

Seminar in Genetics

Biology 4950

Course Outline/Syllabus Winter 2025

This course reviews, evaluates, and discusses current research in biology and genetics using a combination of student presentations and written assignments.

1. Instructor Information

Professor: Dr Amanda Moehring (she/her)

Office hours: Virtually, by appointment

Contact information: amoehrin@uwo.ca

Students must put “BIO4950” in the subject line when contacting the instructor Sign your email with your first and last name so it is clear who it is from. Emails are answered within 2 business days, with the limitations below:

- Questions about course material should be posted on the forum or brought up in class so that other students can benefit from the answer.
- I will not respond to questions that can be answered in the syllabus. Being able to find information yourself is an important soft-skill and an employable outcome.
- All requests for accommodation must be handled through the Academic Counseling Office.

2. Prerequisites

Prerequisites: Enrollment in year 4 of the Honors Specialization in Genetics, or permission of the Genetics Undergraduate Coordinator and course instructor. A minimum grade of 70% in Biology 3596A/B.

Antirequisites: Biology 4920F/G, 4944F/G, 4930F/G, 4931F/G, or the former Biology 4932F/G, 4941E, 4943E, 4946E

Unless you have either the prerequisites for this course or written special permission from your Dean’s Designate (Department/Program Counsellors and Science Academic Counselling) to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees if you are dropped from a course for failing to have the necessary prerequisites.

3. Schedule, Learning Outcomes, Delivery Mode

Please see course time and location information on OWL

Learning outcomes: On successful completion of this course students will be able to:

- Ask open questions
- Participate productively in discussions
- Reflect, evaluate and critique talks and seminars
- Reflect, evaluate and critique popular science writing.
- Write an effective social media post
- Produce an effective short video
- Participate in a journal club and describe and critique primary research papers
- Perform effective searches in reputable internet sources
- Work effectively in a team
- Understand, discuss and debate current topics in genetics

Course delivery and contingency plan: This course will be delivered in-person, however in the unlikely event of any university-declared emergency, some or all of this course may be required to be delivered online, either synchronously or asynchronously. *The grading scheme will not change.* Any assessments affected will be conducted online as determined by the professor.

4. Course Materials

Textbook: *There is no textbook for this course.* Instead of a course textbook, required material is posted to OWL. Students are responsible for checking OWL (<http://owl.uwo.ca>) on a regular basis for news and updates. This is the primary method by which information will be disseminated to all students in the class.

If students need assistance with the course OWL site, they can seek support on the OWL Help page. Alternatively, they can contact the Western Technology Services Helpdesk, which can be contacted by phone at 519-661-3800 or ext. 83800.

Required Equipment:



Stable internet connection



Laptop or computer with webcam



Working microphone

5. Methods of Evaluation

The final mark will be composed of the following:

- Annotations (3): 10%
- Commentaries (3): 10%
- Assignments on research presentations (2): 25%
- Debates (2): 25%
- Presentation (1): 15%
- Participation: 15%

Annotations: Students will provide an annotation of one research article for each of the seminars we will be attending. See more information on OWL.

Commentaries: Students will identify an engaging item related to genetics (text thread, short video, or popular science article, depending on the assignment). Students will submit this item along with a commentary listing, in bullet-point form, five things that item did really well and five things the item did poorly or could improve on. The descriptions of ‘good’ and ‘bad’ aspects should be approximately 1-2 sentences each. See more information on OWL.

Assignments on research presentations: See OWL for more information.

Text thread: Students will create a text thread (similar to Twitter, Bluesky, Tumblr, etc) on the first research seminar presentation. This is worth 5% of the final mark.

TikTok video: Students will create a short video (similar to TikTok) on the second research seminar presentation. This is worth 15% of the final mark.

Debates: Students in groups of 2-3 will defend one side of an ethical debate related to genetics; another group will defend the other side of the debate. Students will have to prepare to defend either side of the debate, and the side they will defend will be decided by a coin flip. The first debate will be worth 10% of the final mark; the second debate will be worth 15% (so 25% total). 40% of the mark will come from peers and 60% from the instructor. See OWL for more information.

Presentation: Students in groups of 2-3 will give a presentation on a recent scientific article, containing the relevant key information, and a media article that covered that scientific article. 40% of the mark will come from peers and 60% from the instructor. See OWL for more information.

Participation: Students must engage in discussions, ask questions, provide feedback to peers, and participate respectfully in the course. Students must also be mindful of not dominating discussions, allowing space for others to contribute.

Essential Learning Requirements: Students who do not complete at least 75% of the course components will receive a grade of 45%.

Late policy: Assignments submitted past the due date will be subject to a 10% penalty per day. Assignments without accommodation that are 4 days or more late past the original due date will be given a score of 0%. See “Student Absences” below for more information on missed assignments.

FLEXIBLE DUE DATES: Life happens. All students are given three days of flex time to use where they want to turn in assignments late without penalty. No formal accommodation is needed to use these days, but the student **must** inform the instructor by email by the due date/time that they are using their flex day(s) on that assignment. All days can be used on one assignment, or the days can be used independently on separate assignments (e.g., two days on one and one day on another, or one day per each of three assignments). These flex days cannot be combined with formal accommodation, and do not extend the period outlined in the Late Policy (eg, if an assignment gets a two day extension then is an additional day late, it will receive a 30% penalty). Flex days also cannot be used for the debates or presentations.

The table below outlines the University-wide grade descriptors.

A+	90-100	One could scarcely expect better from a student at this level
A	80-89	Superior work which is clearly above average
B	70-79	Good work, meeting all requirements, and eminently satisfactory
C	60-69	Competent work, meeting requirements
D	50-59	Fair work, minimally acceptable
F	below 50	Fail

6. Land acknowledgment

We acknowledge that Western University is located on the traditional lands of the Anishinaabek, Haudenosaunee, Lūnaapéewak and Attawandaron peoples, on lands connected with the London Township and Sombra Treaties of 1796 and the Dish with One Spoon Covenant Wampum. This land continues to be home to diverse Indigenous peoples (e.g. First Nations, Métis and Inuit) whom we recognize as contemporary stewards of the land and vital contributors of our society.

7. Student Absences

All Academic Consideration requests normally must include supporting documentation; however, recognizing that formal documentation may not be available in some extenuating circumstances, the policy allows students to make one Academic Consideration request without supporting documentation in this course. However, the following assessments are excluded from this, and therefore always require formal supporting documentation: Debates and Presentations.

When a student mistakenly submits their one allowed Academic Consideration request without supporting documentation for the assessments listed above or those in the Coursework with Assessment Flexibility section below, the request cannot be recalled and reapplied. This privilege is forfeited.

Evaluation Scheme for Missed Assessments

Late submissions are accepted and penalties waived with proof of accommodation. If assignment extensions due to accommodated absences extend past April 11th, the course component will be reweighted either onto the other similar components, if applicable, or evenly onto all components if no similar components exist. Academic accommodation can be received through the steps outlined in the following section. If you are unable to meet a course requirement due to illness or other serious circumstances, please follow the procedures below.

For absences, you must provide valid medical or supporting documentation to the Academic Counselling Office of your Faculty of Registration as soon as possible. For further information, please consult the University's medical illness policy at

https://uwo.ca/univsec/pdf/academic_policies/appeals/academic_consideration.pdf.

The Student Medical Certificate is available at

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf.

8. Accommodation and Accessibility

Religious Accommodation

When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request accommodation for their absence in writing at least two weeks prior to the holiday to the course instructor and/or the Academic Counselling office of their Faculty of Registration. Please consult University's list of recognized religious holidays (updated annually) at

<https://multiculturalcalendar.com/ecal/index.php?s=c-univwo>.

Accommodation Policies

Students with disabilities are encouraged to contact Accessible Education, which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found at:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Accommodation_disabilities.pdf.

9. Academic Policies

The website for Registrarial Services is <http://www.registrar.uwo.ca>.

In accordance with policy,

https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf,

the centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at their official university address is attended to in a timely manner.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf.

TurnItIn: All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

10. Support Services

Please visit the Science & Basic Medical Sciences Academic Counselling webpage for information on adding/dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters: <https://www.uwo.ca/sci/counselling/>.

Students who are in emotional/mental distress should refer to Mental Health@Western (<https://uwo.ca/health/>) for a complete list of options about how to obtain help.

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at

https://www.uwo.ca/health/student_support/survivor_support/get-help.html.

To connect with a case manager or set up an appointment, please contact support@uwo.ca.

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Accessible Education at

http://academicsupport.uwo.ca/accessible_education/index.html

if you have any questions regarding accommodations.

Learning-skills counsellors at the Student Development Centre (<https://learning.uwo.ca>) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Western University is committed to a thriving campus as we deliver our courses in the mixed model of both virtual and face-to-face formats. We encourage you to check out the Digital Student Experience website to manage your academics and well-being: <https://www.uwo.ca/se/digital/>.

Additional student-run support services are offered by the USC, <https://westernusc.ca/services/>.