REPORT OF THE ACADEMIC PLANNING COMMITTEE
TO THE REGULAR February 2020 SENATE

FOR DISCUSSION

QUALITY ASSURANCE - CYCLICAL PROGRAM REVIEW OF LAURENTIAN UNIVERSITY'S
BSc. (Honours) PROGRAM in BEHAVIOURAL NEUROSCIENCE
FINAL ASSESSMENT REPORT & IMPLEMENTATION PLAN, FEBRUARY 2020

In accordance with the Laurentian University's Institutional Quality Assurance Process (IQAP), the Final Assessment Report has been prepared to provide a synthesis of the external evaluation and Laurentian's response and action plan. This report identifies the significant strengths of the program, opportunities for program improvement and enhancement, and sets out and prioritizes the recommendations that have been selected for implementation.

The report includes an Implementation Plan that identifies who will be responsible for approving the recommendations set out in the Final Assessment Report; who will be responsible for providing any resources made necessary by those recommendations; any changes in organization, policy or governance that will be necessary to meet the recommendations; who will be responsible for acting on those recommendations; and timelines for acting on and monitoring the implementation of those recommendations.

SUMMARY OF THE CYCLICAL PROGRAM REVIEW OF LAURENTIAN'S BSc. (Honours) PROGRAM
In
BEHAVIOURAL NEUROSCIENCE

Established in 1982, the Behavioural Neuroscience program was the first program of its kind in Canada. The program was founded on the innovative amalgamation of biology, chemistry, physics, and psychology. Traditional neuroscience programs included the anatomical study of the nervous system coupled with a specialization in one particular level of discourse (i.e. molecular, chemical, or cognitive, etc.). To this day, Laurentian University's undergraduate Behavioural Neuroscience program remains unique in that it singularly encompasses all levels of organization from quanta to population psychology in its instructional programming and research. This program leads to an Honours Bachelor of Science (4 year; specialization).

In August 2017, the program submitted its self-study to the Office of Vice-President Academic and Provost of Laurentian University. The study was divided into three parts and included two Appendices.

Part 1 of the self-study presented an overview of the program and then reviewed the program's self-perception of the faculty, physical resources, students, program regulations, and how the program harmonized with the strategic goals and mission of the University. It concluded with an overall assessment of the program's strengths and weaknesses. There was no information supplied in Part 2 of the study (the curriculum vitae of the faculty—since that information was transferred to Appendix I). Likewise, Part 3 of the study, the List of Proposed Consultants, was also left blank. As noted, Appendix I contained the curriculum vitae of the one full-time faculty in the program Michael Persinger. His c.v. was followed by the c.vs of the sessional professors associated with the program (Drs. Blake Dotta, Robert Martin Lafrenie, Matias Mariani, and Linda St. Pierre. Appendix II, the Report on Library Resources, was also blank.

On April 13, 2018, after reviewing the self-study, the Review Team conducted a site visit. The external was Dr. Jonathan Britt, an Assistant Professor of Psychology at McGill University. In addition, the team consisted of two Laurentian professors, Dr. Cynthia Whissell (Psychology) and Dr. Eric Gauthier (Chemistry and Biochemistry). Finally, there were two current behavioural neuroscience undergraduate students, Max Lakanen and Teagan Neufeld.

The review team visited much of lab and office space associated with the Behavioural Neuroscience Program, including rooms A221, S-125, S-126, S-708, S-710, C-002, and C-004. It also interviewed several faculty members involved in the Behavioural Neuroscience Program (Drs. Blake Dotta, Rob Lafrenie, and Michael Persinger), Associate Librarian Alain Lamothe, nine undergraduate students enrolled in the program, and two MSc students working under the supervision of Behavioural Neuroscience faculty.
In their report dated November 1, 2018, the reviewers noted that:

- While the Behavioural Neuroscience Program is not specifically mentioned in this Strategic Plan, [which includes "Interdisciplinarity" as one of the University's key strengths] it is certainly one of the University's most interdisciplinary undergraduate programs. It spans the Faculties of Arts and Science and is a true amalgamation of biology, chemistry, physics, and psychology.
- The Behavioural Neuroscience program also embodies the shared values of the University, particularly in regard to the sentiments that "Curiosity Drives Research" and "Teaching and Learning Define Us." The principal faculty members in the program are unquestionably, wholeheartedly committed to the mission of teaching, and current students were effusive about their quality and dedication.
- The program requirements and learning outcomes are clearly described on the University's website. Learning outcomes include creative thinking, empirical research, critical analysis, and observation and communication skills.
- The curriculum nicely reflects the current state of the field. Behaviour Neuroscience is a broad topic, but each faculty member in the program has unique and complementary expertise, ranging from magnetic to molecular to clinical.
- There is ample evidence of innovative and creative teaching in day to day classroom activities. Students spoke highly of the neuroscience Jeopardy game used in PSYC 4706 – Advanced Human Neuroanatomy.
- The program seems quite challenging overall, but it clearly attracts highly motivated, engaged, and intelligent students, who are remarkably passionate about neuroscience.
- The creativity of the exam questions often provoked students to think more deeply about the subject matter and contemplate implications they had not previously considered. Flexible grading schemes were also effectively used to ensure struggling students stayed motivated.
- Faculty members of the program assert that the majority of students who earn an undergraduate degree in Behavioural Neuroscience continue their education in high caliber graduate programs.
- The coordinator of the Behavioural Neuroscience program and only full-time faculty member, Dr. Michael Persinger, is an internationally distinguished scholar, with almost 400 peer-reviewed publications to his name as well as several books, many of which have been highlighted…. He is supported by an outstanding group of sessional lecturers.

The reviewers concluded by noting: “The program is currently very effective and successful, as it has been for more than two decades, longer than most behavioural neuroscience programs throughout the world.”

Amidst these encomiums, there were some concerns expressed about the program in the body of the report.

- Some required courses have not been consistently offered due to budgetary constraints and an insufficient number of full-time faculty associated with the program
- The interdisciplinarity of the program creates administrative issues. The program is officially housed in the Faculty of Science, Engineering and ASrchitecture but all the neuroscience-specific courses have PSYC designations and are administered through the Faculty of Arts
- There is clearly an insufficient administrative support, and research space dedicated to the program
- SCH4U (grade 12 Chemistry) and MCV4U (grade 12 Calculus and Vectors) are not strongly recommended for incoming students, as they are for other the biological and physical science programs at the University.
- One downside of the multidisciplinary nature of the program is that students do not appreciate which of their peers are in the program until their third year. Although the sense of community in the program is quite strong, many students are slow to discover it since there is no central gathering spot, shared study space, or administrative office.

The program submitted its comments on the Report and then sent its comments off to the Dean of Science, Engineering and Architecture. The Dean nicely summarized the Reviewers’ recommendations, the Program’s reaction to those recommendations, and added his own reactions. His report, received on October 25, 2019 appears below.[1]

SUMMARY OF THE REVIEW TEAM’S RECOMMENDATIONS (R) THE PROGRAM’S (P) RESPONSES AS WELL AS THOSE OF THE DEAN OF DEAN OF SCIENCE, ENGINEERING AND ARCHITECTURE (D)

The report submitted by Dr. Jonathan Britt (McGill University) on behalf of the committee that participated in the external review of the Behavioural Neuroscience Program in April 2018 was circulated to the Behavioural Neuroscience Advisory Group for feedback.[2] Below you will find a synopsis of the comments received by the Group (**P)** as well as by the Dean of the Faculty of Science, Engineering, and Architecture **(D)**.

(P) The report was extremely positive confirming the high quality of the program, the commitment of the program's principal faculty members, as well as the program' s ability to provide students with the proper preparation for future careers. The report states that "Behavioural Neuroscience is an increasingly popular, multi-disciplinary field…" which is "unlikely to wane

[1] The extraordinarily long delay between the time the Reviewer’s Report in November 2018 and the Program/Dean’s report in late 2019 reflects the university’s uncertainty about the status of the program after the death of Dr. Persinger on August 14, 2018.

[2] The following persons were consulted for feedback: Crestina Beites, Blake Dotta, Robert Lafrenie, Glenn Legault, Abdel Omri, Linda St. Pierre, Mazen Saleh, Kevin Saroka, Cynthia Whissell, and David Vares. Dr. Helen Joly compiled their comments into the report submitted to the Dean.

anytime soon." Because Laurentian was one of the first institutions to have the foresight to develop a program in Behavioural Neuroscience, and because of its success throughout the years "the program should be a source of pride and carefully protected". With regards to the curriculum the strengths of Laurentian's Behavioural Neuroscience program is its genuinely multi-disciplinary approach, the inclusion of experiential learning and the requirement for a comprehensive research thesis. The Behavioural Neuroscience Program aligns with Laurentian University's Strategic Plan key strengths through 'Interdisciplinarity' and resonates with the university's strategic values of 'Curiosity Drives Research' and 'Teaching and Learning Define Us'.

[The program then added some comments clarifying certain parts of the Reviewer's Report.]

In the summary, [the Program commented] the review is strongly supportive of the Behavioural Neuroscience program and the recommendations made in the report are designed to protect what currently exists and to ensure future growth of the program. These recommendations suggest expanding support to the program by formalizing Neuroscience-based faculty, teaching staff, administrative assistance, and course designations and providing support for research infrastructure.

[The following list of recommendations is organized by priority, as is required by the IQAP Guidelines. The Review Team did not follow these Guidelines—starting out with a recommendation about Grade 12 admission standards.]

R1. Two full time faculty members should be associated with the program.

P1. The members of the advisory committee agree that ideally two full time faculty members dedicated to the Behavioural Neuroscience program would be required to ensure the sustainability of the program. However, the program has succeeded for three decades with a single full-time faculty member and two to four sessional lecturers; few programs of this size can make this claim. The success of the program through one full-time member occurred because Dr. Persinger was the champion of the Behavioural Neuroscience program. Everyone understands that there is no replacing Dr. Persinger, but the model has been shown to be effective. With the hiring of a dedicated individual to oversee and grow the program the substantial successes of Behavioural Neuroscience can continue.

In the short term, the faculty member hired to champion the Behavioural Neuroscience program, in consultation with the advisory group, can investigate the possibility of engaging faculty members from other units with interest in neuroscience-related topics to facilitate program delivery. Besides contribution to teaching, the faculty members could aid in the supervision of undergraduate theses, in student recruitment, etc. As suggested in the report the PhD program in Biomolecular Sciences could be investigated as a possible operational model. It is an interdisciplinary PhD program that relies on faculty members from Biology, Chemistry and Biochemistry, Physics, Behavioural Neuroscience, NOSM and HSNRI and is administered by the Faculty of Science, Engineering and Architecture rather than by a department.

The long-term goal would be to hire a second faculty member dedicated to the program. As

pointed out in the report, interest in Behavioural Neuroscience is "unlikely to wane anytime soon" so we will need to increase the faculty complement so time can be devoted to program delivery, curriculum development, student advising, community outreach, etc.

D1. The Program has been successful in attracting and graduating a good number of students every year under the leadership of Dr. M. Persinger supported by a dedicated group of sessionals. However, this single leadership was also the cause for criticism and demands for more involvement of other full-time faculty members in the running of the Program as well as in the supervision of undergraduate projects. This led to the creation of the Advisory Group.

I totally agree that the Program cannot continue without at least the replacement for Dr. Persinger by a full-time faculty member. This year is a "test" year to see how well the Program will do in terms of recruitment, retention, and restructuring. A decision on the hiring of a full-time faculty member will depend on the outcome of this year.[i]

R2. Create a NSCI course code associated with the Faculty of Science and cross- list the relevant courses with PSYC (e.g. Brain and Behaviour PSYC 2606 / NSCI 2606).

P2. We agree that it would be a benefit to give the courses unique to the Behavioural Neuroscience program their own course code and to cross list those shared with Psychology. This would give the Behavioural Neuroscience program the authority to schedule its courses in timeslots that do not conflict with the other compulsory courses required for the degree. The course code also gives a sense of identity to the program which the students can relate to.

D2. This recommendation has already been approved at all levels, and a unique code for the Behavioural Neuroscience courses will take effect July 2020.

R3. Create a NSCI budget line to ensure the program can offer all of the required courses each year.

P3. Funds will be required to hire sessional faculty to help in the delivery of the program. As the report has pointed out having a budget line for the Behavioural Neuroscience program would ensure that the necessary funds are available. In addition, the program coordinator should have access to funds for recruitment activities, promotional material, social events to foster a sense of community amongst the students, etc.

D3. A separate budget for all "orphan" programs, i.e., programs that are under the Dean and do not belong to a certain, unit has been approved in principle pending the determination of the specific amount for each of these programs.

R4. **Recommendations on Admission requirements:**

a. Make SCH4U (grade 12 Chemistry) strongly recommended

b. Make MCV4U (grade 12 Calculus and Vectors) strongly recommended

P4. The appropriateness of the changes will be considered by the faculty member hired to lead the Behavioural Neuroscience program in consultation with the members of the Advisory group and

any modifications will be submitted for approval by the SEA curriculum committee, the SEA faculty council and CELP.

D4. N/A

R5. **Recommendations on Curriculum Changes**
a. Make 1st year MATH/COSC requirement more specific. Suggestion: MATH 1036 (Calculus , MATH 1037 (Calculus II), MATH 1057 (Linear Algebra), COSC 1046 (Computer Science I), COSC 1047 (Computer Science II)
b. Add BIOL 2126 (Cell Biology) to the list of recommended 2nd and 3rd year BIOL courses. Consider making it strongly suggested or mandatory.
c. Consider replacing STAT 2126 (Introduction to Statistics) with STAT 2246 (Statistics for Sciences)
d. Consider replacing CHMI 4297 (Biochemistry of the Immune System) by CHMI 3217 (Biochemistry of Nucleic Acids) and moving CHMI 4297 to the list of Biochemistry electives.
e. Give students more course options to fulfill their requirements. Specifically consider expanding the list of Biochemistry electives: ii. FROM: CHMI 3217 and CHMI 4217 iii. TO: CHMI 3236, 4206, 4207, 4226, 4237, 4246, 4256, 4287 and 4297.

P 5. The suggestions with regards to the curriculum do not require the creation of new courses. The appropriateness of the changes will be considered by the faculty member hired to lead the Behavioural Neuroscience program in consultation with the members of the Advisory group and any modifications will be submitted for approval by the SEA curriculum committee, the SEA faculty council and CELP.

D5. N/A

R6. **Since there is no neuroscience-specific course in the first year of the program, create another way for neuroscience students to find each other (e.g., annual event or shared office space, or photo-board).**

P6. There is no question that the sense of community is important. Reaching out to the first-year students is a good way to improve retention of students in the program. The hosting of an annual event and the mounting of a photo-board are in the purview of the program. However, such projects would require that the program lead have access to administrative assistance.

D6. It is very important to create a sense of belonging for all students in the Behavioural Neuroscience program, especially as there does not exist a distinct Behavioural Neuroscience course at the first-year level. One way for doing this is to organize social activities for these students, such as a welcome reception for first year students. Another possibility is to dedicate one of the sections of PSYC 1105E to science students.

R7. **Raise the profile of the program on and off campus**
a. Encourage participation in Research Week on campus

b. Organize community outreach activities (e.g., visit grade schools and high schools with brain specimen).

P7. As a point of clarification, many of the graduate students working on Behavioural Neuroscience related projects have presented their research findings in the Graduate Student Symposium that occurs during Research Week. We will continue to encourage our students to do so. Also, individuals associated with the Behavioural Neuroscience program have participated in Laurentian University's Open Houses.

D7. It is to be noted that this is the first year that the Behavioural Neuroscience program will have a distinct representation at the Ontario University Fair (OUF 2019).

ACAPLAN'S RESPONSE

ACAPLAN endorses the recommendations of the Review Team but notes the following recommendations have not been included:

R2. Create a NSCI course code associated with the Faculty of Science and cross- list the relevant courses with PSYC (e.g. Brain and Behaviour PSYC 2606 / NSCI 2606).

Reason: The new course codes will come into effect July 2020.

R3. Create a NSCI budget line to ensure the program can offer all required courses each year.

Reason: The Dean has done this.

R6. Since there is no neuroscience-specific course in the first year of the program, create another way for neuroscience students to find each other (e.g., annual event or shared office space, or photo-board).

Reason: This review recommends the creation of a first-year course introducing students to Behavioural Neuroscience.

R7. Raise the profile of the program on and off campus
a. Encourage participation in Research Week on campus
b. Organize community outreach activities (e.g., visit grade schools and high schools with brain specimen).

Reason: The Interim Program Head, Dr. Blake Dotta is already doing this. For example, he represented the program at the 2019 Ontario Universities' Fair for the first time.

The remaining recommendations deal with the program's placement and structure as well as its curriculum all in the context of the loss of Dr. Persinger, a force of nature who championed the program since its inception.

Program Placement and Structure

Throughout its existence Behavioural Neuroscience has been housed in the Faculty of Science Engineering and Architecture and this is where it should remain.

The more important question is: what structure should this program have? The review report suggested that "The Behavioural Neuroscience program could be remodeled to be more like the Biomolecular Science program, which also does not have an official department and is administered by the Faculty of Science, Engineering and Architecture."

In the very short run this makes sense. The first faculty hired for a tenure-track position in the program will have to be assigned to an existing department or school[3] and the program itself would, like Biomolecular Science be attached to the faculty. But as the program adds a second full-time faculty member and gathers a cluster of other faculty members as cross-appointments, this model would become less than ideal. Biomolecular Science is a doctoral program and while many of the graduates of the Behavioural Neuroscience program end up doing doctoral work, in fact the undergraduate program in Forensic Science suggests a more relevant model.

That program started off with the hiring of Dr. Scott Fairgrieve to the Anthropology Department with an early cross-appointment to the Department of Biology, and in 2004, as his courses in forensic biology gained widespread popularity, Senate decided to transfer forensic science to the science faculty whilst at the same time setting up a small department, a department which as the following chart indicates keeps growing.

	Academic Year	Applications	Enrolment	Degree Granted	Ratio Enrolment from Applications	Ratio Degrees Granted from Enrolment	
Forensic Science	2018-2019	277	127	29	45.85%	22.83%	
	2017-2018	202	132	19	65.35%	14.39%	
	2016-2017	224	120	23	53.57%	19.17%	
	2015-2016	182	123	15	67.58%	12.20%	
	2014-2015	204	119	12	58.33%	10.08%	
	2013-2014	173	102	14	58.96%	13.73%	
	2012-2013	189	89	14	47.09%	15.73%	
		194.4	**110.6**	**15.6**	**57.11%**	**14.18%**	**Average**

ACAPLAN is suggesting that before long, Senate also consider setting up a small but separate department of Behavioural Neuroscience in the Faculty of Science, Engineering, and Architecture. Like Forensic Science, there would appear to be little reason that a strong program housed in its own department could not attract the students needed to sustain it. A separate department has a visible physical location, a support person attached and its own budget. The same rationale partially underlay the recent decision by Senate to transfer the Geography program out from the School of Northern Studies to its own newly constituted Department.

In addition, like Forensic Science, Behavioural Neuroscience has grown in *popularity as a discipline* over the last 40 years. As Dr. Roelof Eikelboom and Dawn Good the two external reviewers of the program pointed out in 2010 in an earlier review: [Behavioural Neuroscience] is …. an enterprise that continues to grow exponentially in terms of the numbers of investigators and scientists (e.g., attendance at meetings of the Society for Neuroscience has increased annually from approximately 1,000 since the inaugural meeting in 1971 to the current attendance of approximately 35,000."

[3] This is a requirement of the Collective Agreement signed between the Laurentian University Faculty Association and the Board of Governors. See Article 5.20.2 b).

Here is a snapshot of the applications / admissions over the past seven years[4] that suggests there is strong interest in the program that can only grow at it becomes more stable.

Program	Academic Year	Applications	Enrolment	Degree Granted	Ratio Enrolment from Applications	Ratio Degrees Granted from Enrolment	
Behavioural Neuroscience	2018-2019	108	56	4	51.85%	7.14%	
	2017-2018	96	50	8	52.08%	16.00%	
	2016-2017	132	51	5	38.64%	9.80%	
	2015-2016	98	49	9	50.00%	18.37%	
	2014-2015	120	61	3	50.83%	4.92%	
	2013-2014	106	38	4	35.85%	10.53%	
	2012-2013	7	16	2	228.57%	12.50%	
		92.6	**43.0**	**4.6**	**43.83%**	**11.22%**	**Average**

ACAPLAN also believes that the new Department needs at least two full-time faculty attached to it.

To be sure, the reviewer noted: "Dr. Persinger's professional background in Clinical Neuropsychology and his expertise in experimental physiology, biophysics, psychology and geophysics made him exceptionally well-qualified to meet the teaching and research objectives of the program." But Dr. Persinger ensured the program survived by going over and above the workload expected of a first-rate professor. In addition to his research and private practice, he taught unpaid overloads as a matter of course and bankrolled the program using his own funds.

To expect any one person to clone Dr. Persinger is unreasonable. In addition, as the 2010 reviewers pointed out "the field of neuroscience has grown immensely in the last couple decades and there is a limit to the amount of material that one professor can effectively teach." As the two reviewers back in 2010 also pointed out: To continue to offer a Program in Neuroscience, there is a need to expand the faculty member complement and course offerings to reflect the diversity and expansion of the discipline and to support the dedicated individuals who are already involved.

Once in place, the founding program head could not only lead the hiring of a second colleague but reach out to like-minded colleagues from all faculties to secure cross-appointments to the program. With the creation of the Behavioural Neuroscience Advisory Group, this process has already started.

As to the curricular requirements, ACAPLAN has little to add to the reviewer's suggestions except that it would like the program to consider creating a first-year course in Behavioural Neuroscience. Experience of other programs, such as Labour Studies, which have set up such courses suggest not only that they serve as a means of recruiting students to the program but also creating a sense of belonging that the program seems to need.

LAURENTIAN QUALITY ASSURANCE IMPLEMENTATION PLAN FOR THE B.Sc. PROGRAM In BEHAVIOURAL NEUROSCIENCE

Recommendation	Proposed Follow-up	Responsibility for Leading Follow-up	Timeline
1. Create a	As a start, hire one	Dean of Science,	June 2020 and

[4] 2012-2013 was an anomalous year, not included in the calculations

Department of Behavioural Neuroscience in the Faculty of Science, Engineering and Architecture	tenure-stream professor to champion the program and start the recruitment of a second full-time faculty member as well as other Laurentian faculty interested in cross-appointment.	Engineering and Architecture	ongoing
2. Create a 6-credit course in first year, Introduction to Behavioural Science	Work with CAE to set our learning outcomes and course contents to ensure these outcomes	Program Head	December 2020
3. Consider making SCH4U (Grade 12 Chemistry) and MCV4U (Grade 12 Calculus and Vectors) strongly recommended as entrance requirements	Evaluate specific contents of these courses and relate to curriculum requirements of program	Program Head in consultation with Behavioural Neuroscience Advisory Group	December 2020
4. Consider making 1st year MATH / COSC requirement more specific. Suggestion: MATH 1036 (Calculus I), MATH 1037 (Calculus II), MATH 1057 (Linear Algebra), COSC 1046 (Computer Science I), COSC 1047 (Computer Science II)	Organize meeting to discuss Curriculum changes with Behavioural Neuroscience Advisory Group	Program Head	December 2020
5. Add BIOL 2126 (Cell Biology) to the list of recommended 2nd and 3rd year BIOL courses. Consider making it strongly suggested or mandatory.	Organize meeting to discuss Curriculum changes with Behavioural Neuroscience Advisory Group	Program Head	December 2020
6. Consider replacing STAT 2126 (Introduction to Statistics) with STAT 2246 (Statistics for Sciences)	Organize meeting to discuss Curriculum changes with Behavioural Neuroscience Advisory Group	Program Head	December 2020

7. Consider replacing CHMI 4297 (Biochemistry of the Immune System) by CHMI 3217 (Biochemistry of Nucleic Acids) and moving CHMI 4297 to the list of Biochemistry electives.	Organize meeting to discuss Curriculum changes with Behavioural Neuroscience Advisory Group	Program Head	December 2020
8. Give students more course options to fulfill their requirements. Specifically consider expanding the list of Biochemistry electives: ii. FROM: CHMI 3217 and HMI 4217 iii. TO: CHMI 3236, 4206, 4207, 4226, 4237, 4246, 4256, 4287 and 4297	Organize meeting to discuss Curriculum changes with Behavioural Neuroscience Advisory Group	Program Head	December 2020

The Dean of Science, Engineering and Architecture shall be responsible for monitoring the implementation plan. The details of progress made shall be presented in the Dean's Annual Report and filed with the Vice-President Academic and Provost. The executive Summary and the monitoring reports will be posted on Laurentian University's web site.

CONCLUSION

The BSc. (Honours) program in Behavioural Neuroscience is approved to continue and it will be reviewed in the fall of 2027.

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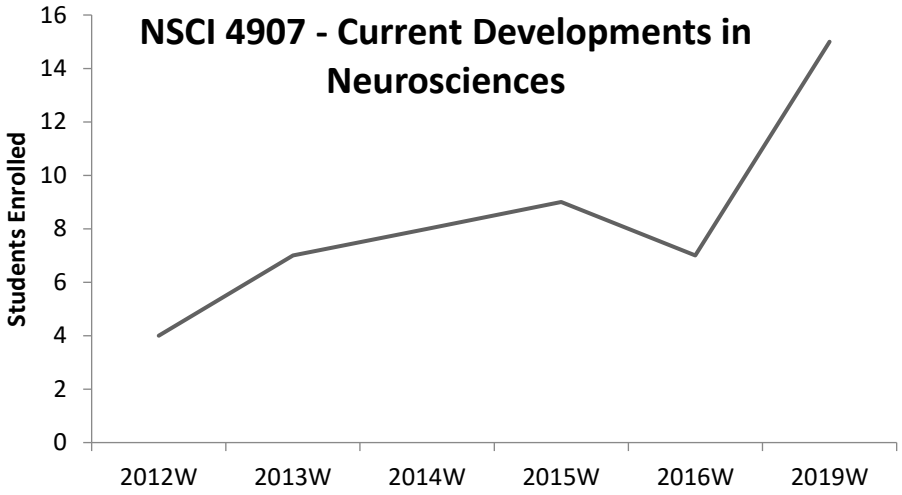
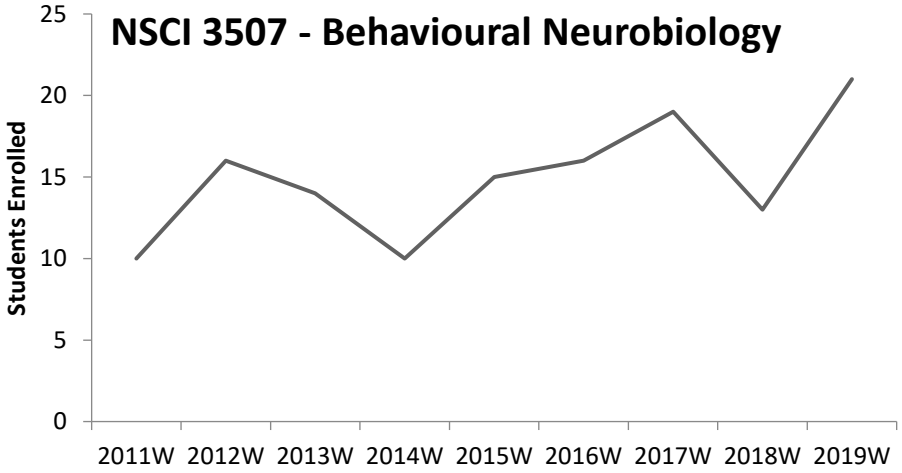
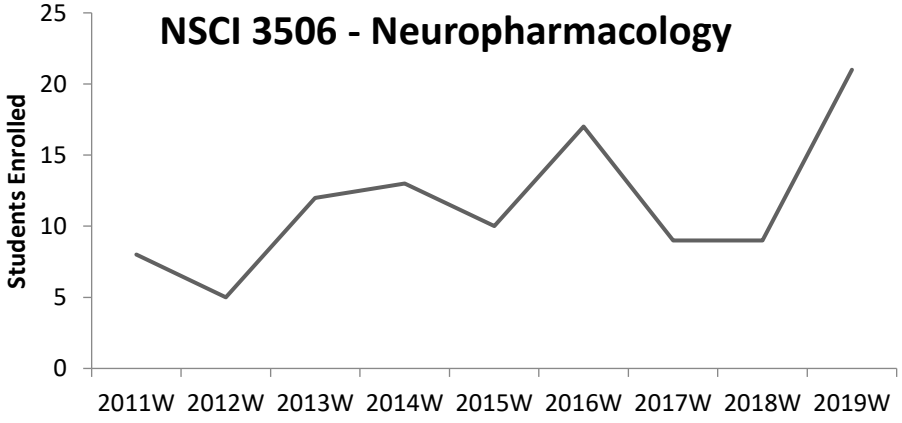
[i] According to Dr. Dotta: Student enrolment in the core courses in Behavioural Neuroscience program have been trending up for the last several years. Our second-year courses - NSCI/PSYC 2606 (Brain & Behaviour) & NSCI/PSYC 2617 (Neuropsychology) - have demonstrated a steady increase in enrollment when comparing the last 5 years with the previous 5 years. These courses have an average student enrollment of 71 and 41 students respectively; this is in an increase of *12 - 16%* over this span. There courses can also be considered "feeder courses" as they contain students in a variety of different programs including: Behavioural Neuroscience, Biomedical Biology, Psychology, Human Kinetics, Outdoor Adventure Leadership, etc. Our largest areas of growth - in terms of class sizes - is in our 3rd and 4th year courses. These courses have class size **increases of 33- 44%.** Student enrollment by course and years can be seen in the graphs which follow.



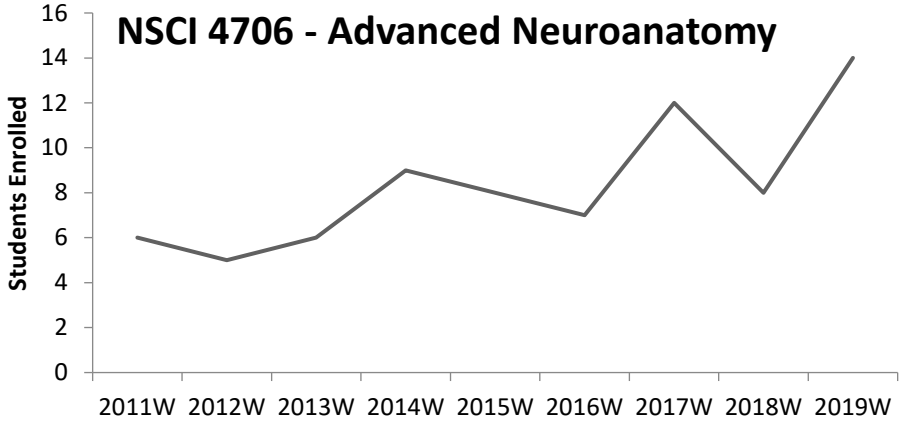
Student enrollment in NSCI/PSYC 4907 - Current Developments in Neurosciences



Student enrollment in NSCI/PSYC 3507 - Behavioural Neurobiology



Student enrollment in NSCI/PSYC 3506 - Neuropharmacology



Student enrollment in NSCI/PSYC 4706 - Advanced Neuroanatomy