not to upload their work to these sites. Whenever a student submits work obtained through Course Hero or One Class, the submitting student will be charged with plagiarism and the uploading student will be charged with aiding and abetting.

Note also that exams, tests, and other assignments are the copyrighted works of the professor assigning them, whether copyright is overtly claimed or not (i.e. whether the © is used or not). Scanning these documents constitutes copying, which is a breach of Canadian copyright law, and the breach is aggravated when scans are shared or uploaded to third party repository sites.

Access/Disability

York University is committed to principles of respect, inclusion and equality of all persons with disabilities across campus. The University provides services for students with disabilities (including physical, medical, learning and psychiatric disabilities) needing accommodation related to teaching and evaluation methods/materials. These services are made available to students in all Faculties and programs at York University. Student's in need of these services are asked to register with disability 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 disabilities 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:

Counselling & Disability Services - <http://cds.info.yorku.ca/>

Counselling & Disability Services at Glendon - <https://www.glendon.yorku.ca/counselling/>

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 in-class test or examination pose such a conflict for you, contact the Course Director within the first three weeks of class. Similarly, should an assignment to be completed in a lab, practicum placement, workshop, etc., scheduled later in the term pose such a conflict, contact the Course director immediately. Please note that to arrange an alternative date or time for an examination scheduled in the formal examination periods (December and April/May), students must complete and submit an [Examination Accommodation Form](#) at least 3 weeks before the exam period begins. The form can be obtained from Student Client Services, Student Services Centre or online at <https://secure.students.yorku.ca/pdf/religious-accommodation-agreement-final-examinations.pdf>

Student 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 <https://www.yorku.ca/secretariat/policies/policies/disruptive-andor-harassing-behaviour-in-academic-situations-senate-policy/>

I wish you great success in BIOL 4400!

If you need any help, please do not hesitate to contact me.

Acknowledgements:

This course outline and some of the assessment instructions for this course incorporate adapted materials provided by Dr. Tamara Kelly, Dr. Kristen Brochu and Dr. Lisa Robertson.