B.Sc. Major in Biology Quality Assurance Plan

Date submitted to SSCPR: September 28, 2022

Date Self-Study Report approved by SSCPR: October 20, 2021

Date of External Review: March 29, 2022

SUMMARY OF PROGRAM STENGTHS, CHALLENGES AND OPPORTUNITIES FOR IMPROVEMENT

Program Strengths:

The B.Sc. Major in Biology program at KPU was formally launched in 2013 to provide access to post-secondary education in the life sciences for the south-Fraser region that KPU serves (Langley, Surrey/Delta, and Richmond). The program was designed with the KPU polytechnic mandate in mind, to serve the newly-identified and growing need for life sciences graduates to possess practical skills that provide a competitive edge in the job market. The recent SSCPR-approved Self-Study Report completed by the Biology department identified many strengths of the B.Sc. Major in Biology program in comparison with similar degrees from other institutions. In particular, the program has strong components addressing practical skill development and job preparedness, through extensive laboratory courses, experiential learning opportunities, and directed research. There are strong affiliations with KPU research units (including the Institute for Sustainable Horticulture and the Applied Genomics Centre) and community/industry partners that provide access to cutting-edge technologies and significant opportunities for undergraduate research. Student enrollment has increased most years since the launch of the program, and student/alumni satisfaction with the curriculum, modes of delivery, and program resources were all very high, particularly regarding the laboratory/experiential learning components. Student outcomes were consistently above Ministry targets, and most alumni surveyed were employed in program-related jobs. The program offers first- and second-year courses at multiple locations across the south-Fraser region, with small class and lab sizes that greatly facilitate student learning and success. The program also boasts highly-qualified faculty with credentials that generally exceed those required by KPU policy, and the program curriculum accordingly benefits, resulting in well-coordinated program competencies/learning outcomes, particularly with regards to literacy and communication skills. The result is a broad-based program with a focus on small-group hands-on instruction, practical experiential learning, and undergraduate research opportunities.

Challenges and Opportunities for Improvement:

The primary challenge identified by the program review process has been student progression. Given the small class sizes and limited enrollments, it is not practical to offer many sections per year of core courses, limiting student options for progression. We propose to meet this challenge with a restructure of our program to increase flexibility and student options, particularly with regards to elective courses, a reduction of total credits to graduate, and curricular changes to 2nd year courses with high DFW rates to improve student success. Additionally, a number of other opportunities for improvement were identified; the primary strength of the program being the focus on practical learning means that it is possible to explore further options to increase this aspect of the degree. For example, the incorporation of an Honours option, a co-op or work study option, and degree streams with greater specialization, were all identified as possible improvements. It was also noted that certain program resources could be improved; for example, that the membership and composition of the Program Advisory Committee should be reviewed and updated. Other resources identified as needing improvement were student study spaces, lab facilities on Richmond campus, and program communication with student advising services. Finally, it was suggested that enrollments could be improved by outreach efforts and creating connections with community groups, alumni, and professional organizations.

RECOMMENDATIONS THE QUALITY ASSURANCE PLAN DOES NOT ADDRESS

The Recommendations from the Self-Study Report and External Review Report that this Plan <u>does not</u> address is provided below, with a brief rationale for why these Recommendations cannot be addressed.

Recommendations	Indicate Self-Study Report (SSR) or External Review Report (ERR) and page number	Rationale for Not Addressing
For next external review, a section describing the faculty/staff, the students, and the institutional context would be useful to the external reviewers.	ERR, Page 4	This suggestion is noted for future – no further activity is needed to address this in the current Program Review.
Improve transparency of core course requirements and course offering by ensuring access to information on requirements and course offerings with increased lead time for planning.	ERR, Page 6	These factors are currently being addressed across the entire institution with the new Course Outline systems, and across the Faculty of Science and Horticulture with changes to scheduling and advising procedures, and are thus outside the scope of this program-specific review.
During the review process, KPU faculty/staff noted that they have introduced a "first year working group." The external reviewers support this group continuing in an ongoing way, to support consistency of teaching & assessment. We also support the continued presence of a teaching & learning specialist on this group in some way, to strengthen connections between instructors and resources, as well as providing pedagogical support.	ERR, Page 6	This recommendation is based on current practice – the working group is ongoing and its connection to the Teaching and Learning Commons will continue, and there is no need to further address this recommendation.
Clarifying (to instructional faculty/staff, as well as to students) available supports from Accessibility services would be beneficial.	ERR, Page 7	This information is contained in all KPU Course Presentations. Accessibility Services already routinely makes presentations at department meetings to clarify available supports as suggested by the review committee, and we will continue to consult with them and invite them to speak with our Faculty and Students periodically to keep current on this. We feel there is no further need to address this recommendation.

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QUALITY ASSURANCE FIVE-YEAR ACTION PLAN

*The Quality Assurance **Goals** for improving or maintaining program quality over the next five years are:*

MONTH/YEAR WHEN THE FIVE-YEAR ACTION PLAN BEGINS: November 2022 to November 2027

GOAL 1: Improve student progression and overall program quality by restructuring program curriculum design, with specific attention to program options and incorporation of improved ethics, writing, sustainability, industry-oriented, and Indigenous content.

Recommendation(s) this Goal Addresses	Indicate Report & Page Number
• *Explore options for degree streams, particularly molecular biology vs organismal biology*	Self-Study Report, page 65
• *Explore the inclusion of specific ethics curriculum (stand-alone course or increased content in existing courses)*	Self-Study Report, page 65
• *With regard to industry feedback about future trends in the Biology sector, it would be useful to increase content specifically identified by sector respondents such as additional exposure to bioinformatics, technological integration, synthetic biology, CRISPR/Cas, Indigenous content, and content related to climate change and sustainability* • *Given the importance and urgency of the global climate emergency, increase the already substantial program content related to climate change and sustainability, as identified by industry feedback about future trends in the sector*	Self-Study Report, page 66
• *In keeping with the KPU Vision 2023 goals regarding decolonization and Indigenization, consult with the newly-formed KPU Indigenous Advisory Committee and Elder-in-Residence regarding strategies to decolonize and Indigenize the Biology curriculum.*	Self-Study Report, page 66
• *Revise course outlines to ensure that course learning outcomes are better aligned with program learning outcomes, meet all SMART criteria, and capture the relevant knowledge, skills, and values of program learning outcomes that are taught in specific courses* • *Revise course outlines to clearly identify opportunities for students to develop leadership skills and engage in discussions about the value and ethics of advances in biological knowledge as they relate to societal and world issues, and to integrate more content involving specialized technical skills and the use of technology and computing relevant to sector career paths*	Self-Study Report, page 66
• *Re-examine 2nd year courses including learning outcomes, to better align and distribute lower level/upper level course content throughout the degree.*	Self-Study Report, page 67

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Recommendation(s) this Goal Addresses	Indicate Report & Page Number
• *To decrease the time to graduate, re-examine the frequency and campus locations of core course offerings; ensure advisors are aware of the schedule for course offerings.* • *Improve communication with academic advisers. Chairs should reach out to academic advisers early and communicate regularly through the timetabling and registration process.*	Self-Study Report, page 67
• *Incorporation of additional elective options as the program expands would also help with time to graduate.*	Self-Study Report, page 67
• *The external reviewers recommend compiling data on student context (full-time vs part-time students in the program; genuine workload within courses; language competencies; first-generation students; etc) – and keeping this context in mind when making curricular design decisions.*	External Review Report, page 5
• *Need to introduce the **Learning Outcome #11** (Discuss and debate the value and ethics of advances in biological knowledge, practice, understanding, and technology as they relate to contemporary societal and world issues) earlier in the Biology curriculum (ie. 1st or 2nd year) as this is a foundation of how to view and use biological information later in the program.*	External Review Report, page 5
• *At the upcoming faculty retreat on the curriculum and streaming, we recommend a focus on smoothening student program progression -- such as pre-requisite structure of core courses vs upper-division, higher frequency of core course offerings, more flexibility for upper-division course selection, instructor redundancy for any new courses designed, etc).*	External Review Report, page 5
• *Make an ongoing plan to **assess student achievement of these goals**. We'd advise consulting with the teaching and learning centre about strategies for this. Specific to biology, possibly useful may be the BioMAPS assessment structure (Smith MK), connected to the learning outcomes developed in the BioCore guide (Brownell SE) and BioSkills guide (Clemmons AW).*	External Review Report, page 5
• *It is recommended that research be done into causes of high DFW rates, and evaluate efficacy of existing or new supports to address causes. When addressing this issue, we note that any "optional" interventions are unlikely to be taken up by the students who most need them. One possible idea would be a required course, at the start of the degree, on academic success (e.g. EDUC1100 or similar).*	External Review Report, page 6
• *Current trends in undergraduate science education pedagogy are centered on **inclusive teaching practices**. [We] encourage the faculty/staff to collectively reflect on their shared pedagogical goals/philosophy as part of a program-level conversation.*	External Review Report, page 6
• *KPU has many resources, and we recommend strengthening the integration of these resources. For example, to respond to DFW and repeat rates that may be related to language skills, it is recommended that faculty better promote and incentivize use of the existing support programs such as "Writing Right in Biology", Learning Centre resources, in addition to researching the advisability of developing a targeted writing course for Biology majors. Integration of Library and Advising resources at the first-year level may also be beneficial.*	External Review Report, page 7

Actions(s) Required to Achieve this Goal	Led by	Start on (M/YY)	Complete By (M/YY)	Notes
1. Establish regular meeting schedule with Program Advisors and Course Sub-Committees for all multi-instructor courses (1st and 2nd year); establish Program Design Sub-Committee (PDSC).	Program/Department Chairs	Nov 2022	Nov 2022	
2. Review curricular content of 1st and 2nd year core program courses, including requirements for course articulation, and restructure content to improve student progression through the program and reduce DFW rates.	Biology Program Design Sub-committee	Nov 2022	May 2023	This information will be used to inform Course Outline revisions
3. Request additional information from OPA regarding student and program data, such as sources of DFW rates, as suggested by External Review Committee.	Program/Department Chairs	Nov 2022	May 2023	This information will be used to help inform the Program Design Retreat
4. Consult with the Office of the AVP Indigenous Leadership, Innovation, and Partnerships and the Teaching and Learning Commons regarding plans to Indigenize and Decolonize curriculum in the program.	Program/Department Chairs	Nov 2022	May 2023	This information will be used to inform Program Design Retreat
5. Review program core and elective courses for restructure, including investigation of options for degree streams. Design preliminary restructure plan with reduced program credit total and more elective options in senior years (3rd and 4th).	Biology Program Design Sub-committee	Nov 2022	May 2023	This information will be used to help inform the Program Design Retreat
6. Hold Program Design retreat for entire department to establish final curriculum design plan for core degree – this retreat should focus on student progression, prerequisite structure, Indigenization and decolonization of course content, program flexibility, incorporation of recommendations to curriculum (ethics, sustainability, biotech, etc.). Faculty will also discuss program-wide teaching philosophy, including inclusive teaching practices (such as UDL) and decolonization of curriculum.	Entire Department	May 2023	Aug 2023	Date TBD – summer of 2023
7. Design new courses to serve identified needs, including writing course, ethics content, Indigenous content, expanded elective options, etc. as identified by above steps.	Course leads and Biology Program Design Sub-committee	Sept 2023	Aug 2024	This may begin sooner depending on completion of the work of the PDSC – new course development will likely continue beyond 2024

Actions(s) Required to Achieve this Goal	Led by	Start on (M/YY)	Complete By (M/YY)	Notes
8. Incorporate the Office of Teaching & Learning writing content into existing core courses at the 1st year level.	Course leads	Nov 2022	Aug 2024	
9. Course Outline revisions – incorporate Program Design Subcommittee recommendations and ensure that all Learning Outcomes follow SMART guidelines, incorporate sustainability content and industry-specific recommendations, Indigenization and Decolonization recommendations, etc.	Individual Course Leads/Instructors	May 2023	Aug 2025	Review can begin immediately, but incorporation of PDSC recommendations will begin May 2023 and progress through Program Retreat.
10. Consult with the Teaching and Learning Commons and explore the use of BioMAPS/BioCore/BioSkills guides for assessing student achievement.	Individual Course Leads/Instructors	Sept 2023	Aug 2024	
11. Implement new Program Changes agreed upon at the Program Design Retreat – the plan is to submit Program Change paperwork for implementation by Fall 2024	Program/Department Chairs	April 2024	Sept 2024	This may occur sooner depending on progression of committee work, some changes may be left for the next program review iteration.

Resource Requirements (if applicable)
Resources required to achieve this Goal: Teaching release for course development would be sought for specific Faculty members; OPA resources for student information; funds/space for a Program Design Retreat and potentially the services of a Curricular Consultant.
When resources will be required: Beginning in 2023, largely in summer
Faculty and/or Institutional support required: Resources as stated above will need to come from Faculty/Institutional levels

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GOAL 2: Incorporate more experiential learning and hands-on opportunities into program; this should include all levels of the program, including senior research projects, laboratory content and field work at junior and senior levels, and external work study opportunities.

Recommendation(s) this Goal Addresses	Indicate Report & Page Number
• *Introduce an Honours program to maximize competitiveness with other institutions.*	Self-Study Report, page 65
• *Explore options for degree streams, particularly molecular biology vs organismal biology*	Self-Study Report, page 65
• *Determine the feasibility of introducing a Co-op program to maximize competitiveness with other institutions.*	Self-Study Report, page 65
• *Explore options to further support faculty and student research opportunities, particularly opportunities to present at research symposia and conferences.*	Self-Study Report, page 65
• *With regard to industry feedback about future trends in the Biology sector, it would be useful to increase content specifically identified by sector respondents such as additional exposure to bioinformatics, technological integration, synthetic biology, CRISPR/Cas, Indigenous content, and content related to climate change and sustainability* • *Given the importance and urgency of the global climate emergency, increase the already substantial program content related to climate change and sustainability, as identified by industry feedback about future trends in the sector*	Self-Study Report, page 66
• *In order to improve course offerings, it may be useful to develop new upper-year course electives, particularly for hands-on methods. This may include the specific content identified above.*	Self-Study Report, page 66
• *Expand experiential learning opportunities for students, particularly by exploring the introduction of an optional Co-op program and further research options in existing courses.*	Self-Study Report, page 66
• *As the development of a Co-op program is likely to be a significant undertaking, a program co-ordinator should be appointed, possibly in cooperation with other departments.*	Self-Study Report, page 66
• *Explore opportunities to expand lab-based experiential learning experiences, particularly field work and research experiences. These opportunities could be linked to community organizations, industry, etc.*	Self-Study Report, page 67
• *Graduates with expertise in climate change and sustainability are urgently needed in the workforce, and we recommend this focus be moved to a short-term recommendation.*	External Review Report, Page 4
• *Teaching allocations and research projects: Fourth-year research projects are a major strength of this program. To sustain these projects, appropriate teaching allocation needs to be in place to build on this strength.*	External Review Report, Page 7

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Action(s) Required to Achieve this Goal	Led by	Start on (M/YY)	Complete By (M/YY)	Notes
1. Construct and submit Honours option as Program Change D7 with attendant Course Outlines for Honours research courses in Biology.	Program/Department Chairs	Nov 2022	Nov 2022	
2. Initiate discussion with Dean's Office and KFA about funding sources to support Faculty research to provide Faculty advisors for students in senior research courses.	Program/Department Chairs	Nov 2022	Dec 2022	Conversations in Fall 2022 will hopefully lead to ongoing efforts.
3. In accordance with Goal 1, program restructure should include incorporation of additional experiential learning and research opportunities in lab content and field work. This will include consideration of degree stream structure, which should focus on industry-appropriate specializations.	Program Design Subcommittee and individual course leads	June 2023	Aug 2023	Completed with summer 2023 program design retreat
4. Consult with Career Development Centre regarding the feasibility and steps required to implement a Co-op option for the Biology program. If feasible, a Co-op Coordinator should be appointed as required.	Program/Department Chairs	Nov 2022	Dec 2022	If the option is feasible and within budgetary restraints, the required D7 form would be submitted after Dec 2022 for implementation in 2024.
5. Explore options for student research presentations at the institutional, regional, and national/international level, and build list of such opportunities and potential funding sources, to be updated annually. This will involve coordination with the Teaching and Learning Commons, and the FSH communications and events team.	Program/Department Chairs	Nov 2022	Ongoing (Nov 2027)	
6. In accordance with Goal 1, develop specific courses focused on experiential learning. These courses should address industry needs, sustainability goals, and may serve as core components of degree streams.	Course leads and Biology Program Design Sub-committee	Sept 2023	Aug 2024	This may begin sooner depending on completion of the work of the PDSC – new course development will likely continue beyond 2024
7. Work with the Applied Genomics Centre, the Office of Research Services, and individual Faculty industry partners to increase industry-relevant content in existing courses and to capitalize on student research opportunities, such as the SRIG grants for senior research students, post-graduate internships, and other student-directed research opportunities.	Program/Department Chairs, Research Faculty	Nov 2022	Ongoing (Nov 2027)	The goal would be to incorporate current opportunities and update the list regularly as new opportunities become available.

Resource Requirements (if applicable)
Resources required to achieve this Goal: Teaching release for course development would be sought for specific Faculty members; funding for student research presentations would be sought through the Office of Research Services and other funding applications; assistance from the Communication and Events team.
When resources will be required: Beginning in 2023, largely in summer.
Faculty and/or Institutional support required: Funds for release would come from institutional sources.

GOAL 3: Improve program resources and connections, as well as facilities, particularly laboratory space on Richmond campus.

Recommendation(s) this Goal Addresses	Indicate Report & Page Number
• *The Advisory committee could use more members from sectors that are relevant to molecular biology and research. Outgoing members need to be replaced.*	Self-Study Report, page 65
• *Increase advertisement/awareness of student career support programs.* • *Support more career fairs and information sessions with industry partners and professional organizations.*	Self-Study Report, page 66
• *It would be useful for the program to forge additional connections with graduate/alumni groups and professional accreditation organizations, such as the BC College of Applied Biology, Student Biotech Network, etc.*	Self-Study Report, page 66
• *Increase student study space in areas surrounding the Biology laboratories on the Surrey campus.*	Self-Study Report, page 67
• *Increase availability and upgrade outdated equipment, particularly on the Richmond campus.*	Self-Study Report, page 67
• *Expand the online journal collection; consider re-allocation of funds from underutilized resources such as audio-visual equipment and DVD's/streaming video.*	Self-Study Report, page 67
• *Explore options for expanded resources (such as The Learning Centre) or incorporating a first-year writing course or other credentials into the program.*	Self-Study Report, page 67
• *Renovation of existing lab space or access to new, larger spaces on the Richmond campus that will accommodate the minimum lab capacity of 20 students.*	Self-Study Report, page 67
• *Notably, lab space has been identified as an issue, which we agree with – impacting scheduling, degree progression, and access to hands-on research.*	External Review Report, page 7
• *To support project grant funding, build connections with SFU/UBC departments (as faculty adjuncts, eligible for NSERC studentships). Other short-term industry grants are also excellent opportunities, and very much in line with the program's mandate.*	External Review Report, Page 7

Action(s) Required to Achieve this Goal	Led by	Start on (M/YY)	Complete By (M/YY)	Notes
1. Update Program Advisory Committee membership and replace outgoing members – schedule PAC meetings for the coming year.	Program/Department Chairs	Nov 2022	Nov 2022	Next meeting is scheduled for November 2022

Action(s) Required to Achieve this Goal	Led by	Start on (M/YY)	Complete By (M/YY)	Notes
2. Coordinate with Career Development Centre and FSH Communications and Event team to organize career fair/Biology student event to be held regularly in Spring; this event can be used to connect with Biology-intended/declared students as well.	Program/Department Chairs	Nov 2022	Ongoing (May 2023)	Assuming the first event goes well, we would like this to be annual.
3. Pursue connections with graduate/alumni groups and professional accreditation organizations, such as the BCCAB. The first steps will be reaching out to these organizations, starting with the BCCAB and beginning a dialogue.	Program/Department Chairs	Nov 2022	Dec 2022	This timeline is for contact, discussion of options, and Department meetings to confirm interest. Full affiliations will take longer to set up and finalize.
4. Assess the department Operating Budget for unused allocations that can be repurposed towards online journal access options and other library resources.	Program/Department Chairs	Nov 2022	Nov 2022	Budget meetings will likely take place in September, with budget allocation amendments effective immediately
5. Update department information board in Surrey Spruce; student study space has been expanded in Spruce atrium already – inquire with Facilities about the possibility of seating in the wider upstairs area outside Spruce 204 for Biology-specific study area.	Program/Department Chairs	Nov 2022	Dec 2022	Follow-ups with Facilities may be required beyond this date.
6. Consult with the Teaching and Learning Commons regarding new/additional English language resources that can be incorporated into existing courses.	Program/Department Chairs	Nov 2022	Aug 2023	Any resources that can be incorporated into existing courses would be integrated during program restructure
7. Obtain quotes and submit Capital budget requests for Richmond lab renovation and equipment upgrades.	Program/Department Chairs	Nov 2022	Aug 2023	Budget requests must be submitted by September for the following year. Renovation may take 1-2 years if budget requests are approved.
8. Reach out to departments at UBC and SFU to investigate the potential for research partnerships with our program Faculty.	Program/Department Chairs	Nov 2022	Nov 2024	

Resource Requirements (if applicable)
Resources required to achieve this Goal: Operating budget changes may be necessary to support professional accreditation and library resources. Capital budget requests will be necessary for Richmond lab renovations and equipment upgrades.
When resources will be required: 2023-2024 fiscal year
Faculty and/or Institutional support required: These budget requests will be submitted through the Faculty.

GOAL 4: Improve program enrollment rates

Recommendation(s) this Goal Addresses	Indicate Report & Page Number
• *There is room for improvement in enrollment through expanded links with community organizations, degree advertising, and other outreach measures.*	Self-Study Report, page 63
• *Further develop community connections as the program expands, via advertising and outreach opportunities.*	Self-Study Report, page 65
• *Provide more flexible course options for students including a greater range of courses across campuses.*	Self-Study Report, page 66
• *Re-examine second year courses including learning outcomes, to better align and distribute lower level and upper level course content throughout the degree.*	Self-Study Report, page 67
• *Establish communication protocols for larger courses with multiple instructors (especially first and second year courses)*	Self-Study Report, page 67
• *To further increase clarity and consistency of assessment, increase focus on assignments and formative modes of assessment other than exams wherever possible.*	Self-Study Report, page 67
• *KPU has many resources, and we recommend strengthening the integration of these resources. For example, to respond to DFW and repeat rates that may be related to language skills, it is recommended that faculty better promote and incentivize use of the existing support programs such as "Writing Right in Biology", Learning Centre resources, in addition to researching the advisability of developing a targeted writing course for Biology majors. Integration of Library and Advising resources at the first-year level may also be beneficial.*	External Review Report, Page 7

Action(s) Required to Achieve this Goal	Led by	Start on (M/YY)	Complete By (M/YY)	Notes
1. Explore outreach options for improving enrollment, such as making use of the KPU marketing team, the Biology Department website, and local community organizations. Consultations with KPU marketing and the FSH communication and events team, to take place within the first 3 months of the review period, will inform specific actions to support this effort; this will include increased presence at KPU events such as Open Houses, KPU Day, etc. Community and local industry connections will be particularly important in the context of Co-op development.	Program/Department Chairs	Nov 2022	Nov 2027	This is likely to be an ongoing effort

Action(s) Required to Achieve this Goal	Led by	Start on (M/YY)	Complete By (M/YY)	Notes
2. Update the Biology Department Website with information about industry partnerships, research opportunities, and career paths associated with the Program, including links to the AGC and partner websites.	Program/Department Chairs	Nov 2022	May 2023	
3. Examine course offerings and lab use to increase the ability to offer a wider range of courses across the different campuses – consider alternation of elective offerings.	Program/Department Chairs	Nov 2022	Ongoing (Nov 2027)	
4. Restructure of second-year high DFW course curriculum will help distribute content to improve student success and attractiveness of the program. The program restructure will also address student language issues by incorporating language resources into first-year courses and develop writing-intensive offerings. The department is also exploring the possibility of revising the B in English 12 requirement to a C+ to improve enrollments.	Program Design Subcommittee and individual course leads	June 2023	Aug 2023	Completed with summer 2023 program design retreat
5. Establish course sub-committees to improve communication and consistency in courses with multiple instructors.	Program/Department Chairs	Nov 2022	Nov 2022	
6. During program restructure, instructors will discuss assessment methods to incorporate greater use of formative assessments, assignments, and assessments other than exams wherever possible. This will also improve program attractiveness.	Entire department	June 2023	Aug 2024	Completed with Course Outline revisions

Resource Requirements (if applicable)
Resources required to achieve this Goal: KPU Marketing team and website administrators; other outreach resources.
When resources will be required: Ongoing
Faculty and/or Institutional support required: As above.

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GOAL 5: Coordinate Faculty and staff resources as needed to maintain program/course quality.

Recommendation(s) this Goal Addresses	Indicate Report & Page Number
• ***Faculty/staff teaching allocations as a program resource****: We recommend compiling data on past frequency of true teaching load at the program level (including buyouts, leaves, contract instructor hires, courses scheduled, research projects supervised, areas of expertise) for faculty, instructional staff, and technical staff) to ensure balanced and sufficient resources are available to maintain program/course quality.*	External Review Report, page 7
• *We recommend building a faculty/staff renewal and appointments plan.*	External Review Report, page 7

Action(s) Required to Achieve this Goal	Led by	Start on (M/YY)	Complete By (M/YY)	Notes
1. Compile data and update the Ed Plan document with all past data regarding teaching loads, release/leaves, NRs, including areas of expertise and research project supervision which has not previously been tracked; compile a similar document for lab staff.	Program/Department Chairs, Lab Coordinator	Nov 2022	Jan 2023	These documents already exist, they just need to be updated and expanded with additional information.
2. Consult with the Dean's office to create a faculty/staff renewal and appointment plan.	Program/Department Chairs, Lab Coordinator	Nov 2022	Jan 2023	
3. Explore options for time release for Faculty to supervise additional undergraduate research projects as enrollment increases, and build list of such opportunities and potential funding sources, to be updated annually.	Program/Department Chairs	Nov 2022	Ongoing (Nov 2027)	

Resource Requirements (if applicable)
Resources required to achieve this Goal: Time release might be sought to increase options for Faculty supervision of research. Dean's Office consultation will help to provide information for updating documents.
When resources will be required: Ongoing – starting no later than Fall 2023
Faculty and/or Institutional support required: Budget requests will be submitted through the Faculty.

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PLAN SUPPORTED BY:

Diane Purvey	Diane Purvey 2022.10.27 09:42:38 -07'00'	
Provost's Name	Provost's Signature	Date
Brett Favaro	Brett Favaro	Oct 21, 2022
Dean's Name	Dean's Signature	Date