

Final Assessment Report for the 2021-2022 Cyclical Program Review of the Honours BSc in Health Sciences

INTRODUCTION

In accordance with Laurier's Institutional Quality Assurance Procedures ([Policy 2.1](#)), this Final Assessment Report provides a summary of the review process for the Honours Bachelor of Science in Health Sciences, prepared by the Quality Assurance Office, along with an identification of the strengths and opportunities for improvement of the program under review authored by the Dean of the Faculty of Science. All recommendations made by the external review committee in their report are listed, followed by a summary of the programs' response, and the relevant decanal responses. Recommendations prioritized are listed in the Implementation Plan, with those not being prioritized for implementation noted as well.

The Final Assessment Report is reviewed and approved by the Vice-Provost: Teaching and Learning and the Provost and Vice-President: Academic. Following completion of the Final Assessment Report, it is approved by the Program Review Sub-Committee and Senate Academic Planning Committee. Approval dates are listed at the end of this report. Final Assessment Reports are submitted to Senate as part of an annual report on cyclical reviews, and to the Ontario Universities Council on Quality Assurance for information. Final Assessment Reports and Implementation Reports are posted on the public-facing page of the [Quality Assurance Office](#) website.

The Implementation Plan for the recommendations prioritized in the Final Assessment Report can be found at the end of this report. Units will submit their first Implementation Report two years following approval of the Final Assessment Report at Senate. The Implementation Report will include comments from the unit on actions taken toward the completion of recommendations, comments from the relevant Dean(s) related to the progress made, and comments from the Program Review Sub-Committee, which is responsible for approving the Implementation Report and deciding if further reports are required. The Senate Academic Planning Committee will also approve the Implementation Report.

SUMMARY OF REVIEW PROCESS

The Department of Health Sciences cyclical program review included the department's BSc in Health Sciences program. The last review of this program took place in 2014-2015.

The Self-Study was authored by Dr. Robb Travers, Chair of the Department of Health Sciences, in consultation with department faculty. In addition to the Self-Study (Volume I), the program also submitted a copy of faculty curricula vita (Volume II), a volume of course syllabi, and a list of proposed external reviewers (Volume III). A draft of the Self-Study was reviewed by the Quality Assurance Office and the Dean of the Faculty of Science prior to submission of the final version.

Following Laurier's IQAP, the external review committee for the review consisted of two external reviewers from outside the university, and one internal reviewer from Laurier but outside of the unit. The review committee was selected by the Program Review Sub-Committee on October 21, 2021, and a virtual external review took place during the week of March 21-25, 2022.

The review committee consisted of **Dr. Paul Mallett** from the Department of Psychology at Wilfrid Laurier, **Dr. Susan Phillips** from the Department of Family Medicine at Queen's University, and **Dr. Stacey Ritz** from the Faculty of Health Sciences at McMaster University. During the external review, the review committee met virtually with the following individuals and groups:

- Dr. Mary Wilson, Vice-Provost: Teaching and Learning
- Dr. Anthony Clarke, Dean of the Faculty of Science
- Dr. Robb Travers, Chair of the Department of Health Sciences (two meetings)
- Dr. Douglas Deutschman, Associate Vice-President and Dean: Faculty of Graduate and Postdoctoral Studies (pertaining to the development of a new graduate program within the department)
- BSc in Health Sciences undergraduate students
- Full-time faculty in the Department of Health Sciences (three meetings, organized by those faculty who work in Social Sciences and Health, faculty who work in Health and Human Disease, and cross-appointed faculty)
- Alumni from the BSc in Health Sciences program
- Meeting with Library Representatives: Ms. Charlotte Innerd, Head of Collections and Acquisitions and Ms. Debbie Chaves, Health Sciences Liaison Librarian
- Dr. Vivienne Vance, Undergraduate Advisor in the Department of Health Sciences
- Ms. Sally Heath, Manager: Academic Program Development and Review and Ms. Jessica Blondin, Executive Assistant

The review committee submitted their completed report on April 28, 2022. The executive summary from the report, and its recommendations, are provided below.

External Reviewers' Report Executive Summary

The Health Sciences Program is very well-aligned with the University's mission and Strategic Academic Plan. Several individuals we met with called the HSP a "jewel" or a "gem" at the university, and it was clearly regarded as an "impressive" program that fills a valuable niche in the ecosystem of the Faculty and the University.

The 'cell to society' brand succinctly describes what this program aims to deliver – a linking of social circumstances that shape health and of underlying scientific processes. Overall, this is a well thought out program whose dedicated, student-centered, and extremely hard-working faculty constantly rethink, revise,

explore and produce a range of relevant and impactful courses that students appreciate. It would be valuable to extend the cell-to-society ethos more deliberately across all 4 years of the program.

Our distinct impression is that the HSP makes very effective use of existing resources, and has been able to accomplish an impressive amount with a relatively small number of bodies (both faculty and staff). Application numbers and incoming cohort sizes have grown substantially since the previous cyclical review, demonstrating continued and growing demand for the program. The rapid and unplanned increase in student enrollment in the last 2 years, especially, has and will continue to put pressure on student advising capacity, teaching and supervision workloads, administrative staff capacity, class sizes, research opportunities, and classroom space. Given the growth in recent years, careful attention should be paid to ensuring that there are sufficient human and material resources to sustain the excellence of the Program with a larger volume of students and potential new programming.

Changes made to the curriculum in recent years demonstrate the Program's responsiveness and attentiveness to quality enhancement, and we agree that the changes made have been appropriate and well-aligned with the goals of a truly interdisciplinary health sciences program. We noted an openness and enthusiasm for reflection, reinvention, and revision within the HSP from all of the key stakeholders, which will be a substantial asset at this stage of the Program's evolution, and we would encourage the HSP and the Faculty to continue to foster that sense of possibility and vision.

There was a broad recognition across all stakeholders that growth in the Program is desirable at this stage in its evolution; at the same time, it will be important to pay close attention to the core values and commitments of the Program that have made it so successful so that those can be deliberately sustained and fostered.

RECOMMENDATIONS AND RESPONSES

The External Reviewers' Report included nine recommendations. All recommendations have been listed verbatim below, followed by a summary of the program's response, and the decanal response.

Recommendation #1: Consider opportunities to operationalise the "cell to society" concept explicitly and early, as this is a key strength and uniqueness of Laurier's Health Sciences program.

Unit Response: We are pleased with this recommendation and support it as a priority for program development/improvement/marketing. We agree that a 'cell-to-society' focus, while a significant niche brand for Laurier Health Sciences, is underdeveloped and requires greater clarification in our promotional materials and in course content in earlier years of the program. Currently, the curriculum is structured so that our students take largely natural science courses in the first two years of the program. The HE Curriculum Committee will review the program structure to see if there are courses that could be moved down to years one and two to allow for greater exposure to a 'cell-to-society' approaches to health earlier on in the degree. This would require rearranging courses in a manner that would allow for a mix of social and natural sciences across all four years of the program. To proactively identify examples of cell-to-society approaches, research, methods, etc., Dr. Nicolas Rouleau will teach a special topics course in winter, 2023 where students will be engaged in identifying empirical

studies that can inform content for cell-to-society ‘building block lectures’ in key health sciences courses. Students will also identify content that can be used in marketing materials for the program.

Decanal Response: The Department has recognized the value of this recommendation and they have already initiated changes to involve a new faculty member who will be joining Laurier in January 2023, while taking time to consider further alterations.

Recommendation #2: Review grade data for required courses in the Health Sciences program to identify courses where there are inconsistencies between sections, or courses where student performance is lower than might be reasonably expected given their overall academic performance. If the perceptions are substantiated by this review, cross-unit consultation and collaboration may be required to achieve appropriate resolution.

Unit Response: We thank the reviewers for bringing attention to this significant student concern. This concern was likely in relation to a couple of required courses that HE students take through other departments. Both problems have been rectified. The problem may also be related to the limitations of the institutional data we received for the report.

Decanal Response: Indeed, there have been concerns amongst students about perceived inconsistencies regarding expected outcomes in one or more courses, and action has been taken to mitigate this in one course. The Department Chair reached out to the Dean of Science Office to develop a solution to the issue in this particular course which has since been implemented with success. The Dean of Science welcomes consultation from its programs and departments on how to address issues of grade inconsistency across sections. While it is the responsibility of the Chair to identify these inconsistencies, the Dean of Science Office is always open to working collaboratively with units to address these concerns.

Recommendation #3: As the program grows and new programming is considered, review faculty and staff complement and student advising capacity relative to program size in the Laurier context in order to ensure that the quality of the program is not compromised, and the growth is sustainable.

Unit Response: We thank the reviewers for constructively raising this concern. While we celebrate the successes of health sciences (increased applications, demand for the program, increased incoming averages, etc.) we are also concerned that the significant growth we have witnessed (a doubling of program size in 4 years) is very challenging – we have noticed increased demand for academic advising, research experience, IA opportunities, reference letters, directed studies and honours theses. Moreover, the addition of Milton health sciences programming and a HE master’s program on the Waterloo campus provides additional opportunities for planned growth that cannot be missed. In fact, we assessed the ability of the HE faculty to supervise graduate students. Almost all are on board to take MSc students. The addition of two incoming faculty is certainly a significant help given this rapid growth. It is not enough, however, and through our strategic planning process, we will identify a plan for sustained growth in the program.

Decanal Response: This is an issue that concerns a number of departments across the Faculty of Science as we have experienced unprecedented growth over the past several years. As alluded to above, there will be an

opportunity to increase our faculty complement with the development of programming for the Milton campus, which will also benefit programming at Waterloo. Also, despite the budgetary pressures currently realized by the University, the replacement of a retiring faculty member from Health Sciences has been given top priority for replacement.

Recommendation #4: Carefully examine the adequacy of library resources addressing the content areas of the curriculum and faculty research in the HSP, particularly if a graduate program is developed.

Unit Response: We will consult with relevant Library personnel as we develop the final program proposal for the HE graduate program. Part of the new program development process involves the preparation of a Library Report on current holdings and gaps which may exist. We will also consult other academic units who have graduate programs for their input/advice/lessons learned.

Decanal Response: As noted above, the issue of library resources is routinely addressed with the development and then approvals of new programs (and courses) and so this will be addressed in due course.

Recommendation #5: Review teaching assignments for cross-appointees to ensure equity between departments and appropriate service commitments for faculty members.

Unit Response: We thank the reviewers for drawing attention to this issue. This remains a significant challenge for the department. Consultations with the Chair of KPE and the Dean of Science will focus on engaging in a process with affected faculty as to whether such cross-appointments still make sense. If they still hold a desire to be cross-appointed, moving forward, we will need to identify strategies for ensuring that cross-appointed faculty members are making equitable and worthy contributions to the Department of Health Sciences. Equity should be considered in relation to teaching, student supervision, and service.

Decanal Response: There is no doubt that managing the teaching assignments of cross-appointed faculty members is always challenging, and this issue is rather acute with Health Sciences given the nature of its faculty complement. Given the growth in student numbers, combined with the expected opening of the MSc program in 2023, we will conduct a review of the Department structure with a focus on faculty member affiliation and commitment, which may serve to alleviate the management issues.

Recommendation #6: The HSP should gather and analyze additional retrospective and prospective data about year-to-year attrition rates to more fully document and understand the reasons that apparent attrition rates seem higher than expected given the caliber of students admitted to the HSP and the other indicators of strong student performance. Such an analysis would provide insight to inform appropriate intervention, if necessary.

Unit Response: We will work with the Vice-Dean, Faculty of Science to design a strategy that will help us to look both retrospectively and prospectively to identify whether this is indeed a problem. If such a problem emerges, we will seek out best practices for intervention to ameliorate attrition.

Decanal Response: The Department is planning the appropriate response to this recommendation.

Recommendation #7: It will be valuable for the HSP to **undertake a strategic planning process** to ensure that there is a **strong, coherent vision** for the Program and that the considerable **strengths of the undergraduate Program are sustained** in light of its growth and the possible expansion of other undergraduate or graduate health programs.

Unit Response: In January, 2023, two new faculty members are joining health sciences; once they have arrived, we will engage in a Strategic Planning Process that incorporates a SWOT analysis (strengths, weaknesses, opportunities, supports) and attends to expansion on the Waterloo and Milton campuses.

Decanal Response: Again, the Department is planning the appropriate response to this recommendation, which will coincide with the planning of a Health Sciences program for delivery on the Milton Campus.

Recommendation #8: If indeed a new graduate program goes ahead, the Program will need to be **attentive to issues of faculty and administrative staff workload, and capacity for student supervision** at the undergraduate level.

Unit Response: As we continue to develop the proposal for an MSc in Health Sciences, we will examine issues of equity in undergraduate supervision of directed studies and honours thesis.

Decanal Response: Again, this is a challenge for a number of departments across the Faculty of Science as we grow our graduate programming and student participation. Such graduate growth, which is essential as we develop into a fully engaged comprehensive university, will inevitably affect the opportunities for the direct supervision of undergraduate students in research programs. With this understanding, the Department needs to remain vigilant in introducing research concepts to undergraduate students through their senior courses while maintaining a manageable level of research experiences for motivated students.

Recommendation #9: Cultivate opportunities for collaboration and shared programming with the Brantford (and future Milton) campus.

Unit Response: There have been several discussions about potential synergies between Laurier Brantford's Community Health Program and Health Sciences on the Waterloo Campus. To date, Community Health has been generous in allowing our students to take some of their online courses as electives, and they have involved Waterloo HE students in their research programs. They are also engaged in some early discussions about revamping their undergraduate degree and developing a possible graduate program. Regarding Milton, once Nicolas Rouleau begins at Laurier (January 2023), we will initiate work on the Milton campus Health Sciences program.

Decanal Response: I am delighted that the Department is open to pursuing collaborative opportunities with Community Health in Brantford and look forward to seeing what develops. With Milton, the Health Sciences program to be offered there will be developed, offered, and managed by the Department and so this issue is moot.

PROGRAM STRENGTHS

Dean of the Faculty of Science: The true strength of the BSc Health Sciences program is its interdisciplinary structure that covers the breadth of human health topics, truly from cell to society. As such, students are provided with an education that prepares them for careers and professions that span the spectrum of the human health sector. Another strength is in the dedication and commitment of its faculty and staff members, as both educators and researchers.

OPPORTUNITIES FOR IMPROVEMENT AND ENHANCEMENT

Dean of the Faculty of Science: The major issue that faces the Department is that their program is interdisciplinary in structure and thus is dependent on the engagement and participation of other departments, together with a number of cross-appointed faculty members. The significant growth in student registrations experienced over the past several years, plus the planned launch of their MSc program, provides the impetus to evaluate and improve on this structure.

SIGNATURES

Dr. Mary Wilson

October 26, 2022

Dr. Heidi Northwood

October 31, 2022

Approved by Program Review Sub-Committee:

January 19, 2023

**Approved by Senate Academic Planning
Committee:**

March 21, 2023

Submitted to Senate (for information):

April 12, 2023

Implementation Report Due Date:

April 12, 2025

RECOMMENDATIONS PRIORITIZED FOR IMPLEMENTATION AND ACTION PLAN

The following Implementation Plan was created by the Dean of the Faculty of Science as part of the Decanal Response.

Recommendation to be Implemented	Responsibility for Implementation	Responsibility for Resourcing (if applicable)	Anticipated Completion Date	Additional Notes
1. Consider opportunities to operationalise the “cell to society” concept explicitly and early , as this is a key strength and uniqueness of Laurier’s Health Sciences program.	Department	n/a	Fall 2025 (coinciding with the launch of the Milton program)	
2. Review grade data for required courses in the Health Sciences program to identify courses where there are inconsistencies between sections, or courses where student performance is lower than might be reasonably expected given their overall academic performance. If the perceptions are substantiated by this review, cross-unit consultation and collaboration may be required to achieve appropriate resolution.	Department (in consultation with Dean of Science Office as necessary)	n/a	End of summer 2023	
3. As the program grows and new programming is considered, review faculty and staff complement and student advising capacity relative to program size in the Laurier context in	Department, Dean of Science	Faculty of Science	Fall 2025 (coinciding with the launch of the Milton program)	

<p>order to ensure that the quality of the program is not compromised, and the growth is sustainable.</p>				
<p>4. Carefully examine the adequacy of library resources addressing the content areas of the curriculum and faculty research in the HSP, particularly if a graduate program is developed.</p>	<p>Department, Library</p>	<p>Library, if necessary</p>	<p>Summer 2023 (coinciding with the launch of the planned MSc program)</p>	
<p>5. Review teaching assignments for cross-appointees to ensure equity between departments and appropriate service commitments for faculty members.</p>	<p>Department Chair</p>	<p>Dean, Faculty of Science</p>	<p>Summer 2023</p>	<p>With completion of course build and workload assignments for 2023-24 academic year.</p>
<p>6. The HSP should gather and analyze additional retrospective and prospective data about year-to-year attrition rates to more fully document and understand the reasons that apparent attrition rates seem higher than expected given the caliber of students admitted to the HSP and the other indicators of strong student performance. Such an analysis would provide insight to inform appropriate intervention, if necessary.</p>	<p>Department</p>	<p>n/a</p>	<p>End of summer 2023</p>	

<p>7. It will be valuable for the HSP to undertake a strategic planning process to ensure that there is a strong, coherent vision for the Program and that the considerable strengths of the undergraduate Program are sustained in light of its growth and the possible expansion of other undergraduate or graduate health programs.</p>	<p>Department</p>	<p>n/a</p>	<p>Fall 2025 (coinciding with the launch of the Milton program)</p>	
<p>8. If indeed a new graduate program goes ahead, the Program will need to be attentive to issues of faculty and administrative staff workload, and capacity for student supervision at the undergraduate level.</p>	<p>Department, Dean of Science</p>	<p>Dean, Faculty of Science</p>	<p>Fall 2023 (coinciding with the launch of the planned MSc program)</p>	
<p>9. Cultivate opportunities for collaboration and shared programming with the Brantford (and future Milton) campus.</p>	<p>Department Chair</p>	<p>Deans of Science and Human and Social Science</p>	<p>Ongoing</p>	