1 Course Details

1.1 Calendar Description

Students are guided to independently research and critically review a topic of emerging importance in animal biosciences. Students select a topic in consultation with the instructor.

Pre-Requisites: 15.00 credits including 2.00 in ANSC or EQN

1.2 Course Description

At the starting of the course, a class student survey will be conducted by the instructor to facilitate and allow class students an opportunity to narrow down and select their interested specific disciplinary topic areas for further topic analysis and expertise development. Then class students will learn how to effectively carry out scientific literature research in working with a university librarian and the course instructor. Students will be further guided to search and define their critical review paper topic and select their original papers for critical analysis in consultation with the course instructor. The instructor will demonstrate to the class how to conduct a critical review, prepare written reviewing reports, and present reviewing results in a panel discussion format as a primary and a secondary reviewer for an original research paper. The instructor will further demonstrate to the class how to present a critical review topic paper to the public. Class student critical review papers will also be presented to their class group as a formal seminar. Thus, students are guided to independently search and critically review a topic of emerging importance in animal biosciences. This course is designed for students in their final year of the Animal Biology and Animal Science majors.

1.3 Timetable
Thurs. 2:30 pm - 5:20 pm; Virtual. Please see WebAdvisor for the latest information.

1.4 Final Exam

There is no final exam for this course.

2 Instructional Support

2.1 Instructional Support Team

Instructor: Ming Fan
Email: mfan@uoguelph.ca
Telephone: +1-519-824-4120 x53656
Office: ANNU 224
Office Hours: Instructional Support Team

Instructor: Ming Fan

Email: mfan@uoguelph.ca

Telephone: +1-519-277-8858 (cell)

Office: ANNU 224

Communicating with your Instructor

You can send your instructor a private message by email. The instructor will attempt to respond to your email within 24 hours. You may book a video meeting on Zoom (or Virtual Classroom on the CourseLink).

3 Learning Resources

3.1 Required Resources

Required Texts (Textbook)
None

3.2 Recommended Resources

Recommended Texts (Textbook)
None
3.3 Additional Resources

Lab Manual (Lab Manual)
None

Other Resources (Other)
Other Resources

Course syllabus, guidelines and other class related information will be posted on the course site as PDF files by the course instructor through using D2L. Student original research papers to be used for class presentation and discussions will be circulated to class students via email by the course instructor.

Course Technologies

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

Course Technologies

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/

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

3.4 Additional Costs
None

3.4 Course Technology and Technical Support

Zoom

This course will use Zoom for lectures. Check your system requirements to ensure you will be able to participate.

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

3.4 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

Ares

How to access course reserve materials through the University of Guelph McLaughlin Library. To access these items, select Ares on the navbar in CourseLink. Note that you will need your Central Login ID and password in order to access items on reserve.

For further instructions on accessing reserve resources, visit How to Get Course Reserve Materials.

If at any point during the course you have difficulty accessing reserve materials, please contact the e-Learning Operations and Reserve Services staff at:

Tel: 519-824-4120 ext. 53621
Email: libres2@uoguelph.ca
https://www.lib.uoguelph.ca/find/course-reserves-ares/how-get-course-reserve-material

3.4 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.

4 Learning Outcomes

4.1 Course Learning Outcomes

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

1. To become familiar with Web-based literature search tools to effectively search academic publications from referred journals.
2. To critically obtain conceptual findings through reading most recently published original research papers in referred journals.
3. To learn how to write a review article in emerging animal bioscience topic areas.
4. To learn how to present an overview in emerging animal bioscience topic areas.

5 Teaching and Learning Activities

5.1 Lecture

Thu, Jan 14

Topics:

- To discuss course delivery and requirements
- To conduct in-class student survey and choose a review topic
- To arrange student paper review and presentation
Thu, Jan 21

Topics:
- Web-based Literature Search with the instructor
- To search original research papers by students in class

Thu, Jan 28

Topics:
- How to conduct a critical reviewing of an original research paper
- Critical reviewing of an original research paper by the instructor
- How to effectively develop an outline and write up a review paper

Thu, Feb 4

Topics:
- Critical reviewing of original research papers by class students

Thu, Feb 11

Topics:
- Critical reviewing of original research papers by class students

Mon, Feb 15 - Fri, Feb 19

schedules
Topics:  
- Winter Break (no class!)

Thu, Feb 25  
Topics:  
- Critical reviewing of original research papers by class students

Thu, Mar 4  
Topics:  
- Critical reviewing of original research papers by class students

Thu, Mar 11  
Topics:  
- How to prepare and present a major review paper in a seminar
  - Major reviewing-based presentation for demonstration: "Novel and Disruptive Biological Strategies for Resolving Gut Health Challenges in Monogastric Food Animal Production" By Dr. Ming Z. Fan

Thu, Mar 18  
Topics:  
- Final class oral presentations of student major review papers

Thu, Mar 25  
Topics:  
- Final class oral presentations of student major review papers

Thu, Apr 1  
Topics:  
- Final class oral presentations of student major review papers

Thu, Apr 8  
Topics:  
- Final class oral presentations of student major review papers
5.2 Seminar

Topics: None

5.3 Lab

Topics: None

5.4 Field Trip

Not Applicable

6 Assessments

6.1 Marking Schemes & Distributions

<table>
<thead>
<tr>
<th>Name</th>
<th>Scheme A (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Assignments and Tests - Table of Information</td>
<td>0</td>
</tr>
<tr>
<td>Participation in Class Discussion before the Winter Break</td>
<td>5</td>
</tr>
<tr>
<td>Major Review Paper - Title and Outline</td>
<td>10</td>
</tr>
<tr>
<td>Paper Critique as a Primary Reviewer</td>
<td>20</td>
</tr>
<tr>
<td>Paper Critique as a Secondary Reviewer</td>
<td>10</td>
</tr>
<tr>
<td>Major Review Paper - Oral Presentation to Class</td>
<td>20</td>
</tr>
<tr>
<td>Participation in Class Discussion after the Winter Break</td>
<td>5</td>
</tr>
<tr>
<td>Major Review Paper</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

6.2 Assessment Details

Course Assignments and Tests - Table of Information (0%)

<table>
<thead>
<tr>
<th>Assignment or Test</th>
<th>Due Date</th>
<th>Contribution to Final Mark (%)</th>
<th>Learning Outcomes Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation in class discussions before the Winter Break</td>
<td>Feb. 11, 2021</td>
<td>5</td>
<td>Outcomes #1 to 4</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>--------------</td>
<td>---</td>
<td>------------------</td>
</tr>
<tr>
<td>Major review paper title and outline</td>
<td>Feb. 25, 2021</td>
<td>10</td>
<td>Outcomes #1 to 3</td>
</tr>
<tr>
<td>Paper critique as a primary reviewer (once)</td>
<td>March 11, 2021</td>
<td>20</td>
<td>Outcomes #1 to 3</td>
</tr>
<tr>
<td>Paper critique as a secondary reviewer (2 times)</td>
<td>March 11, 2021</td>
<td>10 (2 x 5% each)</td>
<td>Outcomes #1 to 3</td>
</tr>
<tr>
<td>Major review paper oral presentation to class</td>
<td>April 15, 2021</td>
<td>20</td>
<td>Outcome #4</td>
</tr>
<tr>
<td>Participation in class discussions after the Winter Break</td>
<td>April 15, 2021</td>
<td>5</td>
<td>Outcomes #1 to 4</td>
</tr>
<tr>
<td>Major review paper</td>
<td>April 27, 2021</td>
<td>30</td>
<td>Outcomes #1 to 3</td>
</tr>
</tbody>
</table>

**Participation in Class Discussion before the Winter Break (5%)**  
*Date:* Thu, Jan 14 - Thu, Feb 11  
*Learning Outcome:* 1, 2, 3, 4

**Major Review Paper - Title and Outline (10%)**  
*Date:* Thu, Feb 25  
*Learning Outcome:* 1, 2, 3

**Paper Critique as a Primary Reviewer (20%)**  
*Date:* Thu, Mar 11  
*Learning Outcome:* 1, 2, 3

**Paper Critique as a Secondary Reviewer (10%)**  
*Date:* Thu, Mar 11  
*Learning Outcome:* 1, 2, 3  
(2 x 5% each)

**Major Review Paper - Oral Presentation to Class (20%)**
Date: Thu, Mar 18 - Thu, Apr 8  
Learning Outcome: 4  

Participation in Class Discussion after the Winter Break (5%)  
Date: Thu, Feb 25 - Thu, Apr 8  
Learning Outcome: 1, 2, 3, 4  

Major Review Paper (30%)  
Date: Tue, Apr 27  
Learning Outcome: 1, 2, 3  

6.3 Additional Notes  
Marking rubrics for students’ class participation will be provided to class students at the beginning of the semester.  
Specific guidelines regarding how to lead an original paper critique as a primary reviewer and a secondary reviewer as well as marking rubrics will be provided to class students at the beginning of the semester.  
Specific guidelines regarding how to develop a major review paper outline and write up the review paper; and their marking rubrics will be provided to class students at the beginning of the semester.  
Specific guidelines regarding how to prepare an overview PowerPoint file; and present an oral major review paper to class; and the oral presentation evaluation rubrics will be provided to class students at the beginning of the semester.  

7 Course Statements  

7.1 Grading Policies  
Students’ PowerPoint presentation files will be submitted to the instructor via email immediately after class presentations for class posting on the course site. Students’ paper critique and major review paper assignments are to be prepared in a MS Word file and will be submitted to the instructor for marking via email by following the suggested due dates. There will be a reduction of 5% as a late penalty for each day.  

7.2 Course Policy on Group Work
7.3 Course Policy regarding use of electronic devices and recording of Lectures

Electronic recording of classes is expressly forbidden without consent of the instructor. When recordings are permitted they are solely for the use of the authorized student and may not be reproduced, or transmitted to others, without the express written consent of the instructor. By enrolling in a course, unless explicitly stated and brought forward to their instructor, it is assumed that students agree to the possibility of being recorded during lecture, seminar or other “live” course activities, whether delivery is in-class or online/remote. If a student prefers not to be distinguishable during a recording, they may:

1. turn off their camera
2. mute their microphone
3. edit their name (e.g., initials only) upon entry to each session
4. use the chat function to pose questions.

Students who express to their instructor that they, or a reference to their name or person, do not wish to be recorded may discuss possible alternatives or accommodations with their instructor.

Online Behaviour

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

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-reg- regchg.shtml

Associate Diploma Calendar - Dropping Courses
https://www.uoguelph.ca/registrar/calendars/diploma/current/c08/c08-drop.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
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-academicmisconduct.shtml

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

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.