Toxicology Program Policy on the Use of Generative Artificial Intelligence in Teaching and Learning

November 2025

The Toxicology Program recognizes that future graduates of our programs will need to be competent in using generative artificial intelligence (genAl) in an ethical manner. Workers who have comfort and skill with genAl applications will likely have a competitive advantage in the future marketplace. As such, the Toxicology Program aims for the judicious use of genAl in programming by students, staff and faculty.

This policy applies to both undergraduate and graduate programs, including PhD candidacy assessments, graduate and undergraduate theses, and courses.

A joint committee representing the Toxicology Undergraduate Programs Advisory Committee and the Toxicology Graduate Studies Committee met and considered three main policy options:

- 1) An outright ban on all genAl use in scholarly activities;
- 2) No restrictions on the use of genAI;
- 3) A flexible option where instructors/committee members/examiners specify the restrictions on genAl for a given assessment.

Option 1 was rejected for several reasons. It is untenable because detection tools are flawed, students require training in genAl because of the likely future pervasiveness of the technology in the workplace, and because academic freedom dictates that individual instructors should have the ability to use genAl in individual classes as appropriate for their learning objectives.

Option 2 was rejected because the committee felt that some restrictions should be put in place. Many of the attributes that we seek in our graduates require them to demonstrate original thinking, creativity, synthesis and integration of information, and written communication skills, which could be compromised by unrestricted genAl use.

Option 3 is considered the optimal approach which strikes an appropriate balance between restriction and permission. Assessments will range from in-person exams where no genAl will be allowed to activities such as the generation of code or boilerplate text where genAl is ideally suited to improve efficiency.

Graduate and undergraduate courses: Each assessment activity within courses should be specified on the ladder of genAl use (Figure 1). The figure provides potential language to be used in course syllabi to describe acceptable levels of genAl use for each individual assessment. In all cases where Al is used (steps 3 to 6 on the ladder in Figure 1), the student must provide a transparency report as an appendix that describes how genAl was used and provide dated example prompts that were used to create content. In these cases, evaluators should be assessing the prompts that students used in addition to the end product that was submitted.

PhD candidacy assessments: The Toxicology Graduate Studies Committee will meet in the near future to determine what will be permitted on the ladder of genAI use.

Graduate theses: The supervisor, student and committee should work together early in the student's program to determine where on the ladder the student will be operating. This may be informed by journal policies in the intended submission venues for the student, as well as the nature of the work undertaken.

Admission packages: The Toxicology Graduate Program reserves the right to reject applicants for admission if there is clear evidence of undeclared genAI use in admission applications.

Additional information: Some direction and additional resources are available from the Western Canadian Deans of Graduate Studies working group on genAI:

http://wcdgs.ca/content/dam/ex/wcdgs/Nov24_2023WorkingGroupReport_GenerativeAl_GraduateRese arch_SupervisionDeliverables.pdf

Other considerations: All users should exercise care when uploading original research data of any kind to a genAl platform because it could violate a copyright or data-confidentiality agreement. Students should explicitly seek written permission from all potentially affected parties prior to doing so.

Figure 1. Ladder of genAl use. Adapted by Susan Bens (Usask) from:

https://scalar.usc.edu/works/c2c-digital-magazine-fall-2023--winter-2024/media/01_Rethinking_PlagiarismContinuum_ScaleOnly.png (image/PNG)

Rethinking "plagiarism" and "cheating"

Al-generated

Human-generated

Sample language for course syllabi

Student plugged prompt into AI, copied response and submitted it to teacher.

Al created a response. Student read, edited, adjusted, and submitted.

Student created multiple AI responses, used the best parts, edited, and submitted.

Student wrote main ideas. Al generated a draft and offered feedback to improve.

Student consulted internet/Al for ideas, then wrote and submitted.

Student wrote all assignment content without consulting AI or the internet.

Any and all uses of GenAI will be permitted for this assessment

You may use GenAl to create responses that you adjust for accuracy or completeness and edit to meet the criteria. You must provide the original GenAl content as an appendix. Failure to submit GenAl content you have used will be regarded as academic misconduct.

You may use GenAl content throughout your assessment with acknowledgements as per the citation protocol in use for this course. Unacknowledged use of content produced by GenAl will be regarded as academic misconduct.

You must be the author of all content for this assessment. Use of content produced by GenAI will be regarded as academic misconduct. GenAI may be used to improve form of this assessment. Form improvements may include (insert). The nature of GenAI use and improvements must be acknowledged using the (insert provided format/template).

You must be the author of all content for this assessment. GenAl may be consulted for ideas only. Use of content produced by GenAl will be regarded as academic misconduct.

Any and all uses of GenAI will be considered academic misconduct for this assessment