



FINAL ASSESSMENT REPORT
March 2022
Bachelor of Allied Health Science
Program Review
Dean: Dr. Carol D. Rodgers

Under Ontario Tech University's Quality Assurance Framework, all degree programs are subject to a comprehensive review every eight years to ensure that they continue to meet provincial quality assurance requirements and to support their ongoing rigour and coherence. Program reviews involve several stages, including:

1. A comprehensive and analytical self-study brief developed by members of the program under review.
2. A site visit by academic experts who are external to and arm's length from the program who prepare a report and recommendations on ways that it may be improved based on a review of the program's self-study and supporting material, and a two-day site visit involving discussions with faculty, staff and students and a tour of the facilities.
3. Development of a plan for improvement by the program and proposed timelines for implementation.

On the completion of the program review, the self-study brief together with the reviewers' report and the assessment team's response are reviewed by the Resource committee, the appropriate standing committee of Academic Council (USC/GSC), and are subsequently reported to Academic Council, the Board of Governors and the Quality Council.

In academic years 2019-2021 a program review was scheduled for the Bachelor of Allied Health Science program.

This is the second program review for this program and the internal assessment team is to be commended for undertaking this assignment in addition to an already challenging workload and within a very tight timeline. The following pages provide a summary of the outcomes and action plans resulting from the review, identifying the strengths of the program as well as the opportunities for program improvement and enhancement. A report from the program outlining the progress that has been made in implementing the recommendations will also be put forward in eighteen months' time.

External Reviewers:

Dr. Brad Martin, Capilano University, British Columbia

Dr. Peter Tiidus, Brock University, Ontario

Site Visit: October 19th, 21st, and 22nd, 2021

Program Overview

The Bachelor of Allied Health Science (BAHSc) program is a career-oriented program, intended to serve the educational needs of graduates from diploma programs in health disciplines. The program's interdisciplinary focus is designed to engage students in the examination of diverse aspects of health, health care delivery, and interdisciplinary research.

Offered completely online, the BAHSc provides an evidence-informed degree program for diploma prepared health care professionals (e.g., paramedics, nurses, midwives, ultra-sound technicians, dental hygienist, pharmacy technicians). The program is designed to enrich the specific credentials of diploma graduates with additional breadth and depth of knowledge of health care and of the disciplines and professions that work in the integrated system.

The goal of the BAHSc program is to prepare experienced health care professionals and practitioners to assume greater responsibility in today's complex health care environments and sectors. The program is designed to reflect:

- a) the educational needs of and opportunities for Allied Health Professionals, one of the largest groups of healthcare workers in Canada; and
- b) the academic foundation in Health Sciences that they receive in their clinical discipline and the additional courses that develop their skills in critical thinking, research methods and specialty areas.

The program assists students in maximizing career opportunities with additional knowledge, critical thinking skills, leadership qualities and the necessary values that will enhance their job mobility and career opportunities and pathways. Students are prepared for the high demand areas of clinical and community-based practice that will be increasingly needed by a society with an aging population.

As graduates of the Bachelor in Allied Health Science, students are highly skilled to pursue leadership, managerial, and administrative positions in a variety of organizations, including but not limited to;

- Government and non-government agencies and organizations;

- Hospitals and community clinics;
- Insurance, biotechnology and pharmaceutical industries;
- Private health and wellness clubs;
- Public health agencies;
- Rehabilitation and end-of-life and palliative care facilities

Significant Strengths of the Program

The BAHSc program has been structured to improve pathways to university for qualified college students and to enhance the recognition and credit of both college and university credentials. The Allied Health Science program aligns strongly with Ontario Tech's mission to provide career-oriented university programs, as well as the University's strategic goals of leveraging technology-enriched learning, creating community partnerships, engaging in socially responsible research, and supporting career preparation and adult learning.

Students value the program as it helps them to bridge to a university degree while also recognizing their college credentials. The fully online delivery of the Allied Health Science program appeals to learners, as the program has been designed to be flexible enough to accommodate students' personal and professional schedules and commitments. Students have the ability to study and complete work anywhere, at any time, with open and equal access to educational material, making it easier to integrate their academic schedule with full-time employment in their designated health care profession. The flexibility of the Allied Health Science program also provides students with the potential of acquiring a minor in health administration.

Opportunities for Program Improvement and Enhancement

In support of the continued strengthening and modernizing of the Bachelor in Allied Health Science program, the following areas have been identified for improvement and enhancement.

- Inclusion/increased focus on Equity, Diversity and Inclusion and Truth and Reconciliation components within course learning.
- Re-examine Program Learning Outcome 6: "Appraise the value of innovation and technology for the enhancement of planning and delivery of health care in Canada", to ensure there is alignment between the learning outcome and offered course material in the program on this topic.
- Improve mathematical and statistical content to assist students with college credentials with mastery in university-level courses of this nature. Potential opportunity to improve alignment in this area and/or enhance the required bridging course.

- Offer more technology help with online learning tools and platforms for students who may have been out of formal education for some time and lack prior familiarity with virtual modes of delivery and assessment.

The External Review

The site visit took place on October 19th, 21st, and 22nd, 2021. Drs. Martin and Tiidus met with members of the Faculty as well as key stakeholders at the University, including Dr. Lori Livingston – Provost, Dr. Carol Rodgers – Dean of the Faculty of Health Science, Dr. Otto Sanchez – Associate Dean – Undergraduate Programs, and members of the internal assessment team and a number of faculty, staff, and students.

The Faculty was grateful for the thoughtful and thorough review provided. The external reviewers recognized the high quality of the faculty, the rigorousness of the program, and the innovation in the content and delivery of the programs.

The reviewers identified nine recommendations, some of which have multiple components. The Faculty values the recommendations and have been very thoughtful in their responses.

Summary of Reviewer Recommendations and Faculty Responses

Recommendation 1

Increase availability of and/or plan regular availability for optional courses perhaps on a rotational basis. This change could facilitate the availability of all optional courses over a period of years and with appropriate planning, allow students a greater range of choices in optional courses.

IAT's Response

As the Health Sciences faculty has changed and grown, some optional (elective) courses have been de-listed as their delivery depended upon faculty expertise no longer available. Thus, the Program is currently reviewing all such offerings and determining which ones, on a rotational basis, would be beneficial to BAHSc students. The new program, Bachelor of Health Administration, could include courses offered cooperatively with the Business and Information Technology faculty to BAHSc students desiring to enhance their administrative portfolios. We continue to discuss the value of offering a wider range of health sciences electives.

Dean's Response

Led by the Associate Dean Undergraduate Studies the Faculty of Health Sciences is currently undergoing a full review of its elective course offerings, as well as the frequency of those offerings. The culmination of this work will result in a more

accurate reflection of available elective courses for BAHSc students (eg. remove listed courses no longer being offered) as well as a 4-year planned rotation of these courses to ensure availability and facilitate course planning for students.

Recommendation 2

Increase flexibility for students to take courses from other faculties (e.g. Education or Social Sciences) and on campus courses. For those students who may have access to on campus courses this option would increase their program flexibility and enhance their options for educational pathways.

IAT's Response

While increasing program flexibility and enhancing options for educational pathways is a worthy goal, our small but growing university has faced challenges in this area. Budgets for developing courses that can be cross-listed across faculties are difficult to manage in times of fiduciary restraint. As faculty hiring improves across the university, and as program enrollment potentially increases, the ability of students outside a particular faculty to register for such courses is difficult and students are often waitlisted for extensive periods. Such a process needs to begin at the level of the Deans as many people at the instructional level are well aware of this issue and have suggested that it should be a priority of the university.

Dean's Response

Flexibility to access courses from other faculties is dependent upon a number of factors, many of which are highlighted in the IAT's response. The number of required courses may also be a factor in decreasing opportunities for students to take electives, whether these be from within the Faculty of Health Sciences or from other Faculties (eg. Education, Social Sciences and Humanities). As such, it would be prudent to review the current required program components, to ensure that they should remain as part of the program pathway.

Recommendation 3

Consider limitations to ability to grow the program for international students (Canadian students most suited). Before embarking on a major recruitment program for international student growth, the possible limitations of the BAHSc program to recruit and retain international students (noted in this report) should be considered and if appropriate addressed.

IAT's Response

The most important focus of this program should be to assist in the advancement of individuals already working in Canada. Many jobs in health care, such as paramedicine, are associated with burnout and paramedics often desire to advance in their careers through acquiring a degree that allows them to take on administrative or educational roles. Other types of students, such as occupational therapy and physiotherapy assistants, desire to seek degrees for the purpose of expanding their scopes of practice.

The IAT agrees that any effort to recruit and retain international students should only be made when the BAHSc program's limitations are addressed. From a teaching perspective, the program could be offered via multiple modes of delivery to meet the needs of international students. However, expanding the program in this way will require significant new financial and administrative resources. It is conceivable that the tuition charged international students can offset these costs provided the allocation of funds for doing so is appropriate. Other limitations may include admissions criteria, screening, and student support services that could affect recruitment and retention.

Dean's Response

At this time recruitment efforts will be directed towards domestic, not international students. As outlined in the external reviewers' report there are a significant number of limitations to the program itself (eg. primarily Canadian content; lack of in-person delivery) that make the significant investment required (both financial and human) to successfully offer a BAHSc program that would be attractive to international students untenable. As highlighted in the IAT response it is important that the BAHSc program's limitations be first addressed, before embarking on an international student recruitment plan.

Recommendation 4

Better tracking of graduates and their careers. Currently there appears to be no formal tracking of graduates. Having data of this kind would be useful to the program, the University and future program development planning.

IAT's Response

The IAT agrees that formal tracking of BAHSc graduates and their careers is desirable as there is currently a lack of data for future program planning and development. Most of what is known about our students and their career paths is anecdotal and, while this can be useful, it is not enough.

Dean's Response

It is agreed that a formal tracking system would be of significant value (as per IAT and reviewers' comments). This would provide valuable career information for marketing the program as well as an important connection with alumni. Accessing available email addresses for distribution of an initial survey could be limiting with respect to "past" graduates but this could certainly be implemented going forward.

Recommendation 5

Consider hiring or appointing a program director and/or additional administrative staff to handle administrative and coordinating duties and to raise the program profile. Additional dedicated resources for program leadership may help address challenges resulting from program isolation and facilitate future program development.

IAT's Response

In early 2022, the program director role will be split in two. One program director will be responsible for the BAHSc and the new BHA programs, and the other program director will be responsible for the BHSc program. Having two core faculty members take responsibility for these important programs will improve the workload balance and facilitate shared information that can lead to better program planning and development. Splitting the program director role could make addressing tracking of graduates and their careers and addressing retention issues much easier.

Dean's Response

A program director has been identified and will assume responsibility for the BAHSc program, as well as the new BHA program effective February 1, 2022.

Recommendation 6

Consider the formation of a program advisory committee to inform future program development. Currently there appears to be no formal and/or regular mechanism for gathering input from community and industry stakeholders on program curriculum and design.

IAT's Response

With the exception of specific courses that may already have strong links to community and industry stakeholders, the IAT agrees that the idea of a program advisory committee would be beneficial to program design and curriculum. What is also important is to maintain or establish links with health and allied health associations who can also inform educators as to what curricular content is necessary for their members.

Dean's Response

As outlined in the IAT's response a PAC would provide important insight into program design and curriculum, particularly in the context of whether this is meeting the needs of employers. A challenge however, would be in the actual composition of this committee given the wide range of professional diploma preparation of the students. To appropriately represent the various professions could result in committee that loses its effectiveness both because of the inherent breadth of its mandate and size. Given the attention that will be given to learning more about our graduates and the causes of attrition in the upcoming months – and the information this might yield with respect to gaps in preparation – the formation of a program advisory committee will be re-visited at a later time. In the interim, a more systematic approach focused on discussions/survey with key professional groups could be considered and may be of more value.

Recommendation 7

Enhance and modernize program marketing efforts and materials. Current efforts appear to be modest and could be more effective in highlighting the strengths and

singularity of the program.

IAT's Response

The IAT members believe that bridging programs have grown in number and competition for students has increased. However, with enhanced marketing, the program can maintain its highly valued status, which is an important goal. New resources and expertise will be required to improve the marketing of the program.

Dean's Response

It is agreed that, as per the reviewers' recommendation and the IAT response that there is a strong need for enhanced efforts in the area of marketing, including the updating of web/social media presence to ensure that the program retains its competitive and unique delivery mode advantage. A request to support these types of initiatives and hire an individual for the FHSc to support such activities has been made to the budget working group as part of the recent 2022/2023 strategic initiative(s) budget planning process.

Recommendation 8

Conduct systematic study to identify reasons for low student retention rates. Most explanations provided to the reviewers were based on anecdotal information. A more data-informed approach may help develop successful student retention strategies.

IAT's Response

The IAT agrees that a data-informed approach regarding student retention is superior to anecdotal information in helping to develop student retention strategies. However, experience tells us that some of our BAHSc students are forced to drop out, sometimes only temporarily, because of work/study/life balance. Thus, a successful student retention strategy should include more help with computer skills and technology in the classroom and connect online students in this program with one another for peer support.

Dean's Response

It is agreed that a data-informed approach to understanding student attrition would be the most informative, particularly when looking to support retention at what might be critical junctures in individual students' decision to withdraw. This would also better inform potential supports that can be provided, whether through formal processes (e.g. technology literacy – pre-program assessment/follow-up “bootcamp”), course design (pre-program math assessment – course requirement/optional and design to focus on identified weaknesses) or informal peer support opportunities that are purposefully created.

Recommendation 9

Implement improvements to enhance student engagement and peer learning in the online delivery model. Student interviewees expressed strong desire for more engaged, experiential learning in the program. Responding to this desire effectively

might strengthen student retention.

IAT's Response

Experiential learning is highly desired by students but such learning presents its challenges because of the diverse backgrounds of the BAHSc students. The reflective observation and abstract conceptualization phases of experiential learning may be more easily achieved in fully online education than concrete experience or active experimentation. Nevertheless, exploring opportunities to include experiential learning to enhance student engagement is a worthy goal.

Dean's Response

One of the attractions of the BAHSc in its current on-line form is that it does not require a specific experiential learning component, recognizing that the majority of students enrolled in the program are diploma prepared individuals in one of several health care professions who manage their studies while working. The IAT's response highlights the importance of reflective observation and abstract conceptualization, something that might be achievable through deliberate reflective assessment pieces that are built upon the current work experience(s) of the students. Thereby achieving more focused student engagement and learning across multiple health professions. Support for faculty development in the utilization of teaching tools that support/enhance student engagement in on-line learning environments could also be provided through professional development opportunities. A review of current assessment practices across the program curriculum might be an initial step in determining whether there is opportunity for more reflective learning integrating "work" experiential learning could be undertaken. The FHSc currently has an internal "Teaching Scholar in Residence" who might also be able to provide support in the area of "student engagement in an on-line environment" for faculty who are interested.

Plan of Action

The table below presents a timeline of the actions planned to address the recommendations from the external report.

Recommendation	Proposed Follow-Up	Timeline	Timeline Responsibility for Leading Follow Up	Resources/Support Needed
Recommendation 1: Increase availability of and/or plan regular availability for optional courses perhaps on a rotational basis.	a. Review the existing electives.	This activity is currently underway (FHSc Curriculum Committee).	<ul style="list-style-type: none"> UG Associate Dean Program Director 	<ul style="list-style-type: none"> Administrative support
	b. Courses that have not been offered over the past 5 years will be assessed to determine whether they should be delisted.	Complete and recommend listing and plan to Faculty Council for implementation in Fall, 2023/24 or 2024/25 academic year		
	c. Once an "updated" listing of elective courses is created will develop a 3-4 year rolling plan for elective course offers			
Recommendation 2: Increase flexibility for students to take courses from other faculties (e.g. Education or Social Sciences) and on-campus courses.	a. Review current program required offerings to ensure "required" components should still be retained as required courses.	Begin Spring 2022 by the BAHS program committee If program changes are required, bring to FHSc Curriculum Committee and Faculty Council by Fall 2022, for Implementation in Fall 2023	<ul style="list-style-type: none"> Program Director Program Committee 	<ul style="list-style-type: none"> Administrative support
	b. identification/ review of optional courses for students to consider			
Recommendation 3: Consider limitations to ability to grow the program for international students.	Focus on domestic Student recruitment until limitations in program delivery and content are addressed.	For the purpose of this review, this item is complete. The limitations/ requirements for more targeted international	<ul style="list-style-type: none"> Dean 	N/A

		recruitment have been identified, and at this time the focus will continue to be on increasing domestic enrolment. Should requirements change, this item will be revisited.		
Recommendation 4: Better tracking of graduates and their careers.	a. Develop exit survey for graduates	Develop in Fall 2022 (Program Director/ Program Committee] for distribution in June 2023.	<ul style="list-style-type: none"> • Program Director • Program Committee • Associate Dean, Undergraduate • External Relations and Advancement (distribution support) 	<ul style="list-style-type: none"> • Administrative support
	b. Formalize process for distribution			
Recommendation 5: Consider hiring or appointing a program director and/or additional administrative staff to handle administrative and coordinating duties and to raise the program profile.	Interview/select a program director	This activity was completed February 1, 2022	<ul style="list-style-type: none"> • Dean 	<ul style="list-style-type: none"> • Funding for course release for Program Director
Recommendation 7: Enhance and modernize program marketing efforts and materials.	Budget request has been submitted to hire communications/marketing expertise.	Pending budget availability	<ul style="list-style-type: none"> • Program Director • Program Committee • Associate Dean, Undergraduate • Dean • University Recruitment 	<ul style="list-style-type: none"> • Funding to hire communications /marketing expertise • Funds for promotional materials
	In the interim, or if request is denied explore using FBIT/FSSH students in marketing and communications through capstone project(s) to support initiatives	Schedule meetings with FBIT/FSSH Deans to discuss capstone option. Fall 2022		

Recommendation 8: Conduct systematic study to identify reasons for low student retention rates.	a. Review retention rates over the last 5 years.	Initiate Fall 2022 with the intent to have an informed process of identifying at-risk students in place by December 2023.	<ul style="list-style-type: none"> • Program Director • Program Committee • Academic Advising 	<ul style="list-style-type: none"> • Administrative Support
	b. Create profile of students who leave and when.			
	c. Identification of at-risk students – ensure appropriate support options			
Recommendation 9: Implement improvements to enhance student engagement and peer learning in the online delivery model.	Undertake a review of current assessment practices across required courses to determine whether there is opportunity for more reflective learning integrating “work” experiential learning.	Begin this activity in Winter 2023 term	<ul style="list-style-type: none"> • Program Director • Program Committee • FHSc Teaching Scholar in Residence • Dean 	<ul style="list-style-type: none"> • Administrative Support • Funding to continue internal Teaching Scholar in Residence (course Release)
	Provide PD support in the area of “student engagement in an on-line environment” for faculty who are interested.	Offer professional Development series to support interested in Fall 2024		

*The Dean of the Faculty, in consultation with the Program Review Chair shall be responsible for monitoring the Implementation Plan. The details of progress made will be presented to the Academic Resource Committee, Academic Council and the Board of Governors and filed in the Office of the Provost and Vice-President (Academic).

Recommendations not Addressed

Recommendations not addressed and rationale from the Decanal response.

Recommendation not Addressed	Rationale
<p>Recommendation 6: Consider the formation of a program advisory committee to inform future program development.</p>	<p>As outlined in the IAT's response a PAC would provide important insight into program design and curriculum, particularly in the context of whether this is meeting the needs of employers. A challenge however, would be in the actual composition of this committee given the wide range of professional diploma preparation of the students. To appropriately represent the various professions could result in a committee that loses its effectiveness both because of the inherent breadth of its mandate and size. Given the attention that will be given to learning more about our graduates and the causes of attrition in the upcoming months – and the information this might yield with respect to gaps in preparation – the formation of a program advisory committee will be revisited at a later time. In the interim, a more systematic approach focused on discussions/surveys with key professional groups could be considered and may be of more value.</p>

Due Date for 18-Month Follow-up on Plan of Action: August 2023

Date of Next Cyclical Review: 2027-2029 review cycle