

BIOLOGY 3595B:

advanced genetics

WINTER 2017
ROOM **TC-203** (MON, WED)
ROOM **NCB-117** (FRI)
12:30-1:30

Instructor: **David Smith** | BGS 3028 | office hours (in-person): THU 12:00-1:00 | dsmit242@uwo.ca

About the class: The fields of genetics and genomics are becoming more and more important and integral to science, health, and public life. Dramatic leaps forward in DNA sequencing technologies and bioinformatics have brought the power of genomics to the scientific masses, and society as a whole. In turn, genetic research is progressing at a startling pace, raising hopes for improvements in quality of life as well as bringing ethical and environmental concerns. This course focuses on the changing landscape of advanced genetic research, with a focus on genomics, bioinformatics, molecular evolution, and the underlying motives driving scientists. Through lectures, workshops, discussions, and visiting experts, we will try to put our fingers on the ever-changing pulse of contemporary genetics.

Text: All materials will be provided online via OWL.

Course website: OWL (<http://owl.uwo.ca>) will be the central location for materials relating to 3595B.

Evaluation:

midterm exam

(Lectures 1-12)

Fri Mar 1
(WSC 55,
1.5 hours)



Assignments & Grading **pg 2–3**, Tentative Course Schedule **pg 4**,
Additional Statements **pg 5**

3. Midterm exam.

The midterm exam will be based on the material and readings covered in the lectures, including workshops and Q&A sessions, from **Jan 10 to Feb 16**. The exam will be a in-class/in-person test (1.5 hours) on ... The exam will include a mix of multiple-choice questions as well as short and long answer questions.

Grading: The midterm exam represents 31% of the final grade.

Make-up final exam: Date and time TBD.

4. Final exam.

The final exam will be based on the material and readings covered in the lectures, including workshops and Q&A sessions, from **Feb 28 to Apr 5**. The exam is a in-class/

TENTATIVE COURSE SCHEDULE (SUBJECT TO CHANGE)

(Note: the most up-to-date version is posted on OWL under the "Course Schedule" tab.)

Land Acknowledgement: We acknowledge that Western University is located on the traditional lands of the Anishinaabek, Haudenosaunee, L'naapéewak, and Chonnonton Nations, 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 (First Nations, Métis and Inuit) whom we recognize as contemporary stewards of the land and vital contributors of our society. Throughout Canada, North America, and the world, Indigenous Peoples are vital contributors to their communities, and we greatly value their presence, knowledge, and wisdom.