1 Course Details

1.1 Calendar Description

Discussions and applications of methodology for collection and examination of gametes and embryos and for measurements of hormones in biological fluids.

1.2 Course Description

Calendar description: Discussions and applications of methodology for collection and examination of gametes and embryos and for measurements of hormones in biological fluids.

Note that the content has been modified to extend beyond the collection and examination of gametes and now includes all aspects of mammalian reproduction.

1.3 Timetable

Lectures (Synchronous on Microsoft Teams) Tuesday, Thursday 10:00 a.m. – 11:20 a.m.
ANNU 030

1.4 Final Exam

N/A
2 Instructional Support

2.1 Instructional Support Team

Instructor: Gregoy Bedecarrats
Email: gbedecar@uoguelph.ca
Telephone: +1-519-824-4120 x53692
Office: ANNU 223
Office Hours: by appointment

2.2 Netiquette Expectations

Inappropriate online behaviour will not be tolerated. Examples of inappropriate online behaviour include:

- Posting inflammatory messages about your instructor or fellow students
- Using obscene or offensive language online
- Copying or presenting someone else’s work as your own
- Adapting information from the Internet without using proper citations or references
- Buying or selling term papers or assignments
- Posting or selling course materials to course notes websites
- Having someone else complete your quiz or completing a quiz for/with another student
- Stating false claims about lost quiz answers or other assignment submissions

- Threatening or harassing a student or instructor online

- Discriminating against fellow students, instructors and/or TAs

- Using the course website to promote profit-driven products or services

- Attempting to compromise the security or functionality of the learning management system

- Sharing your user name and password

- Recording lectures without the permission of the instructor

2.3 Communicating with Your Instructor

During the course, your instructor will interact with you on various course matters on the course website using the following ways of communication:

- **Announcements:** The instructor will use Announcements on the Course Home page to provide you with course reminders and updates. Please check this section frequently for course updates from your instructor.

- **Ask Your Instructor Discussion:** Use this discussion forum to ask questions of your instructor about content or course-related issues with which you are unfamiliar. If you encounter difficulties, the instructor is here to help you. Please post general course-related questions to the discussion forum so that all students have an opportunity to review the response. To access this discussion forum, select Discussions from the Tools dropdown menu.

- **Email:** If you have a conflict that prevents you from completing course
requirements, or have a question concerning a personal matter, you can send your instructor a private message by email. The instructor will attempt to respond to your email within 24 hours.

- **Video Call**: If you have a complex question you would like to discuss with your instructor, you may book a video meeting on Teams (or alternate platform being used by your instructor). Video meetings depend on the availability and are booked on a first come first served basis.

### 3 Learning Resources

Due to the restrictions imposed by the COVID-19 outbreak, all lectures and presentations will be performed using the “Teams” app. Invitations with link will be provided to students ahead of time.

#### 3.1 Additional Resources

**Course Content Definitions (Other)**

**Reproduction**: “the process by which plants and animals give rise to offspring and which fundamentally consists of the segregation of a portion of the parental body by a sexual or an asexual process and its subsequent growth and differentiation into a new individual” *Merriam-Webster Online Dictionary*.

**Mammalian**: any member of the group of vertebrate animals in which the young are nourished with milk from special mammary glands of the mother.

**Placental mammal**: any member of the mammalian group characterized by the presence of a placenta, which facilitates exchange of nutrients and wastes between the blood of the mother and that of the fetus.

**Mammalian Reproduction:**

- **Reproductive organs**: ontogeny, gametogenesis
- **Reproductive cycles**: ovarian, menstrual
- **Heat; Copulation**
- **Fertilization**
- **Implantation/Attachment**
- **Embryogenesis**
- **Parturition**
- **Lactation**
3.2 System Requirements

System and Software Requirements

This course will use a variety of technologies including;

- CourseLink (main classroom) for postings and announcements
- Teams (via Office 365) for synchronous delivery

To help ensure you have the best learning experience possible, please review the list of system and software requirements.

https://opened.uoguelph.ca/student-resources/system-and-software-requirements

CourseLink System Requirements

You are responsible for ensuring that your computer system meets the necessary system requirements. Use the browser check tool to ensure your browser settings are compatible and up to date. (Results will be displayed in a new browser window).

http://spaces.uoguelph.ca/ed/system-requirements/
https://courselink.uoguelph.ca/d2l/systemCheck

3.2 Course Technology and Technical Support

CourseLink
This course is being offered using CourseLink (powered by D2L's Brightspace), the University of Guelph's online learning management system (LMS). By using this service, you agree to comply with the University of Guelph's Access and Privacy Guidelines. Please visit the D2L website to review the Brightspace privacy statement and Brightspace Learning Environment web accessibility standards.

http://www.uoguelph.ca/web/privacy/ https://www.d2l.com/legal/privacy/
https://www.d2l.com/accessibility/standards/

Technical Support

If you need any assistance with the software tools or the CourseLink website, contact CourseLink Support.

Email: courselink@uoguelph.ca

Tel: 519-824-4120 ext. 56939 Toll-Free (CAN/USA): 1-866-275-1478

Support Hours (Eastern Time):

Monday thru Friday: 8:30 am–8:30 pm
Saturday: 10:00 am–4:00 pm

Sunday: 12:00 pm–6:00 pm

**Teams (via Office 365)**

Office 365 Teams is a collaboration service that provides shared conversation spaces to help teams coordinate and communicate information. This course will use Teams for one on one meetings with your Instructor. It is recommended that you use the desktop version of Teams. As a student you are responsible for learning how to use Teams and it’s features.

For Teams Support visit the CCS website for more information.

https://www.uoguelph.ca/ccs/services/office365/teams

**3.2 Technical Skills**

As part of your learning experience, you are expected to use a variety of technologies for assignments, lectures, teamwork, and meetings. In order to be successful in this course you will need to have the following technical skills:
• Manage files and folders on your computer (e.g., save, name, copy, backup, rename, delete, and check properties);
• Install software, security, and virus protection;
• Use office applications (e.g., Word, PowerPoint, Excel, or similar) to create documents;
• Be comfortable uploading and downloading saved files;
• Communicate using email (e.g., create, receive, reply, print, send, download, and open attachments);
• Navigate the CourseLink learning environment and use the essential tools, such as Dropbox, Quizzes, Discussions, and Grades (the instructions for this are given in your course);
• Access, navigate, and search the Internet using a web browser (e.g., Firefox, Internet Explorer); and
• Perform online research using various search engines (e.g., Google) and library databases.

3.2 Library Access

As a student, you have access to the University of Guelph’s library collection, including both physical and electronic materials. For information on checking out or couriering physical library items, accessing electronic journals and returning items to the library, visit the library’s website.

If you are studying off campus and would like to access the library’s electronic resources, use the Off Campus Login and login using your Single Sign On credentials or using your last name and library barcode.

https://www.lib.uoguelph.ca/

https://www.lib.uoguelph.ca/campus-login
4 Learning Outcomes

4.1 Course Learning Outcomes

By the end of this course, you should be able to:

1. By the end of this course, students will be familiar with the general concepts and processes involved in mammalian reproduction. Students will also have acquired basic theoretical knowledge of techniques routinely used for the study of reproduction (molecular, cellular and hormone assays).

2. Based on personal interest, students will be able to understand and discuss in depth a specific topic related to mammalian reproduction (after summarizing the state of knowledge in that specific area, students will challenge current concepts and propose a novel and innovative experimental approach to further advance research).

5 Teaching and Learning Activities

5.1 Lecture

The purpose of lectures is mainly to refresh students on general anatomical structures of the reproductive system, physiological events associated with reproduction, and general techniques used. In addition, specific lectures will be given by invited speakers based on students’ interests.

Tue, Jan 12, 10:00 AM - 11:20 AM

Topics: Introduction / Overview of the semester

Thu, Jan 14, 10:00 AM - 11:20 AM

Topics: Sexual differentiation/germ cell formation

Tue, Jan 19, 10:00 AM - 11:20 AM
Male reproductive system (testis/spermatogenesis)

Thu, Jan 21, 10:00 AM - 11:20 AM

Female reproduction (general anatomy)

Tue, Jan 26, 10:00 AM - 11:20 AM

Female reproduction (ovarian cycle)

Tue, Feb 2, 10:00 AM - 11:20 AM

Female reproduction (uterine/menstrual cycle)

Thu, Feb 4, 10:00 AM - 11:20 AM

Fertilization/implantation

Tue, Feb 9, 10:00 AM - 11:20 AM

Embryogenesis/pregnancy

Thu, Feb 11, 10:00 AM - 11:20 AM

Parturition/lactation

Mon, Feb 15, 10:00 AM - Fri, Feb 19, 11:20 AM

READING WEEK

Tue, Feb 23, 10:00 AM - 11:20 AM

Catch-up lecture

Thu, Feb 25, 10:00 AM - 11:20 AM

Practice journal club presentation by me!

Tue, Mar 2, 10:00 AM - 11:20 AM
Topics: Guest lecture / Special topic I

Thu, Mar 4, 10:00 AM - 11:20 AM

Topics: Journal club by students (1-2 students)

Tue, Mar 9, 10:00 AM - 11:20 AM

Topics: Guest lecture / Special topic II

Thu, Mar 11, 10:00 AM - 11:20 AM

Topics: Journal club by students (1-2 students)

Tue, Mar 16, 10:00 AM - 11:20 AM

Topics: Guest lecture / Special topic III

Thu, Mar 18, 10:00 AM - 11:20 AM

Topics: Journal club by students (1-2 students)

Tue, Mar 23, 10:00 AM - 11:20 AM

Topics: Guest lecture / Special topic IV

Thu, Mar 25, 10:00 AM - 11:20 AM

Topics: Journal club by students (if required)

Tue, Mar 30, 10:00 AM - 11:20 AM

Topics: Guest lecture / Special topic V

Thu, Apr 1, 10:00 AM - 11:20 AM

Topics: Review session for the final presentations

Tue, Apr 6, 10:00 AM - 11:20 AM

Topics: Guest lecture / Special topic VI
Thu, Apr 8, 10:00 AM - 11:20 AM

Topics: First round of final presentations

Tue, Apr 13, 10:00 AM - 11:20 AM

Topics: Second round of Final Presentations

Thu, Apr 15, 10:00 AM - 11:20 AM

Topics: Third round of Final Presentations (if required)

6 Assessments

6.1 Marking Schemes & Distributions

<table>
<thead>
<tr>
<th>Name</th>
<th>Scheme A (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal club (preparation, presentation, discussion)</td>
<td>20</td>
</tr>
<tr>
<td>Review (written Report)</td>
<td>35</td>
</tr>
<tr>
<td>Proposal (presentation)</td>
<td>35</td>
</tr>
<tr>
<td>Class Participation</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

6.2 Assessment Details

Journal club (preparation, presentation, discussion) (20%)

Due: Starting end of February (after winter break)

Students will select an article based on technical or theoretical challenges, and after a summary presentation, the paper will be open for discussion. Up to two articles (2 students) will be presented per session. Additional information on specific content and format, along with guidelines and rubrics, will be provided on the CourseLink site.

Thursdays, 10:00 – 11:20 starting first week of April.

Review (written Report) (35%)

Due: Mon, Mar 15, 12:00 AM
Each student will select a specific topic based on his/her own interest. Students will be responsible to search the literature relevant to the topic and, produce a comprehensive written review (6-8 pages excluding at least 20 references). Additional information on specific content and format, along with guidelines and rubrics, will be provided on the CourseLink site.

Due date: Friday March 14, 2021.

Proposal (presentation) (35%)
Due: Early/Mid April (last week of class/exam period).

After reviewing their specific topic, students will be asked to advance knowledge by proposing a novel experimental paradigm. This proposal will be presented in front of the class in a formal PowerPoint presentation (20-25 min presentation maximum with 10 min for discussion). The presentation should include an introduction/summary (based on the literature review), a statement of rational and objectives, a technical approach (materials and methods), expected results, and potential pitfalls. Note that it should not correspond to your MSc project but rather push the envelope if you had access to significant budget and state of the art equipment. Presentation dates: early April (last week of class/exam period).

Additional information on specific content and format, along with guidelines and rubrics, will be provided on the CourseLink site.

Class Participation (10%)
Date: Ongoing
This includes showing up and actively participating, especially during guest/specific topic lectures and fellow students’ presentations.

7 Course Statements

7.1 Late Policy

As per policy, late assignments submission will result in a reduced by 5% per day after the deadline for the submission of the assignment to a limit of six days.
Extensions will be considered for medical reasons or other extenuating circumstances. If you require an extension, discuss this with the instructor as soon as possible and well before the due date. Barring exceptional circumstances, extensions will not be granted once the due date has passed. These rules are not designed to be arbitrary, nor are they inflexible. They are designed to keep you organized, to ensure that all students have the same amount of time to work on assignments, and to help to return marked materials to you in the shortest possible time.

8 University Statements

8.1 Email Communication

As per university regulations, all students are required to check their e-mail account regularly: e-mail is the official route of communication between the University and its students.

8.2 When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. The grounds for Academic Consideration are detailed in the Undergraduate and Graduate Calendars.

Undergraduate Calendar - Academic Consideration and Appeals
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml

Graduate Calendar - Grounds for Academic Consideration
https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml

Associate Diploma Calendar - Academic Consideration, Appeals and Petitions
https://www.uoguelph.ca/registrar/calendars/diploma/current/index.shtml

8.3 Drop Date

Students will have until the last day of classes to drop courses without academic penalty. The deadline to drop two-semester courses will be the last day of classes in the second semester. This applies to all students (undergraduate, graduate and diploma) except for Doctor of Veterinary Medicine and Associate Diploma in Veterinary Technology (conventional and alternative delivery) students. The regulations and procedures for course registration are available in their respective Academic Calendars.

Undergraduate Calendar - Dropping Courses
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml

Graduate Calendar - Registration Changes
https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/genreg-regregchg.shtml
8.4 Copies of Out-of-class Assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

8.5 Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required; however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance and not later than the 40th Class Day.

For Guelph students, information can be found on the SAS website https://www.uoguelph.ca/sas

For Ridgetown students, information can be found on the Ridgetown SAS website https://www.ridgetownc.com/services/accessibilityservices.cfm

8.6 Academic Integrity

The University of Guelph is committed to upholding the highest standards of academic integrity, and it is the responsibility of all members of the University community-faculty, staff, and students-to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff, and students have the responsibility of supporting an environment that encourages academic integrity. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

Undergraduate Calendar - Academic Misconduct
8.7 Recording of Materials

Presentations that are made in relation to course work - including lectures - cannot be recorded or copied without the permission of the presenter, whether the instructor, a student, or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

8.8 Resources

The Academic Calendars are the source of information about the University of Guelph’s procedures, policies, and regulations that apply to undergraduate, graduate, and diploma programs.

Academic Calendars
https://www.uoguelph.ca/academics/calendars

8.9 Disclaimer

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings and academic schedules. Any such changes will be announced via CourseLink and/or class email. All University-wide decisions will be posted on the COVID-19 website (https://news.uoguelph.ca/2019-novel-coronavirus-information/) and circulated by email.

8.10 Illness

The University will not normally require verification of illness (doctor’s notes) for fall 2020 or winter 2021 semester courses. However, requests for Academic Consideration may still require medical documentation as appropriate.