

## Department of Biology Course Outline

SC/BIOL 2050 4.00 Ecology  
Fall 2021

### Course Description

A study of the interactions between organisms and their abiotic environments, presented in an evolutionary context. Includes processes of evolution, ecosystems and communities, competition, predation, population ecology and current environmental problems such as habitat loss and extinction.

### Prerequisites (strictly enforced)

Prerequisite: Both SC/BIOL 1000 3.00 and SC/BIOL 1001 3.00, or SC/ISCI 1110 6.00, or both SC/ISCI 1101 3.00 and SC/ISCI 1102 3.00. Prerequisite or corequisite\*: SC/BIOL 2060 3.00.

*\*you must take BIOL2060 before 2050 or in the same term (i.e. not 2050 in the fall followed by 2060 in the winter).*

***If you have taken a different Statistics course, please contact the Biology undergraduate office to inquire whether it will be accepted.***

***Please note that for Fall2021 the pre- or corequisite SC/BIOL2060 will be strictly enforced.***

### 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).
- This is a **4-credit course that includes labs**. Therefore, this course requires **considerably more time commitment than a 3-credit lecture course**. Please plan your time commitments accordingly.
- You will 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.
- **Some labs involve SimUText software** made by the SimBio company (simbio.com). It is essential that you check you have the system requirements to run this software as it does not work on some devices, including mobile devices and potentially Chromebooks. Please visit <https://simutext.zendesk.com/hc/en-us/categories/200170134-Check-Your-Tech-> to confirm that the SimUText application will work on your computer, and/or to explore your options if there is a problem.
  - If you have a Chromebook please contact the SimUText support team (below) to determine if your system supports SimUText.
  - For SimUText technical support, including questions about system requirements, please consult the support team at <https://simutext.zendesk.com>.
  - **Purchase of the code to access the SimUText labs should be made directly through the SimBio company at the time of SimUText registration (US\$ 22 total for the 3 labs)**. Exchange rate will apply at time of purchase. A credit card is required for purchase. See lab section on eClass for details.
- I also recommend downloading Office so you can use excel (freely available to students, see: <https://uit.yorku.ca/faculty-staff-services/free-microsoft-office-365-education-software/>), alternatively you can use google spreadsheets.
- Other software that may be needed/useful in the course (SPSS, 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>

## Course Instructor(s) and Contact Information

**Course director:** Dr. Birgit Schwarz [bsteach@yorku.ca](mailto:bsteach@yorku.ca), please briefly indicate topic in your subject line.  
*Please see email policy below in the course policy section before sending an email.*

- Online drop-in hours (for one-on-one meetings): TBA\*
- I will normally also stay on Zoom immediately after class to answer content-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.*

**Lab coordinator:** TBA [b2050lab@yorku.ca](mailto:b2050lab@yorku.ca) (use this email for lab administrative matters e.g. missed labs)

**For lab-related academic issues please contact your lab TA** (contact info TBA)

We will try to respond to email within 3 working days (not including weekends), but this is not always possible, please be patient. Please pose questions that are of interest to the entire class on the appropriate discussion board or ask during/after class. If you have an urgent question, please try reaching me during the online drop-in hours or after class. Please do **not** use eClass messenger for email as this system is not used for this course.

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

- **Use your @my.yorku.ca email address** - email from other sources may be filtered out.
- **Please include your name and student ID in your email text, and sign with the name you would like us to use when addressing you**
- **Subject Line** – Include a brief indication of topic. E.g. “Question about natural selection”

*\*Please see policy on email etiquette below in course policy section before sending an email*

## Schedule

**Synchronous sessions (live on Zoom):** Mon./Wed. 10-11:30am (access through Zoom link on eClass).

- **Weekly, pre-recorded lectures and/or reading assignments or other materials** that introduce content will be provided ahead of time. Please **watch these prior to the synchronous session and complete the online quiz** (marked for correctness).
- During the synchronous Zoom sessions we will **apply the knowledge gained from the videos, readings etc. (e.g. to case studies), practice problem solving, address questions, work on skills needed for the group project** etc.. Answers to activity questions must be submitted for activity marks (marked for completion only). The synchronous sessions provide a chance for you to interact with your peers and me and get timely feedback on your understanding of the course material. To maintain the proven benefits of interaction and active learning, I highly recommend that you attend the synchronous (live) sessions, but alternative options to submit answers will be available for those that are unable to join. Please note though that the course is not meant to be taken completely asynchronously.
- Near the end of the week, a **graded ‘Question of the Week’** will be posted, which you will need to complete individually to demonstrate your understanding (marked for correctness and clarity, i.e. how well the answer is communicated). These questions replace midterms in this course.

**Laboratory Schedule:** All labs take place remotely.

Please refer to the university online course information site and the laboratory schedule on the eClass site for the course. **Times for synchronous laboratory sessions and Zoom links vary by lab section and some weeks do not have synchronous sessions.** We recommend attending the synchronous sessions to get help from TAs. We will do our best to provide asynchronous alternatives for most sessions, but please note that there are some sessions you are expected to attend. Please note that **as per departmental policy the one credit lab portion corresponds to 3 hours of lab sessions per week, therefore you should plan to dedicate at least 3 hours per week to practical lab work for this course (plus extra time to complete reports so 5-6 hours total/week for the lab portion alone), including during weeks when no synchronous lab sessions are taking place.**

## Evaluation

### LECTURE:

<b>Quizzes</b> (individual)	8%	<b>Weekly;</b> Typically released on Tuesday and typically due the following Sunday
<b>Activities</b> (collaborative/individual)	7%	<b>Weekly;</b> Typically released on Monday and typically due on Thursday
<b>Question of the week</b> (individual)	15%	<b>Weekly;</b> Typically released on Thursday and typically due the following Wednesday
<b>Final exam</b> (individual)	20%	<b>Final exam period,</b> scheduled by Registrar's Office
<b>Podcast project</b> (collaborative)	15%	<ul style="list-style-type: none"> <li>• <b>Sign up for or find own team by Fri. Sep. 24</b></li> <li>• <b>Group contract due: Fri. Oct. 8</b></li> <li>• <b>Podcast and script due: Fri. Nov. 5</b></li> </ul>

### LABS:

<b>Lab quiz</b> (covers lab 1) (individual)	5%	<b>Due Mon. Sep. 27</b>
<b>Lab 2 (part 1) Simbio graded Questions</b> (individual)	5%	<b>Lab 2 (Simbio Beh. Ecol. Interactive chapter) part 1 due Mon. Oct. 4, 10am</b>
<b>Laboratory reports</b> (individual, some collaboration permitted for lab 2, part 2)^	<ul style="list-style-type: none"> <li>• Lab 2 (part 2): 15%</li> <li>• Lab 3: 5%</li> <li>• Lab 4: 5%</li> </ul>	<i>Note: additional deadlines for milestones apply, esp. for lab 2 – see lab schedule for details</i> <ul style="list-style-type: none"> <li>• <b>Lab 2 (Beh. Ecol.) part 2: proposal due weeks of Sep. 27 or Oct. 4; lab report due Mon. Nov. 29</b></li> <li>• <b>Lab 3 (Simbio intermediate Disturbance) due Mon. Oct. 25</b></li> <li>• <b>Lab 4 (Simbio Patchy Prairies) due Mon. Nov. 15</b></li> </ul>

^see assignment instructions for details on what kind of collaboration is permitted.

**PLEASE CAREFULLY REVIEW THE INFORMATION ABOUT THE COURSE STRUCTURE AND WEEKLY DEADLINES POSTED ON ECLASS! Please note that the course runs on Toronto time, this also applies to all deadlines!**

Broadly a typical week would usually consist of the following:

- **Pre-class content:** videos, readings etc. (to be completed prior to the start of the week)
- **Online reading quiz** (typically due Sundays before the Monday class, some exceptions may apply)
- **Activities:** two options to complete *either*
  - During synchronous zoom sessions during scheduled lecture time slot (usually together with class mates as a team) *or*
  - Asynchronously (instructions on eClass, due Thursdays)
- **Question of the week** (due the following Wednesday)

Questions of the week typically cover current material but may be of an integrative nature (i.e. answering these questions might require integrating concepts from several topics (weeks) of the course). Detailed information on the podcast project and lab reports will be posted on eClass.

### Quizzes:

- Will be time-limited and are **based on the material you are asked to complete prior to the synchronous sessions** – this can be videos, readings etc.
- Most questions will be multiple choice and are **marked for correctness** (some exceptions may apply to certain questions, such as what you found most confusing).
- You have two attempts for each quiz and only the higher one counts.
- When I calculate your quiz grade, **I will drop the 2 quizzes with the lowest percentage points, including 0's.** This also accounts for missed quizzes for any reason, including missing the deadline, technological/internet problems, illness etc.. and means I cannot grant additional exemptions.
- Because quizzes are there to ensure you are prepared for the coming week's activities, they can not be submitted late, therefore grace days can **NOT** be applied to reading quizzes (see course policy section for detailed information on grace days).

#### Activities grade:

- **Will be marked for participation, not correctness. In order to receive points you have to make a reasonable effort at answering all questions. For collaborative team submissions you must have made substantial contributions.** Deductions or no points may be given if insufficient effort was made.
- Additional activities, e.g. reflections may be posted from time to time (due dates for these may vary).
- When I calculate your activities grade, **I will drop 25% of points (i.e. you only have to reach 75% 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.
- **Grace days** cannot be applied to Activities (see course policy section)

#### Questions of the week (likely submitted through Crowdmark and Turnitin):

- Normally, these will be **short-answer questions** and you will have several days to answer these.
- Normally these questions relate to the material completed the week they are posted, but they can also be integrative (i.e. also require knowledge integration from previous weeks).
- **Open-book, but not open internet**, i.e. you may consult course materials, including internet materials explicitly linked to as part of the course materials, but you **may not search the internet** or use sites other than those linked to through the course. Posting the questions anywhere is strictly forbidden. **Answers MUST be in your own words, don't copy anything from anyone else, the internet, textbooks or course slides.** Remember this is an individual assessment and the equivalent of a midterm question!
- No electronic file-sharing: **You are not permitted to show your answers to anyone or post them anywhere** (doing so is considered aiding and abetting and a **breach of academic honesty**)
- If you have discussed the questions with other people from the course (e.g. in your study group) you **MUST** note their names in your submission (but remember not to copy from each other).
- When calculating your question of the week grade, I will drop the two questions with the lowest points, including 0's (i.e. you can miss two weekly questions without penalty).
- **Grace days** apply to questions of the week, but not the final exam (see course policy section)

#### Podcast project:

- This is a **team project**. Please see assignment instructions on eClass for details.
- Because it is a team project, grace days can **NOT** be applied, but the podcast can be handed in up to 4 calendar days late without late penalty. Please contact me if faced with extenuating circumstances.

#### Labs:

- **Most labs are online labs.** See posted lab schedule for details on synchronous sessions and deadlines.
- For lab 2 and a bonus activity, we strongly encourage you to collect data in your local area, but there will be online alternatives for those that cannot conduct local fieldwork or feel unsafe doing so.
- Grace days only apply to final lab reports and the lab quiz on lab 1 (see course policy section)

#### A note on academic integrity:

- **Electronic file-sharing is not permitted.** Some exceptions apply, e.g. sharing within your team to complete work specifically designated as collaborative or if instructed to do so to receive feedback, or for sharing your own notes from synchronous sessions with students currently enrolled in the course who missed the session, or as note-taker for students with accommodations. Outside of that electronic sharing of files (including but not limited to lab reports, assignments, exam questions etc.) is not permitted. If you are unsure check with us before sharing.
- **Use of services (e.g. essay writing/editing or file-sharing websites or private services) that complete your assignments for you or provide "model answers" is strictly forbidden. Uploading questions to these sites or accessing model answers will result in breach of academic honesty proceedings.** It should be obvious that it is never ok to pay someone to complete your course work for you, but some of the commercial providers are sneaky and will try to make it sound legitimate even though it is not – don't fall for it! Please remember: Not only is this unfair to your peers and detrimental to your learning, you are risking academic honesty charges, and leaving yourself open to blackmail for years to come (do you really want this to come back and haunt you when you are starting your career?), potentially even identity theft if you give them your login information as they will be able to access all your student accounts that may include such information as your SIN, birth date, address etc..

*Note: 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

Lectures	Start Wed Sept 8, last lecture: Mon Dec 6
Labs	Please see the detailed lab schedule on eClass. Note that the first due date is Sep. 27.
Weekly deadlines, lab and assignment deadlines	See Evaluation section and eClass course website
Final Exam	Will be due during the fall examination period, Dec. 9-23. The registrar's office schedules these and announces the date and time.
Fall reading week	Oct. 9-15
Drop deadline: Last day to drop course without receiving a grade	Nov. 12
Course Withdrawal Period: (withdraw from a course and receive a grade of "W" on transcript)	Nov. 13 - Dec. 7

NOTE: for additional important dates such as holidays, refer to the "Important Dates" section of the Registrar's Website:  
<https://registrar.yorku.ca/enrol/dates/fw21>

## Resources

### **Required Textbook:**

W. D. Bowman & S. D. Hacker 2020. Ecology. **5<sup>th</sup> edition**, Sinauer Associates; Oxford University Press.  
Loose-leaf version: LL ISBN: 9781605359229  
Bound version: ISBN-13 9781605359212  
e-book rental: e-ISBN: 9781605359236

**IMPORTANT: You really need the access code to the online resources for this textbook (5<sup>th</sup> edition).**

The textbook and associated access code to online resources are **required**. Please ensure you purchase the **5<sup>th</sup> edition**. The loose-leaf version is available through the York University bookstore (~\$135). An e-book rental version is also available (~\$60) through the eClass course website, please be aware that this is a rental and you will lose access after the specified time frame. A 7-day trial access is available (e.g. while you wait for the physical copy). **Please note that used textbooks and other editions will not allow you to access the online resources which are required in this course.** Please note that this may also affect the re-sale value of this book at York University, so I recommend going with the e-book rental (cheapest option) or the loose-leaf version.

### **Lab materials:**

Lab instructions will be available on the eClass website. **Please read them carefully and start well ahead of the deadlines.** You will have to purchase an access code to three online SimBio activities (22 US\$ total for the 3 labs) and download these onto your own laptop or desktop. You can purchase access to the SimUText labs directly through the SimBio company at the time of SimUText registration. Exchange rate will apply at time of purchase. A credit card is required for purchase. See the lab eClass site for detailed instructions.

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

- Please check the course eClass site often for important information and updates.
- Please note there are separate eClass sites for the lecture and the lab portion of the course.
- **Make sure you receive course announcements to your email & check your email often** (daily)
- Pre-recorded lectures, quizzes, non-textbook readings, assignment and lab instructions, etc. will be posted on the eClass sites (unless otherwise indicated)

**Please note: ALL course materials are copyrighted.** This includes but is not limited to slides, videos, assignment or lab instructions, quizzes, questions of the week, final exam, in-class activities etc.. **You do NOT have the right to post these anywhere or share them with anyone outside of this course.** Please remember to also be respectful of each other's, my and the TAs privacy and not share any conversations, recordings etc. outside of this course.

## Learning Outcomes

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

1. Explain how populations can change over time, differentiating between the different evolutionary mechanisms that drive this change.
2. Explain how natural selection and evolutionary change interact with the environment and ecological processes and how these interactions lead to adaptations.
3. Illustrate how natural selection and trade-offs shape organisms, their life history traits and behaviours, using concrete examples.
4. Describe how and why climatic conditions vary across the earth and analyze how these affect the distribution and characteristics of individuals, populations, communities, ecosystems and biomes.
5. Predict how various factors affect population sizes, apply appropriate population growth models and evaluate different ways of estimating population sizes.
6. Describe how ecosystems function, species' roles and interactions within communities and ecosystems, how energy and chemical elements are transferred within ecosystems and how ecosystems can change over time.
7. Explain the concept of biodiversity, including how it is estimated, and the factors influencing species abundances and distributions, and why these matter in a conservation context.
8. Apply ecological principles to contemporary environmental issues, such as loss of habitat and biodiversity, pollution and climate change and make appropriate conservation-related recommendations.
9. Apply knowledge of ecological concepts to real-life examples, case studies, datasets and models, including designing appropriate studies or experiments, making predictions, interpreting data and graphs and drawing conclusions.
10. Effectively communicate scientific concepts and results to different audiences, including the general public.
11. Work collaboratively to solve problems and jointly create a product (i.e. a podcast, answer to a problem, etc.)
12. Find, summarize and critically discuss primary research literature.
13. Apply the process of scientific inquiry to ecological problems, including hypothesis testing, data collection, data analysis and visualization, interpretation of results, and reporting.

## Course Content

There are now more than 7.5 billion people on Earth – more than two and a half times the number that existed in 1960. Since people take up space, the rate at which natural habitats are being lost has skyrocketed. Species extinction rates mirror this. At the same time, emissions of greenhouse gases are causing global climate change. What does this all mean and how do we make sense of it?

Ecology is the study of biology at the individual, population, community and ecosystem levels, focusing on interactions of organisms with one another and with their abiotic environment. Ecologists try to understand what determines the patterns of distribution and abundance of organisms. Ecologists also aim to predict how ecosystems respond to "disturbance". The central ideas, theories and principles of ecology are, therefore, directly relevant to the issues described above.

We will consider: approaches to the study of ecology; the link between ecology and evolution; adaptations of animals and plants; how selective pressures and trade-offs shape life histories and behaviours; properties of populations; population growth; species interactions such as competition, predation and mutualism; community structure and dynamics; factors that influence species richness and biodiversity; energy flux and nutrient cycling in ecosystems; sustainability; the biodiversity crisis; and the impact of climate change on biodiversity.

**As in all courses, you are expected to spend time beyond the regular course hours in preparation, review, studying, completing assignments, lab reports etc., related to the course.**



## Experiential Education and E-Learning

- Labs: designing an ecological study, collecting, analyzing and interpreting original data. Using computer simulations to test ecological hypotheses.
- Teamwork in activities (e.g. simulations, worksheets, case studies) and podcast assignment
- Online quizzes, videos, labs

## Other Information

**This is a 4-credit course that includes labs. Therefore, this course requires considerably more time commitment than a 3-credit lecture course. Please keep this in mind so you do not overcommit.**

### Labs:

One lab is an independent research project that involves fieldwork in your local environment. Please follow all safety recommendations posted on the eClass site and keep your own safety in mind at all times - only conduct fieldwork if it is safe for you to do so and in accordance with all local regulations and laws. Please note that there are online alternatives if you cannot conduct your own fieldwork safely.

You will be working on your independent project throughout the term. You will conduct your own small research study, which will take a significant portion of your time for the lab component of this course (hence this lab is worth the most towards your course grade). I **strongly recommend starting on lab 2 (independent project) as soon as possible** and start collecting your data for part 2 early on as it may be very difficult to do fieldwork and find your study subjects as it gets colder!

The remaining labs are online. Lab instructions and/or lab simulations will typically be available in advance of the week they are due in. You are strongly encouraged to look at the instructions as soon as they are available to plan out your time – most labs require significant amounts of time to complete them. We also strongly recommend completing them early so you have sufficient time to ask your TAs for help in case you need it.

### About active learning and teamwork

I hope you actively participate in this course. Not only have studies found that active participation is a more effective learning strategy than passive listening, but I have also found that the various activities are the best way to engage my students in learning the material and making it more fun. The podcast as a team project will give you a chance to practice your teamwork skills. 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 so **working in a team for the podcast project is required**, not optional! I will do my best to support you in making this a successful, positive experience, e.g. by providing a group contract and advice on how to work together effectively. If you have concerns or would like to give feedback on a particular activity or have any questions – please talk to me. I hope we can all work together in a respectful, fun and academically stimulating environment – even if it is online!

### What can you do to do well in this course?

My first advice would be not to overcommit. To complete it successfully, this course requires regular participation in the lecture and lab components, including a **substantial amount of time investment outside of formal class hours**. My other advice is to:

- Come with an open mind and prepared for active participation
- Read all announcements, assignment, lab instructions and grading criteria carefully
- Keep up with your independent lab tasks: Follow the time-line outlined in the lab schedule!
- Read, prepare, think critically about the material & practice problem solving
- Talk about the course material with others (your peers, TA's, me, even your friends and family) as much as possible. Ask questions, discuss & practice!!!
- Take charge of your learning: consciously plan your steps and reflect on your learning strategies (are they working? Where might you need to modify your approach?)

- Take care of yourself: get enough sleep, eat healthy foods, exercise & take breaks – don't underestimate the difference this makes!
- Get help early if you need it – there are lots of resources and services available at York University, make use of them!
- For more tips check out the resource section that I created on eClass.

## Course Policies

**I know that this part might seem really boring, but it's REALLY important that you read it ahead of time so that you are familiar with policies now rather than after the fact.**

### Course Contacts:

- **Dr. Birgit Schwarz:** [bsteach@yorku.ca](mailto:bsteach@yorku.ca) : for matters relating to lectures and lecture assessments
- The lab coordinator [b2050lab@yorku.ca](mailto:b2050lab@yorku.ca) : for lab administrative matters (missed labs, access issues)
- **Your TA** (contact info TBA): for academic questions about labs

### Email etiquette:

Meant to help foster a respectful and efficient correspondence, which ultimately benefits everyone!

- Please make sure to use your Yorku email address when emailing me or TA's as other email addresses are filtered out by the university and will not reach us. Don't use the eClass emailing system.
- Subject line: please give a brief indication of the subject of your email (e.g., "question about lecture 3", "missed lab 1", etc.).
- **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!**
- Please remember to include your name and student ID in the text of your email and sign your email with the name you would like to be addressed by (so we know what name to use when we respond!).
- Whether you email me, TA's or classmates, please remember that this is a professional environment, so please be respectful and avoid e.g. all CAPS or text-messaging language, which can also make it very hard to read and understand your message.
- Response time: I will do my best to respond within 72 hours (3 work days, not including weekends), please be patient (remember there are many of you, but only one of me).
  - Please avoid re-sending your email as this just puts it in with the more recent emails, resulting in further delays in responding.
- Before emailing I ask that you consider if you should consult another resource first (e.g. the TA if it is a question related to lab content, or eClass or the syllabus if it is a technical/policy question) and check the eClass site to see if your question has already been addressed!

### Academic Integrity:

- **Electronic file-sharing is not permitted.** Some exceptions apply, such as for sharing within your team for the purpose of completing assignments or activities that are specifically designated as collaborative or if instructed to do so to receive feedback or for sharing your own notes from synchronous sessions with students currently enrolled in the course who missed the session, or as note-taker for students with accommodations. Outside of that electronic sharing of files (including but not limited to lab reports, assignments, exam questions etc.) is not permitted. If you are unsure whether sharing is ok in your particular circumstance check with us before sharing.
- **You cannot post or share assessment questions or answers anywhere.** Doing so is considered aiding and abetting and a breach of academic honesty.
- **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: Lab reports, assignments and answers to assessment questions MUST be in your own words, you cannot copy anything from anyone else, nor from the internet, textbooks or course slides.** Copying a sentence, paragraph or more and then just changing some of the words is still considered plagiarism! If you copied from someone else it is not your own work and thought process and you will not receive credit for it! 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/>
- If you have discussed assessment questions with other people from the course (e.g. in your study group) you **MUST** note their names in your submission (but remember not to copy from each other).

#### **Copyright and Intellectual Property:**

- Images and material presented throughout the course are subject to Canadian copyright law.
- **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.** This includes but is not limited to slides, videos and lecture recordings, recordings of synchronous class or lab sessions, assignment or lab instructions, quizzes, questions of the week, final exam questions, in-class activities etc.. **You do NOT have the right to post these anywhere or share them with anyone outside of this course.** Please remember to also be respectful of each other's, the TAs and my privacy and not share any conversations, recordings etc. outside of this course. 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.

#### **Missed assessments or other course work:**

- In designing this course, I have built-in a lot of flexibility to accommodate a multitude of different circumstances (including illness, accidentally missing a deadline, technical difficulties, other obligations) and give everyone a chance to complete this course successfully. E.g. you normally have at least several days to complete quizzes, assignments, labs, assessment questions etc. and most components allow you to miss the occasional assessment without penalty and/or provide grace days for the occasional late submission. As such, **there should be no need for additional exceptions (including for illness) and therefore I will not provide these.** If you feel that there are extenuating circumstances in your case (e.g. you were ill for an exceptionally long time), you must contact me as soon as possible so we can try to find a solution (normally within 2 days of the missed deadline and at the latest as soon as you are capable of participating again). Please note that the format of any make-up assignment can differ from the original format (e.g. instead of a written answer to a question it could be an oral exam).
- **If you miss the FINAL EXAM** you must email me within one week of the date of the final exam with a completed DSA attached ([bsteach@yorku.ca](mailto:bsteach@yorku.ca)), and [petition](#) your home faculty for [deferred standing](#). It is the Petition Committee's decision whether deferred standing is granted; if it is, the committee will set the deadline for writing the deferred exam. Denied petitions will result in a zero on this assessment.
  - **The format of the make-up assignment can differ from the original final exam format, e.g. it could be an oral exam.**

#### **Religious observance days:**

- Should the dates for assessments pose a conflict with a religious observance day for your particular religion, please complete an **Examination Accommodation Agreement Form**, available at <https://secure.students.yorku.ca/pdf/religious-accommodation-agreement-final-examinations.pdf> and submit it to me **at least 3 weeks before the date of the test.** This should not apply to most coursework since you are given several days to complete it.

### Accommodations

- I have designed the course according to universal design for learning principles that address many accommodations (providing lots of time to complete assessments and grace days). The evaluation deadlines for Quizzes, Questions of the Week, Activities, Lab reports and Assignments are in keeping with universal design for learning principles, such that the time provided (several days at minimum) allows for self-accommodation. Quizzes can be completed at any point during the multiple day period during which they are open, but do have a time-limit once started. In keeping with universal design principles, the time limit for quizzes already includes at minimum an additional 100% of time on top of the longest time normally needed to complete these. Therefore, the amount of time provided allows for self-accommodation and no other accommodation is normally required.
- Although this course is designed such that accommodations for extra time are already taken into account, you may have accommodations other than this. Please upload your CDS Accommodation letters to the new student portal by Sept. 24.
- 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 November 12, 2021.**
- 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.

### Turnitin.com:

- In this course, you will be asked to submit electronic copies of some answers to assessment questions and lab reports to Turnitin.com (likely through the eClass site). This will ensure that your hard work, once added to the database, cannot be plagiarized in the future by students at any university!

### Grading, 'grace' days and late penalties:

- 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.**
- I understand that these are unprecedented and in many ways unpredictable times that call for some flexibility. Life happens, and unexpected things sometimes come up or multiple deadlines in different courses make it difficult to complete things on time. I am therefore offering a **maximum of four (4) days each for up to four (4) questions of the week or activities for the lecture section. Additionally, there will be a maximum of four (4) days each for up to two (2) lab reports or the lab quiz.**
- The following rules apply:
  - You cannot transfer any lecture grace days to the lab portion or vice versa.
  - For the lecture section **you can use grace days for questions of the week or activities.**
  - For the lab section **you can use grace days for final lab reports and the lab 1 quiz** (e.g. you cannot use them for part-way milestones deadlines worth bonus points etc.).
  - **Grace days will automatically be applied, please don't email to ask permission to use them.**
  - It is your responsibility to keep track of how many grace days you already used.
  - If you do not use the entire four days for one late assignment (e.g. you submit only one day late), you **cannot** transfer some of these days to other late assignments (i.e. you can submit a max. of 4 assessments late and none more than 4 days). **4 days = 4 calendar days: if you submit e.g., 1 hour late, it still counts as 1 day; each day in a weekend counts as well.**

- **Questions of the week or activities will not be accepted after the grace days have passed or are used up.** If you submit these afterwards they will not be marked and you will not receive points (this is due to our marking schedule and for fairness as you cannot submit once others have received feedback as this would create an unfair advantage. It is also important to keep on track throughout the course.)
- Grace days cannot be applied to the podcast project, but you may submit the podcast up to 4 calendar days (i.e. weekend days count) late without incurring a late penalty, after that the regular 10% late penalty per calendar day applies.
- Lab reports handed in after grace days have passed or are used up will incur **a penalty of 15% per calendar day**. Since the 'grace' days allow for some flexibility, we will strictly apply the late penalty, so choose wisely and please do not ask me for further exceptions as this would be unfair to everybody else.
- **Quizzes can not be handed in late** but have another form of flexibility built-in (you can miss some and still get full points, see section on evaluation above).
- Grace days do **NOT** apply to the final exam.

*\*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:**

- We encourage you to participate actively in the course and engage with your peers, me and your TAs 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 2050/Biology. 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 e.g. on someone's answer to a practice question, 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](https://secure.students.yorku.ca/pdf/religious-accommodation-agreement-final-examinations.pdf) 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 2050!**

**If you need any help, please do not hesitate to contact me (or the lab coordinator or your TA, depending on your question).**