FACULTY OF MI	ALBERTA EDICINE & DENT	ISTRY		Meeting Minutes			
Committee	Special Fol	MD Faculty Council					
Members:	Dr. B Hemmelg As set out in th	garn (Chair) e Post-Secondary Learning Act	Date :	January 28, 2025			
		nted by those faculty members member present.	Time:	4:30pm			
Called to Order:	er: 4:30pm		Location:	Via Zoom			
Guests	None		Scribe:	Erin Neil			
Approval of agenda	Approved by co	onsensus with no additions.					
Meeting Attachments:	All attachments	s provided via email January 22, 2025					
Торіс		Su	ummary		Action by whom	Target Date	Status
 Bachelor of Health Sciences Program Dr. Manns presented: Faculty Councils BHSc Jan 2025,pptx.pdf Will be presented at all faculties in the College of Health Sciences. Opened for questions. Program map has been provided. Budget model applies. Motion: That Faculty Council recommends the approval of the Bachelor of Health Sciences program through University and p processes. Vote: 86% in favour. 8% no and 6% abstain. APPROVED. Announcements 							
2. Announcements		Motion: That Faculty Council recommends th processes. Vote: 86% in favour. 8% no and 6%			through University and pro	ovincial govern	ment approval
		Motion: That Faculty Council recommends th processes. Vote: 86% in favour. 8% no and 6% None	% abstain. APPRC		through University and pro	ovincial govern	ment approval
2. Announcements Next Meeting		Motion: That Faculty Council recommends th processes. Vote: 86% in favour. 8% no and 6%	% abstain. APPRC		through University and pro	ovincial govern	ment approval

Bachelor of Health Sciences

CHS Faculty Councils

January 2025





Bachelor of Health Sciences

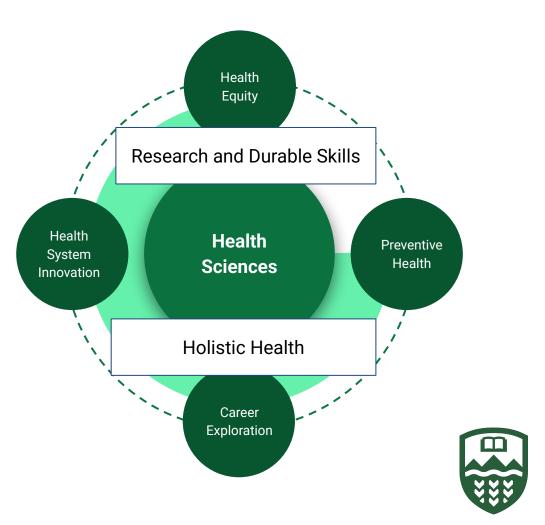
The purpose of this program is to provide students with a foundation of interdisciplinary health knowledge and competencies to support careers and/or future studies in health-related fields.

Today:

• Program Proposal



Health Programming in One Package

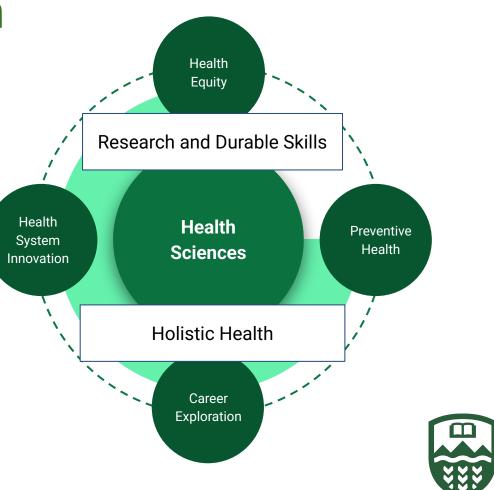


Bachelor of Health Sciences

Specializations (18 units)

- 1. Population and Public Health
- 2. Health System Innovation
- 3. Mental Health and Wellness

Pre-Professional Option



Program Demand - Comparators

University (year)	Number of Applications (total)	Number of Admitted students (per year)	
UCalgary (2024)	700-900	110	
<u>ULethbridge</u>	NA	100 (in three major streams - Addictions Counselling, Public Health, Indigenous Health)	
<u>Queens</u> (2024)	5783	369	
Western (2023)	4700	385	
McMaster (2023)	6636	222	
Ottawa (2024) - English	3097	444	
Ottawa (2024) - French	577	132	
Manitoba (2023)	400	80 (40 in Health Sciences, 40 in Health Studies)	





INT D 100

Your Future in Health: Pathways and Possibilities

Fully online, 3 credit course

Learn from top health experts and connect with realworld professionals.

Explore health careers and key topics like health inequities, climate change, Indigenous health and new health technologies.

uab.ca/YourFutureInHealth

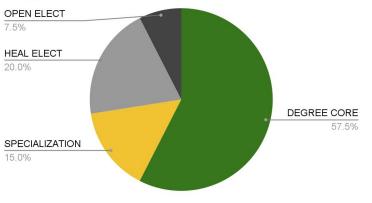


Proposed Program of Study

The BHSc program comprises **120 credit units** over four years. In summary the degree consists of:

- Degree Core: 69 credit units.
- **Specialization**: Students must complete one 18-credit unit specialization. Three specializations population and public health, health system innovation, and mental health and wellness.
- Health Electives: Students select 24-credits from a broad list of approved health electives
- **Pre-professional option:** Students select and complete health professional program prerequisites as health electives.
- **Open Electives**: Students select 9 credits of electives from across the University.

Program Map Breakdown





Discussion and Next Steps



Contacts:

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COLLEGE OF HEALTH SCIENCES



Kinesiology, Sport & Recreation Medicine & Dentistry Nursing Pharmacy & Pharmaceutical Sciences Public Health Rehabilitation Medicine

For CHS Faculty Councils January 2025

The Bachelor of Health Sciences (BHSc) proposal including Part A, Part A Appendices, and Part B are provided in the Faculty Council package. The Part A Appendices in particular provide a summary of the curriculum. The development of the proposal is a culmination of consultations and collaborative development work over the last 2 years. We are excited to bring the program proposal forward to CHS Faculty councils as part of the governance process. Once through the UAlberta governance process, Part A and Part A appendices will be submitted to the Government of Alberta for approval. Below is an executive summary.

Executive Summary

The Bachelor of Health Sciences (BHSc) program offers a new level of interdisciplinary health science learning that spans the full spectrum of human health from particles to policy to populations to planetary health. Health equity, preventive health strategies, and durable skills such as communication and critical thinking are central to the degree. The breadth of career possibilities in health are introduced early and throughout the program to help students find the role that is right for them. Students complete one of three specializations including 1) population and public health; 2) health system innovation, and 3) mental health and well-being. A pre-professional option provides guidance and coursework options for students interested in next destination health professional programs.

The BHSc program comprises **120 credit units** over four years. In summary the degree consists of:

- Degree Core: 69 credit units.
- **Degree Specialization**: Students must complete one 18-credit degree specialization. Each specialization has two required courses and students can choose from a list to select 4 additional courses.
- Health Electives: Students select 24-credits from a broad list of approved health electives; including from courses listed within the specializations (i.e., courses students didn't complete as part of their specializations). Health professional program

³⁻³⁹⁸B Edmonton Clinic Health Academy (ECHA), 11405 – 87 Ave NW, University of Alberta, Edmonton, Alberta, Canada T6G 1C9 Telephone: 780.492.0441 email: deanchs@ualberta.ca www.ualberta.ca/Health-Sciences

prerequisites can be used as health electives.

- **Pre-professional option:** Students select and complete health professional program prerequisites as health electives.
- **Open Electives**: Students select 9 credits of electives from any course across the University.

Program learning outcomes in brief include:

- 1. How the body works
- 2. Preventive health
- 3. Equity
- 4. Holistic health
- 5. Health system innovation
- 6. Career exploration
- 7. Research and evaluation
- 8. Durable skills

Program learning outcomes are broad and address demand for undergraduate training in health that will train students who are equity focused, understand the determinants of health broadly, and have foundational research and durable skills (communication, team functioning, curiosity) to support future contributions in health careers. Graduates of the BHSc program will move into careers directly after their degree (see information in the Appendices regarding labour market) or utilize the BHSc degree as a pathway to professional programs or graduate training in health or health related areas.

Demand for the BHSc programs is high across the country with programs reporting large numbers of applications. Student interest at UAlberta is supported by consultations (reported in the Appendices) and through enrollment in the first course in the BHSc - INT D 100: Your Future in Health: Pathways and Possibilities. This course is being offered to students across the University for the first time in Winter 2025 to 250 students (full capacity).

Proposal Template: New Bachelor's Degree Programs and Specializations (Part A: System Coordination Review)

Complete this template for proposals for new bachelor's degree programs or specializations. Institutions should:

- ensure that submission content is concise. Any additional information may be appended;
- indicate "not applicable" when questions are not relevant to a particular proposal; and
- ensure that applicable supporting documents are attached to the proposal.
- when submitting the final proposal to CAQC (i.e., Part A and Part B), group all appendices together sequentially at the end of the proposal or include as a separate document.

SECTION A: PROPOSAL OVERVIEW

Basic Information (Complete the table below)

Institution	University of Alberta	
Program Name	Bachelor of Health Sciences	
Specialization Name	Health Sciences	
Credential Awarded	Bachelor of Health Sciences	
Proposed Effective Date	July 1, 2027	

Type of Initiative (Answer the following questions)

This is a proposal for (select one from the drop-down menu):

New program

SECTION B: OVERVIEW OF PROPOSED PROGRAM OF STUDY

1. Program Description (Answer the following questions)

- a. Attach (as an appendix to this proposal) a concise program description document that includes:
 - Please refer to the Appendix A. The appendix includes a detailed overview of the proposed program, including:
 - o Calendar Description
 - o Proposed Program of Study
 - o Program Location and Delivery Mode
 - o Program Learning Outcomes

b. Where applicable, identify planned collaborations with other post-secondary institutions, departments within the institution or other organizations that this program respectively facilitates or provides for.

1

Planned collaborations within the institution:

- The development of the Bachelor of Health Sciences (BHSc) degree program is a collaboration among the 6 faculties within the College of Health Sciences: Kinesiology, Sport, and Recreation; Medicine & Dentistry; Nursing; Pharmacy and Pharmaceutical Sciences; Public Health; and Rehabilitation Medicine. Administratively, the BHSc will have a program director and an oversight committee with a representative from each of the Faculties involved. A Memorandum of Agreement documents the shared understanding of the roles of all College of Health Sciences partners in the implementation, delivery and sustainability of the proposed BHSc program.
- Augustana Campus is collaborating initially (i.e., at program launch) through the transfer of students into the program. In the future, it may be possible to collaborate to offer a 1 + 3 (i.e., students take Year One at Augustana and complete the remaining three years studying at North Campus in Edmonton). Augustana has expressed willingness to explore opportunities for work integrated rural learning placements in Camrose.
- Students in the BHSc will have the opportunity to take embedded undergraduate certificates from across the University in health-related or health adjacent subject areas (e.g., planetary health, leadership), which means collaborating with a number of programs in various fields across the University.
- The College of Social Sciences and Humanities and the College of Natural and Applied Sciences have agreed to deliver core program courses (e.g., English, Biology, Chemistry).
- Business, Nutrition and Native Studies have agreed to allow BHSc students to take minors in their disciplines. These are all from different faculties across the University.
- Collaborations exist with all the health professional programs at the University. To support the pre-professional option, professional programs will identify elective courses they recommend BHSc students complete to help to prepare them for future study in a professional program. Courses will often be pre-requisite courses for next destination programs, but may include other areas of study to support preparation.

Planned collaborations with other institutions:

- The University of Lethbridge and University of Calgary have existing BHSc programs. They have expressed openness to discussions about identifying synergies between the programs.
- There may be an opportunity to leverage the existing affiliation of Northwest Polytechnic (NWP) with the University of Alberta through its nursing programs, and the new Undergraduate Medical program satellite in Grande Prairie. There have been initial discussions about work integrated learning placements at NWP, though no confirmed collaborations at this time.

Letters and/or meeting notes from each of the aforementioned partners participating in planned or future collaborations are attached in the Appendix B.

Reviewer's Comment:

•	200	ork Integrated Learning (If applicable, answer the following questions)
	a.	Identify the number of placements required in the program (including type of work setting and duration/timing of activities).
	•	The proposed BHSc program is a non-accredited undergraduate health program. There are no typical clinical (i.e., in health facilities, doing clinical work) placements associated with the program
	•	Work-Integrated Learning (WIL) will include community service learning, field placements, group based projects, simulation activities and internships.
	•	WIL opportunities will be available to all students in the BHSc and is part of the core curriculum. Students will have the 'option' to complete field placements in the 3rd-year and 4th-year Interdisciplinary Health Experiential Learning courses (INT D 3XX, INT D 4XX). But it's important to note that forms of WIL are included in two of the other core Interdisciplinary health courses (INT D 100 and INT D 2XX) and it is included in many of the other core courses.
		Completing a field placement in Year 3 is not a prerequisite for completing a field placement in Year 4. Field placements/internships are optional. Placements in population and community health organizations will draw on existing infrastructure and connect with the Masters of Public Health and other graduate training in health related fields. New placement sites have been confirmed in health, health technology and data science organizations in Alberta. See appendix B for a number of letters of support from industry partners that will have field placements available to the set of the set
	•	 3rd and 4th year students who wish to do placements. Field Placements/Job Internships (called "placements" going forward) o The program has optional placements and the exact number of students seeking placement opportunities is unknown. A conservative estimate is that 50 placements may be required per year (assuming students are placed in groups of 2).
		 Placements will include those supported by existing program partners, and those that students identify that are of specific interest to them. Students will work with BHSc program advisors and placement team in the College of Health Sciences in placement of existing partners, and student-identified placements.
•		Duration and timing of placement activities o Formal placements are associated with INTD 3XX (3 units) and INTD 4XX (6 units)
		 In INT D 3XX, students will have an option to complete a field placement for 2 hours per week. In INT D 4XX, students will have the option to complete a longer placement in the same or similar location as their 3rd-year placement.

- Students not completing an optional placement can choose to complete a group project with a community or global organization, study abroad, or engage in research in a University-based project. A 4th-year independent capstone project with an organization is considered WIL if there is opportunity for the student to receive input/feedback from the organization. The placement team will ensure students have opportunities to connect and receive feedback from an organization.
- o Simulation learning activities will be utilized in senior experiential learning
- INT D 2XX (exploring interdisciplinary problems in health) will include a job shadowing opportunity for groups of students to visit a job site and interview a health professional.
- b. Summarize communications with employers (append applicable letters of support, minutes of program advisory committee meetings, etc.) showing that sufficient placements will be available when needed.
- The work setting for the placement experiences vary depending on the employer and student interest. <u>Health Cities</u>, Alberta Health Advocates, Community Health Services (Edmonton Zone), and the Office of the Chief Medical Information Officer (Alberta Health Services), Alberta Health Services - Primary Care (Edmonton Region), Alberta Health Services - Community Health Services, College of Physicians and Surgeons of Alberta, Youth Empowerment and Support Services are examples of employers who have agreed to allow students to complete placements with their organization. These organizations can offer students a variety of experiences depending on the projects they have in place. Consultations were overwhelmingly positive and placement opportunities are confirmed in their meeting notes and letters of support (see Appendix B).
- We will continue to engage with health organizations to propose collaboration opportunities through work integrated learning and/or other experiential learning offered through our core coursework.
- A key message communicated to prospective placement sites was that they would have the opportunity to work with a diverse group of students who will provide fresh perspectives and contribute to collectively building the health system of the future. Employers received an overview of the program, including its purpose and learning outcomes, and emphasized that our students will be high achievers capable of collaborating on or leading projects. We anticipate that this will garner further secure placement opportunities once the program is launched.
- c. Comment on whether/how work integrated learning placements in other programs (at the institution or at other institutions within the Alberta Adult Learning System) may be impacted as a result of this program.
- The Bachelor of Health Sciences program will have <u>no impact</u> on clinical placement opportunities for students in the accredited health professional programs at UAlberta and across the province.
- Specific UAlberta programs that may be impacted or have synergistic WIL
 placement opportunities participated in the BHSc working group. There is a

commitment to continue to work together to ensure that existing programs are not disadvantaged by this new program.

3. Endorsement of and/or Support for Program (If applicable)

- a. Describe endorsement(s) from relevant professional organizations, regulatory bodies, advisory committees, employers, and/or industry.
 - The proposed program is not accredited and does not require endorsement of a regulatory body. At this stage, relevant professional organizations such as health professional programs and regulatory bodies have not been consulted. While this program has an important pre-professional option, the direct connection with professional organizations and regulatory bodies is through the professional programs. Professional and regulatory health bodies will be informed of the program and its development and their feedback will be solicited.
 - The program has been endorsed by the College of Health Sciences Council of Deans (a committee that includes all Deans of the Health Sciences Faculties).
 Development of the Bachelor of Health Sciences is the # 1 education priority of the CHS Council of Deans.
 - The program has been endorsed by employers, including but not limited to: Alberta Health Services, Health Cities, Alberta Health Advocates.

Reviewer's Comment:

SECTION C: ENROLMENT PLANNING

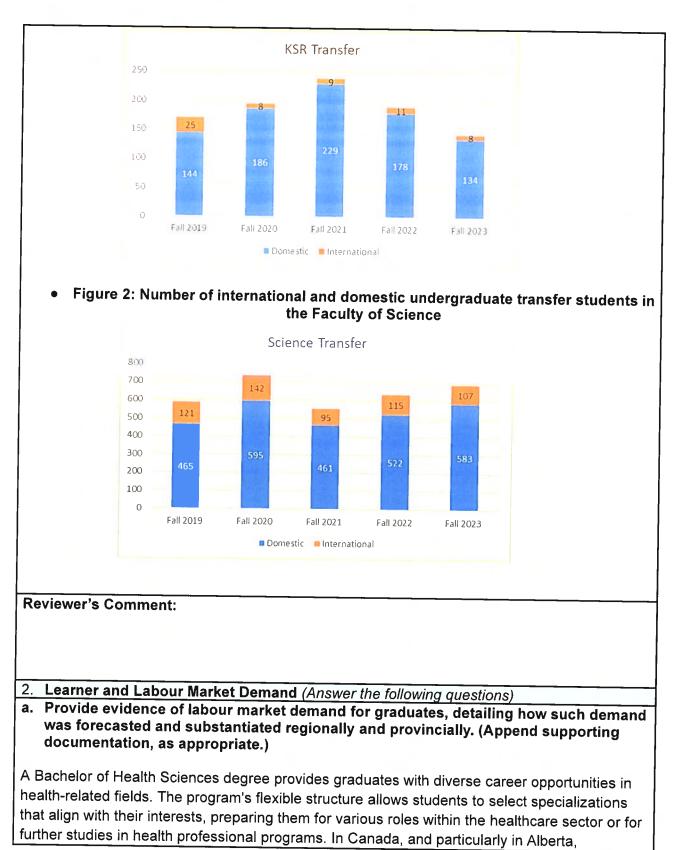
1.	(a)	Projected	Student	Enrolment	(Complete the	table	below	as applicable).
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Proposed Enrolment	1 st Year of Implement ation	2 nd Year of Implement ation	3 rd Year of Implement ation	4 th Year of Implement ation	Annual Ongoing
Total Headcount	250	500	750	1000	1000
 1st Year of Study 	250	250	250	250	1000
 2nd Year of Study 	0	250	250	250	750
 3rd Year of Study 	0	0	250	250	500
 4th Year of Study 	0	0	0	250	250
 5th Year of Study 	0	0	0	0	0
Anticipated No. of Graduates	0	0	0	250	250
Reviewer's Comment:					

The proposed admission number is 250 students per year. Student enrollment above does not include attrition or student transfers. Based on conversations with our enrollment partner and partners across the University, we believe attrition and transfer will balance out over time. The

majority of transfers will be into Year 2.

- a. Indicate the percentage of international students in the enrolment projections and provide a brief rationale regarding how the percentage was established.
 - We expect to admit 25 international students in the cohort of 250 (10%). There is also expected transfer of international students into the program, as discussed below.
 - Rationale:
 - o The percentage of undergraduate international students enrolled at UAlberta was 13% in 2023-24 (<u>Undergraduate Enrolment Appendix 2023/24</u>).
 - o The proportion of international undergraduate students in Fall 2024 in the Faculty of Science is 20%
 - o The proportion of international undergraduate students in Fall 2024 in the Faculty of Kinesiology Sport and Recreation is 7%
 - o Based on the range of international students across the University and in related programs, we believe 10% is a reasonable estimate.
 - In discussions with the Director of International Recruitment and Transnational Programs and Enrolment Management Partner, College of Health Sciences the importance of clear pathways (after graduation) and work integrated learning (including in offer letters) is critically important when recruiting international students. Pathways into jobs in health administration, health data science, public health and others will be clearly articulated. Students will have access to clear program/career maps, as will our program advisory team.
 - In addition to international students directly admitted to the program, international students will transfer into the program from other UAlberta programs. The undergraduate programs in the Faculty of Kinesiology, Sport and Recreation (KSR) and the Faculty of Science experience transfers of international students; 7% in KSR and 18% in Science. The percentages are based on the historical percentage of international students who transferred into each of the Faculties' programs over the last five years, as shown in Figures 1 and 2.
 - Transfers are expected to balance out attrition of international students thus the estimate of international students in the program at its inception remains 10%.
 - Figure 1: Number of international and domestic undergraduate transfer students in
 the Faculty of Kinesiology Sport and Recreation



employment growth in healthcare areas aligned with this degree is projected to outpace the national average of 1.4% annually until 2031¹. Specific year over year growth projections are indicated in this report for the major employment opportunities stemming from this degree.

KEY FINDINGS

Demand for Bachelor of Health Sciences (BHSc) programs is increasing due to the growing need for health system and healthcare professionals and the expansion of career opportunities within the health sector. Employment in the health care and social assistance industry in Alberta increased by 4.9% from 2022 to 2023, and by 36.9% over the last decade², reflecting the sector's importance and growth. There are significant shortages in healthcare workers, which suggests a strong potential for continued growth in demand for BHSc graduates.

There are many different career opportunities and pathways for graduates with a BHSc degree. The following categories/themes describe some of these opportunities and the labour market demand within different sectors of the health system:

Public Health and Community Health

Roles in public health and community health, including Health Educators, Health Coaches, and Community Health Workers, are in demand. The NOC 42201 category for Social and Community Service Workers, which includes these positions, is projected to see medium growth. Emerging roles such as Health Coaches, who assist clients in managing chronic conditions and maintaining healthy lifestyles, are becoming increasingly important as the focus on preventative care grows.

Health Administration and Management

Career opportunities in healthcare administration and management are expected to be in high demand, particularly for roles such as Clinic Managers, Health Services Managers, and Medical Office Administrators. The National Occupational Classification (NOC) 0311, which includes these positions, has been identified as high demand in Alberta. BHSc graduates with a focus on health administration, and a business minor, are well-positioned to fill these roles.

Health Policy and Advocacy

Health Policy Researchers, Consultants, and Program Officers (NOC <u>41404</u>) are in high demand, with very good employment prospects according to Job Banks Canada and <u>ALIS</u>. Graduates specializing in health policy and advocacy are likely to find ample opportunities in government, non-profits, and other organizations focused on shaping healthcare policy and improving public health outcomes. Entry level roles and roles that require more education exist.

Health Informatics and Data Analysis

The field of health informatics and data analysis is rapidly growing, driven by the increasing digitization of health records and the need for data-driven decision-making in healthcare. Positions such as Health Information Technology Specialists (NOC 21221) are listed as high demand and are expected to see significant growth, especially in Eastern Canada. The demand for skills in health information management, clinical data management, and health informatics is high, and BHSc graduates with these skills will be highly sought after. Students in the BHSc, particularly those that choose the Health System Innovation specialization, will gain important

¹ Macroeconomic Outlook (2022-2031) - Canadian Occupational Projection System (COPS) - Canada.ca (esdc.gc.ca)

² Open Alberta Industry Profile 2023 Health Care and Social Assistance

foundational knowledge and skills that will allow them to access further training in this area. For example, <u>Master of Health Informatics | School of Public Health Sciences | University of Waterloo</u>.

Occupational Health and Safety

Occupational health and safety roles, including Occupational Health Specialists and Safety Coordinators (NOC 22232), are in medium demand, with above-average job prospects. As workplaces continue to prioritize employee health and safety, the need for professionals in this area is expected to grow, offering stable career opportunities for BHSc graduates.

Research and Development

Although specific data on demand for research and development roles is limited, BHSc graduates can pursue careers as Research Assistants and Clinical Research Coordinators. These roles are critical for advancing healthcare knowledge and supporting the development of new treatments and technologies, making them essential to the healthcare industry's ongoing innovation.

Further Health Professional Education and Health Research Specialization

Many BHSc graduates use their degree as a foundation for further education in a health professional program, leading to advanced careers in medicine, dentistry, pharmacy, and other specialized fields. The demand for health professionals is high, and expected to continue to be high. The degree also provides a strong basis for pursuing master's or PhD programs in Public Health, Epidemiology, or other health sciences, enabling graduates to specialize further and increase their career prospects in high-demand areas such as hospital administration, health economics, and biostatistics.

b. Identify which stakeholder groups were consulted regarding demand/need for this program:
 X <u>Student/learners</u>

X Faculty

- X Program advisory committee
- Regulator and/or accreditation bodies (N/A)
- X Employers and professional associations
- □ Community organizations
- X Other post-secondary institutions
- Other (please identify)

c. Briefly discuss the results of the identified consultations and attach supporting documentation (e.g., minutes of meetings, letters of support, etc.), when available.

Students:

 Student learners were consulted through a 2-day tabling at the Geoffrey and Robyn Sperber Health Sciences Library. Over 50 students were engaged in one-on-one discussions.

- In Fall 2024, a survey was completed by 95 respondents including students in health professional programs and students in health science adjacent undergraduate degrees, such as Bachelor of Science (with varying majors).
- Comments from students during in person sessions, or on the survey included:
 - enthusiasm about a degree that explores different health careers and introduces them to a holistic view of health.
 - many students felt that their degrees specialized too much, too soon and appreciated that the proposed BHSc degree program allows students to explore many different careers in health every year
 - students already in health professional programs were interested to hear about a potential degree program that teaches about both individual and population health, along with emerging areas such as health data science and planetary health.
 - a few students had taken Bachelor of Health Science degrees at other institutions and discussed how they felt they were very well prepared for a career in health with the degree offering a well-rounded, health education with a great deal of flexibility for them to move into areas that interested them through their electives.
 - Student quotes and key survey results are attached in the Appendix
- In addition to the consultations mentioned above, meetings were also held with members of the Health Sciences Students Association (March 29, 2023; January 16, 2024; Oct 30, 2024) to discuss the program.

Faculty:

- Consultations related to the BHSc program began in Summer of 2022. All consultations are included in the following <u>spreadsheet</u>. Larger and collective consultations are discussed below.
 - Visioning sessions were held in Feb 2023 and included representatives from all the College of Health Science Faculties, the Faculty of Native Studies, Augustana Campus, the College of Natural and Applied Sciences, the College of Social Science and Humanities, and the Vice Provost Programs. Program rationale was discussed. The outcome of the sessions was a willingness to move forward with program development.
 - Town Halls. The BHSc program was discussed at 2 College of Health Sciences town halls. All Faculty and staff members in the Health Science Faculties were invited to learn more about a proposed program and had the opportunity to ask questions and provide feedback. About 200 people attended each town hall. A number of important questions surfaced at these town halls. Overall the Faculty members that attended the meetings were positive and supportive of the program.
 - Curriculum Mapping. In Fall of 2024, Faculties/programs were individually engaged in specific discussions about offering courses as part of the BHSc curriculum (i.e, willingness, capacity). Letters of support include information from Faculties/programs about courses they are able to offer as part of the BHSc. In most cases, courses will be offered as a new BHSc section.
 - CHS Council of Deans meetings. The Associate Dean Education, College of Health Sciences regularly attends the CHS Council of Deans meetings which include all Health Sciences Deans; chaired by College Dean and Vice Provost, College of Health Sciences. Updates are provided and feedback sought during

those meetings. The BHSc program has been a focus of two recent mini-retreats with the College Dean and the Health Sciences Deans.

Program Advisory Committee (BHSc Program Working Group):

- In November 2023 a BHSc working group was formed and included one representative from each Health Sciences Faculty, and Augustana Campus. The working group met monthly until June 2024 and was chaired by the Associate Dean Education in the College of Health Sciences and the Assistant Teaching Professor in Interdisciplinary Health.
- The outcome of the working group meetings was the documentation of the program rationale including student destinations and careers, collaborative development of program learning outcomes, and development of the program structure (preliminary curriculum mapping with course topics). The importance of mapping to professional programs (i.e., understanding prerequisites for professional programs) was emphasized in discussions with the working group.

Employers and Professional Associations:

- Health organizations have been consulted and in some cases have agreed to provide placement opportunities for students in the BHSc (<u>Health Cities</u>, Alberta Health Services (multiple departments), Ministry of Health, Alberta Health Advocates, Youth Empowerment and Support Services, College of Physicians and Surgeons of Alberta). Letters of support are found in the Appendix B.
- Professional organizations were not consulted during the process as the proposed degree will not lead directly to licensure in a health profession. Health professionals in many different health settings were consulted and contributed to the development of course content in the first course in the BHSc - Your Future in Health: Pathways and Possibilities.

Other post-secondary institutions - BHSc Program Consultations (Alberta, Canada, New Zealand, Australia)

- In the past two years, meetings were held with 12 program directors/leads of BHSc programs; many on more than one occasion. A complete list of these meetings can be found in BHSc Summary of Meetings (program director meetings highlighted in yellow)
- In Alberta, UCalgary, ULethbridge, MacEwan University and NW Polytechnic were consulted. UCalgary and ULethbridge have existing BHSc programs, MacEwan was considering a new BHSc program but it is now on hold.
- d. Provide evidence of learner demand for this program. How was this demand determined? (Append supporting evidence, as appropriate e.g., survey results, waitlists, demand in similar programs at other institutions etc.)

Over the past year, we met with administrators of the majority of BHSc programs across Canada. All experience high demand for their programs with the number of applications far exceeding the number of seats available. Information about the number of applications and number of admitted students is provided for select Canadian programs in the Table below.

University (year)	Number of Applications (total)	Number of Admitted students (per year)
UCalgary (2024)	700-900	110
ULethbridge	NA	100 (in three major streams - Addictions Counselling, Public Health, Indigenous Health)
Queens (2024)	5783	369
Western (2023)	4700	385
McMaster (2023)	6636	222
<u>Ottawa</u> (2024) - English	3097	444
Ottawa (2024) - French	577	132
Manitoba (2023)	400	80 (40 in Health Sciences, 40 in Health Studies)

As shown above, all BHSc programs have a high number of applicants. The UCalgary program meets 15% of demand, with some programs in Ontario only accepting 3-6% of applicants. Demand in Alberta can be assumed to be high, based on UCalgary application to enrollment data. UCalgary admits ~100-120 students, partly due the nature of the program as an honours only program, requiring extensive research experiences in senior years.

A recent <u>Toronto Star article</u> discusses the Queen's and McMaster BHSc programs and the demand for those programs. The number of applications for those programs alone suggest that it may be possible to market the proposed program in Ontario.

e. Identify and discuss any additional factors that may impact learner demand for this proposed program.

- Surging population growth in Alberta led to a recent <u>announcement of \$8.6B plan to build</u> <u>new high schools</u>. The population growth will similarly put pressure on seats in post-secondary education and further escalate the need for training in health.
- f. Briefly describe how the enrolment plan aligns with the anticipated demand for this program, taking into account the identified labour market demand and other Alberta program providers.

• The enrolment plan aligns with numbers from the larger programs in Ontario.

- The enrolment plan helps to provide additional spots at the UAlberta for Alberta students who are interested in health.
- g. Comment on the overall sustainability of learner demand for this program over the longer term.
 - The BHSc program is a health-focused program that supports pathways into careers immediately post-BHSc graduation (e.g., health data science, climate change and health); into accredited health professional training programs (e.g. Undergraduate Medical Education, Nursing Pharmacy, Occupational Therapy and more); and into research graduate programs. The need for people to work in health settings will not abate in the future. Health roles/careers roles may change and evolve; the program will evolve along with the most current knowledge and skills needed for employment.

Reviewer's Comment:

SECTION D: GRADUATE OUTCOMES AND PATHWAYS

- 1. Employment Outcomes (Answer the following questions)
- a. For what types of career paths (including entrepreneurial and/or self-employment paths) and employment opportunities does the proposed program/specialization prepare graduates?

The proposed program will prepare students for a number of different career opportunities. Discussed below are some potential employment outcomes <u>directly after completion of a BHSc</u>. There are also next destination outcomes into health professional programs, and into graduate learning opportunities that will be briefly discussed.

Knowledge and skills that contribute to employment outcomes are obtained in the BHSc through completion of core courses, a mandatory specialization and health electives. The core curriculum addresses program learning outcomes related to the determinants of health, health inequities, health system innovation, preventive health strategies, health careers, and research and durable skills. It is expected that completion of the core curriculum will allow students to be employed in entry level health careers, particularly in areas connected to the three specializations. The specializations discussed in the program of study are aligned with different careers and examples of employment outcomes are outlined below. The list of employment outcomes is not exhaustive. For a more complete labour market report that gives specific examples of jobs connected to each of the three specializations, go to appendix D.

Population and Public Health Specialization:

Professions include but are not limited to: Health policy research analyst, Health promotion program officer/ Health promotion specialist, Health services research assistant, Healthcare consultant, Policy development officer, Community Liaison, Community Relations Specialist, Environmental Health Specialist, Public Health Program Coordinator, Community Health Worker, Public Health Policy Analyst, Mental health programs consultant, Health Educator/Health Coach

Health Systems Innovation Specialization

Professions include but are not limited to: Public Health Program Manager, Research Coordinator, Healthcare Quality Improvement Consultant, Health records technician, Health information management practitioner, Data science specialist

Mental Health and Well Being Specialization (under development)

Possible Entry-level Careers: Addiction Counsellor; Career Development Professional; Child and Youth Care Worker; Crime Prevention Coordinator; Crisis Counsellor; Group Home Coordinator; Psychologist Assistant; Behavioural Health Consultant; Family and School Liaison

Next Destination - Pre-professional Option: The Pre-professional option enables students to complete prerequisite courses required to enter health professional programs atUAlberta. In addition to prerequisite courses, each professional program will recommend courses that will enhance preparation for their program. Example professions include:

- Nurse
- Occupational Therapist
- Pharmacist
- Physician
- Physiotherapist
- Speech Language Pathologist
- Dietetics
- Medical Laboratory Scientist
- Radiation Therapist
- Dental Hygienist
- Dentist

Next Destination requiring further study (Examples)

- health informatics specialist
- health policy researcher
- health data analyst/researcher
- b. In cases of regulated professions, how was the regulatory body consulted and what feedback did it provide in terms of labour market factors?
 - Not applicable
- c. Identify existing or planned program or institutional supports that enable transition from post-secondary institution to work for graduates.
 - The University of Alberta Career Centre is the source for career and employment information and expertise at the University of Alberta. The Centre strives to empower students, postdoctoral fellows, and alumni to develop the skills, knowledge, experiences, and connections they need to confidently manage their careers. Students can receive individual advising on career management and work search strategies, work search tools, graduate school applications, interview preparation for industry or academia, and their LinkedIn profile. Students who require prolonged career support to address complex issues can access career coaching services with the option of accessing online modules for added support. A suite of experiential learning programs including speaker series, career information interviews, career mentoring, job shadowing, internships and work experience programs puts students in contact with professionals from their field of interest to explore career options at a deeper level.

	Students can also access funding to offset the costs of professional or leadership activities. The Career Centre offers an extensive online job board, several online resources, and two multi-disciplinary career fairs per year. Career support is also offered
•	to alumni for life. University of Alberta International (UAI): The International Student & Visitor Services (ISVS) team at UAI provides programs, services, and events for UAIberta international students. The UAI team of licensed immigration consultants and student advisors support international students and academic visitors with immigration and support in adjusting to Edmonton – helping them to succeed at UAIberta. Some of these services include assistance with acquiring study permits, working in Canada and post-graduation work permit support, and pathways to permanent residency.
Revie	ewer's Comment:
Le	arner Pathways
a. To	what extent will learners be able to transfer credits to and from other post-secondary stitutions?
٠	<u>Transfer Alberta Search</u> will be used to indicate to students what courses may transfer into a BHSc.
٠	Transfer Credit from Augustana Campus will be determined specifically for this program and reviewed and updated regularly.
•	Transfer credit has been discussed in conversations with the Faculty of Kinesiology, Sport, and Recreation, and Faculty of Science at UAlberta. Clearly defining transfer credit for students is a priority and something that will be addressed with our partners in the lead up to the launch of the degree.
o. Wi pu	hat types of further studies, if not within the same field, would graduates be most likely to rsue?
•	Further graduate research degrees in health adjacent fields (e.g., data science) and management-focused degrees (e.g., MBAs) will be strong possibilities for students to pursue after this degree. Students will also pursue graduate training in kinesiology, rehabilitation medicine, public health or other health related graduate programs. Further studies in health professional programs is an important pathway. Several of the health professional programs, including Occupational Therapy, Physical Therapy, Speech Language Pathology, After Degree Nursing and Undergraduate Medical Education require a Bachelor's degree before application.
Revie	wer's Comment:
. So	cietal and Community Benefits (if applicable)
. In c	cases where labour market demand is not the primary reason for this program, identify
ant	icipated benefits from implementation of the proposed program to the wellbeing of
con	nmunities in Alberta, particular those that your institutions serves:

 The proposed Bachelor of Health Sciences program will foster several vital social and community benefits, positively impacting the University community, Alberta, and beyond. This program will create a foundation for students to develop a holistic understanding of health that integrates social, cultural, and environmental determinants, equipping graduates to address complex health challenges with a well-rounded perspective. By focusing on interdisciplinary education, the program will encourage students to think critically and collaboratively, skills essential for engaging in community health initiatives and driving health innovation.

- A new health sciences degree will give students another option for undergraduate health programming at UAlberta. This is important to ensure that seats in Nursing in particular are used by students who will add to the Nursing workforce, as opposed to using the Nursing degree as a stepping stone to another health degree that requires a bachelor's degree before application (e.g.,medicine, physical therapy, occupational therapy, speech language therapy). Society and the community benefit when students in health programs go on to practice in a profession they trained for.
- The program will also strengthen community connections through partnerships with local community health organizations, health facilities, and public health agencies. These partnerships allow students to participate in real-world projects that directly impact community well-being, from public health campaigns to hands-on community health assessments. Such experiences will not only enhance students' practical skills but also their commitment to serving underrepresented populations in Edmonton and Alberta, aligning with the broader goal of improving health equity.
- The program will cultivate leaders prepared to address shortages in the healthcare system and encourage students to take on global health challenges. Through courses on Indigenous health, health data science and AI, and health system science, graduates will gain a broad understanding of health system issues that resonate both locally and globally.
- A BHSc program will be a pathway into health professional programs, and help to support the high demand for health professionals. The BHSc program exposes students to all UAlberta health professional programs, including those that currently have large student interest, and those that receive fewer applications and are less well known. That exposure helps to support the health workforce.

Reviewer's Comment:

SECTION E: FINANCIAL VIABILITY AND SUSTAINABILITY

1. Budget and Funding Sources (Answer the following questions)

a. Describe how the institution plans to finance the program, (e.g. tuition, grants etc.):

• The program will be funded via tuition revenue. An application for Targeted Enrollment Expansion funding will be made should it become available. The program will not be launched without sufficient funds to enable its delivery and sustainability.

- A program fee of \$500 per student/per term will be charged to cover costs related to interdisciplinary experiential learning, including land-based learning.
- Funding for the administrative services such as timetabling, academic integrity, and work integrated learning are supported through existing funding for those functions in the College of Health Sciences.
- Many courses in the curriculum map are existing courses; the Faculties that teach those courses have existing staff to teach the courses, and they will receive revenue from that instruction.
- b. Discuss risk mitigation plans should full revenue(s) not be achieved or should costs exceed amounts budgeted.
 - Based on demand in other BHSc programs in Canada, and population growth, we believe the target number of 250 admitted students can be attained.
 - There is unmet demand for other programs at the University of Alberta, suggesting that there are students who would enroll at the University of Alberta if there were additional seats in a new program. For example in 2023-24 the Faculty of Science received 15,438 applications and 3361 students registered. (See <u>Undergraduate Enrolment Appendix 2023/24</u>).
 - Some program-specific courses, especially within the Interdisciplinary Health Experiential Learning sequence (e.g., INTD 100 Your Future in Health) will be available for registration to other students in other programs, allowing tuition revenue to support the courses and the costs associated with them, and the program generally.
 - International students will be actively recruited into the BHSc program; with an initial target of 10% of enrollment, growing to 15% within 5 years. International student enrollment includes international students admitted and those who transfer into the program, as discussed in Section C. The additional revenue realized from International student enrollment will help to support the program.
 - A conservative resource growth plan will be implemented during program implementation. The number of dedicated advisors and other administrative staff will only increase as enrollment increases (e.g., as the program rolls out towards full capacity), keeping costs of the program lower in the first 1-2 years.
 - Academic positions including an ATS instructor to teach and support specific BHSc courses (INTD courses), and an Indigenous scholar may be shared and have responsibilities related to the BHSc program and programming in a Faculty, at least initially. As the program rolls out to full implementation staff members will become fully funded by the BHSc program and have responsibilities dedicated to the BHSc program.
 - Areas of risk include:
 - Academic salaries once implemented the majority of academic salaries will be related to course instruction which is in the Faculties, and supported by academics in the Faculties. Risks related to academic salaries are reduced because the program emphasizes areas of study that are identified areas of research excellence at the University of Alberta (for eg. Health System Innovation, AI and Health, Population and Public Health) and have Faculty capacity.

Reviewer's Comment:

2. Tuition and Student Cost Considerations (Answer the following questions)

- a. Document tuition and fee projections for students (specify domestic student tuition fees, international student tuition fees, compulsory student fees, and other costs likely to be incurred by students (texts, equipment etc.). Provide rationale where appropriate such as comparisons with similar programs. (Consult with the Ministry as needed.):
 - Based on tuition from comparators (see Tables below), tuition will be set at rates comparable to UAlberta programs in the Paculties of KSR and Science. Budget modeling for this program has been done using those rates.
 - A program fee of \$500 per student/per term will be charged to cover costs related to interdisciplinary experiential learning, including land-based learning.
 - Full time students (i.e., registered in 9 or more credits of courses) will pay \$1153 in compulsory <u>Non-Instructional Fees</u>

Tuition Comparators - Tuition for BHSc Programs in 2023-23 Academic Year

Institution	Domestic Tuition	International Tuition	
McMaster University	\$7,204.50 (Out of Province) \$6,042.60 (In Province)	\$54,017.40	
Queen's University	\$6,083.10	\$25,770.00	
University of Calgary	\$7,100.00	\$28,460.00	
University of Manitoba	\$4,931.40	\$18,846.30	
University of Ottawa	\$6,842.54 (Out of Province) \$6,206.38 (In Province)	\$43,335.08	
University of Waterloo	\$9,500.00 (Out of Province) \$9,000.00 (In Province)	\$48,000.00	
Western University	\$6,669.00 (Out of Province) \$6,050.00 (In Province)	\$42,233.00	
Dalhousie	\$10,320	\$28, 866	

	Domestic Tuition	International Tuition
BSc Kin (in Faculty of KSR)	\$7011.60	\$33,968.40
B Sc (in Faculty of Science)	\$7,011.60	\$33,968.40
 te: Projected 2025-26 Internat KSR - \$35,666.40 B Sc (in Faculty of Science 		l
 KSR - \$35,666.40 		
 KSR - \$35,666.40 	e) - \$36,175.20	

SECTION F: INSTITUTIONAL IMPACT

1. Institutional Capacity (Answer the following questions)

- a. Briefly describe how the proposed program aligns with the institution's mandate and government priorities.
 - The <u>University Strategic Plan</u> (SHAPE), <u>Strategic Plan for Research and Innovation</u>, and the <u>Student Experience Action Plan | University Strategic Plan</u> align with and guide the development of the new BHSc program. The <u>Indigenous Strategic Plan</u>, <u>Braiding Past</u>, <u>Present and Future:University of Alberta Indigenous Strategic Plan</u>, was foundational to the development of the program at all stages of development.
 - o SHAPE
 - One of the transformational impacts discussed in SHAPE is innovative and flexible pedagogies. The new BHSc program has the opportunity to fully consider and implement innovative and flexible pedagogies to support diverse learners. An example of our innovative approach is the first offering of INTD 100 Your Future in Health: Pathways and Possibilities. This fully online asynchronous course is offered for the first time in Winter 2025. It is accessible to learners across the University and to non-UAlberta students (enrolling as an open student). Other courses within the program will be fully online to support student agency. Mode of course delivery will be clearly communicated to students to allow planning.
 - Expected population growth of those aged 18-24, as discussed in SHAPE, provides rationale for an expansion of seats in the post-secondary sector. The new post-secondary enrolment seats associated with this proposed program will be specific to health and provide foundational health education for students, who will then contribute to health system change and enhancement in Alberta.
 - o The <u>Strategic Plan for Research and Innovation</u> identifies Health and Well Being as one of 3 areas of global excellence where UAlberta has "broad, long-term and deep institutional strength". Health researchers across the College of Health Sciences, and in other parts of the University, support classroom teaching in the BHSc program, and in selected undergraduate research experiences. Research strengths in climate change and health, the integration of the social determinants of health into our scholarly work, and in the prevention of health challenges align directly with the BHSc curriculum which considers health a holistic multifactorial state.
 - o The <u>Student Experience Action Plan</u> includes 7 themes; 3 of which will be discussed in more detail.
 - Enabling academic agency and flexibility is addressed in the proposed program through the offering of some courses (where appropriate) in fully asynchronous learning environments with purpose built online courses. The program has several electives and in our discussions with students, they have supported the flexibility and opportunity that electives give them to explore topics.
 - The BHSc fully supports *Transitions into and out of study* by welcoming students to learn about the wide range of careers in health in one of the first courses in the program. Through academic advising and recommendations from health and research programs, students will be guided in their path (particularly their use of minors electives) to support transitions directly into careers and to next destinations.

 Finally, the Student Experience Action Plan emphasizes that
Relationships, Connection, and Belonging Matter. Programming,
particularly in the Interdisciplinary backbone (INT D 100, 2XX, 3XX, 4XX)
will bring the cohort of students together every Fall. Learning activities in
those courses use group-based learning to build relationships, team and
communication skills while exploring wicked problems in health and learn
more about health careers.
 The draft <u>EDI Integrated Action Plan</u> moves from strategic planning to action and strives for a "vibrant and interconnected University Community". The action plan
discusses practices that help the University consider and embrace our
responsibilities supporting an interconnected place to study and work; a place of
belonging. The EDI Strategic Initiatives Officer in the College of Health Sciences
has been engaged in conversations of the BHSc working group and will continue
to support programming that ensures equity, diversity and inclusion are
foundational to student learning.
 Braiding Past Present and Future: Indigenous Strategic Plan and the TRC calls
to action inform and shape the proposed program in terms of content and
approach.
 The Vice Provost: Indigenous Programming and Research was consulted
early in the development process and challenged us to consider
innovative ways to decolonize the curriculum. Approaches were discussed
along with resources (including people) who could be engaged to support.
 The Indigenous Strategic Initiatives Officer (Marissa Nakochee) in the
College of Health Sciences was involved in BHSc working meetings, and
provided guidance regarding the approach for content and methods of
instruction to support the development, delivery and weaving of
Indigenous content and ways of being into the program. Marissa will
continue to be an important partner in the development of the BHSc
program.
 The senior level 300 level course called INT D 3XX will be a team taught
course, developed with the expertise of Marissa Nakochee and other
Indigenous scholars. An initial discussion has occurred with a group of 5
Indigenous scholars about that senior course. The early plans for the
course include collaboration with Indigenous communities and land based
learning.
 A representative from the Faculty of Native Studies participated in the
visioning sessions for this program, in Feb 2023. A minor in Native studies
is planned.
 The proposed budget includes an Indigenous scholar, as an advisor and
an integral part of program delivery. More information can be found in the
Appendices.
 Continued guidance will be needed to support the Indigenization of the
BHSc curriculum.
 Alignment with Government of Alberta priorities.
o Programming in health is an identified priority for the Government of Alberta, and
this program introduces students to the many possible careers in health, along
with skills and experiential learning for students in durable skills including
communication, critical thinking, team functioning, role clarification, and

 negotiation where there may be disagreement. Durable skills are recognized in <u>Alberta 2030: Building Skills for Jobs</u> as a critical need that will allow students to learn, adapt and thrive in rapidly changing work environments. The <u>Refocusing health care in Alberta</u> plan strives to provide timely access to a health care practitioner. Timely access means more health care professionals but importantly team based collaborative care, with the right people in the right places to help people to be and stay healthy by preventing health challenges. The BHSc program will consistently allow students to develop and refine their skills as team members, explore hierarchies that sometimes challenge teams, and expose them to the breadth of opportunities for careers in health.
 b. To what extent does the program build on the institution's existing programs, infrastructure, resources and experience from offering programs in related fields? The BHSc is a new program at the University of Alberta, and the first that has been intentionally built to capitalize on the knowledge and expertise of faculties across the College of Health Sciences and the University as a whole. The College structure, put in place in 2021, provides the structure that supports this type of new interdisciplinary offering. Integrated Enrolment Growth Plan (IEGP) report, published Oct 2024, recognizes and plans for upgrades and changes to infrastructure and student services that will be required to support additional students.
Reviewer's Comment:
2. Internal Review and Approval
 Indicate which internal governance body recommended approval and specify date of approval.
The Host Faculty is the School of Public Health.
 SPH Faculty Council - December 2024 - vote confirmed willingness to serve as the Host Faculty SPH Faculty Council - January 21, 2025, for approval
Reviewer's Comment:

SECTION G: SYSTEM IMPACT

1.	Program/Specialization Duplication (Answer the following questions)
a.	Does the proposed program/specialization potentially duplicate existing programming in the
	Alberta Adult Learning System? X Yes; or No
b.	If yes, list these programs.
	 University of Calgary - Bachelor of Health Sciences
	 University of Lethbridge - Bachelor of Health Sciences

c. If proposed program/specialization potentially constitutes program duplication, explain why such duplication is appropriate and beneficial in this circumstance.

UCalgary BHSc

- The proposed program and the University of Calgary Bachelor of Health Sciences are distinct programs as indicated in the <u>UCalgary letter of support</u> and summarized below:
 - The UCalgary program is a research intensive honours only program. The proposed program does not have an honours option.
 - The proposed program is a more general program than the UCalgary program and less bio-medically focused
- The UCalgary program faces significant application pressure (700-900 applications each year for 110 seats). The support letter from UCalgary communicates confidence that based on student demand and curricular differences between the two programs the programs can co-exist and complement each other. A BHSc program at both the University of Calgary and the University of Alberta benefits students in Alberta by providing programming that allows them to stay in Alberta.

ULethbridge BHSc

• The University of Lethbridge BHSc program is housed in the Faculty of Health Sciences. There are three separate programs/majors leading to a Bachelor of Health Sciences (Addictions Counselling, Indigenous Health and Public Health). The programs/majors have separate program coordinators and the Public Health major is the largest program. In their Letter of Support, the Dean of the Faculty of Health Sciences and the Coordinator of the Public Health program see the UAlberta proposed program as one that contributes to education in Public Health. In their view the proposed program would become one of only 4 in the country to provide bachelors level education in Public Health.

Reviewer's Comment:

SECTION H: OTHER CONSIDERATIONS

Other considerations

- a. Are there other factors or considerations the Ministry should take into account when reviewing this proposal?
 - <u>NA</u>

Reviewer's Comment:

RECOMMENDATION (FOR DEPARTMENT USE)

Recommendation(s):

Rationale for Recommendation:

Reviewer(s):

Date Completed:



COLLEGE OF HEALTH SCIENCES

Bachelor of Health Sciences Proposal

Appendices

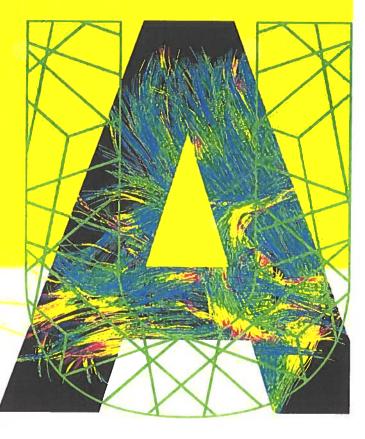


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Appendix A: Overview of Proposed Program

Calendar Description (3-4 sentences)

The Bachelor of Health Sciences (BHSc) program offers a new level of interdisciplinary health science learning that spans the full spectrum of human health from particles to policy to populations to planetary health. Health equity, preventive health strategies, and durable skills such as communication and critical thinking are central to the degree. The breadth of career possibilities in health are introduced early and throughout the program to help students find the role that is right for them. Students complete one of three specializations including 1) population and public health; 2) health system innovation, and 3) mental health and well-being. A pre-professional option provides guidance and coursework options for students interested in next destination health professional programs.

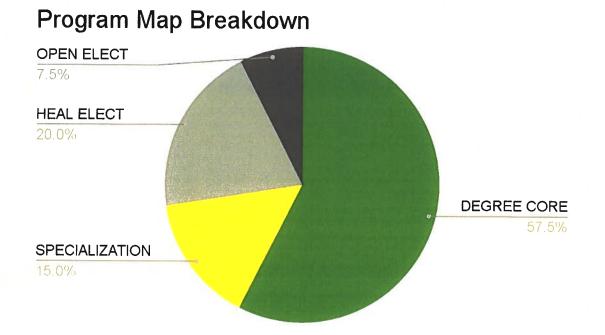
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Proposed Program of Study

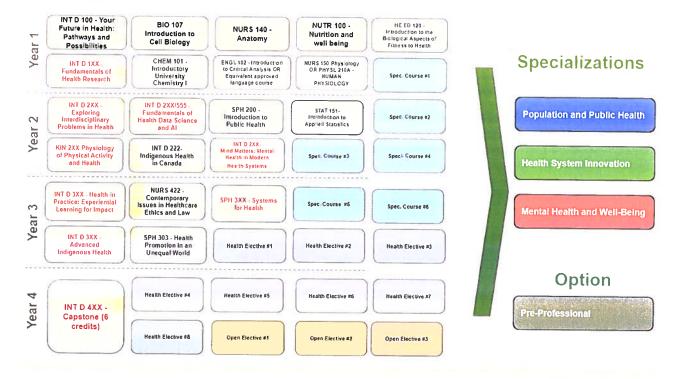
The BHSc program comprises **120 credit units** over four years. In summary the degree consists of:

- Degree Core: 69 credit units.
- **Degree Specialization**: Students must complete one 18-credit degree specialization. Each specialization has two required courses and students can choose from a list to select 4 additional courses.
- Health Electives: Students can select 24-credits from a broad list of approved health electives, which can also includes courses they didn't take in their specialization or in other specializations. These can also be health professional program prerequisites. Need to complete at least 9-credits at the 300 level and 9-credits at the 400 level.
- **Pre-professional option:** Students can select to complete health professional program prerequisites as health electives.
- **Open Electives**: Students will be able to select 9 credits of electives from any course across the University.

The map below provides a breakdown of the % of credits for each credit type.



Program Curriculum Progression Map (Overview)



Courses in **RED** are new courses.

Degree Core: Courses by Year

Year 1

INT D 100 - Your Future in Health: Pathways and Possibilities

3 units (fi 6)(EITHER, 3-0-0)

This course introduces students to health topics including human health, health equity, and health systems - with a particular focus on possible vocational roles in health and health adjacent positions. Foundational principles specific to team-based practice are introduced.

BIOL 107 - Introduction to Cell Biology

3 units (fi 6)(EITHER, 3-0-3)

An introduction to cell structure and function. Major topics include the molecules and structures that comprise prokaryotic and eukaryotic cells, the mechanisms by which energy is harvested and used by cells, how cells reproduce, and how information is

stored and used within a cell via the processes of DNA replication, transcription, and translation. Prerequisites: Biology 30 and Chemistry 30. Note: BIOL 107 is not a prerequisite for BIOL 108. BIOL 107 and 108 can be taken in either term.

NURS 140 - Anatomy

3 units (fi 6)(EITH/SP/SU, 3-0-0)

Introduction to the structure of the human body. Available to all students. Nursing students must achieve a minimum grade of C+ in order to progress in the program. Note: In Fall term, this course is not open to students currently in a Nursing program with the Faculty of Nursing at the University of Alberta. These students must take courses as outlined in the Course Sequence for their program in the University Calendar.

NUTR 100 - Nutrition and Well-being

3 units (fi 6)(EITHER, 3-0-0) Principles of nutrition. The need for and functions of the major nutrients for humans.

HE ED 120 - Introduction to the Biological Aspects of Fitness to Health

3 units (fi 6)(EITHER, 3-0-0)

A biological analysis of the contributions of physical activity and exercise to fitness and long term health. Emphasis is on the introduction of training principles, health related components of physical fitness, exercise and physical activity guidelines, and the application of these concepts for determination of physical fitness, individual long term health outcomes, and preventable disease.

ENGL 102 - Introduction to Critical Analysis

3 units (fi 6)(EITHER, VARIABLE)

Introduces methods of critical analysis through a range of literature written in English, broadly conceived, from different historical periods and cultural locations. Note: Not to be taken by students with 6 units in approved junior English.

CHEM 101 - Introductory University Chemistry I

3 units (fi 6)(EITHER, 3-1S-3/2) Atoms and molecules, states of matter, chemistry of the elements. Prerequisite: Chemistry 30, or equivalent.

NURS 150 - Physiology

3 units (fi 6)(EITH/SP/SU, 3-0-0) An introduction to human physiology. Available to all students. Corequisite: NURS 140. Nursing students must achieve a minimum grade of C+ in order to progress in the program. Note: In Fall term, this course is not open to students currently in a Nursing program with the Faculty of Nursing at the University of Alberta. These students must take courses as outlined in the Course Sequence for their program in the University Calendar. In other terms, this course is open to all students, including those currently in a Nursing program with the Faculty of Nursing at the University of Alberta.

INT D 1XX - Fundamentals of Health Research (NEW)

3 units (fi 6)(EITHER, 3-0-0)

This course introduces students to the essential principles of health research and its critical role in the health system and for health professionals. Students will explore research methodologies, data collection, and analysis, gaining hands-on experience by conducting their own research projects. Through this process, they will learn how empirical evidence informs decision-making, policy, and practice in various health-related fields. The course emphasizes the connection between research and improving health outcomes in professional practice.

Year 2

INT D 2XX - Exploring Interdisciplinary Problems in Health (NEW)

3 units (fi 6)(EITHER, 3-0-0)

This course engages students in problem-based learning to address contemporary, complex, multifaceted health issues that resist straightforward solutions. Using system and design thinking frameworks, students will analyze wicked problems in health while proposing research designs and learning how to gather data, and carry out systematic reviews. The course emphasizes critical thinking and collaboration, equipping students with the skills to evaluate health research and contribute meaningfully to solving real-world health challenges. This course is open to BHSciences students only. Prerequisite: INTD 100.

INT D 2XX - Fundamentals of Health Data Science and AI (NEW)

3 units (fi 6)(EITHER, 3-0-0)

This course introduces Undergraduate students from all disciplines, but specifically health, to essential data science techniques and AI tools, enabling them to transform ideas into impactful analyses. Students will gain practical skills in programming, data visualization, and ethical AI usage, preparing them to apply these competencies across health-related fields and professional contexts.

SPH 200 - Introduction to Public Health

3 units (fi 6)(EITHER, 3-0-0)

This course will introduce you to fundamental knowledge and concepts related to public health. Starting with the history and evolution of the discipline of public health, onto how the health of populations is protected and measured, you will gain a better appreciation of the importance of the social determinants of health and how health inequities, chronic and communicable diseases, injuries and the environment can impact health are explored. Additional topics include how promotion of healthy communities can be achieved through knowledge translation and advocacy. If you are interested in health then this course will serve as an excellent primer to your future studies in any health field. Topics are covered using a mix of lecture, discussion and interactive case study evaluation.

STATS 151 - Introduction to Applied Statistics

3 units (fi 6)(EITHER, 3-0-0)

Data collection and presentation, descriptive statistics. Probability distributions, sampling distributions and the central limit theorem. Point estimation and hypothesis testing. Correlation and regression analysis. Goodness of fit and contingency table. Prerequisite: Mathematics 30-1 or 30-2.

KIN 2XX Physiology of Physical Activity and Health (NEW)

3 units (fi 6)(EITHER, 3-0-0) Course description TBD.

INT D 222 - Indigenous Health in Canada

3 units (fi 6)(EITHER, 3-0-0)

This course is offered in response to the Truth and Reconciliation Commission of Canada: Calls to Action, and is the beginning step to culturally safe interaction and practice. Focus is on introducing students to a variety of historical realities and contemporary issues relevant to Indigenous health in Canada. Students will examine issues and contributions facing settler relations from a historical, contemporary and critical perspective, with a focus on health and well-being. Note: Priority will be given to students in health science programs where this is a required course. Not to be taken if credit is received for NURS 222.

INT D 3XX - Mind Matters: Mental Health in the Modern Health System (NEW)

3 units (fi 6)(EITH/SP/SU, 3-0-0)

This course explores the complexities of mental health within the contemporary health system. In particular, it will highlight the interplay between mental health, systemic

health system challenges, stigma, and access to care. Students will analyze current policies and practices while developing strategies to promote mental health awareness and improve outcomes in diverse populations. Note: this course is available to BHealth Sciences students only.

Year 3

INT D 3XX - Health in Practice: Experiential Learning for Impact (NEW)

3 units (fi 6)(EITH/SP/SU, 1-0-2)

This course bridges theory and practice through immersive, hands-on learning experiences in the health sciences. Students will select from a range of experiential options, including service learning with community health organizations, health projects with health industry partners, international experiences, or micro-placements in health organizations or research labs. Emphasizing collaboration, leadership, and communication, the course continues to develop students' durable and research skills for tackling real-world interdisciplinary health challenges. By applying systems thinking in complex, authentic settings, students prepare for diverse career pathways and further studies in health. Note: this course is available to BHealth Sciences students only. Prerequisites: INTD 100, INTD 2XX (Interdisciplinary Problems).

NURS 422 - Contemporary Issues in Healthcare Ethics and Law

3 units (fi 6)(EITH/SP/SU, 3-0-0)

The course examines a range of ethical theories, relevant research, and approaches to ethical decision-making to critically debate real world problems in health care. Students will develop an understanding of health law and health care ethics and of the relationship between law and ethics. Note: Available only to nursing students in the Collaborative/Honors Program, After Degree/After Degree Honors Program or RPN-BScN Program. Prerequisite for students in the Collaborative/Honors and After Degree/After Degree Honors Yours and After Degree/After Degree Honors After Degree Honors Yours and After Degree/After Degree Honors Yours Yours Yours and After Degree/After Degree Honors Yours Your

SPH 3XX - Systems for Health (NEW)

3 units (fi 6)(EITHER, 3-0-0)

This course examines the health systems in Canada and other countries, focusing on how health is delivered and the factors influencing access and quality. Students will engage in comparative analysis, and explore the idea around a health learning system. Students will use health systems science as a guiding framework and apply various research methods to investigate the effectiveness of health policies and practices in promoting equitable health outcomes. Prerequisite. INTD 100, SPH 200

INT D 3XX - Advanced Indigenous Health (NEW)

3 units (fi 6)(EITH/SP/SU, 0-0-3)

This course focuses on advanced topics in Indigenous health and well-being, exploring the impacts of colonization and systemic racism. Through experiential learning opportunities, students will engage with Indigenous communities to understand traditional healing practices, cultural resilience, and the ongoing challenges faced in health. This course emphasizes the importance of collaboration and respect in addressing Indigenous health. Note: this course is available to BHealth Sciences students only. Prerequisite: INTD 222.

SPH 303 - Health Promotion in an Unequal World

3 units (fi 6)(EITHER, 3-0-0)

Health promotion employs a diverse range of targeted and population-level social and environmental actions to advance health, well-being, and equity. It involves multi-sectoral collaboration to help communities, individuals, and governments address public health issues. Health promotion action takes the form of healthy public policy, creating environments that are supportive of health, and strengthening community and individual capacity and skills to improve their control over their health. In this course, students will be exposed to the fundamental concepts, principles, theories, and contemporary practices within the field of health promotion, as a core function of public health. Additionally, the course introduces the students to health promotion using lenses of health equity and social determinants of health. The curriculum aims to impart both practical and theoretical knowledge encompassing the planning, development, implementation, and evaluation of health promotion-focused public health interventions.

Year 4

INT D 4XX - Independent Capstone in Health Sciences (6 credits) (NEW)

6 units (fi 12)(EITHER, 1-0-5)

This capstone course allows fourth-year BHSc students to design and undertake an independent project that aligns with their career interests and personal learning goals. With flexibility in credit hours (3, 6, or 9 credits), students can tailor the project's scope and depth, choosing from a wide range of topics and methodologies in the health

sciences field, including but not limited to: research, community health initiatives, policy analysis, or health education. Note: this course is available to BHealth Sciences students only. Prerequisites: INT D 100, INT D 2XX and INT D 3XX.

Information about Interdisciplinary Health Experiential Learning Course Sequence

INT D 100 Your Future in Health: Pathways and Possibilities (already developed) 3 *units* will give students a common framework for understanding health by 'introducing' students to definitions, models of health, social determinants of health, and more all through a systems thinking approach. Students will also be introduced and practice research and durable skills. They will be introduced to some of the major challenges faced across the health system—climate change, health system improvement, and mental health and addictions. Students will learn about different health careers through listening to and reflecting on a weekly podcast called 'Shaping Health'.

INT D 2XX Exploring Interdisciplinary Problems in Health 3 *units* will allow students to continue to explore professions through group job shadowing/interviewing professionals. They will also do a small systems/design/complex adaptive systems group research project on a key problem in the health or healthcare systems with links to social determinants of health. The course will be split into 3 modules, which will be of three major health problems facing the health system at the time. These will be a continuation of the major problems explored in INT D 100. The main focus of this course is a deeper dive into the social determinants of health, and intentionally practicing durable skills (focus on communication and collaboration) reflecting on their implementation and being evaluated on them via assessments. As an additional course requirement, student groups will organize a panel on a particular health issue/social determinant as part of a BHSc learning festival event (still in the ideation phase). Prerequisite: INTD 100

INT D 3XX Experiential Learning in Health 3 units This course offers students the opportunity to bridge theory and practice through immersive, hands-on work integrated learning experiences in health. Students will select from a variety of experiential learning options tailored to develop skills and follow interests in key areas of health sciences, preparing them for careers and further studies in diverse health fields. Experiences include service learning with community health organizations, simulation learning activities in the Health Sciences Education and Research Commons, collaborative health projects with industry partners, and micro work placements in a health organization or research lab. Through active participation, students will build

professional skills, engage with real-world health challenges, and apply systems thinking in complex, authentic settings. Prerequisites: INTD 100 and 2XX

INT D 400 Independent Study/Capstone 6 units This course will be a continuation of INT D 3XX with increasing depth and independence of learning. Experiential learning will be central to this course. Students can choose to build on any of the pathways in INT D 3XX. They may consider an 'International Experience' with the assistance of partners at UAI. Prerequisites: INTD 100, 2XX, and 3XX.

Degree Specializations

Students in the BHSc program will tailor their degree by choosing a mandatory specialization (18-credits) from 3 areas, including:

- 1) Population and Public Health
- 2) Health Systems Innovation
- 3) Mental Health and Well-being

Students must declare a specialization before the end of their 2nd year Fall term. They will declare a specialization by submitting a form to the BHSc program office, allowing predictability in terms of class sizes.

4) Pre-professional Option

A pre-professional option, separate from a specialization, will also be offered. Students can use their health electives to complete the pre-professional option. This option allows students to complete prerequisite courses for specific professional programs. Student advisors and health professional programs guides will be used to help students select the correct prerequisites for various health professional programs.

Selection and development of specializations were based on the following principles:

- An area of demonstrated UAlberta research excellence
- Labour market analysis
- Student interest
- Teaching capacity

Learning outcomes, courses, and careers or next destinations associated with the specialization, and the pre-professional option are summarized below.

1.Population and Public Health

Population and public health focuses on promoting wellness and reducing disease across communities, emphasizing prevention and health promotion. Students will learn to address population health issues, including global health, inequities, epidemiology, and health behavior, and design public health interventions to improve community well-being. This pathway prepares graduates for roles in public health, health policy, and preventive care, and provides a foundation for further studies in fields like kinesiology, epidemiology, and global health.

LO1 - Apply Health Determinants: Students will examine and apply systems and design thinking to local, national and global social, environmental, and behavioral determinants that influence the health of individuals and populations.

LO2 - Develop Public Health Strategies: Students will design proactive health promotion and disease prevention interventions to improve community well-being.

LO3 - Apply Epidemiological and Evaluation Methods: Students will gain skills in epidemiological analysis and program evaluation to assess public health issues and outcomes. LO4 - Advocate for Health Policy and Equity: Students will analyze and create policies that address health disparities and protect the health of diverse populations.

A specialization in Population and Public Health includes the completion of 18 credit units. Students complete 4 common courses including:

- 1. HE ED 221 Population Health
- 2. SPH 300 Applied Public Health and Epidemiologic Principles
- 3. SPH 356 Climate Change and Human Health
- 4. INT D 420 Perspectives on Inclusive and Global Health

Next students will select 2 courses from courses listed below.

- 5. SPH 301 Public Health in a Global World
- 6. <u>SPH 302 Fighting Misinformation for Public Health</u>
- 7. SPH 412 Environmental Risk Assessment
- 8. SPH 414 Introduction to Environmental Health
- 9. SPH 416 One-Health
- 10. SPH 431 Statistical Methods in Health Research
- 11. REN R 466 Climate Change and the North (not yet confirmed with department)
- 12. HE ED 320 Social Dimensions of Health and Health Promotion
- 13. <u>HE ED 321 Psychological Dimensions of Health Promotion</u>

Possible Entry-level Careers: Public Health Researcher; Public Health Program Coordinator; Gerontology; Health/Public Policy Analyst & Administration; Community Health or Development; Community Health Educator; Environmental Health Specialist; Occupational Health and Safety Specialist; Global Health Professional; Public Health Inspector; Community Mental Health Specialist

Possible Next Destination Degrees:

Master of Public Health

2. Health Systems Innovation

Health systems innovation (HSI) blends business, leadership, and health research to improve outcomes for individuals and populations. Students in this track will learn to evaluate and transform health systems for greater efficiency, accessibility, and better community outcomes, covering topics such as health policy, digital health technologies, and healthcare leadership. The program emphasizes system analysis, evidence-based decision-making, and designing innovative solutions for complex health challenges.

LO1 - Analyze Health Systems: Evaluate the structure and performance of health systems, focusing on accessibility, efficiency, equity, and management strategies.

LO2 - Apply Health Policy, Ethics and Governance: Examine key policies, governance models, leadership practices and ethical, legal, and social implications that influence health system decisions and organizational management.

LO3 - Design Innovative Health System Solutions: Use systems and design thinking principles to create evidence-based solutions that could improve health system delivery, patient care, and population level outcomes.

LO4 - Integrate Digital Health Technologies: Explore the role of digital health tools and business management strategies in transforming health systems and improving operational efficiency.

LO5 - Demonstrate the Ability to Lead and collaborate to support innovation. Use leadership and collaborative skills to advance ideas and projects.

A specialization in Health Systems Innovation includes the completion of 18 credit units. Students complete 4 common courses including:

- 1. INT D 101 Inspired to Dream: Becoming a Leader
- 2. <u>SEM 200 Introduction to Management for Non-Business Students</u>
- 3. CMPUT 200 Ethics of Data Science and Artificial Intelligence
- 4. HEAL 4XX Health Systems and AI Integration (NEW)

Next students will select 2 courses from courses listed below.

- 5. <u>NS 115 Indigenous Peoples and Technoscience</u> (to be confirmed with FNS)
- 6. INT D 161 Artificial Intelligence Everywhere
- 7. ECON 101 Introduction to Microeconomics
- 8. ECON 102 Introduction to Macroeconomics
- 9. CMPUT 195 Introduction to Principles and Techniques of Data Science
- 10. NURS 200 Innovation, Systems Thinking and Leadership in Healthcare
- 11. AIB 101 Health Systems Science 1
- 12. HEAL 3XX Policy, Systems and Governance in AI and Digital Health (NEW)

Possible Entry-level Careers: Clinical Data Manager; Clinical Research Coordinator; Health Economist; Health Information Manager; Clinical Data Assistant; Health Information Assistant;

Health policy analyst, Researcher in AI and Health, Population Health Data Scientist; Health AI Specialist

Next Destination Degrees:

<u>MBA:</u> Master of Sustainability; <u>Master in Health Administration</u>; <u>Master of Science (Computing Science)</u>; <u>Masters of Health Informatics</u>; <u>Masters in Data Science and Analytics</u>

3. Mental Health and Well-Being

The Mental Health, Well-being minor explores the biological, psychological, and social dimensions of mental health and addiction, emphasizing evidence-based approaches to prevention, treatment, and recovery. Designed to prepare students for direct entry roles in mental health and addiction services or research, the minor integrates foundational neuroscience with durable skills for addressing real-world mental health challenges.

LO1 - Understand Mental Health: Students will explain key concepts in mental health, well-being, and neuroscience within individual and population health contexts.

LO2 - Evaluate Determinants of Mental Health: Students will analyze biological, social, and environmental factors influencing mental health and addiction.

LO3 - Apply Holistic Approaches: Students will design and assess interventions promoting mental health and well-being using holistic, culturally sensitive frameworks.

LO4 - Collaborate Across Disciplines: Students will integrate interdisciplinary health knowledge to address mental health challenges and advocate for equity and inclusion in the health systems.

A specialization in Mental Health and Wellbeing is the completion of 18 credit units. The Students complete 4 common courses including:

- 1. PSYCH 104 Basic Psychological Processes
- 2. INT D 2XX Mental Health Interventions: Strategies for Behavior Change (NEW)
- 3. PMCOL 200 Drugs An Introduction to Pharmacology
- 4. NEURO 210 Introduction to Clinical Neuroscience

Next students will select 2 courses from courses listed below.

- 5. INT D 246 Grieving and Loss
- 6. AUPSY 342 Health Psychology
- 7. AUPSY 343 Health Psychology: Biological Foundations
- 8. PSYCI 3XX/515 Maternal, Child and Adolescent Mental Health
- 9. PSYCH 275 Brain and Behavior
- 10. PSYCH 335 Introduction to Clinical Psychology
- 11. OCCTH 3XX Introduction to Psychosocial Rehabilitation (NEW) tentative
- 12. AUPSY 477 The Neurobiology of Learning, Memory, and Addiction

Additional requirement - Mental health first aid certificate

Possible Entry-level Careers: Addiction Counsellor; Career Development Professional; Child and Youth Care Worker; Crime Prevention Coordinator; Crisis Counsellor; Group Home Coordinator; Psychologist Assistant;; Behavioural Health Consultant; Family and School Liaison

Possible Next Destination Degrees: Clinical Psychologist; Social Worker; Occupational Therapy, Master of Education (Counselling Psychology), <u>Master of Education in School and Clinical Child Psychology</u>. Master of Arts in Community Engagement, Master of Science in Public Health Areas

4. Pre-Professional Option

This option supports preparation for students interested in applying to professional programs at the University of Alberta. Courses are drawn from the prerequisites for the 11 professional programs, some that are common across programs; as well as recommendations from the professional programs of courses they suggest students complete to prepare them for study in a next destination professional program. Learning outcomes will be course specific and linked to next destination programming the student is considering. These courses will not be part of a specialization. They will be counted as health electives.

The pre-professional option is an important pathway for the BHSc but one that will not provide guarantees of acceptance into a professional program.

Students can select from:

- 1. 3 additional credit units of Chem or Biochemistry
- 2. PHYSL 210B Human Physiology (Note: Physiol 210 A is part of core)
- 3. MMI 133 Medical Microbiology for health care professionals
- 4. Cell 201 Introduction to Molecular Cell Biology
- 5. Psychology (3 cu)
- 6. Principles of Human Movement for Rehabilitation PTHER 351 | Physical Therapy
- 7. INTD 403 (modified from current course) an undergraduate version focused on teams, communication, simulation
- 8. <u>CSD 200: Introduction to Communication Sciences and Disorders</u> AND <u>CSD 311:</u> <u>Language Development in Children and Adolescents | Communication Sciences +</u> <u>Disorders</u> - if considering speech language pathology

The courses listed above are related to current prerequisite courses for professional programs. These may change by BHSc program launch. The pre-professional option, and the courses within it will be maintained by:

- Yearly review by student services assistant of program prerequisites, and updates where needed
- Yearly review by leads of professional programs, who may add courses to the list that are not specific program prerequisites, but courses that provide desired preparation.

Possible Next Destination Programs/Careers:

Dietetics, Physical Therapy, Nursing After Degree, Occupational Therapy, Speech Language Therapy, Dietetics, Medical Laboratory Sciences, Medicine, Radiation Therapy, Dental Hygiene, Dentistry

List of Health Electives (by Level)

NOTE: the courses in the list below are additional courses related to health, offered across the University of Alberta. Students select from these courses to fulfil their health elective requirement. Not all faculties/departments have been approached about these courses, and we expect there will be adjustments to the health elective list. Principles for inclusion of courses on the health elective list are tentatively as follows: 1) alignment with at least 1 of PLOs 1-6; 2) consistent offerings; and 3) agreement from teaching faculty/department.

100 Level

AN SC 100 - Introduction to Animal Health Science HE ED 110 - Introduction to Personal Health and Well-Being LAW 101 - Introduction to Canadian Law INT D 130 - Communication Skills ENGL 125 - Indigenous Literatures ENGL 150 - Introduction to English Studies WRS 101 - Exploring Writing

200 Level

INT D 250 - Survey Course on Cannabis NU FS 223 - The Cultural Ecology of Food and Health CHEM 261 - Organic Chemistry I CHEM 263 - Organic Chemistry II CSD 200 - Introduction to Communication Sciences and Disorders INT D 207 - Inspired to Lead: Skills You Need INT D 246 - Grieving and Loss INT D 247 - Resilience INT D 248 - Loneliness Matters

INT D 249 - The Science of Joy and Happiness

300 Level ANTHR 393 - Health and Healing AUMUS 356 - Music and Wellness BIOL 310 - Biology of Aging ECON 357 - Health Economics EDPY 304 - Adolescent Development and Learning

HGEO 343 - Geographies of Health and Health Care

HIST 353 - History of American Medicine

INT D 375 - Intercultural Exploration of Health and Practice in Italy

KIN 385 - Physical Activity and the Aging Adult

KRLS 323 - Indigenous Perspective on Activity, Health, and Wellness in Canada

PTHER 350 - Structural Human Anatomy

PTHER 351 - Principles of Human Movement for Rehabilitation

PTHER 352 - Introductory Statistics for the Health Care Professions

NU FS 305 - Introduction to the Principles of Nutrition

NU FS 356 - Nutrition Across the Lifespan

NU FS 377 - Introduction to Population and Public Health Nutrition

CSD 311 - Language Development in Children and Adolescents

INT D 301 - Foundations of Leadership

INT D 306 - Leadership for Social Innovation

MICRB 320 - Microbial Ecology

NEURO 375 - Functional Neuroanatomy

NS 376 - Indigenous Demography and Disease

PMCOL 343 - Scientific Basis of Pharmacology: Part I

POL S 326 - Canadian Health Politics

SEM 333 - Technology Ventures: Navigating Entrepreneurial Innovation and Growth

400 Level

AFNS 416 - One Health

CATS 480 - Psychedelics, Spirituality, and Mental Health

BIOCH 415 - Metabolic Modifications in Health and Disease

CELL 403 - Principles of Medical Genetics

HE ED 421 - Psychological and Behavioural Aspects of Chronic Disease Management

HGEO 443 - Environment and Health

BME 415 - Design and Analysis of Bioinformatics Algorithms

BME 513 - Imaging Methods in Medicine (will be offered as 400 level in future)

<u>PHARM 592 - Foundations of Health Services Research</u> (will be offered as 400 level in future)

INT D 457 - Global Health - China Collaboration

MMI 445 - Clinical Microbiology and Human Health

<u>NURS 508 - Leading Digital Health Transformation</u> (could be offered as 400 level in future)

PMCOL 450 - Diabetes and Its Pharmacotherapy

POL S 424 - Health Policy

Program Location and Delivery Mode

The program is in-person and located on North Campus in Edmonton. Students will be located in Edmonton. To allow flexibility and student agency there are 3-4 courses in the degree core that are planned for fully asynchronous delivery. There are no terms where courses are completely online so students will need to be located in Edmonton throughout the entire program.

Program Learning Outcomes

	How the human body works
PLO1	Describe how the human body functions at multiple levels in both health and disease
	How preventive health measures can improve health
PLO2	Discuss how preventive and restorative health measures can improve individual and population health outcomes
	How equity work can positively transform the health system for all
PL03	Demonstrate advocacy for equity, diversity and inclusive policies and practices to challenge structurally embedded social injustices
	Ensure Indigenous languages, cultures and ways of knowing health are consistently applied in practice
	How determinants of health influence health outcomes
PLO4	Critically discuss the impact of social, biological, cultural and environmental determinants of health and how they influence health outcomes for individuals and populations
	How innovations can improve the health system
PL05	Identify and evaluate how health technologies, data, social and system innovations impact health outcomes for individuals, populations and the planet
	How the health system includes numerous career possibilities
PLO6	Explain and differentiate the distinct and synergistic career pathways and possibilities across the health care system and health sector

	How research and evaluation can be used for impact
PL07	Demonstrate the ability to gather, evaluate, and interpret health information, including emerging data, scientific evidence and advancements in AI relevant to current and future health disciplines
	How durable skills can develop a more dynamic health workforce

Appendix B: Consultations

Internal Consultations - Students

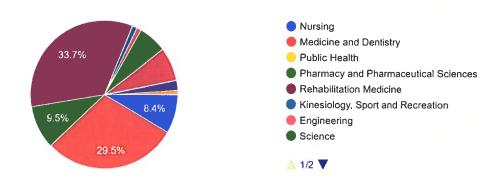
Student Engagement Survey

This presents a snapshot of the responses from both student engagements (i.e., survey and one-on-one conversations) with current UAlberta students about the BHSc.

Summary of Student Respondents:

Of the 95 students that responded to the survey, almost 50% were in their first year of a health professional program with 25% Medicine, Pharmacy, and Rehabilitation Medicine). All the students were interested in careers in health or already in a health-related degree.

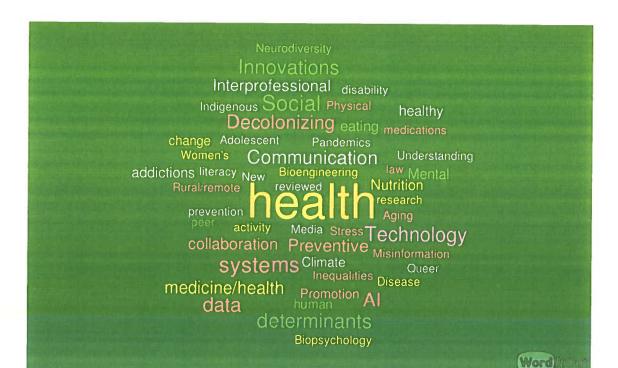
In which Faculty are you currently registered? 95 responses



We also had one-on-one conversations about the degree with over 50 students during two library sittings in the Sperber Health Science Library.

Topics of Interest:

We asked what topics in health they thought were growing areas in health that need to be covered in a new BHSc. Below is a word cloud that highlights the most popular subject areas mentioned by students.



Student quotes:

"Health and the study of the health sciences often offers a limiting misconception to students that more notable careers are what they are limited to (Medicine, etc). By creating opportunities in undergraduate degrees for exposure to many careers in the health sciences offers opportunities for students to better understand the vastness of career opportunity while also establishing a fundamental foundation in a degree program that will offer a better transition into a post graduate program or career."

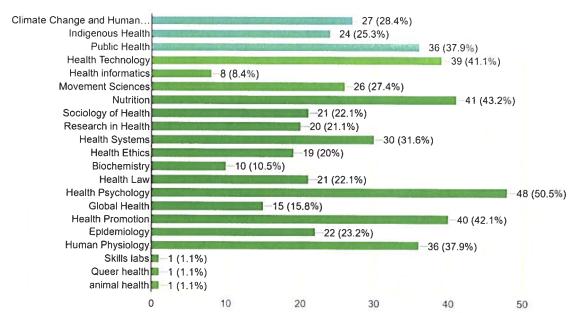
"Understanding how to handle health misinformation, advocate for public health, and climate change's effects on different people/locations are critical topics for a new BHSc degree."

"Some key topics should be: health communication (health and science literacy, communicating public health information), climate change, AI, vaping and vaping alternatives, health advocacy (especially in relation to vulnerable groups including in the context of controversy), and the effects of technology and social media on health"

"Technological advancements that are in sync with the healthcare system, research in healthcare, infertility studies/research."

"Going back to my Undergrad, I would've liked to have a better working understanding of the healthcare system in general. How changes are made, how advocacy groups work and how negotiations are made between professions and the government."

Below is a table that shows some topic areas students would be interested in taking. These topics were included in the survey based on an internet scan and discussions with 15 BHSc programs in Canada, New Zealand and Australia. Health psychology was a popular topic area followed by nutrition, health promotion, public health, physiology and health systems.



What health topic areas would you be most interested in taking courses about? Check your top 5. 95 responses

The students were then asked 'Describe learning experiences you find most impactful in courses?' The list below illustrates some of the learning experiences preferred by students.

- Hands on application
- Group discussion
- Real world cases and experiences
- Skills labs
- Problem-based learning
- Engaging with community organizations
- Practical application
- Directed studies

The students believed that the skills that are most important for future health professionals are (**bold is most mentioned**)...

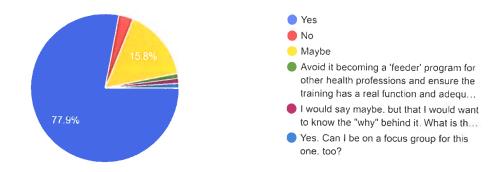
- Communication
- Collaboration and teamwork
- Systems thinking
- Empathy
- Work ethic
- Perspective taking
- Cultural competency
- Critical thinking
- Resilience
- Time management
- Understanding research
- Compassion
- Management/leadership skills

When asked about what they liked (or did not like) about other programs' structures, they said...

- More electives!
- Too many courses with too many pre reqs
- In-field learning
- More interdisciplinary group projects
- Balance between asynchronous/online and in person learning
- No classes on Fridays
- Having a strong cohort that progress together
- Flexibility and innovation are key!

Finally, students were asked if they felt that there was a place for a BHSc degree at UAlberta. With limited knowledge about what the program would entail, close to 94% of students responded **yes or maybe to this question.**

Do you think there is a place for an Interdisciplinary Health degree program at the University of Alberta? 95 responses



Internal and External Consultation Meetings

Letters of Support

Appendix C: INSTITUTIONAL STRATEGIES

Bachelor of Health Sciences Program Indigenization Strategy

The Bachelor of Health Sciences program views Indigenous worldviews and ways of knowing as essential for fostering a student environment and eventually a health system that respects and addresses the unique needs of Indigenous communities.

As highlighted by Dr. Alika Lafontaine¹, the first Indigenous president-elect of the Canadian Medical Association, meaningful reconciliation in the health sector requires active collaboration with Indigenous peoples in the creation and delivery of educational curricula. This approach not only acknowledges historical inequities but also empowers Indigenous voices in co-creating future health and healthcare systems that prioritize culturally relevant practices and solutions.

Consultation

The development team for the Bachelor of Health Sciences program has engaged and will continue to engage with the following Indigenous partners:

- Marissa Nakoochee, Indigenous Initiatives Strategic Officer, College of Health Sciences, University of Alberta
- Dr. Florence Glanfield, Vice-Provost, Indigenous Programming & Research, University of Alberta
- Dr. <u>Wayne Clark</u>, Assistant Professor, Faculty of Medicine & Dentistry, University of Alberta
- Dr. Grant Bruno, Assistant Professor, Faculty of Medicine & Dentistry, University of Alberta
- Dr. Tibetha Kemble (Stonechild), Project Lead, Indigenous Accelerating Clinical Trials (ACT), Faculty of Medicine & Dentistry, University of Alberta

The College of Health Sciences commits to collaborating with these Indigenous partners. They will make up the 'Bachelor of Health Science Indigenous Health Curriculum Team' and will guide curriculum and programming related to Indigenous ways of knowing at all levels of the Bachelor of Health Sciences program. Terms of commitment will be drafted upon program approval.

¹Five things we all need to know about reconciliation in health care | Folio

The University of Alberta recognizes that incorporating Indigenous worldviews, histories, and perspectives into the Bachelor of Health Sciences curriculum will increase the capacity of graduates to:

- Work with Indigenous communities to create positive health solutions, including improving access to healthcare, addressing social determinants of health, and supporting Indigenous-led health initiatives.
- Fully integrate Indigenous people and Indigenous knowledge systems at all levels of the health system.
- Continually recognize the impact of colonization and put Indigenous historical and lived experiences at the forefront of all conversations in the BHSC degree.
- Understand the contributions and perspectives of Indigenous peoples working in the health field.
- Participate in reconciliation and demonstrate an awareness of the various land agreements impacting Indigenous communities.

Proposed Strategies to Indigenize the Bachelor of Health Sciences Program

Our plan for Indigenizing the Bachelor of Health Sciences program consists of the following strategies:

- 1. Acknowledge the Impact of Health Sciences on Indigenous Peoples, Lands, and Communities
 - The first step is to acknowledge the impact that health sciences and healthcare practices have had on Indigenous peoples and communities. This acknowledgment will be integrated into introductory courses within the program and will be developed through Indigenous-led consultation. Through Indigenous-led consultation, it will be determined how to include this acknowledgement in the curriculum, starting with an acknowledgement of colonizations impact on the health of Indigenous peoples in Canada in INT D 100. This is already included in week #2 of the course and makes up most of the week's content.

2. Understand Relationships with Indigenous Lands

- Before students begin practical placements, the program will introduce Indigenous perspectives on land, understandings of interconnectedness, and the importance of consultation with Indigenous communities. This content will be developed through the BHSc Indigenous Health Curriculum Team on an ongoing basis and delivered largely through INT D 3XX
- 3. Weave Indigenous Worldviews, Histories, and Perspectives into the Program²

² https://www.ualberta.ca/en/indigenous/strategic-plan/index.html

- Indigenous knowledge systems and perspectives will be woven into the curriculum in meaningful ways, such as:
 - i. Partnering with Indigenous-led organizations and communities for capstone projects.
 - ii. Incorporating Indigenous perspectives into health policy and systems courses.
 - iii. Adding courses that explore Indigenous health and wellness practices to the list of approved electives.
 - iv. Developing case studies that highlight the connection between health, land, and Indigenous communities.

4. Amplify Indigenous Voices

- Indigenous voices will be highlighted throughout the program to enhance cultural sensitivity and present a range of Indigenous worldviews. Courses will include Indigenous authors, subject matter experts, and guest speakers from Indigenous communities.
- 5. Engage in Consultation with Indigenous Communities
 - Program leadership will actively engage in Indigenous-led consultations to gather feedback on the curriculum and ensure it is inclusive and responsive to Indigenous peoples' needs. An Indigenous Program Advisory Council will be established to provide periodic reviews of the program and oversee new initiatives.

6. Improve Indigenous Access to the Bachelor of Health Sciences Program

- To enhance access and improve enrollment and graduation rates for Indigenous students, the program will collaborate with Indigenous communities to address barriers to education and create targeted recruitment strategies. Initiatives will include:
- Developing resources and support systems for Indigenous students and collaborate and learn from existing <u>Indigenous health programs in the</u> <u>Faculty of Medicine</u>, led by Dr. Wayne Clark.
- Promoting engagement with Indigenous cultural activities.
- Establishing mentorship programs connecting Indigenous students with health professionals.

7. Provide Indigenous-Centered Training for Faculty and Staff

 The College of Health Sciences will supplement existing training resources for faculty and staff, focusing on Indigenous protocols, cultures, and the duty to consult with Indigenous peoples. This training will be integrated into faculty professional development.

By implementing these strategies, the Bachelor of Health Sciences program will work towards the goals of the institution's Indigenous Strategic Plan, ensuring that the curriculum is inclusive and responsive to the needs of Indigenous peoples. Indigenization is a continuous process that requires ongoing engagement with Indigenous communities, the Bachelor of Health Science Indigenous Health Curriculum Team, and regular review to ensure the program meets its goals.

Bachelor of Health Sciences Program EDI Strategy

This document outlines a strategic approach to embedding Equity, Diversity, and Inclusion (EDI) principles within the University of Alberta's Bachelor of Health Sciences program. It aligns with broader institutional goals, including the university's Indigenization Strategy, *Braiding Past, Present, and Future*, and the College's <u>Strategic</u> <u>Priorities around EDI</u>. Key components aim to advance EDI beyond superficial engagement, establishing it as integral to both culture and curriculum.

These initiatives call for continuous assessment and consultation to maintain alignment with EDI goals and to adapt to evolving challenges in fostering inclusivity. The Bachelor of Health Sciences program will regularly review and adapt its strategies to ensure that EDI principles remain at the core of its teaching, recruitment, and community outreach efforts.

Objectives and Strategic Actions:

- 1. Program Recruitment, Hiring and Retention:
- In line with the College's Gender Equity Plan, the Health Sciences program will use inclusive practices to attract underrepresented groups. This includes diversity-focused hiring guides, bias training for committee members, and benchmarks to ensure at least 30% of hiring committee members are trained in bias reduction.
- To enhance diversity, the College will use anonymous equity surveys to review applicant demographics and re-open searches if diversity targets (e.g., 30% gender equity) are not met.
- The program is also developing policies for spousal hires, cross-appointments, and interview questions on inclusivity and equity.
- In addition, long-term satisfaction data will be collected to follow-up on hiring promises. Benchmarking applicant diversity and applying data-informed reviews before final hiring decisions will help build a more inclusive College. Policies will be put in place as soon as the program is approved and will draw <u>on work done</u> <u>in FoMD</u> as a benchmark.

2. Improve Access to Health Sciences

 Increase accessibility, especially for Indigenous, rural, and returning students, by (Scarborough Charter of Anti-Black Racism) building pathways from transfer colleges and adjusting admissions criteria where possible.

- Initiatives such as flexible degree options and partnerships with organizations focused on diversifying health sciences aim to attract and support underrepresented groups, ensuring these students feel included and supported in health sciences pathways.
- A variety of admissions assessments and a flexible degree option will be considered to expand access, especially for students with additional course interests.

3. Expand Outreach and Engagement

- The Faculty will collaborate with DiscoverE to create health sciences activities for K–12 students, especially in rural and Indigenous communities.
- Support will be provided to Future Creators, a mentorship nonprofit, to foster youth interest in health sciences through interactive projects.

4. Challenge Norms in Health Sciences

The program will actively challenge stereotypes and biases that discourage underrepresented groups from pursuing health sciences. This will be reflected in curriculum design, communication, outreach, and promotional materials. Key actions include:

- Inclusive Communication: Curate program communications to represent diverse gender, cultural, and ability perspectives, allowing individuals across the gender spectrum and diverse backgrounds to see themselves in the field.
- **Program Outreach**: Create the program website and materials to dispel myths about the health sciences, clarifying diverse career options and societal impacts.
- Engagement with Underrepresented Students: Collaborate with recruitment partners to create information sessions that align with EDI strategies, focusing on roles in public health, policy, and wellness to highlight impact beyond clinical roles.
- Role Models and Mentors: Showcase diverse professionals in health sciences in print and digital media, particularly in information sessions for transfer, rural, and Indigenous students.
- **Outreach to Influencers**: Develop resources to educate parents, teachers, and counselors on the value of health sciences for all genders and backgrounds, making these resources available on the program's website.

5. Incorporate EDI Principles into the Curriculum

To foster inclusivity and belonging, curriculum enhancements are essential:

- Understanding EDI in Health: This content will be built into INT D 100 and will be scaffolded and integrated into other BHSc coursework to address the impact of historical and ongoing exclusion in health.
- **Group Dynamics and Bias Recognition**: Foundational courses, such as INT D 100, will cover group dynamics, implicit bias, and decision-making skills.
- **Diverse Voices and Lived Experiences**: Incorporate literature and studies that present diverse perspectives in health (e.g., case studies on global health inequalities).
- **Pre-Clinical Preparation**: Prior to clinical placements, students will engage with materials on creating inclusive environments and handling discrimination in the workplace.

6. Create an Inclusive Learning Environment

To build a more inclusive student culture, the program will:

- Universal Design for Learning: Embed principles in all course designs, encouraging a supportive atmosphere where seeking help is normalized.
- Mental Health and Support Resources: Include information on available supports in course syllabi and remind students during high-stress periods (e.g., exams). This is especially important in the early years, to make sure students are aware of resources and make them feel comfortable with talking about mental health.
- Inclusive Syllabus and Assignments: Syllabi will include a land acknowledgement and use positive, learner-centered language. Instructors will receive resources to integrate EDI and decolonization into assignments and assessments.
- Create More Inclusive Placements: Program placements, especially in rural health organizations, can be difficult places that are not accepting of diversity. The program will ensure all program placement sites have training and knowledge about how to create inclusive learning spaces for students and how to create environments that are accepting of all.

7. Engage in Ongoing Consultation

 BHSc program leaders will establish an EDI Advisory Committee to provide ongoing feedback, periodically reviewing the program's EDI strategies. They will consult knowledge holders and maintain relationships with other faculty committees to share best practices. This committee will be led by the program director and the EDI strategic initiatives officer in the College of Health Sciences. • To assess effectiveness, the program will analyze data from surveys, focus groups, and institutional sources. This will include tracking student progress, attrition rates, and feedback, enabling continuous improvement of the program.

8. Provide Training for Faculty and Staff

 Faculty and staff will engage in regular EDI training, supplemented by institutional resources, such as workshops on supporting students in distress and promoting diversity. A new teaching program, developed in partnership with the Faculty of Education, will ensure that new instructors receive EDI-focused training as part of their onboarding.

This Bachelor of Health Sciences program is committed to fostering an inclusive, diverse, and equitable learning environment, equipping students to address the complex health needs of diverse populations.

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Appendix D: LABOUR MARKET RESEARCH

Mental Health and Well-Being Specialization

Possible Entry-level Careers: Addiction Counsellor; Career Development Professional; Child and Youth Care Worker; Crime Prevention Coordinator; Crisis Counsellor; Group Home Coordinator; Psychologist Assistant;; Behavioural Health Consultant; Family and School Liaison

Addictions Counsellor

Sample Job Requirements

Qualifications: University degree in a related field (e.g. Sociology, Psychology, Social Work) plus specialization in addiction counseling. Registered with a professional college Minimum 2-3 years related experience providing counseling with a concentrated focus on addictions and substance abuse.

Required Education, Skills and Qualifications Post-secondary degree or diploma in the field of Child & Youth Care or Social Services A minimum of one year of experience in a treatment setting; experience working with youth is desirable

Alberta Health Services Job Title: Addictions Counselor III

Required Qualifications: Completion of a bachelor's degree in Addictions or a combination of a bachelor's degree in a related field with course work in addictions. A related degree combined with a diploma related to addictions, or an equivalent combination of education and experience, may be considered.

Government of Alberta Job Title: Addictions Counselor

Qualifications Directly related to a two (2) year diploma or a degree related to the position assignment and four (4) years of related experience in the addictions field. Experience in providing treatment and recovery services to youth would be preferred.

Required Qualifications: Completion of a bachelor's degree in Addictions or a combination of a bachelor's degree in a related field with course work in addictions. A related degree combined with a diploma related to addictions, or an equivalent combination of education and experience, may be considered. Individuals eligible for registration under the Health Professions Act must maintain active registration. Individuals may require authorization/permission under regulation to perform restricted psychosocial interventions

and/or restricted activities. Additional Required Qualifications: 2-3 years adult addiction counselling experience within the past 5 years

Educational Requirements:

1. Bachelor's Degree:

- Typically required in fields such as:
 - Addictions Counseling, Psychology, Social Work, Sociology, or Child & Youth Care.
- Some roles may also consider a related bachelor's degree combined with coursework or certifications in **addictions counseling**.

2. Diploma Programs:

- A two-year diploma in Addictions Counseling, Social Services, or a related field is acceptable for certain positions, particularly with additional professional experience.
- 3. Combination of Education and Training:
 - A bachelor's degree in a related field plus a specialized diploma or coursework in addictions.
 - Equivalent combinations of education and experience are often considered.

4. Professional Registration:

 Registration with a professional college or association (e.g., for social workers, psychologists, or other regulated professions) is often required or preferred.

Experience Requirements:

- 1. General Experience:
 - 2-4 years of related experience in the addictions counseling field.

2. Specialized Experience:

 Experience working in treatment and recovery services, particularly with specific populations like youth or adults struggling with substance abuse.

3. Preferred Skills:

 Direct experience providing counseling focused on addictions, substance abuse, and related psychosocial interventions.

Summary:

Addictions Counsellor roles typically require a bachelor's degree in fields such as Addictions Counseling, Social Work, or Psychology, with a diploma or coursework in addictions being an alternative for some roles. 2–4 years of experience in addiction-focused counseling and recovery services is commonly required, along with registration with a professional body and the ability to perform restricted psychosocial interventions.

Child and Youth Care Worker

Sample Job Requirements

- EDUCATION: Diploma or Degree Therapeutic Recreation Diploma or Degree, Social Service Worker • Diploma or Degree, Child and Youth Worker
- Education Requirements: Ideally, you possess a high school diploma along with one of the following: Child and Youth Care Worker (CCW/CYW/CYC) Diploma, Social Service Worker (SSW) Diploma, Community Justice Worker (CJW), Police Foundations (PF). Similar experience working in Social Services will also be considered.
- Education College/CEGEP Experience 2 years to less than 3 years
- Medicine Hat Family YMCA Job Title: child and youth worker
 Education No degree, certificate or diploma Experience 1 to less than 7 months
 Work setting Children's program Babysitting agency Benefits Financial benefits
 Mileage paid Other benefits Free parking available On-site amenities Paid time off
 (volunteering or personal days) Team building opportunities

• Surrey, BC Phoenix Respite Job Title: Child and Youth Worker

Phoenix Respite is looking for qualified, motivated, and experienced behavioural counselors to provide much-needed support to our clients/families in the region. Our goal is to bring institutional quality support directly to the home, creating lasting results while keeping families together. We work directly in the home with clients suffering from a wide range of mental health and behavioural conditions including ASD, ADHD, Borderline Personality Disorder, Intermittent Explosive Disorder, Conduct Disorder, Aggressive Tendencies, as well as youth involved in the Justice System. Staff will work closely with management, social workers, psychologists, mental health professionals, and family members to foster the best treatment outcomes possible. Applicants should be experienced in the implantation of support plans, behavioural tracking, and data logging. Strong crisis management, verbal de-escalation, therapeutic intervention skills, and valid NVCI are required for this position. Job Types: Full-time, Part-time, Casual Salary: From \$21.00 per hour

 Toronto, ON Revolutionary Network Inc Job Title: Child and Youth Worker Qualifications: Post-secondary education/college diploma in Child and Youth Worker and/or Social Service Worker or the equivalent combination of education and experience. A minimum of two-year experience working experience as a Child & Youth Worker and/or Social Worker in the Child Welfare Industry . Experience working with individuals with developmental disabilities and/or physical/medical/behavioral support needs or an equivalent combination of education, training, and experience.

Summary:

The educational experience required for a Child and Youth Care Worker typically includes a **diploma** in fields such as Child and Youth Work or Social Service Work or a related program such as Community Justice Worker (CJW).

In some cases, a **high school diploma** combined with **relevant work experience** in the social services field can also be considered acceptable. Most employers expect candidates to have at least **one to two years of post-secondary education** in a related discipline. Additionally, some roles may require **certifications** in areas like **Non-Violent Crisis Intervention (NVCI)**, especially if the job involves managing challenging behaviors or working with individuals who have mental health or developmental conditions.

*https://ca.indeed.com/viewjob?jk=c3eea83d6925fdfd&from=shareddesktop

Crime Prevention Coordinator

Sample Job Requirements

Community Safety Liaison - City of Edmonton

Qualifications:

A Bachelor's degree in Social Work, Social Sciences, Human Ecology, or a related field.

Registration with the Alberta College of Social Workers (if qualified as a Social Worker) Minimum of 5 years of experience in community development, including needs assessments, community engagement, strategy development and implementation, and working with a broad range of stakeholders Assets:

A Master's degree in a related field

Understanding of social policies and government initiatives related to crime and violence prevention

Project Management skills and/or certification

Security Coordinator - Niagara Region

Education

- Post-Secondary Education in Law & Security Administration, Police Foundations, Public Safety and Investigations, or other security related field.
- An equivalent combination of education, experience and qualifications may be considered.

Knowledge

- Minimum of 3 years of full-time security, military, or policing experience is preferred.
- Valid Dual (Security Guard and Private Investigator) License with the province of Ontario or the ability to obtain one as a condition of employment.
- Experience with security systems, physical security, and crime prevention.
- Experience working with various computer programs and software applications relevant to security management.
- Ability to maintain accurate and detailed records within computerized systems.
- Familiarity with commonly used software e.g. Microsoft Office, Resolver, AtHoc.
- Computer literacy and competency in Data base programs and Microsoft Office.
- De-escalation and threat response training required.
- Knowledge of security practices, terminology, and relevant regulations.
- CPTED Ontario (Certified Crime Prevention Through Environmental Design) Level 1 certification is an asset.
- Experience in incident investigations is an asset.
- Associate Protection Professional (APP), Physical Security Professional (PSP), Professional Certified Investigator (PCI), or Certified Protection Professional (CPP) designation recognized through ASIS or other security-related designations is an asset.

Summary:

Roles such as these typically require post-secondary education in fields such as Law & Security Administration, Police Foundations, or Public Safety and Investigations, or a Bachelor's degree in areas like Social Work, Social Sciences, or Human Ecology. In some cases, other certifications and/or registrations are required. These roles demand a combination of formal education, practical experience, and specific certifications or licenses to ensure candidates are equipped to handle the complexities of community safety or security management.

Psychology Assistant

Sample Job Requirements

- Education (Degree/Diploma/Certificate) Bachelor?s degree in Psychology from a recognized university required. Master?s degree preferred.
- Experience Minimum three years recent related clinical experience working with adults, children and adolescents. Education (Degree/Diploma/Certificate) Bachelor?s degree in Psychology from a recognized university required. Master?s degree preferred.

Calgary, AB WCB Alberta Job Title: Psychological Assistant Bachelor's

- Your experience and skills: A Bachelor?s Degree in a Psychology Program with related experience in a similar environment.
- Education (Degree/Diploma/Certificate) Bachelor?s degree in Psychology from a recognized university required. Master?s degree preferred.
- Education (Degree/Diploma/Certificate) Bachelor?s degree in Psychology from a recognized university required. Master?s degree preferred.
- Education College, CEGEP or other non-university certificate or diploma from a program of 1 year to 2 years or equivalent experience Social work, general Nurse/Nursing Assistant/Aide and Patient Care Assistant Experience 1 year to less than 2 years

The educational requirements for a **Psychology Assistant** or related roles can be summarized as follows:

1. Bachelor's Degree in Psychology:

- Required by most postings as the minimum qualification.
- Degree should be from a recognized university.

2. Master's Degree in Psychology:

- Preferred in many cases, though not always mandatory.
- 3. Alternatives (for certain roles):
 - Some postings accept **non-university certificates or diplomas** (1–2 years) in fields like Social Work or Nursing, combined with equivalent experience.

4. Experience Requirements:

• Generally, **1–3 years of related clinical experience** is required, especially with populations such as adults, children, or adolescents.

Summary:

A **Bachelor's degree in Psychology** is the standard requirement for most Psychology Assistant roles, while a **Master's degree** is preferred for advanced or competitive positions. Equivalent qualifications, like a Psychology diploma combined with relevant experience, may be considered for some positions.

Group Home Coordinator

Sample Job Requirements

- Education College, CEGEP or other non-university certificate or diploma from a program of 1 year to 2 years or equivalent experience Experience 2 years to less than 3 years
- QUALIFICATIONS: Basic Skills Training. Previous experience working with persons with developmental disabilities and related training is an asset.
- Education College/CEGEP Experience 1 year to less than 2 years
- Education: University Diploma
- Education College/CEGEP Experience 3 years to less than 5 years
- Education: Completed at least some post-secondary Experience: 1-2 Years

Summary:

Group Home Coordinator roles generally require a **college/CEGEP diploma** or **university education** in a relevant field, with **1–5 years of experience** in group home settings or working with individuals with developmental disabilities. Formal education can sometimes be substituted with equivalent experience, and additional training in caregiving and behavioral support is considered an asset.

Maximum Annual Wage	Minimum Annual Wage
\$59,162.17	\$56,299.98
+	400,200.00

Family Service Worker

Sample Job Requirements

- Education and Experience BSW or BA and two years related experience, or a combination of education and five years related experience
- Education College/CEGEP Experience 1 to less than 7 months
- Education College, CEGEP or other non-university certificate or diploma from a program of 1 year to 2 years Experience 1 to less than 7 months
- EDUCATION & EXPERIENCE Minimum of two years? experience in the field of Child and Family Services or equivalent social services field. Bachelor of Social Work Degree; alternatively a Post-secondary degree in a related field with at least 2 years direct CFS experience may be considered.
- Education/experience in social services or child welfare is an asset, but not required

Summary:

Family Service Worker roles typically require a **Bachelor's degree in Social Work** (or a related field) with **2 years of relevant experience**. However, a **1–2 year college diploma** or equivalent education with less experience is accepted for some roles. Experience in **child welfare**, **social services**, or **family support** is highly valued, and some positions may accept significant related experience in lieu of formal education.

Maximum Annual WageMinimum Annual Wage\$61,948.04\$54,330.77

Health Systems Innovation

Possible Entry-level Careers: Governance and Compliance Specialist; Digital Health Specialist; Clinical Data Manager; Clinical Research Coordinator; Health Economist; Health Information Manager; Clinical Data Assistant; Health policy analyst

Governance and Compliance Specialist

Sample Job Requirements

<u>Accreditation and Governance Coordinator</u> - Canadian Mental Health Association, Vernon Branch

QUALIFICATIONS

Education, Training & Experience

- Degree in a business-related field and/3-5 years work experience in administration or assistant roles at an executive level.
- Experience in the non-profit sector
- Experience with accreditation, evaluation, and strategic planning,

Knowledge, Skills & Abilities

- Demonstrated excellent communication, interpersonal and leadership skills.
- Demonstrated ability to prioritize workload to meet challenging deadlines.
- Excellent analytical skills and demonstrated problem solving strategies.
- Able to work independently and as a member of a multidisciplinary team.
- Excellent active listening, negotiation, and presentation skills.
- Respects diversity in co-workers, clients, volunteers, and community.
- Commitment to enhancing a culture of equity, inclusion and belonging at CMHA Vernon.

Senior Advisor, Compliance and Privacy - Fortis Alberta

Education and Experience:

- Bachelor's degree in a related field plus a minimum of seven (7) years in a compliance or privacy role; an equivalent combination of education, relevant experience and professional qualifications may be considered.
- Experience facilitating conversations to build consensus, formulate strategies and recommendations.
- Experience in leading projects would be an asset.
- Experience working in a regulated environment, preferably within the electrical utility industry, would be an asset.

Health Compliance Officer - Government of Alberta

Continuing Care Home Inspection Program:

A university degree in Nursing with a minimum of 4 years of relevant experience in home and community care, continuing care, or case management, or a master's degree related to the position assignment and three (3) years of related experience, or a minimum of 6 years of related experience with a diploma in nursing.

Home and Community Care Program:

A university degree in health related field (Nursing or Social Work) with a minimum of 4 years of relevant experience in home and community care, continuing care, or case management, or a master's degree related to the position assignment and three (3) years of related experience, or a minimum of 6 years of related experience with a diploma in nursing, social work, or a related field.

Note: Only Social Workers with clinical experience can apply for this job.

Must be a regulated member of the appropriate college as required by the Health Professions Act. A valid driver's license with the ability to travel across Alberta as required for site inspections and audits.

Preference:

- Minimum of 6 years of clinical work experience in healthcare, preferably in compliance monitoring, regulatory enforcement, investigation, or quality assurance.
- Strong understanding of continuing care and accommodation standards, relevant legislation (e.g., Continuing Care Act), and regulatory frameworks in Alberta.
- Ability to apply and interpret legislation such as the Health Information Act, Protection for Persons in Care Act, the Public Health Act, and IPC standards.
- Proven experience in managing, leading, or contributing as a crucial member in compliance-related projects, inspections, investigations, accreditation, or audits.
- Strong written and verbal communication skills, with experience in engaging a wide range of stakeholders, including service providers, clients, and government entities.
- Demonstrated ability to lead quality assurance projects and act as an educator or mentor to service providers or team members, fostering compliance and continuous improvement.

Assets:

- An advanced degree or certification in Gerontology, Geriatric, Social Work, Public Health, Health Administration, or a related field.
- Certification or completion of courses such as Foundations of Administrative Justice or National Certified Investigator and Inspector (or an equivalent program).
- Certification in Infection Prevention and Control (IPC) or similar relevant certifications.
- In-depth knowledge of Alberta's healthcare delivery system, particularly in continuing care settings.
- Experience working in environments where complaint resolution, administrative fairness, and natural justice principles are applied.

Summary:

Qualifications include a university degree or master's degree in Nursing or a related health field with several years of experience in community care, continuing care, or case management, clinical healthcare experience, ideally in compliance monitoring, regulatory enforcement, investigation, or quality assurance. Candidates should have experience managing compliance-related projects, audits, inspections, or investigations, along with strong communication skills to engage with stakeholders.

Additional qualifications include an advanced degree or certification in Gerontology, Geriatrics, Social Work, Public Health, or related fields, along with certifications in areas like Infection Prevention and Control (IPC), Foundations of Administrative Justice, or National Certified Investigator and Inspector.

Digital Health Specialist

Sample job requirements

Lead, Digital Health - Ontario Health

Education and Experience

- University degree in business administration, health administration, or a related field.
- Minimum 7 years of leadership/management experience with the ability to manage complex projects involving multiple agencies and stakeholders, particularly in the primary care sector
- Demonstrated understanding of current and future trends in digital health, health information management and health information technology systems.
- Demonstrated experience/knowledge within the digital health community in Ontario in a project management role, business development, health system planning and architecture, stakeholder engagement/facilitator, client service or a similar role.
- Previous knowledge and experience of the Ontario healthcare system including a working understanding of /or exposure to the Ontario community.
- Excellent abilities to analyze and interpret complex information to deliver a solution that meets business needs including prioritization.
- Superior organizational skills and solid knowledge and experience in project management and quality improvement methodology.
- Travel is required; driving may be necessary.

Project Director, Digital Health - Spectrum Health Care

Qualifications

- 7+ years Project Management experience in healthcare
- Undergraduate degree in Information Technology, Computer Sciences, Engineering, Health Care/ Informatics, or Business Administration
- Project Management Professional (PMP) certification is an asset
- Must have knowledge of Project Management methodologies and the Project Management Body of Knowledge (PMBOK)
- Conversant in various tools for project management, project planning, and time tracking, e.g., Primavera, MS Project, MS Excel, MS Visio, WBS Pro and Eclipse
- Experience with Agile and Lean methodologies is an asset
- Proven ability to lead, plan, implement, and manage projects and initiatives in a healthcare setting

Summary:

Requires a university degree in business administration, health administration, or a related field, along with several years of leadership or management experience, particularly in the primary care sector. Key qualifications include project management experience, familiarity with healthcare planning and stakeholder engagement, and proficiency in project management tools like MS Project and Primavera. Certifications like PMP and knowledge of Agile and Lean methodologies are advantageous. Strong organizational and analytical skills are essential.

Clinical Research Coordinator

Sample Job Requirements

- Education Earned doctorate degree
- Requirements: University or college degree, or certification in a related allied health profession from an appropriately accredited institution (e.g., nursing licensure).
- REQUIREMENTS -Bachelor's degree in health sciences or nursing (mandatory);
- Qualifications/Skills: Requires the successful minimum completion of a Bachelor's degree, or recognized equivalent, in a health or science-related discipline with 3-5+ years clinical and/or professional experience •
- Qualifications/Skills: Requires the successful minimum completion of a Bachelor's degree, or recognized equivalent, in a health or science-related discipline with 3-5+ years clinical and/or professional experience •
- Minimum requirements Degree in scientific or healthcare discipline.

 Job Qualification Graduate of Registered Nursing Program holding current registration from an accredited School of Nursing, Nurse Practitioner, or PhD in a life sciences field, preferably with oncology or immunology experience. Bachelor's degree or higher combination of education/experience in science or health-related field required CCRP

(Certified Clinical Research Professional) certification or equivalent clinical research program certificate, is an asset.

Educational Requirements:

- 1. Minimum Bachelor's Degree (Standard Requirement):
 - A Bachelor's degree in health sciences, nursing, or a science-related discipline is typically required.
- 2. Advanced Degrees (Preferred or Required in Some Cases):
 - **Earned doctorate degree (PhD)** in a life sciences field (e.g., oncology, immunology) may be required for some advanced or specialized roles.
 - Master's degrees in health or scientific fields can be advantageous.
- 3. Alternative Education:
 - University or college degree in an allied health profession (e.g., nursing licensure, Registered Nurse or Nurse Practitioner certification).
- 4. Additional Certifications (Preferred/Optional):
 - Certified Clinical Research Professional (CCRP) or equivalent clinical research certification is considered an asset.

Experience Requirements:

1. Professional Experience:

- **3–5 years** of clinical and/or professional experience in research or healthcare settings is commonly required.
- Specific experience in clinical trials, oncology, or immunology is advantageous for specialized roles.
- 2. Combination of Education and Experience:
 - Some roles may accept a combination of education and equivalent professional experience in clinical research or related fields.

Preferred Skills and Training:

1. Scientific and Healthcare Knowledge:

- Expertise in a scientific or healthcare discipline relevant to clinical research.
- Oncology or immunology knowledge is highly valued for some roles.

2. Professional Certification:

• Certification in **clinical research programs**, such as CCRP, is highly desirable.

Summary:

Clinical Research Coordinator roles typically require a **Bachelor's degree** in health sciences, nursing, or a related field, with **3–5 years of professional experience** in clinical research or healthcare. Advanced degrees, such as a **PhD** or **Master's**, are often preferred, especially for specialized roles. Certification in clinical research (e.g., CCRP) and a background in oncology or immunology can provide a competitive edge.

Health Economist

Sample Job Requirements

Edmonton, AB, Institute of Health Economics Job Title: Principal Health Economist

Qualifications: PhD or Masters level qualification in Health Economics or a closely related field A minimum of 3 (PhD) or 5 (Masters) years post-qualification experience

Vancouver, BC Provincial Health Services Job Title: Senior Health Economist

What you bring A level of education, training and experience equivalent to a PhD in Health Economics, Health Services, Health Policy or related discipline and a minimum of 3-years related experience in a healthcare or academic research environment. An equivalent combination of education, training and experience will be considered. Advanced knowledge of health economics theory and demonstrated excellence in the application of health economics methods. Expert knowledge of study design, data collection and analysis. Demonstrated ability to perform advanced data manipulation, analysis and information presentation through the use of database and spreadsheet software. Working knowledge of health systems. Ability to adapt to new technology. Programming economic models using

statistical software such as R, and /or SAS, and /or in Microsoft Excel is required. Good knowledge of descriptive statistics, statistical inference and modeling using statistical software such as R, and /or SAS.

Ontario Health Job Title: Health Economist

Education and Experience Master's degree or PhD in health economics, health technology assessment or related field Master's degree or PhD in health economics or health technology assessment, preferred 3-5 years of relevant professional experience, including PhD in health economics or related field Experience in conducting systematic literature review, cost-effectiveness analyses and/or budget impact analyses Knowledge and Skills Solid understanding in health economic concepts, decision modelling, health technology assessment and/or epidemiology Ability to conduct statistical analysis to identify and analyze relevant data sets, manipulate data, prepare reports Ability to provide critical appraisal and quality assurance on economic models Ability to use TreeAge or Excel for health economic modelling Excellent verbal and written communication skills; excellent presentation skills Ability to work independently as well as in a team environment Knowledge of the Canadian health care system

Halifax, NS Nova Scotia Health Authority

Job Title: Research Health Economist Research Innovation & Discovery

Qualifications ? We would love to hear from if you have the following: ? ? Master's degree in Health Economics or a related quantitative area required Strong quantitative skills, including training in econometrics or statistics, with a demonstrated understanding of treatment effect analysis, is an asset 2 years of demonstrated research activity and proficiency in presentations and/or publications Demonstrated experience or training in economic evaluations, including cost-effectiveness and cost-utility analyses using decision analytic modelling is an asset Familiarity with Crystal Ball, TreeAge, or @risk an asset Strong working knowledge of Microsoft Excel, including Visual Basic for Applications (VBA), is an asset Knowledge of statistical software such as R, and Stata Ability to work in a results-oriented clinical and health research methods service environment with direction, as a team member, and independently

Fredericton, NB Department of Health Job Title: HEALTH ECONOMIST

QUALIFICATIONS: Masters degree in health economics, demography, epidemiology, mathematics, statistics, or a related field supplemented by a minimum of five (5) years of related experience; OR a Bachelor's degree in an economic discipline, demography, epidemiology, mathematics, statistics, business administration, health information/informatics or a related field supplemented by a minimum of seven (7) years of related experience. The successful candidate must also have a minimum of three (3) years experience working with complex data in a health or social sciences related field. An equivalent combination of education, training and experience may be considered. Written and spoken competence in English and French is required. Please state your language capability on your application. Applicants must clearly demonstrate the essential qualifications to be given further consideration. Please ensure that preferred language for assessment is identified on your resume In the event that this competition poses difficulties in recruiting a qualified candidate, a covering off appointment at a lower level may be made. In that case, candidates with less than the required related years of experience may also be considered. ASSET QUALIFICATION: Preference may be given to candidates that possess the following asset qualification: Experience with analysis, modeling, statistical and, data manipulation software such as SPSS, SAS, PHYTON or R.

Educational Requirements:

- 1. PhD or Master's Degree (Standard Requirement):
 - PhD in Health Economics, Health Services, Health Policy, or related disciplines preferred for senior roles.
 - **Master's degree** in **Health Economics**, **Health Technology Assessment**, or related quantitative areas may be sufficient with additional experience.
- 2. Alternative Educational Backgrounds:
 - Degrees in quantitative fields such as epidemiology, mathematics, statistics, demography, or business administration may also be accepted, particularly if paired with relevant health economics experience.

Experience Requirements:

- 1. Professional Experience (Post-Graduate):
 - 3–5 years of professional experience in health economics, health policy, or related fields after completing a PhD.
 - 5–7 years of professional experience after completing a Master's degree.
 - Some roles consider a Bachelor's degree with 7+ years of professional experience in relevant areas.
- 2. Healthcare or Research Environment:

• Experience working in **healthcare**, **academic research**, or **policy analysis** is essential.

3. Specialized Experience:

- Proficiency in systematic literature review, cost-effectiveness analyses, and/or budget impact analyses.
- Familiarity with conducting **economic evaluations** (e.g., cost-utility analyses, decision-analytic modeling).

Key Skills and Technical Requirements:

1. Quantitative and Statistical Skills:

- Advanced understanding of health economics theory and methods (e.g., decision modeling, econometrics).
- Proficiency in statistical software such as R, SAS, or Stata.
- Knowledge of tools like TreeAge, Crystal Ball, or @Risk for modeling.
- 2. Data Analysis and Programming:
 - Strong skills in data manipulation, analysis, and visualization using software like SPSS, Excel (with VBA), Python, or R.

3. Knowledge of Healthcare Systems:

- Familiarity with the Canadian healthcare system and policies.
- Working knowledge of health technology assessment (HTA) and health services research.

4. Communication and Collaboration:

- Ability to communicate technical findings effectively through reports, presentations, and publications.
- Strong teamwork and independent research skills.

Summary:

Health Economist roles typically require a **Master's or PhD** in health economics or a closely related field, with **3–7 years of professional experience** depending on the level of education. Candidates must possess advanced quantitative and statistical skills, proficiency in modeling tools (e.g., TreeAge, R), and strong knowledge of health systems or policy. Effective communication and teamwork abilities, as well as experience in health technology assessment or healthcare settings, are key differentiators.

Health Information Manager and Health Information Assistant;

A program accredited by the **Canadian Health Information Management Association** (CHIMA) ensures that the education aligns with national standards. CHIMA accreditation is recognized as a benchmark for quality in HIM education.

Canadian Health Information Management Association (CHIMA) offers the **Certified Health Information Management (CHIM)** credential and **Health Information-Certified Associate** (HICA) title, among other designations.

Westlock, AB Alberta Health Services

Job Title: Health Information Management Professional I

Qualifications: Completion of diploma from an accredited Health Information Management Professional (HIMP) program. Active or eligible for registration with the Canadian Health Information Management Association (CHIMA).

Policy Health Analyst

Sample Job Requirements

health policy research analyst Employer details Union of Ontario Indians Education College, CEGEP or other non-university certificate or diploma from a program of 3 months to less than 1 year

policy development officer health Queen's University Education College/CEGEP Experience 3 years to less than 5 years

University of British Columbia Job Title: health policy research analyst

Education Earned doctorate degree or equivalent experience Epidemiology Health policy analysis Occupational health and industrial hygiene Public health, other Experience 1 year to less than 2 years

Toronto, City of Job Title: POLICY DEVELOPMENT OFFICER TPH Indigenous Health Your application must describe your qualifications as they relate to: Post-secondary education in a professional discipline relevant to the job function and/or relevant experience or equivalent combination of education, experience, and understanding of the unique perspectives of Indigenous communities

Edmonton, AB Government of Alberta Job Title: Sport, Physical Activity and Recreation Policy Analyst

Qualifications Requirements: A university degree in Social Science, Public Administration, Political Science, Recreation Administration, or other related field PLUS a minimum of four years of related experience in the area of sport administration is required. Directly related education or experience considered on the basis of: 1 year of education for 1 year of experience; or 1 year of experience for 1 year of education. Relatable experience must also include: Demonstrated understanding of the policy development process Experience conducting qualitative and quantitative research

Summary:

Health policy analyst roles typically require at least **post-secondary education**, with higher-level roles favoring **bachelor's or advanced degrees**. Related fields such as public health, social sciences, or political science are common. Experience requirements range from 1–5+ years, depending on the position's seniority. Some roles allow education and experience to substitute for one another.

Population and Public Health

Possible Entry-level Careers: Public Health Researcher; Public Health Program Coordinator; Gerontology; Health/Public Policy Analyst & Administration; Community Health or Development; Community Health Educator; Environmental Health Specialist; Occupational Health and Safety Specialist; Global Health Professional; Public Health Inspector; Public Health Researcher

Public Health Inspector

Sample Job Requirements

Public Health Sudbury & Districts Job Title: Public Health Inspector #22 228 Job Opportunity

Requirements: Bachelor of Applied Science Degree in Environmental Health or its equivalent. Current Certification in Public Health Inspection from the Canadian Institute of Public Health Inspectors. Current certification or ability to obtain certification in specified time frame as required by the Ontario Building Code (this is a requirement only for permanent Public Health Inspectors). Minimum of 2 years experience in public health inspection.

Edmonton, AB Alberta Health Services Job Title: Public Health Inspector I

Qualifications: Completion of bachelor's degree in Environmental Health or in a related field of study plus a recognized Environmental Health technical program. Completion of certificate in Public Health Inspection (Canada). Active Member in Good Standing with the Canadian Institute of Public Health Inspectors (CIPHI).

Saskatoon, SK Saskatchewan Health Authority Job Title: **PUBLIC HEALTH INSPECTOR DEGREE**

Required Qualifications Bachelor Degree in Environmental Health Certificate in Public Health Inspection (Canada), CPHI

Niagara Region Job Title: Public Health Inspector

QUALIFICATIONS EDUCATION A Bachelor degree in Applied Sciences or equivalent from an institution approved by the Canadian Institute of Public Health Inspectors (CIPHI) Board of Certification. KNOWLEDGE/EXPERIENCE A minimum of two years of experience as a PHI. Knowledge of the Health Protection and Promotion Act and regulations thereunder, the Ontario Public Health Standards and protocols, and other legislation and guidelines. Enforcement experience (including collection and documentation of evidence; issuance of orders, tickets, and or summons; preparation of legal briefs; and/or testifying in court) SKILLS Demonstrated evidence-informed risk assessment, investigative and problem-solving abilities Excellent communication skills (both verbal and written) Proficient computers skills, including familiarity with Windows, MS Word, PowerPoint, Excel, and use of the Internet; knowledge of the Hedgehog Inspection Database is an asset Proficiency in another language is an asset SPECIAL CONDITIONS Valid certification by the CIPHI A member in good standing with the CIPHI

Alberta Health Services Job Title: Public Health Inspector II

Required Qualifications: Completion of Bachelor's Degree in Environmental Health or in a related field of study plus a recognized Environmental Health technical program. Completion of certificate in Public Health Inspection (Canada). Active Member in Good Standing with the Canadian Institute of Public Health Inspectors (CIPHI). Additional Required Qualifications: Minimum of 5 years? experience working in an Environmental Public Health Program with a bachelor?s degree or 3 years? working experience with a related master's degree Preferred Qualifications: Previous experience working as part of a zone and/or provincial committee.

Educational Requirements:

1. Bachelor's Degree:

- A Bachelor's degree in Environmental Health, Applied Science, or an equivalent field is required.
- For some roles, completion of a **recognized Environmental Health technical program** is also necessary.

2. Certifications:

- Certificate in Public Health Inspection (Canada) (CPHI(C)): Mandatory certification from the Canadian Institute of Public Health Inspectors (CIPHI):
- Additional certifications related to the Ontario Building Code may be required for certain positions in Ontario (e.g., Sudbury).

3. Membership:

• Active membership in good standing with CIPHI is often required.

Experience Requirements:

- 1. Entry-Level Experience:
 - Some positions specify no experience is required beyond the educational credentials for entry-level roles (e.g., Public Health Inspector I).

2. Mid-Level Experience:

 Minimum of 2 years of experience in public health inspection for some roles (e.g., Niagara Region, Sudbury).

3. Senior-Level Experience:

• At least **3–5 years of experience** in Environmental Public Health Programs for senior roles (e.g., Public Health Inspector II at Alberta Health Services).

Knowledge and Skills:

1. Legislation and Standards:

- Familiarity with:
 - Health Protection and Promotion Act and its regulations.
 - Ontario Public Health Standards and protocols.
 - Other relevant public health legislation and guidelines.

2. Risk Assessment and Enforcement:

- Evidence-informed risk assessment and investigative skills.
- Experience in **enforcement activities** (e.g., collection of evidence, issuance of orders/tickets, preparation of legal briefs, court testimony).

3. Communication and Technical Skills:

- Strong written and verbal communication skills.
- Proficiency in:
 - Software such as MS Word, Excel, PowerPoint, and the Internet.

- Inspection databases (e.g., Hedgehog Inspection Database) is an asset.
- Knowledge of additional languages is considered an asset.

4. Analytical and Teamwork Abilities:

 Ability to work collaboratively as part of a zone or provincial committee for more senior roles.

Preferred Qualifications:

1. Advanced Degrees:

- Master's degree in Environmental Health or related fields preferred for some senior positions.
- 2. Specialized Experience:
 - Experience in zone or provincial-level committee work is a plus for leadership roles.

Summary:

Public Health Inspector roles typically require a **Bachelor's degree in Environmental Health or related fields** and a **Certificate in Public Health Inspection (Canada) (CPHI(C))**. Candidates must be active members of CIPHI. Entry-level positions require minimal to no professional experience, while senior roles demand **3–5 years of public health inspection experience**. Strong knowledge of health protection legislation, risk assessment, enforcement, and communication skills are essential, with technical and language proficiency considered assets.

Public Health Program Coordinator

Job Opportunity Overview:

As a Public Health Program Coordinator, you will play a key role in the design, implementation, and evaluation of public health programs aimed at improving community health outcomes. This role involves working closely with local health authorities, community organizations, and stakeholders to ensure public health initiatives are effectively delivered and meet established health goals. The Public Health Program Coordinator will manage various health-related projects, monitor program effectiveness, and advocate for the health needs of the community.

Educational Requirements:

Bachelor's degree in Public Health, Health Promotion, Environmental Health, or a related field.

A Master's degree in Public Health or a related discipline is preferred for senior-level roles or specialized program management.

Experience Requirements:

Minimum of 3 years of experience in public health program coordination or management. Experience in community health, program evaluation, or health education is highly desirable.

Experience working with diverse populations and understanding public health disparities is an asset.

Communication Skills:

Excellent verbal and written communication skills, with the ability to present information clearly to diverse audiences, including stakeholders, staff, and the public.

Leadership and Collaboration:

Ability to work collaboratively with multidisciplinary teams, stakeholders, and community members. Demonstrated leadership abilities and experience managing projects or programs.

Analytical and Critical Thinking:

Strong analytical skills for interpreting health data, evaluating program outcomes, and making recommendations for program improvements.

Technical Proficiency:

Proficient in Microsoft Office Suite (Word, Excel, PowerPoint) and experience with public health data management tools or program management software.

Cultural Competence:

Ability to work effectively with diverse populations and understand cultural factors that impact health.

Public Health Researcher

Sample Job Requirements

The Hospital for Sick Children (SickKids) Job Title: researcher health care Earned doctorate degree Experience 5 years or more Work setting Urban area Health care institution, facility or clinic Research institute, laboratory or centre School or educational institution/establishment Specialty hospital and acute care hospital Responsibilities Tasks Provide advice to senior managers and officials Compile and analyze statistical information provided by private and public health care institutions and organizations Organize conferences and meetings Prepare research papers, educational texts or articles Design and implement health and wellness projects or programs Interpret trends and developments on health issues Conduct evaluations and assessments of health projects and programs Develop policies, standards and guidelines Co-ordinate multidisciplinary projects Deliver presentations at conferences, workshops or symposia

University of British Columbia, Faculty Relations

Job Title: researcher health care

Education Earned doctorate degree or equivalent experience Epidemiology Biological and biomedical sciences, other Occupational health and industrial hygiene Experience 5 years or more Work setting Willing to relocate Research institute, laboratory or centre School or educational institution/establishment Responsibilities Tasks Supervise laboratory technical personnel, medical clinical personnel, graduate students, research scientists and other professionals Maintain, update and manage health information databases Compile and analyze statistical information provided by private and public health care institutions and organizations Produce reports Present the views of an association or organization to members, the media and the general public Organize conferences and meetings Produce newsletters, magazines and other documents Prepare research papers, educational texts or articles Conduct literature reviews Interpret trends and developments on health issues Conduct evaluations and assessments of health projects and programs Develop policies, standards and guidelines Co-ordinate workshops Co-ordinate multidisciplinary projects Deliver presentations at conferences, workshops or symposia Monitor and compile research results

Royal Ottawa Health Care Group

Job Title: researcher health care

Education Master's degree or equivalent experience Experience 3 years to less than 5 years Work setting Health care institution, facility or clinic Research institute, laboratory or centre Responsibilities Tasks Provide advice to senior managers and officials Maintain, update and manage health information databases Perform administrative tasks Compile and analyze statistical information provided by private and public health care institutions and organizations Produce reports Present the views of an association or organization to members, the media and the general public Organize conferences and meetings Prepare research papers, educational texts or articles Conduct interviews Interpret trends and

developments on health issues Co-ordinate workshops Develop people resources and networks for health information and other wellness issues Co-ordinate multidisciplinary projects Deliver presentations at conferences, workshops or symposia Monitor and compile research results Supervision Working groups Committees Experience and specialization Policy and program experience Addiction or substance abuse Mental health Area of work experience Health human resources planning Health promotion Professional health care education Public or community health centre

Vancouver, BC University of British Columbia

2023-02-28

Job Title: health care researcher

Date: February 27, 2023 Job market information health care researcher NOC 41404 Lower Mainland?Southwest Region Median wage 33.65 \$/hour Explore this career Health care researcher VERIFIED Posted on February 27, 2023 by Employer details University of British Columbia Job details Location Vancouver, BC Salary 90,000 annually 40 hours per week Terms of employment Term or contract (ending: 2024-04-30) Full time Start date Starts as soon as?2023-05-01 Benefits: Health benefits, Long term benefits vacancies 1 vacancy Verified Source Job Bank #2356548 Overview Languages English Education Earned doctorate degree Experience 2 years to less than 3 years Work setting School or educational institution/establishment

Dental Epidemiology Network

Job Title: researcher, health care

Work Term: Permanent Work Language: English Hours: 30 to 44 hours per week Education: Degree in medicine, dentistry, veterinary medicine or optometry Experience: 3 years to less than 5 years Public health, general (MPH, DPH) Tasks Provide advice to senior managers and officials Maintain, update and manage health information databases Perform administrative tasks Compile and analyze statistical information provided by private and public health care institutions and organizations Produce reports Recruit and hire staff Monitor health care programs Present the views of an association or organization to members, the media and the general public Organize conferences and meetings Produce newsletters, magazines and other documents Prepare research papers, educational texts or articles Provide consulting services to government and other organizations Conduct interviews Conduct literature reviews Act as liaison within organization between staff and management around wellness issues Design and implement health and wellness projects or programs Interpret trends and developments on health issues Conduct evaluations and assessments of health projects and programs Develop policies, standards and guidelines Co-ordinate workshops Develop people resources and networks for health information and

2024-02-10

other wellness issues Coordinate multidisciplinary projects Deliver presentations at conferences, workshops or symposia Monitor and compile research results

Educational Requirements:

- 1. Doctorate Degree (Ph.D.):
 - Preferred or required for most positions. Fields include:
 - Epidemiology, Biomedical Sciences, Public Health, Occupational Health, or related areas.
 - Some positions accept an earned doctorate degree or equivalent experience.
- 2. Master's Degree:
 - Accepted in some roles, particularly for candidates with significant professional experience (3–5 years). Relevant fields include:
 - Public Health (MPH, DPH), Statistics, or Health Sciences.
- 3. Professional Degrees:
 - Degrees in specialized areas like medicine, dentistry, veterinary medicine, or optometry may be suitable for roles in clinical and public health research.

Experience Requirements:

- 1. General Experience:
 - Typically 2–5+ years in health care research, policy development, or health program evaluation.
 - Senior roles may require 5–7 years or more of demonstrated leadership in health-related research.
- 2. Specific Expertise:
 - Experience with statistical analysis, database management, and health-related program evaluations.
 - Proven ability to compile and interpret health data and trends.

Responsibilities and Skills:

- 1. Key Tasks:
 - \circ Design and implement health and wellness projects or programs.
 - Conduct literature reviews, statistical analyses, and interpret health trends.
 - Develop policies, standards, and guidelines.
 - Prepare and present research papers, reports, or educational materials.
 - Evaluate and assess health projects and programs.
 - Co-ordinate multidisciplinary projects and supervise teams or working groups.
- 2. Technical Skills:

- Management of health information databases.
- Advanced skills in data analysis and statistical software.
- 3. Additional Skills:
 - Conference and workshop organization.
 - Presentation and communication skills for engaging with stakeholders, senior managers, and the public.
 - Knowledge of health promotion, mental health, addiction, and other health policy areas.
- Research institutes, laboratories, and centers.
- Health care facilities or clinics.
- Universities and educational institutions.
- Government organizations or public health agencies.



Library Impact Statement

Faculties seeking changes to existing programs must consider and seek the agreement to any impact of the proposed program changes on the library system and on course enrolments in other academic units. In addition, any new program proposal going forward for approval will require a service impact statement. Where the affected Faculties and/or Library are in agreement this statement will note that fact and details of the arrangement.

Please contact your subject librarian to solicit feedback on your program proposal and request a Library Impact Statement.

Library Contact:

Name:	Date:
Allison Sivak	November 1, 2024
Library Unit:	Email:
Geoffrey & Robyn Sperber Health Sciences	
Library	asivak@ualberta.ca

Program Proposal Contact:

Name:	Dept/School:
Tim Konoval	Interdisciplinary Health
Faculty:	E-mail:
College of Health Sciences	konoval@ualberta.ca

Proposed Program Changes:

Insert specific program proposal name here

Bachelor of Health Sciences (BHSc)

Library Service or Resource	Description of Library Impact
Instruction (e.g., classes with a librarian, tours, online resource guides, online tutorials, etc.)	Instruction related to the creation and dissemination of authoritative health information, misinformation, and disinformation may be useful for students in the BHSc program. Librarians can offer additional instruction on grey literature, systematic searching for evidence synthesis, and the emerging roles of new technologies (such as AI and popular media) within the health information field.
	The Library offers a range of <u>workshops</u> throughout the academic year to assist students with their research needs. These include an <u>asynchronous systematic</u> <u>searching workshop</u> , and a live virtual offering of the workshop monthly. In addition, <u>online instructional guides</u> and <u>tutorials</u> are accessible via the Library's web site to support the research process. Course/assignment specific instruction is also available via subject librarians. Allison Sivak is the subject librarian for the BHSc and has the capacity to support this Program/Certificate.
Reference assistance (e.g., ongoing one-on-one help)	The subject librarian or other librarians in complementary subject areas will be able to accommodate requests for assistance via email, phone. or online.

University of Alberta Library Impact Statement November 2022

	General reference assistance is available at all University of Alberta Library service desks and online via Ask us services.
Collections – course materials. print, electronic [note any impacts on simultaneous users, licensing considerations etc.]	The Library's already-robust suite of subscriptions to print and electronic journals and books will adequately support this program. Any items that are not available and/or accessible through the Library can be requested through Interlibrary Loan. Resources with particular relevance to this program include: MEDLINE / PubMed CINAHL EMBASE Scopus Indigenous Healing Collection Other subject specific <u>databases</u> and resources may be required. The Library also supports <u>course reading list and reserve requests</u> online using the <u>Talis platform</u> . These Library Subject Guides will be relevant for the BHSc students: Public Health Acquiring Evidence First Nations, Métis, Inuit (FNMI) Health Resources Health Statistics
Collaboration with other UAL library units, if interdisciplinary program (consult with the other UAL units affected and include their comments with yours)	Given the role of emerging technologies within the realm of health, services such as Sperber Library's <u>Virtual Reality Lab</u> , the <u>Media Studio</u> , and our 3D <u>printing service</u> will offer different experiential learning opportunities. The <u>Digital</u> <u>Scholarship Centre</u> (DSC) is another library facility that may be of use to those completing this certificate/program given their innovative resources, including access to the <u>DSC Makerspace</u> . Any student can gain access to these resources, including <u>high performance computers</u> , in this facility provided the use is tied to a curriculum based project.
Physical facilities (e.g., sufficient room for group work; in-library work, etc.)	Physical facilities are in place to support student research needs. The recently-opened Sperber Library offers ample space for quiet study and student. collaboration. The Indigenous Learning Space offers a culturally-informed setting, for ceremony and learning with College Elders or for smaller classes. There are bookable group study spaces, as well as collaborative and individual study spaces in all library locations.
Other (specify)	
M	

X

X Proposal has an impact on the Library and can be supported.
 Proposal can be supported with additional resources; see attached details.
 Proposal has no impact on the Library.

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University of Alberta Library Impact Statement November, 2022

Unit Head Name	Unit Head Signature	Date		
Connie Winther	Acres Here	November 1. 2024		
Associate University Librarian Name	Associate University Librarian Signature	Date		
		November 4, 2024		

University of Alberta Library Impact Statement November, 2022

Proposal Template: New Degree Programs and Specializations (Part B: Campus Alberta Quality Council Review)

If a proposed program receives a positive outcome from the System Coordination Review, the Minister may refer the program to the Campus Alberta Quality Council for quality assessment, the second stage of review.

The onus is on the applicant institution to satisfy CAQC that the level of learning to be achieved is consistent with that which is expected at the proposed degree level, that the program has sufficient breadth and rigour to meet national and international standards as outlined in, for example, the Canadian Degree Qualifications Framework (CDQF) and the Alberta Credential Framework (ACF), and that the program is comparable in quality to similar programs (if any) offered in Alberta and elsewhere. The program proposal should demonstrate how CAQC's program quality standards and any applicable guidelines have been addressed and describe any unique dimensions that set the program apart from similar programs thus providing new educational opportunities for students.

NOTE: Part A of the program proposal may undergo changes as a result of the System Coordination Review. It is important that Part A be up-to-date and complete before it is forwarded to CAQC. Building on the information provided in Part A, the program proposal that is sent to CAQC should contain the additional information requested below. When possible, links to existing policy documents and institutional policies should be provided, rather than recopying them in response to questions.

SECTION A: PROGRAM SPECIFICS

1. Program Learning Outcomes (PLO)

a. Provide the program's learning outcomes (as presented in Part A of the proposal).

Program Learning Outcomes

	How the human body works	
PL01	Describe how the human body functions at multiple levels in both health and disease	İ
	How preventive health measures can improve health	1
PLO2	Discuss how preventive and restorative health measures can improve individual and population health outcomes	
	How equity work can positively transform the health system for all	1
PLO3	Become advocates for equity, diversity and inclusive policies and practices to challenge structurally embedded social injustices	

	Ensure Indigenous languages, cultures and ways of knowing health are consistently applied in practice
	How determinants of health influence health outcomes
PLO4	Critically discuss the impact of social, biological, cultural and environmental determinants of health and how they influence health outcomes for individuals and populations
	How innovations can improve the health system
PLO5	Identify and evaluate how health technologies, data and system innovations impact health outcomes for individuals, populations and the planet
	How the health system includes numerous career possibilities
PLO6	Explain and differentiate the distinct and synergistic career pathways and possibilities across the health care system and health sector
	How research and evaluation can be used for impact
PL07	Demonstrate the ability to design, gather, review, evaluate, and interpret health information, including emerging data, scientific evidence and advancements in Artificial Intelligence relevant to current and future health disciplines
	How durable skills can develop a more dynamic health workforce
PL08	Cultivate durable skills, such as in collaboration, communication, curiosity, language literacy, and critical thinking, to become dynamic professionals equipped to apply interdisciplinary knowledge across contexts

2. Program Structure

a. Provide a comprehensive outline of the entire program curriculum, listing the course names, course numbers, and credits for all required courses and specified electives. Indicate which courses are new for this program. Where applicable, specify the requirements for any minors, work-integrated learning (WIL), specific general education or breadth elements, or other elements that are part of the program.

The BHSc program consists of Core courses (69 cu), specializations (18 cu), health electives (24 cu), and open electives (9 cu). The core program has been designed with an emphasis on fundamental knowledge in basic, social and health systems sciences while keeping industry needs and employability in mind. The specializations provide additional training linked to specific vocational roles or next destination programs.

- See Appendix A for a list of the calendar entries for all core courses, specializations and courses within them, and specified electives. The appendix includes the calendar designation for credits and numbers of lecture, lab seminar, tutorial hours, etc.
- For new courses under development (highlighted in red on program map), a tentative calendar entry has been provided. For all additions/revisions to existing courses, the Faculty commits to approving the calendar changes before program implementation.
- Work Integrated Learning:
 - o The Interdisciplinary Health Experiential Learning backbone (outlined in more detail in Appendix A) includes experiential learning in each course which occurs each year of the program. The courses include series on exploring health professions, durable and research skills and practice, and utilize problem-based learning to encourage students to put their coursework and skills into practice to explore some of the major problems impacting the health system.
- Specializations (2nd level)
 - o The program features three possible 18 cu specializations including: Population and Public Health, Health Systems Innovation, and Mental Health.
 - o Students must select and complete one of the specializations. Normally they will declare a specialization in 2nd year.

b. If the curriculum includes a WIL component(s), provide the following information:

i. how placements will be arranged, and what resources and/or personnel the institution will make available to undertake these processes.

Students will be able to access WIL in a variety of ways in the BHSc program including research based learning, community-service learning and field placements. To support WIL, a work integrated learning coordinator will be hired. They will work with the program director and institutional and industry partners to identify, document and communicate WIL opportunities. Students will also actively participate in the identification of WIL opportunities, specifically through the INTD courses in the BHSc program.

In addition to WIL opportunities with known program partners, the <u>Undergraduate Research</u> <u>Initiative</u> provides faculty with a process to post research opportunities that students in the BHSc program can access.

Support of Work Integrated Learning:

The College of Health Sciences has three full time placement (WIL) administrators who coordinate and provide administrative support for common tasks related work integrated learning for faculties/programs across the College. Common tasks include management of agreements with WIL partners (eg. communications with legal, communications with WIL partner, seek feedback from programs where needed) and collection and secure storage of documents required for students to participate in WIL (documents vary but may include police check, vaccinations etc). The placement coordinators also liaise with the Dean of Students and are part of a community of practice about accommodations for students in work integrated learning settings.

Information about the services provided in the Office of Education can be found in the 2024 <u>CHS</u> <u>Office of Education Report</u>. The BHSc program will be able to access these established services to the benefit of the program and its students.

ii. expectations and obligations of student and host and how these will be coordinated.

Students are expected to conduct themselves professionally at all times when taking part in work integrated learning activities with institutional or industry partners.

Students must adhere to the Student Conduct Policy and the Student Academic Integrity policies at the University of Alberta.

- iii. how mentoring and supervision of students during their WIL experience will take place.
 - mentoring may be from faculty/staff who are employed by the University of Alberta, or by mentors who are external partners.
 - External partners will receive orientation information about work integrated learning placements and the responsibilities of the University, the students and the partner. The College of Health Sciences will develop and maintain a website that provides these resources for partners.
- iv. how evaluation of student performance will occur.

Final assessment of completion of a WIL learning experience will be completed by the designated supervisor of the learning experience, in collaboration with the WIL coordinator. The WIL will assign a grade.

Students completing WIL learning experiences will receive one of 4 grades: Pass with distinction, pass, borderline pass, fail. Criteria related to each of those grades will be established and communicated to supervisors. Students who receive a grade of borderline pass will, in most instances, be required to complete additional work. Students who receive a grade of fail will be required to repeat the course.

v. how opportunities will be afforded to students to reflect on how the WIL experience contributed to their degree program.

Students will reflect on and evaluate each WIL placement using up to 10 standard evaluation questions developed in collaboration with survey experts. Optional questions may be included where site specific information is required.

The WIL coordinator will meet regularly with students following WIL placements to ask for student reflections on the experiences. Information from those discussions will guide adjustments or changes to WIL opportunities.

WIL will be a standing item at BHSc curriculum committee meetings and student representatives will be asked to collectively report on student experiences in WIL.

vi. If not already included above, indicate the resources and/or personnel that the institution will make available to undertake these processes as well as any other relevant features of the WIL component.

Included above.

b. Provide a summary outline of the program structure and requirements in a table that indicates the number of junior and senior courses, and credit totals, for the components listed in the sample table below. Additional components, such as minors or general education may be added as appropriate.

The BHSc program is an interdisciplinary program that combines and integrates courses and staffing from the six faculties in the College of Health Sciences, as well as faculties in the College of Natural and Applied Sciences, and the College of Social Sciences and Humanities.

The program is composed of 69 credits of CORE courses and 51 credits of non-CORE courses (courses in specializations, in approved health electives, and in open electives). The CORE curriculum provides a laddering of knowledge and skills to the level of mastery. There are three 2nd level specializations (18 cu) including: 1) population and public health and 2) health system innovation; and 3) mental health and well being.

Component ¹	Junior courses (maximum)	Junior Credits	Senior courses (minimum)	Senior Credits (min)	Total Credits	
Core Curriculum	10	30	13	36	69	
Approved Health Electives	4	12	6	18	42	
Other electives	2	6	1	3	9	
Total	16	48	24	72	120	

Table 1: Program structure

Students will be required to include a minimum of 6-400 level courses in their program. The requirement will be met using the 2-400 level courses in the CORE, and a minimum of 3-400 level electives (total 18 cu at minimum at 400 level).

Students will be required to include a minimum of 7-300 level courses in their program. The requirement will be met using the 4-300 level courses in the CORE, and a minimum of 3-300 level electives (total 21 cu at minimum at the 300 level).

In general students will complete a minimum of 72 cu at the senior level (200, 300, and 400 level courses).

c. For undergraduate degrees, demonstrate (in a table, if possible) how the program meets the structural requirements for the relevant degree type as set out in CAQC's Expectations for Design and Structure of Undergraduate Degrees (Handbook s. 4.3.3.).

Expectations (from 4.33 <u>CAQC</u> <u>Handbook (2022)</u>	Response
Expectation 1. a. the proposal conforms to the structure and meeting quality standards	 The BHSc program is an interdisciplinary program and conforms to the required structure as articulated in 4.3.3.1 (CAQC handbook) including: 120 credits at least 6 credits in each of humanities, social sciences and science. a minimum of 72 credits at the senior level (minimum of 15 cu at 400 level, and minimum of 18 cu at 300 level) a minimum of 3 credits in each of 5 disciplines a maximum of 72 credits in any one discipline
Expectation 1(con't). b. the expectations of graduates are at the baccalaureate level as defined in Part B Canadian Degree Qualifications framework	Please see chart below in Section 4 for information mapping expectations to programs learning outcomes, and general information about how the proposed degree meets the expectations (Section 4 Alignment with ACF)
Expectation 2. a) the type of institution proposing the degree is appropriate	The University of Alberta is a degree granting institution and has existing programs at the Bachelor's level.
Expectation 3. a. the proposed program meets the Program Design and Outcomes expectations including	The program meets expectations - see <u>Alignment</u> with <u>Alberta Credential Framework (ACF)</u> (jump to Table)
Expectation 4. All new Bachelor's programs will meet the Knowledge and Skills standards	Alignment with Alberta Credential Framework (ACF) (jump to Table)

Table 2. Alignment with Expectation CAQC

3. PLO Mapping

- a. Provide a mapping of the courses to the PLOs. Although proponents may choose alternative ways to present a curriculum map, the following example represents one way required and elective courses in a specialization can be mapped to PLOs to demonstrate
 - how the courses that fulfil the requirements for the specialization (major) contribute to the achievement of the learning outcomes, and
 - a progression in the development of the PLOs across these courses.

Although all courses in a program contribute to PLOs, the focus in this map is on the courses that constitute the program CORE.

Course Code and name	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8
Required CORE courses in the BHSc program								
YEAR 1								
INT D 100 - Your Future in Health: Pathways and Possibilities		I	1	1	1	1	1	1
BIOL 107 - Introduction to Cell Biology	I							
NURS 140 - Anatomy	1					<u> </u>		
NUTR 100 - Nutrition and Well-being	t	1	1	1				1
ENGL 102 - Introduction to Critical Analysis								1
INT D 1XX - Fundamental of Health Research		!	1		1		!	!
CHEM 101 - Introductory University Chemistry I	1							
HE ED 120 - Introduction to the Biological Aspects of Fitness to Health	1	1		1		1		1
NURS 150 - Physiology	1	1						
YEAR 2				3.89M	101			
INT D 2XX - Exploring Interdisciplinary Problems in Health		D	D	D	D	D	D	D

Table 1: Curriculum mapping of the PLOs to courses constituting the CORE in the proposed program

INT D 2XX - Fundamentals of Health Data Science and Al			1		1		D	D
INT D 222- Indigenous Health in Canada			D	D				1
INT D 3XX - Mind Matters: Mental Health in the Modern Health System	D	D	D	D		ii.	D	D
SPH 200 - Introduction to Public Health			D	D	D	D		
STAT 151 - Introduction to Applied Statistics							D	
KIN 2XX Physiology of Physical Activity and Health	D	D		D			D	
YEAR 3				L	L	I		L
INT D 3XX - Health in Practice: Experiential Learning for Impact			D	D	D	D	D	D
NURS 422 - Contemporary Issues in Healthcare Ethics and Law			D	D			D	D
SPH 3XX - Systems for Health			D	D	D	D	D	D
INT D 3XX - Advanced Indigenous Health			D	D				D
SPH 303 - Health Promotion in an Unequal World			D	D			D	D
YEAR 4								
INT D 4XX - Capstone (6 credits)			М	M	D	М	D	D
			-					

 Indicates that knowledge and skills to help learners achieve this PLO are introduced in this course
 Indicates that knowledge and skills to help learners achieve this PLO are further developed in this course

M: Indicates that knowledge and skills to help learners achieve this PLO are mastered (appropriate to the degree level) in this course

4. Alignment with Alberta Credential Framework (ACF)

Graduates are also expected to demonstrate the degree-level expectations in each of the six knowledge and skill areas set out in the ACF (see the CAQC Handbook), describe how the proposed program meets the expectations in each of the areas listed below, and how the academic culture helps learners achieve these expectations.

The College of Health Sciences provides an interdisciplinary learning environment for students seeking a broad degree in Health Sciences. The academic culture of health is reinforced by the home of the BHSc being the Edmonton Clinic Health Academy (ECHA). ECHA is also home to a number of health programs (staff and students) including Nursing, Pharmacy, and Dentistry (among others).

The tables below map the CAQC expectations to the program learning outcomes, and offer a narrative below each table describing how the program meets the expectations.

Depth and breadth of knowledge:

EXPECTATIONS		Program Learning Outcome
1.	Knowledge and critical understanding in a field of study that builds upon their secondary education and includes the key assumptions, methodologies, and applications of the discipline and/or field of practice;	1-6
2.	Basic understanding of the range of fields within the discipline/field of practice and of how the discipline may intersect with fields in related disciplines;	1-6
3.	The ability to gather, review, evaluate, and interpret information, including new information relevant to the discipline, and to compare the merits of alternate hypotheses or creative options relevant to one or more of the major fields in a discipline	5,7,8
4.	The capacity to engage in independent research or practice in a supervised context	7
5.	Critical thinking and analytical skills inside and outside the discipline	3, 4, 7, 8
6.	The ability to apply learning from one or more areas outside the discipline	3,7,8

Students will learn about health topics in depth through the CORE courses, and the health specific electives that will be required. Depth in health related topics specific to the proposed BHSc degree is a full recognition and understanding that health is a multifactorial concept and that issues related to equity must be at the forefront. The different factors (e.g., economic, biological, social, cultural etc) that influence health will be studied in depth. Students will have scaffolded learning opportunities in Indigenous Health and Indigenous ways of knowing that they will apply to problems in health.

Learning opportunities in the INTD core courses (related to interdisciplinary knowledge skills and attitudes) provides breadth; knowledge and skills build from INTD 100 to the capping projects. INTD 100 is the first course students take in the degree - it is built to support breadth of knowledge in careers in health with more than 20 podclasses; interviews with health professionals working in different areas of health. Students will achieve further breadth through the electives they will take - both health specific (42 cu) and non-health specific (9 cu).

Conceptual awareness and/or knowledge of research: (i.e., knowledge of approaches to inquiry and/or creative work)

EXPECTATIONS	Program Learning Outcome
 a) An understanding of methods of enquiry or creative activity, or both, in their primary area of study that enables the student to evaluate the appropriateness of different approaches to solving problems using well established ideas and techniques, devise and sustain arguments or solve problems using theme methods, and describe and comment upon particular aspects of current research or equivalent advanced scholarship in the discipline and on their relevance to the evolution of the discipline 	3-5, 7,8 4,5,7,8 1-7
 b) The ability to review, present, and critically evaluate qualitative and quantitative information to develop lines of argument; make sound judgments in accordance with the major theories, concepts, and methods of the subject(s) of study; apply underlying concepts, principles, and techniques of analysis, both within and outside the discipline; and where appropriate, use this knowledge in the creative process 	2-5, 6, 7

Core courses introduce, explore, and integrate knowledge of health concepts, health behaviour theories, health equity, health systems, and health research (in broad areas, aligned with program learning outcomes). Students will demonstrate their knowledge through written assignments, oral presentations, critical analysis of Al generated research summaries vs. summary of primary research and other creative processes.

Communication skills:

EXPECTATIONS	PLOs
the ability to communicate information, arguments and analyses accurately and reliably, orally and in writing to varying audiences (lay person and specialist) using structured and coherent arguments	7-8

PLO 8 specifically addresses the program's focus on communication as a foundational durable skill. Practice of oral and written communication skills, including the use of artificial intelligence, are embedded in the INTD backbone courses, and in several other courses that include the requirement for communication. We think of communication broadly as communication in today and tomorrow's world, including in a world with artificial intelligence. Students will develop and practice strategies to manage evolutions in technology and how changes in technology impact roles in health.

Application of knowledge:

EXPECTATIONS	PLOs
 a) The ability to use a range of established strategies and techniques to 1. initiate and undertake critical evaluation of arguments, assumptions, abstract concepts, and information; 	1-5, 7, 8
 frame appropriate questions for the purpose of solving a problem; propose solutions solve a problem or create a new work 	
b) The ability to make critical use of scholarly reviews and primary sources.	8

The INTD backbone courses (INTD 100, 2XX, 3XX, and 4XX) are application courses - places where students will learn about health and research concepts and apply them in a problem based learning situation. Students will access community service learning, simulation learning activities in the Health Sciences Education and Research Commons (HSERC), and apply their knowledge and skills to problems in health.

Professional capacity and autonomy:

EXPEC	TATIONS	PLOs
b)	Qualities and transferable skills necessary for further study, employment, community involvement, and other activities requiring the exercise of initiative, personal responsibility and accountability in both personal and group contexts,	8 4-6, 8
c)	working effectively with others, and behaviour consistent with academic integrity	8 7, 8

The BHSc program is not a professional program, but many of the students who enroll in this program will go on to study in a professional program. Work integrated learning opportunities throughout the curriculum will offer opportunities to initiate and connect with community partners, and be accountable to relationships and expectations of relationships and work with community partners. The ability to work in a team, and to communicate effectively are foundational skills in health care, especially with a stressed health care system - teams and high functioning teams are critically important. Teamwork and communication are foundational skills that will be embedded in learning activities throughout the program.

a. Awareness of limits of knowledge:

EXPECTATIONS	PLOs	
 An understanding of the limits to their own knowledge and ability; an a) appreciation of the uncertainty and ambiguity of and limits to knowledge, and b) an appreciation of how this might influence analyses and interpretations. 	3,7,8	<u> </u>

Encountering and appreciating ambiguity is an important concept that will be introduced early and reinforced through the program. Ambiguity alludes to not knowing, or that there is more than one right answer - concepts that students may be uncomfortable with in competitive learning environments where the highest marks are the goal. Psychologically safe learning environments where "questions are appreciated, ideas are welcome, and errors or failures are discussable" ¹ is the desired environment for students in the BHSc program - a concept that will be discussed and revisited often. Psychologically safe environments welcome ambiguity, accept that there are limits of our knowledge and help to develop students who are curious, comfortable trying new things, and accepting of the varied contributions of others in team settings.

We will consider developing a fearless innovator award similar to the staff award to recognize failure, learning from failure, and resilience after failure. See <u>Fearless Innovator Awards</u>. Appreciating ambiguity and reinforcing the desire for curiosity (and sometimes trying and failing) will require adjustments in assessment methods.

5. Requirements and Pathways for Admission and Academic Progression

- a. Provide the following information:
 - i. admission criteria (including any provision for prior learning assessment)

The BHSc program is a direct entry program. Students will be admitted on a competitive basis, with the assistance of the College of Health Sciences enrolment partner and the registrar's office.

Prerequisites for the program include:

- Biology 30
- Chemistry 30
- English Language Arts 30-1
- Math 30-1 or 30-2
- One subject from Group A
- One other science course (option to choose course from Group C)
- ii. residency requirements

The program is located at the north Edmonton campus of the University of Alberta. It is an in-person program, though it will be possible for students to enroll in a mix of in person and online courses. The agency and ability to choose a variety of different learning modes was something that was discussed as a priority in the student experience action plan.

iii. academic performance progression requirements

Promotion: A student's progress is evaluated on completion of each academic term, with decisions on promotion made at completion on the basis of performance on Fall/Winter GPA or Spring/Summer GPA. Decisions on academic progress are based on Fall/Winter GPA

Satisfactory Standing: Fall/Winter of 2.0 or greater. Promotion, repeating any failed course(s).

iv. graduation requirements applicable to the program

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¹ Edmondson, Amy (2023). Right kind of wrong: how the best teams use failure to succeed. Penguin Books. (page 15)

Requirements to Graduate: To graduate, a student must pass all CORE courses required by the program; have a Graduation Average of 2.0 or greater (calculated based on all years and all academic terms); be in satisfactory academic standing, i.e., have a Fall/Winter GPA of 2.0 or greater.

v. grading scale/system.

The University of Alberta uses a four-point letter-grading system for calculating Grade Point Averages (GPA). Grade points reflect judgments of student achievement performance in a class. The instructors mark in terms of raw scores, rank the students in order of merit, and assign an appropriate grade to each student.

A+	4.0
A	4 0
A	37
B+	3 3
8	3 0
В	27
C+	2 3
С	2.0
C	1.7
D+	1.3
D	1.0
F	0.0
	A B+ B C+ C D+ D

b. Note any program specific regulations (e.g., for doctoral programs, note any candidacy or dissertation requirements, examination requirements, time to completion requirements, etc.).

N/A

c. Identify potential opportunities for transfer/laddering into the proposed program from other institutions or other programs within the institution, and for transfer/laddering from the proposed program to other programs within the institution or at other institutions. List any formal agreements for internal or inter-institutional transfer/laddering that have been negotiated to this point.

Transferring/laddering from institutions outside of Alberta will be possible. Incoming students will apply similar to direct entry students and if accepted their possible transfer of credits will be assessed using the UAlberta <u>Transfer Credit Search | Undergraduate</u> Admissions + Programs. The National Recruitment office at UAlberta will support

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recruitment from outside UAlberta.

Outside UAlberta (but within Alberta)

Specific conversations regarding transfer have occurred with MacEwan University, and Northwest Polytechnic in Grande Prairie. At this time we are exploring possibilities and have no defined pathways.

Transferring/laddering within the University of Alberta

- There are existing bachelor's programs in 2 faculties within the College of Health Sciences- KSR and Nursing. Nursing's undergraduate program is an accredited professional program. KSR has 4 bachelor's programs. We expect there will be movement between the Bachelor of Health Sciences and the programs in Nursing and KSR, in both directions. Courses will ladder between programs using the transfer credit guide. As program implementation approaches (within a year of program launch), there will be specific conversations with Nursing and KSR about transfer credit.
- Augustana Campus we expect that some first year courses in the BHSc program may have equivalent courses at Augustana (eg. Biol 107). Students at Augustana will be able to enroll in INTD 100, the first course in the BHSc, as that course is fully asynchronous. We will work with our enrollment partner and Augustana to develop transfer pathways from Augustana.
- There may be transfers from other programs at UAlberta (particularly Science and Arts) and transfer credit will be applied as per the transfer credit guide. There will be specific conversations with Science and Arts about transfer credit.

6. Engaged and Active Learning / Delivery Methods

- a. Discuss the pedagogical strategies used in the program, including rationale and resource implications where possible.
 - The pedagogical approaches in the Bachelor of Health Sciences program will vary, reflecting the diversity of faculties and health disciplines involved. This variation in teaching strategies across courses is a unique strength of the program, offering students exposure to multiple ways of learning and approaching health issues. Faculty from different disciplines bring varied perspectives and methodologies, enriching the learning experience and preparing students for the interdisciplinary nature of health professions.
 - Overall, problem-based learning (PBL) will serve as a cornerstone, particularly within the interdisciplinary health experiential learning course sequence. PBL will engage students in real-world health challenges, requiring them to apply critical thinking and problem-solving skills in collaborative settings. Inquiry-based learning will complement PBL by encouraging students to explore complex questions independently, fostering a spirit of curiosity and self-directed learning essential for health professionals. Group assignments will play a major role in many courses, prompting students to engage in team-based work that builds leadership and durable skills, such as effective communication and adaptability.
 - Equity, Diversity, and Inclusion (EDI) principles will be embedded in the program's
 pedagogical practices to ensure that assessments and instructional methods are fair and
 inclusive. This commitment to EDI will not only guide teaching approaches but also shape
 the content, making discussions on diversity a critical component of health learning. These
 strategies require investment in faculty training, diverse instructional materials, and
 support for experiential learning resources, but these investments are essential to
 fostering a dynamic, just, and impactful educational environment for all students.
 - The program will leverage existing resources across faculties, drawing on established expertise and instructional tools already in place. This approach not only supports the development of the degree but ensures that resources are used efficiently, with a blend of both existing and new pedagogies creating a dynamic and rich learning environment for students. This combination allows students to experience a mix of instructional methods, consistent with the varied and interdisciplinary nature of real-world health settings.
- b. Describe how engaged, active, and experiential learning will be encouraged.
 - The Bachelor of Health Sciences program emphasizes engaged, active, and experiential learning through a unique, interdisciplinary pedagogy centered on problem-based learning (PBL). In many courses, students will work on real-world health challenges that require collaboration across disciplines, encouraging them to apply knowledge and skills from multiple fields to develop innovative solutions. This active approach not only deepens their understanding of complex health issues but also fosters critical thinking, adaptability, and a hands-on approach to learning that extends beyond traditional classroom settings. Through PBL, students will regularly engage in case studies, simulations, and

collaborative projects that mirror the realities of health work environments, making their learning relevant and directly applicable.

- Guided by faculty from diverse health disciplines, students will experience a blend of established and emerging pedagogies that prepare them for interdisciplinary teamwork. By emphasizing active engagement, the program ensures that students build not only foundational health knowledge but also the durable skills needed to thrive in a constantly evolving healthcare landscape.
- c. Where applicable, demonstrate how CAQC's Additional Quality Assessment Standards for Programs Delivered in Blended, Distributed or Distance Modes will be met (Handbook s. 4.5).

The BHSc program is an in person program; with offerings of selected courses in online asynchronous environments.

CAQC Standard	Requirement	Bachelor of Health Sciences (BHSc) Program Details
Institutional Commitment and Resources	Evidence of institutional commitment and sufficient resources to support distance learning, including technical infrastructure and support staff.	The program leverages dedicated learning management systems (e.g., Canvas) with full IT and academic support for students and faculty. Institutional commitment includes investment in digital infrastructure, such as virtual labs and accessible library resources, ensuring a consistent online learning experience. <u>Online Learning and Continuing Education</u> has supported the development of the first course in the BHSc program (INTD 100). This course is fully asynchronous, and is being offered ahead of the BHSc program launch. Online and Continuing Education will be available to support additional course development in the program.
Risk Management	Policies and processes for assessing and managing risks associated with distance learning, ensuring continuous delivery of the program.	Risk management includes backup servers for the LMS, regular system maintenance, and protocols for minimizing disruption. Staff training covers distance delivery challenges, and there are contingency plans for unexpected events, such as additional resources for students facing tech difficulties.
Learner Support and Resources	Access to academic advising, counseling, technical support, and resources like online libraries to facilitate remote learning.	The program provides comprehensive online learner support, including digital academic advising and library services. Technical support is available for Canvas during working hours, and students have access to career counseling and wellness resources to support their health and well-being. All BHSc course syllabi will be created in the syllabus tool (<u>Simple Syllabus</u>), which will provide students with consistent

		structure in courses.
Program Design and Student Engagement	Design strategies to ensure interaction and engagement, using a combination of synchronous/asynchronous activities and assessment types.	Courses are structured to encourage engagement through weekly discussions, collaborative projects, and live sessions. Asynchronous content like recorded lectures and interactive simulations support flexible learning, while regular feedback keeps students engaged.
Technology and Accessibility	Use of accessible, secure technology platforms for learning, with consideration for student privacy and data protection.	The program will use Canvas, a secure LMS with built-in privacy controls and follows data protection regulations. Accessible design ensures compatibility with screen readers, and captioned video lectures are available to support diverse learning needs.
Academic Integrity and Quality Assurance	Processes to ensure academic integrity in online settings, such as secure exams and plagiarism detection, along with quality assurance for continuous improvement.	Secure online proctoring (e.g., ExamLock) tools are integrated to uphold integrity. Quality assurance includes student feedback, course reviews, and continuous updates to keep the curriculum relevant and rigorous.

7. Program Comparison

T.

a. Provide a comparative analysis of the proposed program (curriculum, structure, admission requirements, etc.) with similar programs offered in Alberta or elsewhere (see sample table below). Provide a rationale for which comparator programs were chosen. Illustrate the similarities and differences. Include hyperlinks to comparator programs, if possible.

Rationale for Comparator Programs.

- The University of Calgary has a long standing (more than 20 years) <u>Bachelor of Health</u> <u>Sciences</u> degree program and the biggest existing Bachelor of Health Sciences program in Alberta. The program is on honours program only which differentiates it from the proposed UAlberta Bachelor of Health Sciences which does not have an honours option.
- <u>Bachelor of Health Sciences | Queen's University</u> has a large well established program. The program started as an online only program, but now includes online and in person cohorts. The Queen's BHSc program is housed in the Faculty of Health Sciences. The School of Medicine, School of Nursing and School of Rehabilitation Therapy are within the Faculty of Health Sciences - similar to our College of Health Sciences structure.
- <u>Honours Bachelor of Health Sciences (BHSc)</u> Ottawa was chosen as the third comparator because they have existing streams that are similar to the embedded pathways we are proposing.

Table 3: Program comparison

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Program component	UAlberta (proposed)	UCalgary	Queen's	Ottawa
Name of credential	BHSc	BHSc	BHSc	BHSc
Entrance requirements	GPA	GPA and supplemental application	GPA >75%, Eng, Bio, Chem, Math and supplemental application for on campus program	GPA
Areas of study / Curriculum	Interdisciplinary, no honours option, no majors, specializations	Honours only, 3 majors - bioinformatics, health and society, biomedical	core and option courses, no majors	Honours only. 3 specializations - population and public health; technologies and innovations in health care; integrative health and biosciences
Students admitted (per year)	200-250	100-120	250	540
Mode of Delivery	in person with several online course options	in person	online and in person (separate cohorts)	in person
Other		housed within the Cumming School of Medicine	offers Indigenous and first generation admission pathway; performance based admission through interest stream	Program offered in French and English

8. Other Elements Affecting Quality

a. Note any other relevant aspects of the proposed program that might affect quality (e.g., fast-tracking, individual study, parts of the program to be offered in cooperation with another institution, prior learning assessment, transfer agreements (e.g., 2+2 type programs, etc.).

N/A

SECTION B: IMPLEMENTATION AND RESOURCES

1. Program Implementation Plan

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a. Provide a program implementation plan by academic year (start to maturity) that includes any elements to be phased in (e.g., new academic staff hires, courses, minors, co-op option). If introduction of this program is dependent on a similar program being phased out, the implementation plan should include how both programs are being supported until the phase out and start up are completed. Confirm that students will be given the option to complete the program in which they are originally registered, within the normal time to degree completion regulations, or to transfer to the new program. If this will not be the case, explain why.

The BHSc program is supported by experienced teaching staff in each of the 6 faculties in the College of Health Sciences, where the majority of courses will be delivered. The BHSc program is new and is not dependent on any existing programs being phased out. In the first year of operation we expect the majority of the cohort will be direct entry students from high school, with a small proportion of students transferring from within UAlberta.

The staffing plan during implementation is discussed below.

2. Staffing Plan

a. Provide a comprehensive staffing plan. Show how the number (head count and FTE) and qualifications of teaching staff meet CAQC's requirements and the objectives of the program as a whole. If the hiring of additional staff is planned, include the academic staff expertise to be recruited. Provide summary information of current academic staff and new hires who will be teaching in the proposed program in the following format (see sample table below).

The BHSc program is an interdisciplinary program administered through the College of Health Sciences. The <u>College of Health Sciences</u> brings together expertise from across the 6 faculties, offering a rich educational environment for undergraduate students to learn and explore across the College in a BHSc. The majority of the courses will be taught in the faculties, with the administrative work for the program housed in the College of Health Sciences. This approach allows faculties to contribute to the BHSc program, and maintains their ability to focus on their discipline specific health programs.

Courses listed below include information about current instructors. This information may be adjusted upon program implementation.

Course Code and name	NAME	Earned credenti als and specializ ation1	Professi onal designati on (if applicabl e)	Academic staff status
YEAR 1				
INT D 100 - Your Future in Health: Pathways and Possibilities	Konoval, Tim	PhD	N/A	Assistant Teaching Professor
BIOL 107 - Introduction to Cell Biology	Cirelli, Damian	PhD	N/A	ATS Assistant Lecturer
NURS 140 - Anatomy	Lozza, Denaine	PhD	BScN	Assistant Lecturer
NUTR 100 - Nutrition and Well-being	Valentine, Sabina	MSc, PhD Candidat e	RD	Assistant Lecturer
ENGL 102 - Introduction to Critical Analysis	Rea, Matthew	PhD	N/A	Assistant Lecturer
CHEM 101 - Introductory University Chemistry I	Gedik, Melis	PhD	N/A	Associate Teaching Professor
HE ED 120 - Introduction to the Biological Aspects of Fitness to Health	Kennedy, Michael	PhD	N/A	Associate Professor
NURS 150 - Physiology	Prendergast, Susan	PhD	BScN	Assistant Lecturer
YEAR 2				
INT D 2XX - Exploring Interdisiplinary Problems in Health	NEW HIRE #1	PhD	N/A	ATS (full-time academic teaching staff)
INT D 2XX - Fundamentals of Health Data Science and AI	Abdulla, Mohammed	PhD	N/A	Assistant Professor
INT D 222- Indigenous Health in Canada	Ledermeyer, Gillian	PhD	BScN	Assistant Professor
SPH 2XX - Systems for Health	Wright, Erin	МРН	N/A	Associate Teaching Professor
SPH 200 - Introduction to Public Health	Hannington, Patrick	PhD	N/A	Associate Professor, Associate Dean, Education (SPH)

Table 2: Courses taught by academic staff by credential and specialization

KIN 2XX Physiology of Physical Activity and Health	TBD			
YEAR 3				
INT D 3XX - Health in Practice: Experiential Learning for Impact	NEW HIRE #1	MA/MEd /PhD	N/A	ATS (full-time academic teaching staff)
NURS 422 - Contemporary Issues in Healthcare Ethics and Law	Ledermeyer, Gillian	PhD	BScN	Assistant Professor
INT D 3XX - Mind Matters: Mental Health in the Modern Health System	TBD Department of Psychiatry	PhD	MD	Assistant Professor
INT D 3XX - Advanced Experiential Indigenous Health	Bruno, Grant	PhD	N/A	Assistant Professor
SPH 303	Wright, Erin	PhD	N/A	ATS
YEAR 4		£	·	
INT D 4XX - Capstone (6 credits)	NEW HIRE #2	MA/MEd/ PhD	N/A	ATS (full-time academic teaching staff)

¹ Include only highest *earned* credential; if faculty member is enrolled in a graduate program, indicate in a footnote. For new hires, indicate the desired credential and specialization.

* Currently enrolled in a [Name of Program] at [Institution]. Expected to graduate in [Date].

b. Explain the workload expectations for teaching, scholarship, and service of all of the academic staff categories involved in teaching this program.

Workload expectations including teaching, scholarship and service are set out in AASUA collective agreement for both tenured and Academic Teaching Staff (ATS). Workload is discussed, documented and agreed upon prior to the academic year.

c. Clearly indicate how many academic staff will be teaching in the program at launch and at maturity.

Academic Year 2024-2025 (Current Year)

- Number of new hires 0
- Program implementation actions during the academic year
 - Finalize committee terms of reference for oversight committee, curriculum committee
 - Finalize memorandum of understanding
 - CHS and Host faculty work together to move new courses through governance
 - Determine process to hire/appoint program director
 - Work with recruitment partners to develop material for viewbook (after program approval only)

- Offer INT D 100 Your Future in Health: Pathways and Possibilities (Winter 2025) this course is a foundational course in the BHSc program
- start to develop additional new courses in the BHSc CORE or elective streams

Academic Year 2025-26 (Year 0)

- Number of new hires
 - program director 0.75 FTE, Indigenous Scholar (0.5 FTE with remaining 0.5 FTE held in a CHS faculty), ATS instructor (1.0 FTE), 1 Academic advisor. Plan is to hire those individuals with a start date of April 1, 2026. Preparations to hire (job descriptions etc.) will begin in 2025.
- Program implementation actions during the academic year
 - New course development (for development of new courses, aligned and scaffolded assessment strategies)
 - continue moving new courses through governance (as needed)
 - work with teaching faculties to plan course delivery in Year 1, which in many cases will be new course sections for BHSc cohort. This planning will be done in collaboration with the Director of Education in CHS, and scheduling staff, and the Registrar's office.
 - o program director and academic advisor will work with and train recruiters
 - develop academic advising system
 - build relationships with Indigenous communities and partners in collaboration with CHS Indigenous Strategic initiatives officer.
 - o continue to develop new courses
 - o develop processes to gather feedback from students and from WIL partners
 - quarterly meetings of oversight and curriculum committees (starts here and continues)
 - identification of specialization leads
 - o development of BHSc teaching assignment training and support program

Academic Year 2026-27 (Year 1) -

- Context
 - 250 students in Year 1
- Number of New Hires 1 FTE student services assistant
- Program Implementation actions during academic year
 - work with community partners and employers to further develop work integrated learning opportunities for students
 - build and maintain relationships with Indigenous communities and partners in collaboration with CHS Indigenous Strategic initiatives officer.
 - o continue developing new courses (courses in Year 3 and Year 4)
 - o continue committee meetings (Oversight and curriculum)

Academic Year 2027-28 (Year 2)

- Context
 - 250 students in Year 1, 250 students in Year 2 (Total = 500)
 - Total number of students
- Number of new hires 1.0 FTE student advisor
- Program Implementation actions during academic year
 - continue working with community partners and employers to further develop work integrated learning opportunities for students

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o complete all new course development

Academic Year 2028-29 (Year 3)

- Context
 - 250 students in Year 1, 250 students in Year 2, 250 students in Year 3 (Total = 750)
- Number of new hires 1.0 FTE advisor

Academic Year 2029-30 (Year 4- fully operational)

- 250 students in each year, 1000 students in total.
- Number of new hires 0

Steady state BHSc staff - 0.75 FTE program director (program director also teaches and does scholarship related to BHSc to make up 1.0 FTE), 0.5 FTE Indigenous scholar, 1.0 FTE ATS instructor, 3 FTE program advisors, 1 FTE student services assistants

* Note 1 - Tenure track and ATS instructors in the faculties will teach courses into the curriculum, including CORE courses and electives. There are 69 credit units (23 3-cu courses) of CORE courses. The 6 health faculties have agreed to teach between 0-3 BHSc CORE courses each year (see letters of support). All faculties have existing or planned courses that will be available to BHSc students as electives. The College of Natural and Applied Sciences and the College of Social Sciences and Humanities each teach courses into the BHSc curriculum, in the Core and as approved health electives.

**Note 2 - we expect that throughout implementation of the BHSc that there will be tenure track and ATS hires in each of the 6 health faculties. Those new faculty members will primarily help to support disciplinary programs, but some may be designated with a portion of their role as teaching in the BHSc program. The new tenure track hires will contribute to research in health broadly, thus supporting and advancing the knowledge and learning opportunities available to students in the BHSc program.

d. Identify any academic staff who will be teaching in the program who do not meet CAQC's requirements with respect to qualifications of academic staff as noted in s. 4.3.4.3 of the Handbook (normally an acceptable Master's degree or equivalent in the discipline in which the staff member is assigned to teach), and provide the rationale for claiming equivalence.

All academic staff will meet the CAQC's requirements (Master's degree or equivalent). Indigenous elders or advisors will be hired for their knowledge and experience and a Master's degree will not be required. f. Include CVs of academic staff teaching courses that comprise required or elective courses in the specialization. Be sure their permission has been given.

CVs will be provided in a subsequent version of the application.

3. Scholarly and Creative Activity

a. Describe what constitutes scholarship and/or creative activity for academic staff teaching in this program. Explain the institution's and if relevant, the faculty's, school's, and/or department's formal policies articulating expectations of scholarly performance for instructors in the proposed program, and how evaluations of this performance are taken into account in overall assessments of instructors' performance.

Scholarship and creative activity is multifaceted and may include papers and presentations at scientific conferences, as well as community engaged research where outputs are less traditional (i.e, new relationships with Indigenous communities, evidence of facilitation of community led research). Faculty members will study disseminate outcomes specific to the BHSc program - processes and outcomes.

Scholarship for academic teaching staff in particular may include collaborative educational activities such as the development of novel assessments using technology, and dissemination of that work within and beyond the University of Alberta.

Faculty and staff teaching in the BHSc program will be evaluated using approved evaluation standards (FEC or ATSEC).

b. Describe current and anticipated support for scholarly activities and professional development of academic staff (see CAQC's expectations regarding scholarship, research, and creative activity in s. 3.7.3 of CAQC's Handbook). Highlight some of the existing strengths in scholarship relevant to the program, as well as key challenges.

Support for scholarly activities.

There are several UAlberta resources to support scholarly activities through the Vice President Research and Innovation. The research partner network, including partners embedded in the College of Health Sciences, support researchers from idea to award administration. Internal awards are available including support through the <u>Strategic Research Initiatives Fund (SRIF)</u>. SRIF specifically supports multidisciplinary research initiatives and initiatives with community partners - both are areas that are relevant to the BHSc. Research partners fully support the administrative processes of researchers applying to external award competitions.

All faculty and staff receive a professional allowance to support continuing education opportunities, and can use work time (upon approval) for continuing education opportunities.

Existing strengths in scholarship relevant to the program.

There are 700 researchers in the College of Health Sciences, in a broad range of fields including rehabilitation medicine, medicine, nursing, kinesiology, pharmacy and public health. The BHSc program through its administration in the College of Health Sciences draws on health research broadly, from across the College, and engages students in health research from different perspectives, using varied research methodologies to intentionally provide a broad perspective on health, and careers in health.

As discussed in the UAlberta Strategic Plan for Research (<u>Forward with Purpose</u> - 2023-2028) the University of Alberta has broad, long term and deep institutional strength in health and well being research, from health, disease prevention and life-course approaches to care and well-being (see <u>Health and Well-being | Research + Innovation</u>). Health researchers across the College of Health Sciences, and the University of Alberta will provide students with cutting edge health knowledge and experiences.

The College of Health Sciences houses a number of Canada Research Chairs whose work is reflected in the planned content and embedded pathways available to students in the BHSc program. Health System Innovation experts will help our students learn about health systems, and the interconnectedness of actions within a health system. The Climate Change and Health Hub is housed in the College of Health Sciences and brings together researchers to study climate change and health. A 2nd research hub in the College of Health Sciences is planned - Artificial Intelligence (AI) in Health. The AI in Health hub along with expertise in <u>Alberta Machine</u> Intelligence Institute provide students with learning opportunities in AI that they can use in health roles. Indigenous Research | Research + Innovation is also an area of strength - researchers in this area are collaborating to create novel and embedded learning opportunities for students in the BHSc.

4. Physical and Technical Infrastructure

- a. Describe the facilities, laboratory, and computer equipment (as applicable), and any additional infrastructure available to meet the specialized demands of the program, as well as plans to address any deficiencies in what might be required.
 - The Edmonton Clinic Health Academy (ECHA) is the health learning hub at the University of Alberta. ECHA is the location of the new Sperber Health Sciences Library (link) that houses an Indigenous Learning space, and individual and group learning spaces for students. The library has 3D printing facilities and a virtual reality space with access to hardware and software. Students in the BHSc will be able to utilize the library space along with students in other health sciences programs primarily located in ECHA (e.g., nursing, dentistry). The Health Sciences Education and Research Commons (HSERC) is also located in ECHA and will be the location of some of the experiential simulation learning opportunities for BHSc students.

Learning Environment (online learning opportunities and classrooms)

• The learning environment will be carefully planned to prioritize cohort building and a sense of belonging for students in the BHSc programs. The majority of courses will be in person and may include learning activities using a flipped classroom approach (i.e., students

complete learning activities on their own, in their own time, and then participate in in person learning activities to consolidate knowledge and skills. There are fully online courses planned in the BHSc curriculum; and those will be carefully planned along with the in person courses. Availability of online courses addresses priorities in the student experience action plan related to student agency and flexibility of learning options. Online courses are purpose built for the online environment, and have fully accessed the expertise of the online and continuing education office in development. These courses do not put pressure on classroom space.

- CORE courses that are online, or have the option for online delivery include INTD 100, Nurs 140 and 150, SPH 200, and selected electives
- In 2024 the University of Alberta undertook visioning and planning sessions related to enrollment growth. A strategy related to infrastructure and IT is fully recognized as area that requires attention to support enrollment growth. The <u>Integrated Enrolment Growth</u> <u>Plan (IEGP)</u> provides information about desired enrollment growth and the strategies underway to support growth.
- At this time, there are limited classrooms that hold 250+ students, including 4 in ECHA and 14 across the University. There are 42 classrooms that hold between 100-199 students and if needed an instructor could teach from one classroom and live stream to another (i.e., book two classrooms). Administrative services related to classroom scheduling and timetabling are coordinated through the 3 Colleges (including the College of Health Sciences) and the scheduling group, along with the Director in the Office of Education CHS will be able to plan room utilization. Many of the courses in the planned curriculum are existing courses and have space allotted.
- ECHA has 3 computer labs with 240 computers (1 room with 120 computers, and 2 that have 60 computers). The computer rooms have the capability to teach from one room, and live stream to all 3 rooms. These computer labs will be available for booking for courses as needed; for example the health data science course that is in 2nd year.

Library Services

- The Geoffrey and Robyn Sperber Health Sciences Library, located on the University of Alberta's North Campus, is dedicated to supporting students and faculty in health-related fields with extensive resources and specialized services. It offers access to a wide range of health sciences databases, journals, and electronic resources, along with quiet study spaces and technology-equipped rooms for collaborative learning. The library's skilled staff provide research support, guiding students in advanced information retrieval and critical evaluation of health literature.
- For a new Bachelor of Health Sciences program, the Sperber Health Sciences Library would be an invaluable asset, offering resources and expertise that help students build foundational skills in evidence-based research, critical analysis, and health information literacy. The library has been consulted about this degree program and has provided an impact statement to highlight that it has capacity and is very supportive of the new program. The statement can be found under Appendix E.
- ECHA, which includes the Sperber library and HSERC, will be important places for students to meet, work, have events and feel part of a high-quality degree program.

5. Information Services

- a. Provide an inventory and analysis of information resources to support the program (using standard library reference guides), plans to deal with any deficiencies, and a description of student access to other information services.
 - For a new Bachelor of Health Sciences program, the Sperber Health Sciences Library is an invaluable asset, offering resources and expertise that help students build foundational skills in evidence-based research, critical analysis, and health information literacy. The library has been consulted about this degree program and has provided an impact statement to highlight that it has capacity and is very supportive of the new program. The statement can be found under Appendix E.

SECTION C: CONSULTATION AND ASSESSMENT

1. Program Evaluation

- a. Describe the criteria and methods which will be used to ensure the ongoing quality of the program. Include mechanisms for periodic review using external evaluation. Describe the mechanisms to be used for critically assessing the extent to which the program learning outcomes have been met, and any key performance indicators that the institution wishes to include.
 - Annual Program Feedback and Course Reviews (all PLOs): Use student surveys (SPOT surveys) to gather feedback from students about how well the courses cover fundamental concepts. For example, human body's functioning (PLO1), the role of preventive health measures (PLO2), the determinants of health (PLO4), and innovations in health (PLO5). We will measure the effectiveness of teaching these topics through student satisfaction scores and identify areas for improvement in content or delivery.
 - Learning Outcomes Assessment through Capstone Projects (PLO1, PLO2, PL03, PLO4, PLO7): Utilize capstone projects to assess students' ability to apply knowledge of body systems (PLO1), preventive health (PLO2), health equity (PLO3) determinants of health (PLO4), and research/evaluation techniques (PLO7) to real-world issues. Evaluate these projects with standardized rubrics that measure the integration of interdisciplinary knowledge and the ability to propose evidence-based solutions. KPIs could include the number of projects demonstrating effective integration of health determinants and prevention strategies, as well as innovative research and evaluation approaches.
 - Graduation, Career Tracking, and Alumni Surveys (PLO5, PLO6, PLO7, PLO8): Track graduate outcomes, including employment in health-related roles or further education, and career pathways (PLO6). Assess participation in roles involving research or

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- evidence-based decision-making (PLO7), as well as engagement in health system innovations (PLO5). Additionally, collect feedback from alumni on how well the program prepared them to apply their knowledge, navigate career opportunities, and develop durable skills, such as collaboration, critical thinking, and communication (PLO8). KPIs would include employment rates in health-related careers, the percentage of alumni involved in research and evaluation, career progressions, and alumni ratings of skill preparedness.
- External Program Review every 5 Years (PLO3, PLO6, PLO7, PLO8): Engage an external panel of experts to assess the program's alignment with current health sector trends, equity-focused health practices (PLO3), current and future careers in health (PLO6), research and evaluation competencies (PLO7), and the integration of durable skills like communication and critical thinking (PLO8). Use the review to ensure the program remains responsive to emerging challenges in health system design and workforce needs. KPIs would include recommendations for course adjustments based on evolving health system demands or technological innovations.
- Quality Assurance Review CAQC every 7 years.

2. Consultation / Accreditation or Regulatory Approval

- a. If not already included in Part A of the proposal, outline the consultation that has occurred with other institutions, organizations or agencies, including advisory bodies formed by the applicant institution, to assist in program design, implementation, and evaluation. This should include, where appropriate, professional associations, regulatory agencies and/or accrediting bodies, and prospective employers.
 - This is outlined in template A and all consultations (meeting notes and letters of support) can be found in Appendix B.
- b. If the program is subject to accreditation or approval of a regulatory body, provide a description of the review process, requirements of the body, and timing of the review (if in process). If possible, a chart or table may be useful to outline accreditation or regulatory approval requirements.

This program is not an accredited program.

c. If not already covered above, indicate how graduates will meet professional or regulatory expectations.

N/A

3. Reports of Independent Academic Experts

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a. CAQC views external peer review as fundamental to ensuring the quality of academic programs. In order to strengthen the proposal, before the proposal is finalized, the institution must solicit comprehensive reviews of the proposal from two or more independent academic experts it selects from outside the institution. Terms of reference must be provided to the reviewers (see Appendix G of the CAQC Handbook for sample terms of reference), as well as up-to-date drafts of Part A and Part B of the proposal, and appendices. Please append the full reports of the independent academic experts, the institution's response to the reports, and CVs from the independent academic experts (see Appendix G of Independent Academic Experts).

External peer review will be sought as the program proposal moves through governance and with the guidance of the Vice Provost.

SECTION D: OTHER

1. Adverse Claims or Allegations

a. Disclose any adverse claims or allegations (and, if possible, identify their provenance) that might affect this application or be of concern to CAQC.

2. Other Documentation

a. Provide any other supporting documents such as the Graduate Program Handbook, Faculty Handbook, current calendar, or cyclical review of programs policy that would add support to the applicant's case and would help reviewers (provide website links, if available).

Note the Statement of Institutional Integrity which appears on the separate page below.

3. Statement of Institutional Integrity

Please sign the Statement of Institutional Integrity below.

A signed Statement of Institutional Integrity must accompany each application (self-study and program proposal), as well as each revised program proposal, to the Campus Alberta Quality Council.

In the institutional integrity section of the Campus Alberta Quality Council's *Academic Freedom and Scholarship Policy*, the following statements are made:

- The institution must present itself accurately and truthfully in all of its written documents. This includes the manner in which it describes its qualities and programs and compares them with other institutions.
- Full compliance with legal matters such as copyright law is expected.

On behalf of memory of applicant institution I/we attest that, to the best of my/our knowledge, the information presented in this application is complete and accurate and reflects the highest standards of institutional integrity.

Signed by

President of Institution

(for applications from institutions not authorized to offer a government-approved degree program)

Board Chair of Institution

(for applications from institutions not authorized to offer a government-approved degree program)

OR

Senior Academic Officer

(for subsequent program proposals from institutions authorized to offer at least one government-approved degree program)

Date