



Food and Nutritional Sciences Final Assessment Report & Implementation Plan

Faculty / Affiliated University College	Brescia University College
Degrees Offered	BScFN
Modules Reviewed	Honours Specialization in Foods and Nutrition Honours Specialization in Nutrition and Dietetics Specialization in Foods and Nutrition
External Consultants	Dr. Susan Tosh, Associate Professor, School of Nutrition Sciences, Faculty of Health Sciences, University of Ottawa Dr. Gordon Zello, Professor, College of Pharmacy and Nutrition, University of Saskatchewan
Internal Reviewer	Dr. Laura Melnyk Gribble, Associate Academic Dean, King's University College
Date of Site Visit	March 31 – April 1, 2021
Evaluation	Good Quality
Approval Dates	SUPR-U: January 26, 2022 SCAPA: February 9, 2022 Senate (for information only): February 17, 2022
Year of Next Review	2027-2028

In accordance with Western's Institutional Quality Assurance Process (IQAP), the Final Assessment Report provides a summary of the cyclical review, internal responses and assessment and evaluation of the undergraduate modules delivered by the School of Food and Nutritional Sciences, Brescia University College. This report considers the following documents: the program's self-study, the external reviewers' report and the responses from the School and the Academic Dean. The Final Assessment Report identifies the strengths of the program, opportunities for program enhancement and improvement and details and prioritizes the recommendations of the external reviewers and prioritizes those recommendations that are selected for implementation.

The Implementation Plan details the recommendations from the Final Assessment Report that are selected for implementation, identifies who is responsible for approving and acting on the recommendations, any action or follow-up that is required and the timeline for completion.

The Final Assessment Report and Implementation Plan is sent for approval through SUPR-U, SCAPA, Senate and the Ontario Universities' Council on Quality Assurance and is made

available on a publicly accessible location on Western's IQAP website. The Final Assessment Report and Implementation Plan is the only document resulting from the undergraduate cyclical review process that is made public, all other documents are confidential to the Program/School/Faculty and SUPR-U.

Executive Summary

The School of Food and Nutritional Sciences (FNS) has been providing food and nutrition programming at Brescia since 1936. Food and Nutrition degrees continue to be very attractive to many students and enrolments in the food and nutrition modules have nearly tripled in the last 10-15 years.

Since its last review in 2012, the School has undergone a revision in its name from Division to School, and many module changes have been implemented in the program and in collaboration with other programs (e.g., Family Studies and Human Development and Management and Organizational Studies (MOS)). In addition, the School has added a number of courses to provide more elective options in year three and four of the modules, and modified courses for non-nutrition students. The School collaborated with Biochemistry to make changes to the required biochemistry course, so that there is more content relevant to the program's students.

Following the virtual site visit, the external reviewers noted the "dedication exhibited by all the College administrators, staff, faculty, and instructors to the School's success." They made particular mention of the new Academic Pavilion as featuring state-of-the-art facilities that greatly improve the program. The reviewers offer some considerations and a series of recommendations for further enhancement.

Summary of the Self-Study

Strengths and Innovative Features Identified by the Program

- New Academic Pavilion with state-of-the-art food laboratories, including two food preparation labs, a food science lab, commercial kitchen lab, sensory food evaluation lab, and counselling tutorial room.
- Regular feedback from dietetic preceptors related to student preparedness which helps to identify gaps and opportunities for the curriculum.
- Hon Spec Nutr Diet is a PDEP-accredited program which prepares students for a dietetic practicum program which together enable the graduate to become an RD.
- Strong relationships with Dietitians of Canada (DC), the Canadian Association of Professional Programs in Human Nutrition (CAPPN), and the Canadian Nutrition Society.
- Annual events onsite in collaboration with DC, for students, alumnae, and preceptors (e.g., Dietitians of Canada Roundtable Networking Event for students, and the Southwestern ON Dietitian Networking Event).
- Many opportunities to get involved in research in a variety of ways (e.g. train undergraduates to critically evaluate the literature, collect data, input data, and conduct statistical analyses).
- High retention rates and the percentage of graduates who go on to achieve dietetic practicum programs.

Challenges

- Maintaining high standards and opportunities for experiential learning.
- Maintaining consistency across course sections.
- Supervisory load of faculty members (e.g. many faculty supervising four to five students at a time).
- Lack of consistent food lab instructors for the two required food science lab courses: FN 2232 and FN 3342A/B

Opportunities for Program Improvement and Enhancement Identified by the Program

- Provide students with more career-focused messaging to enable them to choose elective courses which will help them with their career goals.
- The School will be determining and attempting to fill any gaps in the programming to enable them to ultimately pursue accreditation status from the Canadian Society for Nutrition Managers (CSNM).

Self-Study Process

The School began a thorough curriculum review process in 2017 and since that time has held bi-monthly School meetings and additional strategic planning sessions with faculty and staff. To assist this work, discussions took place with recent graduates of the program, members of the Educational Policy Committee (EPC), and employer/professional groups. Similarly, job postings were reviewed, and surveys were conducted with current students and alumnae.

Review Process

The review committee (comprised of the two external reviewers and one internal reviewer) was provided with Volumes I and II in advance of their visit and then (due to pandemic restrictions) met virtually with the following over the course of the two days.

- Vice-Principal and Academic Dean, Dr. Laretta Frederking
- Chair, School of Food and Nutritional Sciences, Dr. Colleen O'Connor
- Vice-Provost of Academic Programs, Dr. John Doerksen
- Interim Principal, Cheryl Jensen
- Research Officer, Dr. Jen Pecoskie
- Director of Library Services, Caroline Whippey
- Acting Registrar, Dr. Melanie Molnar
- Director, Advanced Learning and Teaching (ALT) Centre, Associate Academic Dean, Dr. John Mitchell
- Food and Nutritional Sciences Faculty
- Food and Nutritional Sciences Administrative Staff and Dietetic Education Coordinators
- Food and Nutritional Sciences Students

Following the formal review, the external reviewers submitted a comprehensive report of their findings which was sent to the Program Chair and Vice-Principal and Academic Dean for review and response. Formative documents, including Volumes I and II of the Self-Study, the External

Report, and the School and Decanal responses form the basis of this final assessment report of Brescia's Food and Nutritional Sciences programs.

Summative Assessment – External Reviewers' Report

Reviewers commented on the dedication exhibited by staff and faculty, and that “students acknowledged that they were receiving a quality education at the School and College”

Strengths of the Program

- The complementary structure of the two specializations allow students to attend courses which address expected learning outcomes that are common to both together and then learn focused knowledge in courses that are specific to each module in smaller classes. This approach was noted to be both practical from a teaching workload standpoint and gives students a broader knowledge base.
- The state-of-the-art facilities have greatly improved the program.
- The co-curricular activities, led by professors, offer students a framework to practice skills and interact with clients in a supervised environment.
- The strong emphasis on co-curricular and extracurricular learning allows students hands-on experience to apply knowledge gained in class.

Areas of Concern Identified

- The large workload has taken a toll on the professors' ability to conduct research as indicated by the low numbers of publications by many in the past 3 years.
- The ratio of contract instructors to tenure-track/full-time faculty seems too high.
- Many courses taught were small to very small in student numbers. Understanding both the advantages and disadvantages using this teaching approach, the feasibility of continuing with this model is of concern.
- Students are under a great deal of stress as most are striving to become a registered dietitian upon completion of the degree. This continues to be a concern in non-fully integrated programs.

Summary of the Reviewers' Key Recommendations and Department/Faculty Responses

Reviewers' Recommendations	Academic Unit / Decanal Response
<p>1a. Faculty involved in non-credit activities (above and elsewhere) should be credited for these contributions in tenure and promotion cases (e.g. service contributions).</p> <p>1b. Students noted that, although the clubs were voluntary, they felt pressured to participate in order to have these activities on their CVs when applying to dietetic internship programs or masters programs. The possibility of changing these to optional courses should be explored or not given weight in applications. The metrics of an individual student's participation (little to lots) is difficult, and students may have other obligations that make club participation difficult.</p>	<p>Program: The program agrees with the assessment that non-credit activities should be considered in tenure and promotion cases with respect to service contributions.</p> <p>There is an understanding of why some students may feel pressured to participate in clubs given the competitive nature of the program, and how that puts undue stress on them. Students could also choose to participate in non-Brescia opportunities as well.</p> <p>Faculty: Such service is already noted in Brescia's yearly self-reports as part of the Annual Reviews for faculty. In those reviews, service activity is noted and appreciated by the College administration.</p> <p>The comment regarding students feeling pressure to participate in such activities, "... in order to have these activities on their CVs" (p.4) is a valid one. This is a problem for any professional program's students, however: to be seen to be "engaged". Students from Brescia apply to many post-graduate opportunities, not simply Brescia's MSc, and all such programs look for this sort of engagement on students' CVs.</p>
<p>2. Some courses are taught in multiple sections (i.e. repetition of classes); consideration for decreasing the number of sections would reduce faculty teaching workload (deemed high) and allow faculty to spend more time on other scholarly activities (i.e. research). Faculty expressed more time for conducting research would be beneficial in reaching tenure and promotion requirements. There is also a push to increase undergraduate research activities which in the current teaching environment (e.g. multiple sections, teaching load) would be difficult.</p>	<p>Program: The program is currently using the larger classrooms for courses that do not have a significant hands-on component. However, the reason why the program has multiple sections of courses is so it can have small class sizes and provide students with experiential learning.</p> <p>Faculty: Small class sizes align with Brescia's approach to education and are appreciated by students (as noted by the Consultants), however, and are often necessary for proper delivery of course content in Food and Nutritional Sciences. The issue of increasing student involvement in research was noted, also, and it is hoped that the new faculty hire in the School of Food and Nutritional Sciences, in increasing the faculty complement, will aid in improving this aspect of the programs offered.</p>
<p>3. Continue to work on improvements identified in the survey, however, be mindful that students always want more (e.g. training in TPN etc.) and resources and time in program limits its feasibility. Overall, the</p>	<p>Program: Two areas for improvement that were suggested in the review were obtaining Canadian Society of Nutrition Management (CSNM) accreditation and more training in areas such as research methods and epidemiology. The program is in the process of obtaining CSNM accreditation, which will ensure that all aspects of the 8 competencies</p>

<p>dietetics stream is meant to meet entry level requirements and some of the wishes go beyond this (e.g. post-grad Certification as TPN expert, Diabetic Educator, etc.).</p>	<p>are met in the program’s curriculum. Student training in research methods, statistics, and epidemiology has also been improved. Whereas previously the program offered a statistics course in year 2 for foods and nutrition students and then a research methods course for year 4 students (both 0.5 courses), a year 3 course is now offered – Research Methods and Statistics, which is a 1.0 course in each term. The advantage of this new course offering is that students get to learn how study design, research methods, study objectives, and research hypotheses fit and correspond with the appropriate statistical tests used.</p> <p>Faculty: The School of Food and Nutritional Sciences is addressing this issue already, currently working on gaining Canadian Society of Nutrition Management (CSNM) accreditation.</p>
<p>4. The School/College should consider increasing a part-time administrative assistant position to full-time and preferably permanent.</p>	<p>Program: The program is in agreement that it would be very advantageous for the School to have two full-time administrative assistants commencing in the next academic year.</p> <p>Faculty: This is being considered in the current budget planning (for 2022-2023).</p>
<p>5. The College/University hire at least two more full-time faculty members to increase teaching capacity.</p>	<p>Program: Full-time faculty workload is very high, as the program has a much higher teaching load than at research-intensive universities, including main campus at Western University. In terms of metrics, it would be interesting to note what the faculty publication output is being compared to. If it is to larger, research-intensive universities, perhaps it is an unrealistic expectation given that Brescia is a smaller institution with a very high comparative teaching load. There is agreement, however, that the School does not have enough courses being taught by full-time faculty (only 35% of courses). To get more courses taught by full-time faculty, there is a need for more full-time faculty members. There is currently a posting for one full-time faculty member whose position would commence in July 2022. I will continue to advocate for another faculty member moving forward.</p> <p>Faculty: This is partially achieved, with one new full-time faculty member coming in the 2022-2023 Academic Year. (There is also the issue of the confusion regarding Dr. Dworatzek retiring, which might have skewed perception of apparent full-time faculty numbers; Dr. Dworatzek returns January 1, 2022.)</p>

<p>6. The School/College should consider purchasing or licensing software packages that partners and preceptors use and teach students how to use them so that they are better prepared for internships and dietetic practice.</p>	<p>Program: In the new FN 3390 course, Research Methods and Statistics, students learn how to enter and analyze their own foods and nutrition data using appropriate statistical techniques in SPSS. They also have SPSS assignments where they must write up the interpretation of their statistical output. Students are also using ESHA in at least two courses every year. Beyond that, the program is now in the process of getting CBORD software for FN 3348, Food Production Management course for the 2022-2023 academic year.</p> <p>Faculty: Regarding other resources to support undergraduate scholarship and research, the program now has an IT specialist for learning, whose contract was recently extended, and there is a proposal to make this position full-time, continuing, in the next budget. The department also is in process of acquiring additional statistical programs for student use.</p>
<p>7. The College/University should hire at least two more full-time faculty members to increase teaching capacity (see also above) and provide time for faculty to fulfill their other scholarly requirements. Consideration should also be given to hiring instructors on limited contracts (e.g. 3 to 5-years) which improve both job security and program continuity.</p>	<p>Program: The program appreciates the recommendation of hiring at least two more full-time faculty members to increase teaching capacity and to provide time for faculty to fulfill other scholarly requirements. As noted above, the School has now posted a position for a full-time professor at the Assistant or Associate level that we hope to hire and start in the School come July 2022. It is hoped that this will lead to another faculty hire soon thereafter.</p> <p>Faculty: The situation is being dealt with to some extent by the faculty hire now “in process”. The Consultants do make a good point regarding more long-term contracts.</p>
<p>8. Utilize the newly available larger classrooms to increase student numbers in courses that can be and are best suited to be taught with larger class sizes.</p>	<p>Program: The program is currently using the larger classrooms for courses that do not have a significant hands-on component.</p> <p>Faculty: Having fewer sections combined into larger lecture classes are feasible and can be done now that there are larger classrooms in the Academic Pavilion. However, that there is also the necessity for some small classes,</p>
<p>9. The College/University hire at least two more full-time faculty members to increase teaching capacity and maintain positive experiential learning activities, as well as provide time for faculty to fulfill their other scholarly requirements.</p>	<p>Program: The program certainly appreciates this recommendation as a way to maintain positive experiential learning opportunities for students and to allow more time to focus on research. It is hoped that the new faculty hire (July 2022) will provide the program with more time to focus on experiential learning and research until it is able to hire a second additional full-time faculty member.</p>

<p>10. Investigate opportunities for collaborative research outside of the School, establish graduate programs and/or joint graduate programs (e.g. this has been recognized and establishing joint graduate programs with Western underway).</p>	<p>Program: There is uncertainty as to how research output is being compared across food and nutrition programs in Canada. Many of the graduate students in the School's internship stream get a peer-reviewed publication out of their research work, despite only 8 full weeks dedicated to research and a full year of being away on placements. Moreover, many of the MScFN graduates have gone on to pursue and complete a PhD in another program, which speaks to the success of the program. This is evidence of the success of the well-established graduate program. Many faculty are already involved in collaborative research outside the School and Brescia. Admittedly, most faculty members have limited time to apply to Tri-Council grants given their heavy teaching load, service work, and time commitment in supervising graduate students.</p> <p>Faculty: The faculty perspective is quite different and in fact could be argued that the faculty members in the undergraduate program of the School of Food and Nutritional Sciences are doing very well in research and scholarly publication, especially for a teaching intensive institution. Furthermore, while this review is of the undergraduate program, not the Academic Unit itself, the faculty notes that several faculty members hold/have held Tri-Council research grants (CIHR, SSHRC) as well as other major grants (e.g., Lawson Foundation, Ontario Ministry of Education). In addition, the Chair, Dr. Seabrook, has recently been nominated for the Children's Health Research Institute (CIHR) Scientist of the Year Award for 2021. Having read this past year's Faculty Annual review reports the senior administrators have been impressed with the level of research and scholarship of the full-time faculty in this program.</p>
<p>11. The feasibility for improvement is not possible in the current environment. Investigate opportunities for collaborative research outside of the School, establish graduate programs and/or joint graduate programs (e.g. this has been recognized and establishing joint graduate programs with Western underway).</p>	<p>Program: It would be useful for the School to know the metrics for which it is being compared to. Again, if the comparison is to other large, research-intensive universities where the teaching load is much lower than Brescia's, it is felt that this is an unequal comparison. Many of the faculty members collaborate with researchers at other institutions and continue to seek more collaborations.</p>
<p>12. Development of an integrated or working hybrid dietetic program is/has been a struggle for most dietetic programs across Canada. Some have been more successful than others in mitigating the stressors on both instructors and students. There is no easy fix. However, a thorough investigation on</p>	<p>Program: The program contends that the majority of students have a reasonable time to completion. It is unclear to what alternative approaches are being referred to by the reviewers. Students are clearly aware of progression requirements to remain in the dietetic stream. As noted earlier, the program is in the process of obtaining CSNM accreditation, which will ensure that all aspects of the 8 competencies are met in the</p>

alternative approaches would be prudent. Although, we as reviewers were not carrying out an accreditation assessment, it was clear from both discussions with faculty and students as well as the survey results of a high level of anxiety. More work needs to be carried out to promote the Foods & Nutrition module as a valuable and desirable option.

program's curriculum. The School is in the process of prioritizing strategies to promote the Foods & Nutrition module as a desirable option to students.

Faculty: The Consultants affirm that student anxiety affects most such programs in Canada. The suggestion for promotion of the Foods and Nutrition module more, as a viable alternative to the dietetic stream, is a good one, and can be done easily.

Reviewers' recommendations related to staffing and research are not typically prioritized in the implementation plan as they are outside the scope of the IQAP driven review. The number of recommendations prioritized for implementation has been reduced given that several are already underway or are outside the scope of the review, as explained in the program and faculty responses.

Implementation Plan

The Implementation Plan provides a summary of the recommendations that require action and/or follow-up. The Department Chair/Director, in consultation with the Dean of the Faculty/Affiliated University College will be responsible for monitoring the Implementation Plan.

Recommendation	Proposed Action and Follow-up	Responsibility	Timeline
<p>Recommendation #1b: The possibility of changing non-credit activities to optional courses should be explored.</p>	<p>The chair is currently in the process of inquiring about making extra-curricular opportunities available as an elective course (e.g., Research Ready) in the program, as this course would provide students with the skills to appraise the methodological and statistical quality of peer-reviewed nutrition research.</p> <p>Next steps include preparing a draft course outline and calendar copy for review by the Brescia Educational Policy Committee, and pending approval, progressing this through the normal approval processes at Western.</p>	<p>Program Chair</p>	<p>By December 2022</p>
<p>Recommendation #4: The School/College should consider increasing a part-time administrative assistant position to full-time and preferably permanent.</p>	<p>Increasing the part-time administrative staff member position to a permanent full-time position has been included for consideration in the current budget planning process for 2022-2023.</p> <p>The results of the planning process should be known by Winter 2022. Next steps would include posting the position, interviewing, and hiring.</p>	<p>Program Chair Academic Dean</p>	<p>By September 2022</p>
<p>Recommendations #5, 7 and 9: Increase teaching capacity to reduce overwhelmed faculty, maintain positive experiential</p>	<p>Given the comments about faculty feeling overwhelmed and its correlation with work satisfaction and quality of life, the program chair will</p>	<p>Program Chair Academic Chair</p>	<p>By December 2022</p>