

Minor Modification Proposal

Faculty: Health

Department: Psychology / Biology / Kine

Program: Neuroscience Diploma

Degree Designation: Graduate Diploma (Neuroscience)

Type of Modification: Minor; edits to course requirements

Location (*current campus and, if applicable, proposed*): Keele

Effective Date: Fall 2026

Approval Date at Faculty Council:

1. Describe the proposed modifications to the program.

We propose a **minor modification to the breadth requirement** in the Neuroscience Graduate Diploma. Currently, students are required to complete a *comprehensive review paper* on a topic outside their thesis area. Given recent advances in generative AI, this format no longer effectively assesses students' independent breadth or synthesis skills.

To preserve the original intent of the requirement, demonstrating integrative understanding of neuroscience beyond the student's research focus, we propose maintaining the same **content scope** but offering **alternative delivery formats**. Students will now have the option to fulfill the breadth requirement through **one** of the following:

1. Delivering a guest lecture in an undergraduate neuroscience-related course (with instructor approval);
2. Preparing a *Journal Club*-style critique or commentary for submission to a peer-reviewed venue (e.g., *Journal of Neuroscience* "Journal Club" or *Journal of Neurophysiology* "NeuroForum"); or
3. Producing a 15–20 minute recorded podcast or presentation explaining a neuroscience topic outside their thesis area.

This change is **minor** in nature: it does not alter program length, structure, or learning outcomes—only the *mode of assessment* for the existing breadth requirement. The steering committee voted in favor of this modification.

2. Provide a rationale for the proposed modifications.

The current breadth requirement (a comprehensive review paper) can now be easily completed using AI tools, limiting its educational value. The proposed alternatives maintain the same learning objectives, developing breadth and communication skills beyond the thesis area, while promoting authentic engagement, creativity, and skill diversity through more interactive and verifiable formats.

3. How will the proposed modification support the achievement of Program Learning Outcomes?

The new formats strengthen the program's learning outcomes by promoting critical thinking, synthesis of knowledge beyond the student's research area, and effective scientific communication. Whether through teaching, peer-reviewed writing, or podcast presentation, students will demonstrate integrative understanding and the ability to translate neuroscience concepts for diverse audiences, key outcomes of the diploma.

4. Describe how students currently enrolled in the program will be accommodated.

Students currently enrolled in the program will retain the option to complete the original **comprehensive review paper** or select one of the new alternatives (guest lecture, journal club critique, or podcast). This flexible approach ensures no disadvantage to current students while allowing immediate piloting of the new formats.

5. Describe any resource implications and how they are being addressed (e.g., through a reallocation of existing resources). If new/additional resources are required, provide a statement from the relevant Dean(s)/Principal confirming resources will be in place to implement the changes.

There are **no additional resource requirements** associated with this modification. The Neuroscience Diploma Coordinator will continue to verify completion of the breadth requirement, as was done previously. All new assignment formats will be managed within existing administrative and instructional structures.

6. If relevant, summarize the consultation undertaken with relevant academic units, including commentary on the impact of the proposed changes on other programs. Provide individual statements from the relevant program(s) confirming consultation and their support.

The proposed change was discussed and unanimously supported by the **Neuroscience Graduate Diploma Steering Committee**, which includes representatives from Psychology, Kinesiology, Biology, and EECS. Because the modification does not alter course content, program length, or resource allocation, there is **no impact on other programs**. Committee members confirmed that the change aligns with the interdisciplinary goals of the diploma and enhances academic integrity in the AI era.

APPENDIX

Attach a Side-by-Side Academic Calendar Copy Comparison

Ensure that deletions are indicated with strikethrough (e.g., ~~striethrough~~) text and additions are made in a contrasting colour (e.g., **KINE 1000**)

Existing Calendar Copy	Proposed Calendar Copy
<p>GRADUATE DIPLOMA (NEUROSCIENCE)</p> <p>Graduate Diploma in Neuroscience students must successfully complete the following requirements:</p> <p>Thesis or Dissertation Topic</p> <p>Successful concurrent completion of a master’s thesis or PhD dissertation in the field of neuroscience under the supervision of a core faculty member.</p> <p>Enrollment and Participation</p> <p>Minimum two-year consecutive participation in the Graduate Diploma in Neuroscience.</p> <p>Coursework</p> <p>Successful completion of two half-credit graduate courses in neuroscience:</p> <p>Kinesiology & Health Science 6155 3.0: Fundamentals of Neuroscience I: Structures, Neurons and Synapses/Same as Biology</p>	<p>GRADUATE DIPLOMA (NEUROSCIENCE)</p> <p>Graduate Diploma in Neuroscience students must successfully complete the following requirements:</p> <p>Thesis or Dissertation Topic</p> <p>Successful concurrent completion of a master’s thesis or PhD dissertation in the field of neuroscience under the supervision of a core faculty member.</p> <p>Enrollment and Participation</p> <p>Minimum two-year consecutive participation in the Graduate Diploma in Neuroscience.</p> <p>Coursework</p> <p>Successful completion of two half-credit graduate courses in neuroscience:</p> <p>Kinesiology & Health Science 6155 3.0: Fundamentals of Neuroscience I: Structures, Neurons and Synapses/Same as Biology</p>

<p>5146 3.0 and Psychology 6257 3.0, and Psychology 6253 3.0: Fundamentals of Neuroscience II: Circuits, Systems and Behaviour/Same as Biology 5147 3.0 and Kinesiology & Health Science 6156 3.0. Please note that these two courses may also count towards the degree requirement of the student’s graduate program.</p> <p>Neuroscience Seminar</p> <p>Attendance at all sessions of the monthly neuroscience seminar series, by both first and second year graduate diploma students.</p> <p>First-year graduate diploma students only are required to read monthly seminar articles, submit two questions, and meet with the speaker.</p> <p>Neuroscience Review Paper</p> <p>Successful completion of a neuroscience review paper:</p> <p>the topic must be selected in consultation with the student’s supervisor;</p> <p>the main review paper approval form must be submitted</p> <p>the student must be the sole author;</p> <p>paper must be in journal format (e.g., Nature Reviews);</p> <p>the paper must be approximately 6000 words in length, not including references; and,</p>	<p>5146 3.0 and Psychology 6257 3.0, and Psychology 6253 3.0: Fundamentals of Neuroscience II: Circuits, Systems and Behaviour/Same as Biology 5147 3.0 and Kinesiology & Health Science 6156 3.0. Please note that these two courses may also count towards the degree requirement of the student’s graduate program.</p> <p>Neuroscience Seminar</p> <p>Attendance at all sessions of the monthly neuroscience seminar series, by both first and second year graduate diploma students.</p> <p>First-year graduate diploma students only are required to read monthly seminar articles, submit two questions, and meet with the speaker.</p> <p>Neuroscience Breadth Requirement</p> <p>Successful completion of a breadth assignment on a neuroscience topic outside the student’s thesis area, selected in consultation with the supervisor.</p> <p>Students may fulfill this requirement through one of the following formats:</p> <ol style="list-style-type: none"> 1. Guest Lecture – Deliver a lecture in an undergraduate neuroscience-related course (with instructor approval). 2. Journal Club Critique – Prepare a concise, journal-style critique (e.g., Journal of Neuroscience “Journal Club,” Journal of Neurophysiology “NeuroForum”) for submission. 3. Podcast or Recorded Presentation – Produce a 15–20 minute recorded
---	--

<p>references must be primarily to original sources and must be extensive enough to thoroughly cover the topic.</p> <p>Research Day. Research presentation</p> <p>A 10-15 minute presentation of students' own research to members of the graduate diploma, followed by a question and answer period.</p> <p>For more information including how to apply to the graduate diploma, please go to: yorku.ca/gradstudies/neuroscience/.</p>	<p>talk explaining a neuroscience topic for a general or student audience.</p> <p>All options require prior approval from the Diploma Coordinator and documentation of completion.</p> <p>The assignment must demonstrate independent synthesis and communication of neuroscience concepts beyond the student's primary research focus.</p> <p>Research Day. Research presentation</p> <p>A 10-15 minute presentation of students' own research to members of the graduate diploma, followed by a question and answer period.</p> <p>For more information including how to apply to the graduate diploma, please go to: yorku.ca/gradstudies/neuroscience/.</p>
--	---