

# Seminar in Genetics

## Biology 4950

Course Outline/Syllabus Winter 2024

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 “BIO3467” 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

See the syllabus on OWL for room and time information and the class calendar.

**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
- Generate an effective infographic
- 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): 15%
- Assignments on research presentations (3): 20%
- Debates (2): 25%
- Presentation: 15%

Participation: 15%

**Annotations:** Students will provide an annotation of one or two research articles for each of the three seminars we will be attending. See more information on OWL.

**Commentaries:** Students will identify an engaging item related to genetics (infographic, text thread, 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. Each commentary is worth 5% of the final mark (15% total). See more information on OWL.

**Assignments on research presentations:** See OWL for more information.

**Infographic:** Students will create an infographic representing a key area of the first research seminar presentation. This is worth 10% of the final mark.

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

**TikTok video:** Students will create a video (similar to TikTok) on the third research seminar presentation. This is worth 5% 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). See OWL for more information.

**Presentation:** Students in groups of 1-2 will give a presentation on a recent scientific article, containing the relevant key information, with the content presentation geared towards the general public. This is worth 15% of the final mark. 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. This component is worth 15% of the final mark.

**Other:** See “tentative calendar” above for due dates.

All assignments are due by **10:30 am** of the date listed unless otherwise stated.

Assignments will be submitted to Turnitin (statement in policies below).

Note that there is no final exam for this course.

**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. 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

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

**TurnItIn:**

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.