Department of Biology Course Outline

S1 2024A BIOL 4270 3.0 Integrative Reproduction: Questions and Concepts

BLENDED DELIVERY – classes will be a combination of in-person and Zoom meets

Course Section Instructor:

Dr. Lisa Robertson Hear my name

How to address me:

Dr. Robertson/Dr. R/Dr. Lisa/Lisa

Personal Pronouns: she/her/hers

Office Location: LSB 102C –

Email: biol4270@yorku.ca

Note: If you have a question or would like to talk with me, send me an email, visit me during student hours (see below), or approach me 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: one of the following

- BIOL 3130 (which requires BIOL 2040)
- BIOL 2040 AND BIOL 3171
- BIOL 2040 AND BIOL 3070

Class Times and Location:

Monday & Wednesday, 10:00 am – 1:00 pm

Location**:** Chemistry Building (CB) 129

Click here for visual directions to CB.

Note: Please check the timetable closer to the start date of the class in case of a change of location!!

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

Course Format: BIOL 4270 is an interactive flipped classroom course. Each class will have activities (mainly through group work), so attendance is strongly encouraged. Classes (or portions thereof) may be recorded, depending on what we're doing in class.

Note: The S1 compressed format of 6 weeks results in a course that is delivered at double pace. This results in a heavy workload for students. Class time throughout the semester will be designated for project work to assist students in managing their time.

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 slide decks 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 4270!

All living things (i.e., species) reproduce; in fact, it's a characteristic that differentiates us living things from non-living things such as rocks (although rocks are still cool). When we hear the term 'reproduction', we typically think "sex", but what we often think of as the status quo for reproduction is certainly not! And the variations in nature are truly mind-blowing!! **The goal of the course is twofold, 1. to help you develop skills transferable to any future pursuit, whether it be schooling or a career you pursue all while, 2. exploring the varied and wonderful field that is "reproduction".** Join in the journey as we look beneath surface differences to see the molecular, physiological, and ecological processes that tie us together as living organisms.

This course assumes that you have fundamental knowledge and understanding of basic biological processes, including DNA replication, cell division, genetics, natural selection, life history, and heredity. In this course, **we use the term reproduction broadly** as it relates to a range of biological fields, including behaviour, physiology, anatomy, and evolution. While we will discuss human reproduction, it is **NOT the focus** of this course. Rather we will explore the complexities of reproduction in a variety of other species (we'll also discuss what we can and can't extrapolate from other species to understand human reproduction). 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 transferable skills in planning, writing, teamwork, and presenting.

Course Calendar Description: Evolutionary, molecular, physiological, and ecological aspects of reproduction. Evolutionary advantages and disadvantages of different forms of sexual and asexual reproduction. Topics updated to represent current or relevant findings. Independent and team work on projects, paired with written and oral communication to a variety of audiences.

Course level learning objectives

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

Course Content	Skills
1. Appreciate and explore diverse topics in plant and animal reproduction. 2. Explain concepts, methodologies, and issues in reproduction (*e.g.,* paradox of sex). 3. Critically evaluate information (*e.g.,* experiments and data) about reproduction from a variety of sources. 4. Compare and contrast reproductive differentiation among various organisms. 5. Describe factors that influence reproduction (*e.g.,* output, sex balance).	1. Communicate reproductive concepts to science and general audiences using various media. 2. Develop skills and strategies for effective communication, peer evaluation, and wellness. 3. Work effectively, responsibly, and collegially with your peers in and out of class. 4. Synthesize and summarize key points from a primary or review article to provide relevant information and support for an assignment, argument, etc. 5. Create new knowledge (in the form of reflections, presentations, and other course assignments) with academic integrity, acknowledging clearly which ideas are not your own.

Equity, Diversity, and Inclusion in BIOL 4270:

I want the course to **foster an inclusive, equitable environment that supports your learning, growth, and success**. I am committed to providing and encouraging an environment of equity, diversity, and inclusion (EDI) within this course. In that spirit, this course has been designed 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—both you and me — 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 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 I am working to reduce and ultimately eliminate. The hope is to continue improving this course, integrating diverse scientists and experiences. Please contact biol4270@yorku.ca or let me know through course surveys if you have any suggestions to further improve the course in terms of equity, diversity, and inclusion.

To help create an environment where each one of us, and our identities, are respected, there will be an opportunity for students to complete a survey to let me 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. I am still in the process of learning about diverse perspectives and identities, and inclusionary practices and I will make mistakes, and hopefully correct myself. **In the interest of improving, if anything was said in class (by anyone, including the instructor) that made you feel uncomfortable, please talk to someone about it (instructor, a fellow student, or anonymous feedback are options).**

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, you will…	As an instructor, I will…
Honesty	• 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 be mentally/physically present • 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 challenging 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	• Be open and transparent about what we are doing in class • Not distribute course materials to others without authorization	• Be available to you when I say I will be • 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 I 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 the Instructor

Please use biol4270@yorku.ca to contact the instructor, **not** the eClass message system or personal email address. Please **use your yorku.ca email address, if possible**, as emails from other addresses are likely to be filtered as spam/junk and will delay your receiving a response. The **subject line should include a relevant topic description**. To use professional and personal time more effectively, email is typically not checked between 5 pm and 9 am, nor at any time on the weekends.

Learning Materials

~~**Textbook:**~~ There is **NO** textbook for this course! Original research and review journal articles (as well as lecture information) will be used to investigate various aspects of reproduction in a diverse array of organisms. You are expected to read relevant/assigned papers prior to class. The individual assignment and the team project require additional research and reading of the scientific literature.

eClass site: BIOL 4270 uses eClass (https://eclass.yorku.ca) extensively. 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 and inspirational messaging.

Technology Checklist:

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

Assessment in this Course

Research about learning strongly suggests that the most important factor in learning is doing the work of reading, writing, recalling, practicing, synthesizing, and analyzing – all things that you will be doing in this course! Learning happens best when people actively engage with learning material on a consistent basis. This course has been designed according to Universal Design for Learning (UDL) principles that introduce flexibility into the course and addresses many accommodations (and the time provided allows for self-accommodation). Below a few common questions about assessments are included, and you can find additional questions with answers in the FAQ on eClass.

What will I be doing in this class?

A lot of different things. This course has a lot of work! Projects are broken down into smaller manageable parts or tasks that you complete throughout the term. These project management skills and other skills you will be developing are necessary for any field you go into and career you would like to pursue!

Most of this course involves learning from primary and secondary literature, and discussions with your peers; there is a limited component of this course that is "lecture-y". Class time focuses on discussion, activities, and sometimes time for teams to work on their projects. This course is set up to help you develop your skills in thinking critically, writing, collaborating, and presenting (in the context of reproduction as a subdiscipline of biology); skills that are useful no matter what your career aspirations. Classes, or portions thereof, will be recorded *depending on what we're doing that day*. Your participation and presence are appreciated by the instructor and student colleagues in the class; you'll gain much more from the course by being an active participant in it.

Since there's no textbook, are there assigned readings? How should I prepare for class?

Yes! To help keep you on track and provide community, you'll be asked to annotate your assigned readings in *Perusall* before coming to class. You may need to consult resources outside of those provided in the course to understand more complex issues and concepts —this is another great skill to develop (and quite useful in course assignments!). During class or in course announcements, I'll point out problematic areas for students, but you may need to draw to my attention concepts that you find confusing (other students likely have the same questions). If you are struggling with an idea: talk to your fellow students (in class, on eClass, in groups or your teams), find and read additional references, and/or come see me. As well, I'll give you time, in class, to work on your team projects—please use this time to your advantage. The course is work-intensive, but you should find yourself well-supported and your experiences 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 participation marks: participation should be relevant and on-topic, you must participate to earn marks (telepathy is not an effective form of communication in the class), 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 a lot of teamwork in this course. Do I have to work as 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 (for example, it's one of the things typically asked about on referee forms). 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?

A bunch! In this class, you'll also get to choose your own topics for the projects. While there is some latitude with topics, this course will focus on biology and not sociology or psychology, although these may occasionally come up. Please refer to the course website for more detail on the course schedule.

How do you reduce unintentional bias when grading?

For most assignments, you will submit your work to Crowdmark. To reduce unintentional bias in grading, grading is completed anonymously. Therefore, it's important that when you are asked **not** to put your name or identifying information 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, I am offering flexibility in deadlines for *some* course assignments in the form of two (2) grace days. These two calendar days are automatically added to 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 Sunday to hand in the assignment without penalty.

If you hand in the assignment after the end of the grace period, it will be subject to a 25% late penalty per calendar day or portion thereof. So, if the last grace day is Sunday at 11:59 pm, and you hand in the assignment on Tuesday at 9:00 am, the late penalty applied to your submission would be 50%.

Course Breakdown

COMPONENT	WEIGHTING & INFORMATION
WELLNESS LEARNING ACTIVITIES	15% (best 90%)
PERUSALL ANNOTATIONS	10% (best 90%)
INDIVIDUAL PROJECT	40% (multiple elements/due dates)
TEAM PROJECT*	35% (multiple elements/due dates)

Please note: This course does not have any midterms or final exams. *You must complete the team project to pass the course. You must complete the final team progress report to receive a grade on the team presentation.

Grace days and Late policy: Life can indeed be challenging, and to reduce the worry that comes with that, I have built-in flexibility in the form of two (2) grace days for many course tasks. For activities and Perusall annotations, I'm offering flexibility by dropping a few (see the 'best of' language in the course breakdown). For course tasks handed in late, a 25% per calendar day or portion thereof will apply.

Religious accommodation: You are entitled to religious accommodation where necessary. **Please let me 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, and every effort has been made to schedule these interactions outside of religious observations.

Wellness Learning Activities (15%)

This class relies on the participation of all students. Most, but not all, engagement points will be earned during class time and will mainly be group activities. Understanding that you may have to miss a few classes, **you need only 90% of the total engagement points to earn the full marks toward your wellness learning activities grade.** If you earn less than 90% of the total engagement points, your mark out of 10 will be pro-rated. So, 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.

Perusall Annotations (10%)

Perusall has collaborative annotation tools that help you in your reading and analysis of primary and secondary literature. You'll be reading 8 articles in this course just for the in-class component (this is how you'll learn about different topics in the course. Given that we can't always do stellar work, the **best 90% of your Perusall assignments will go toward your Perusall annotations grade.** For example, if there are 10 papers assigned, your best 9 Perusall annotation grades will go towards this 10% of your course grade. Below is a table of the papers you will be reading to allow you to see the topic and timing of the papers we will discuss in class. **Grace days do not apply to Perusall** assignments as these readings prepare you for class discussion.

Note the list of papers in the table below and associated due dates is subject to change.

SEMESTER WEEK	TOPIC	PAPER
WEEK 1	Intro	Syllabus
	Inclusivity & reproduction	Hales, 2020
WEEK 2	Types of reproduction	Chapman et al. 2007
	Types of reproduction	Ryder et al. 2021
WEEK 4	Impacts on reproduction	Fobert et al. 2019
	Sperm storage – You will choose to read ONE of these articles	Liberti et al. 2018 Melo et al. 2018 Shaw et al. 2014 Paynter et a. 2016
WEEK 5	Why sex?	Morran et al. 2011
	Sex determination	Warner & Shine, 2008

Individual Project: Popular Media Article (40%)

Communication of scientific ideas to a variety of audiences is a valuable skill. In this course, the topics for the individual and team assignments are integrated so that you can concentrate your efforts on one area and allow you to delve deep into a topic of your interest. What you do for the individual project will help you to develop your team project and vice versa. To develop your written communication skills, you will choose a primary article related to your team project and write a lay summary of that primary article in the form of a popular media article. Completing this assignment will help you to step back and see the bigger picture of the context and importance of your topic for this and the team project. The primary article (no reviews or meta-analyses) that you choose must be published within the past 5 years and related to your team project. I want you to improve *over the term*, so you submit a 'polished draft' (more about that in class) and will receive feedback from your peers, which will allow you to make substantial improvements for your submission near the end of the term. In turn, you will provide your peers with feedback on their assignments. This draft phase as well as smaller components of this assignment will help keep you on track with your work and allow you to earn marks for simply staying on track ☺

COMPONENT OF INDIVIDUAL PROJECT	WEIGHT OF FINAL GRADE	DUE	GRACE DAYS ALLOWED?
Selection of article (graded for completion)	--	Wed. May 15, 11:59 pm	YES
Draft submission for peer review	--	Fri. May 24, 11:59 pm	YES
Peer review of draft	5%	Fri May 31, 11:59 pm	YES
Final popular article	35%	Fri. June 14, 11:59 pm	YES

NOTE: You may be asked to submit electronic copies of **any** written work (*e.g.,* article critique) first to Turnitin and then to Crowdmark. 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.

Team Project: Presentation (35%)

The team project allows you to work collaboratively to address a topic. This project is a 'deep dive'; you'll need to search and read the literature on your team's topic and identify important aspects, including any controversies, gaps in the literature, recent developments, etc., and you will teach your peers (in other teams) about this topic in a presentation during the last three weeks of the term (Nov. 13 – Nov. 29). Your peers, as well as the instructor, will evaluate your presentation and provide feedback. For each team that presents, another team will be assigned to ask questions about the presentation and to 'chair' questions from other peers.

Teams will be assigned by the instructor, and some class time will be provided to work on your project, although additional time out of class will also be needed. **You must complete the Team Project to pass the course**.

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 TEAM PROJECT	WEIGHT OF FINAL GRADE	DUE	GRACE DAYS?
Team Charter + Topic refinement + research question	2%	Fri. May 17, 11:59 pm	YES
Deep Dive presentation	30%	June 10, 12 in class	**NO**
Assigned "Questionners"	1%	June 10, 12 in class	**NO**
Team Evaluations	2%[#]	1. Mon. May 27 – in class 2. June 17	1. **NO** 2. YES

[#]You must submit your Final Team Evaluation to receive a grade for the Team Presentation

Reappraisal Procedures

The instructor will provide feedback on work, and where a student requests a reappraisal of a course component, the instructor will complete the reappraisal if appropriate reasoning/rationale is provided.

Reappraisal requests should be submitted to biol4270@yorku.ca within 5 business days of the work being returned or feedback being made available. The request must include a written rationale providing academically valid reasons for the reappraisal request 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. All reappraisals will be reviewed within 2 weeks of the reappraisal deadline.

Please note that to be fair and consistent grades are not negotiable. The course has been designed 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

Important Dates

Classes start: May 6, 2024
Drop Deadline: June 3, 2024 (last day to drop without receiving a grade)
Victoria Day: May 20, 2024 – NO CLASS
Course Withdrawal period: June 4-17, 2024 (course still appears on transcript with 'W")
Course End Date: June 17, 2024 (*but you never want BIOL 4270 to end!)*
Exams: June 19-21 (*but you don't have to worry about this for BIOL 4270!)*

Grading Scheme

In accordance with the York University Undergraduate Calendar Regulations, the letter grades assigned in undergraduate courses at York conform to the descriptions and grade ranges shown here: https://calendars.students.yorku.ca/2022-2023/grades-and-grading-schemes

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/

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, etc. can be found, here:
https://calendars.students.yorku.ca/policies-and-regulations

Course Overview – *topic timeline & course task due dates are subject to change*

Topic	Mon	Tues	Wed	Thur	Fri
			May		
			1	**2**	**3**
Week 1: Introduction; Inclusive Language	Semester begins! **6** **First Day of 4270!** *(I know; You're super excited to start 4270!)* Syllabus	**7**	**8** Hales GTKY Survey DUE	**9**	**10**
Week 2: Types of Reproduction	**13** Chapman Meet your Team	**14**	**15** Ryder Primary article selection DUE	**16**	**17** Team Charter DUE Peer Review Partner Choice DUE
Week 3:	**20** Victoria Day **No class**	**21**	**22** TEAM WORK PERIOD - NO CLASS	**23**	**24** Popular article draft DUE
Week 4: Anthropogenic Impacts on reproduction; Sperm Storage	**27** Fobert START of peer review period Team Progress Report 1	**28**	**29** Sperm Storage articles	**30**	**31** END of Peer review period Peer Review DUE
			June		
Week 5: Why Sex?; Sex 'Determination'	**3** Morran Peer Reviewer Mtg	**4**	**5** Warner & Shine	**6**	**7**
Week 6: Team Presentations	**10** Team Presentations	**11**	**12** Team Presentations	**13**	**14** Final Popular article DUE
Week 6 CON'T: Team Pressies, Course Wrap Up	Semester ends! **17** **Last Day of 4270** *(I know; you never want 4270 to end..)* Team Presentations Team Progress Report 2 DUE	**Colour Legend:** All times stated below are subject to change. • Perusall Annotations – due at 9:00 AM (except Syllabus due at 11:59 pm), NO grace days • Individual Project components – due at 11:59 pm; MAY have grace days ○ Peer Review components of the individual project • Team Project components – due at 11:59 pm OR in class (pressies); MAY have grace days • Activities – due at 11:59 pm OR in class; MAY have grace days			