

## SENATE STANDING COMMITTEE ON PROGRAM REVIEW

**Regular Meeting**  
**Wednesday, February 16, 2022**  
**3:00 p.m. - 5:00 p.m.**  
**MS Teams Online**

### AGENDA

1. Call to Order .....Amy Jeon 3:00
2. Approval of Agenda
3. Approval of Minutes, January 19, 2021
4. Chair's Report ..... 3:05
5. New Business .....
  - 5.1. Education Assistant Program External Review Report..... Amy Jeon 3:10
  - 5.2. Technical Apparel Design First Annual Follow-Up Report .....  
Jessica Bayntun, Andhra Goundrey ..... 3:15
  - 5.3. Mathematics Quality Assurance Plan..... Allyson Rozell, Elizabeth Worobec 3:25
6. Items for Discussion..... 3:45
7. Manager's Report for OPA ..... 3:50
8. Adjournment..... 3:55

## SENATE STANDING COMMITTEE ON PROGRAM REVIEW

### MINUTES OF REGULAR MEETING

Wednesday, January 19, 2022

3:00 p.m. – 5:00 p.m.

MS Teams Online

Voting Member Quorum 8 members		
Xavier Ardez David Burns Shelley Boyd Aimee Begalka Lori McElroy Leeann Waddington Julia Denker	Melissa Swanink Marti Alger Courtney Verhage Nishan Perera Lindsay Norris Allison Richardson Fergal Callaghan	
		<b>Non-voting</b>
		Amy Jeon – Chair Steve Cardwell Melike Kinik-Dicleli
<b>Regrets</b>	<b>Senate Office</b>	<b>Guests</b>
Stephen Yezerinac Tomasz Gradowski Diane Purvey	Ruby Gupta Meredith Laird	Jack Hayes Betty Worobec Greg Millard Jessica Bayntun Andhra Goundrey Tess Kroeker Cayley Velazquez Wade Deisman

### 1. Territorial Acknowledgement and Call to Order

The Chair opened the meeting with a Territorial Acknowledgement and called the meeting to order at 3:00 p.m.

### 2. Approval of Agenda

**Fergal Callaghan moved the agenda be confirmed as presented.**

**The motion carried.**

### 3. Approval of Minutes November 24, 2021

**Aimee Begalka moved the minutes be accepted as circulated.**

**The motion carried.**

### 4. Chair's Report

Amy Jeon, Chair, thanked members for their work on the committee and in performing the reviews of the submissions for this month in particular, which required reading and commenting over the holiday period. She introduced the new Senate Office administrative assistant, Ruby Gupta, to the committee.

## **5. New Business**

### **5.1 Anthropology External Review Report**

The Chair reminded the committee that no changes are typically made to the External Review reports, but that the committee may choose to append a memo to the report if there are ever comments the committee wishes to add to the record.

**Julia Denker moved THAT the Senate Standing Committee on Program Review accept the Anthropology External Review Report as attached.**

**The motion carried.**

### **5.2 History Quality Assurance Plan**

The Chair described the reviewer comments and the updates made by the program in response to the feedback. Jack Hayes, Instructor in the History Department, thanked the committee for the feedback provided and answered the questions of the committee.

The committee discussed how to capture steps programs will take towards indigenization and decolonization, since the plan to engage in consultations and then create a plan is itself a measurable action which might more easily assigned a timeframe, with the understanding that these initiatives will continue over many cycles of review.

Action: The committee requested that the proponent update 'on-going' completion dates to measurable timeframe.

**David Burns moved THAT the Senate Standing Committee on Program Review accept the History Quality Assurance Plan with revisions as noted.**

**The motion carried**

### **5.3 Foundations in Design Quality Assurance Plan**

The Chair summarized the reviewers' comments and noted that the proponents have already made many of the suggested changes. Dean Andhra Goundrey and Jessica Bayntun, FIND instructor, requested additional information about comments related to proposed consultations and addressing transfer credits.

Action: The committee requested that the proponent add information about laddering and credit transfer between programs within the Wilson School of Design and to make the change in completion dates requested by reviewers.

**Julia Denker moved THAT the Senate Standing Committee on Program Review accept the Foundations in Design Quality Assurance Plan with revisions suggested by the committee.**

**The motion carried.**

#### **5.4 Health Science 2<sup>nd</sup> Annual Follow-Up Report**

The Chair summarized the reviewers' comments and noted that the proponents have made all necessary revisions to the feedback. Dean Betty Worobec and Cayley Velazquez, HSCI instructor, were present to answer questions. The committee congratulated the proponents for successfully completing the program review process.

**Julia Denker moved THAT the Senate Standing Committee on Program Review accept the Health Science 2<sup>nd</sup> Annual Follow-Up Report as attached.**

**The motion carried.**

#### **5.5 Bachelor in Psychiatric Nursing 1<sup>st</sup> Annual Follow-Up Report**

The Chair noted that the reviewers had commended the Program's submission and since there were delays to a number of planned actions, a second annual follow-up report was requested. Tess Kroeker, Bachelor of Psychiatric Nursing instructor, answered the questions of the committee. The committee discussed the need to have documentation of the completion of the recorded changes.

**Marti Alger moved THAT the Senate Standing Committee on Program Review accept the BPN 1<sup>st</sup> Annual Follow-Up Report as attached revisions.**

**The motion carried.**

**Lori McElroy moved THAT another Annual Follow-Up Report be provided to the committee.**

**The motion carried.**

#### **5.6 Political Science Study Report**

The Chair expressed her appreciation to the three reviewers for their continued efforts to support the Political Science program. Ross Pink, Political Science instructor, thanked the committee members for their thorough review and comments through the several revisions of the report. He committed on behalf of the program to improve the report with any suggestions of the committee.

The committee suggested that additional editing to harmonize the language in the report was required in order to both record accurately the work being done by the program and to best represent the program, along with a series of specific changes required for each chapter.

Actions: A thorough copy edit of the report is required to unify the language and style.

Chapter One: Some information still requires references. The last paragraph of the brief history requires revision and paraphrasing.

Chapter Two: This chapter is still disjointed and disorganized and requires overall re-organization and improvement on clarity. Re-visit the reviewer's recommendations and comments.

Chapter Three: Program competencies and core foundation curriculum information need additional attention. Reach out to the reviewers and Teaching and Learning Commons if necessary.

Chapter Four: Learning style, assessment and skills information required additional clarification and supporting evidence.

Chapter five: n/a

Chapter six: Overall recommendations and summary needs to be coherent and consistent with the rest of the report.

**Julia Denker moved THAT the Senate Standing Committee on Program Review accept the Political Science Study Report as attached.**

**Lori McElroy moved THAT the Political Science Department submit a revised report to the March meeting of this committee.**

**The motion carried.**

## **6. Items for Discussion**

### **6.1. AC9 Essential Skills Policy**

David Burns shared that this policy is currently undergoing consultations in order to capture feedback prior to redrafting for comment and shared the ways in which members may provide their feedback and suggestions for consideration. The committee discussed how the essential skills in this policy are meant to align with the government data supplemented with the KPU relevant information.

### **6.2. Mandate and Membership Review**

Amy Jeon led a discussion of the current mandate and membership of the committee and shared several suggested changes that had been recorded through consultations.

The committee discussed simplifying the mandate by drafting common language for the committee's role in reviewing and approving the various stages of program review. The committee discussed that adding two members to the committee would ease the workload for all members by reducing the number of times each member is appointed as a primary reviewer by the Chair, as well as removing the seat for a Faculty Senator or representative from the Faculty of Trades & Technology, given that: the seat has been vacant for a lengthy period, there is only one SSCPR-reviewed program in the Faculty, and the number of faculty from which a member might be nominated is small.

**Leeann Waddington moved THAT two additional seats be added to the committee for Faculty Representative, one for Arts and one for the Melville School of Business.**

**The motion carried.**

**Marti Alger moved THAT the Senate Standing Committee on Program Review recommend that the Senate Governance and Nominating Committee recommend that Senate approve the Mandate and Membership as attached.**

**The motion carried.**

## **7. Manager's Report**

The committee received the written report. Melike Kinik-Dicleli highlighted that two new external reviews, English and Biology programs, would commence shortly and that it had been easy to enlist external reviewers on this occasion.

#### **8. Adjournment**

The meeting adjourned at 4:54 p.m.

## SENATE STANDING COMMITTEE ON PROGRAM REVIEW

**Agenda Item:** 5.1

**Meeting Date:** February 16, 2022

**Presenter:** Amy Jeon

### Agenda Item                      EDAS External Review Report

Action Requested	Motion
------------------	--------

<b>Recommended Resolution</b>	THAT the Senate Standing Committee on Program Review accept the EDAS External Review Report as attached.
-------------------------------	--

**Senate Standing Committee Report**                      For Senate Office Use Only

**Attachments**                      EDAS External Review Report

**Submitted by**                      *Melike Kinik-Dicleli, Manager of Quality Assurance*

**Date submitted**                      *January 27, 2022*

REPORT: Education Assistant Program External Review Report

DATE: January 18, 2022

#### EXTERNAL REVIEW TEAM MEMBERS (THE “ERT”)

Sandra Polushin  
Jennifer Erickson  
Nicole Tunbridge

#### OVERALL ASSESSMENT

##### SELF-STUDY REPORT

*Criteria: The Self-Study Report provides a data-supported analysis of the program’s strengths, weaknesses, opportunities and challenges.*

##### Standard for Assessing this Report:

- The programmatic strengths and weaknesses identified in this report are supported by data and on-site findings;
- The Report has appropriate scope, as articulated by the Self-Study Guide;
- Recommendations are supported by data, a clear rationale and on-site findings.

##### The External Reviewers:

Validate the Self-Study Report’s findings and recommendations **X**

Do not validate the Self-Study Report’s findings and recommendations

##### Rationale for this Determination:

The External Review Team met with the KPU Faculty of Arts Associate Dean and the Education Assistant Program (EDAS) Chair, Library Liaison, Faculty Advisor, faculty members, current students and one alumnus. Additionally, we received written feedback from two alumni that were not able to attend the site visit. Alumni feedback represented both the full-time and part-time programs. Based on these meetings, we found that the feedback was incredibly positive and supported the findings of the Self Study Report.



## REVIEWERS' VALIDATION OF THE SELF-STUDY REPORT

### CHAPTER 2: Program Currency and Connections

*Criteria: This chapter adequately assesses program competitiveness and its connections to the discipline/sector. The assessment is supported by appropriate evidence and conclusions.*

#### Standard for Assessing this Chapter:

- The programmatic strengths and weaknesses identified in this chapter are supported by data and on-site findings;
- The chapter has appropriate scope, as articulated by the Self-Study Guide;
- Recommendations are supported by data, a clear rationale and on-site findings.

#### Additional Recommendations Identified by the ERT—include a rationale for the recommendation:

We have no additional recommendations for this chapter.

#### The External Reviewers:

Validate the Chapter's findings and recommendations <b>X</b>	Do not validate the Chapter's findings and recommendations
--	--

#### Rationale for this Determination:

Through the discussions we had with various representatives of the program during the site visit, it is apparent that EDAS students feel very well supported by the faculty in preparation for their future role as education assistants. Current students shared that they felt inclusion was a major focus of the program, and that instruction is personable with a strong focus on building community within the cohort. Major highlights of the program according to both alumni and students were the connections between theory and real life, including such fieldtrips as those to Woodlands memorial gardens, the importance of self-reflection in the role of an EA, the diversity of teaching styles, and faculty modeling evidence-based practices.

#### Program Advisory Committee (PAC)

EDAS faculty and the Associate Dean both identified the need to reinvigorate connections with the PAC to be current and responsive to local school districts and aligned with the current role of the EA. Inviting PAC members from local school districts may help build relationships and increase opportunities for local practicum placements.

#### Alumni Connections

Alumni clearly appreciated their learning experience at KPU and were enthusiastic about the potential for future learning or sharing opportunities. Alumni cohorts are currently creating their own Facebook and other social media groups to maintain connection and to share with each other during the program. They continue to use those tools after graduating. The department may want to consider creating something more structured to keep students connected with KPU as well. Maintaining connection with alumni could expand opportunities for future practicum placement and mentorship.

### **Outreach and Relationships**

Administration is supportive of creating professional development opportunities to connect faculty, current students, alumni and school boards. Examples provided include workshops or a keynote event. We recognize that with a small faculty, 80% of which are regularized part-time employees, consideration needs to be given to logistical challenges and ongoing demands of running the program.

We agree with the findings that EDAS continues attending articulation with a focus toward creating standards of practice for Education Assistants. Consider working with other Human Services Articulation Sectors at KPU to host a future articulation meeting.

### CHAPTER 3: Quality of Curriculum Design

***Criteria:** This chapter adequately examines the quality of the program's curriculum and its current relevance to the discipline/sector. The assessment is supported by appropriate evidence and conclusions.*

#### **Standard for Assessing this Chapter:**

- The programmatic strengths and weaknesses identified in this chapter are supported by data and on-site findings;
- The chapter has appropriate scope, as articulated by the Self-Study Guide;
- Recommendations are supported by data, a clear rationale and on-site findings

#### **Additional Recommendations Identified by the ERT—include a rationale for the recommendation:**

##### KPU EDAS Department:

- work with the Teaching and Learning Commons to develop learning outcomes that focus on current issues in education.
- connect with KPU Indigenous Services and elders in residence for guidance on Indigenizing curriculum.
- explore crisis prevention intervention hiring requirements with school districts. If this is found to be a requirement and is impeding KPU EDAS graduates from being hired, a recommendation is that EDAS faculty receive training in CPI or an equivalent crisis intervention program (e.g., MANDT) or approach those trained in crisis intervention to offer workshops to KPU EDAS students.
- explore opportunities for guest presentations or professional development with agencies such as SET-BC (Special Education Technology BC) to help support student understanding of technological tools used in the K-12 setting.
- implementing technological tools such as an iPad cart with software that is frequently used in the field. Faculty training may also be needed to learn to use and teach these tools.
- connect with the Dean's Office to investigate the possibility of adding more supervision support to EDAS practicums.
- consider adding a short course from an outside agency such as the Provincial Outreach Program for Autism and Related Disorders or adding more ASD content to existing course(s). For the latter, consideration for faculty training in specific areas such as applied behaviour analysis (ABA) should be discussed with the Dean's office.

**The External Reviewers:**

Validate the Chapter's findings and recommendations <b>X</b>	Do not validate the Chapter's findings and recommendations
--	--

**Rationale for this Determination:**
**CURRICULUM DESIGN STRENGTHS**

Current students and alumni shared that EDAS course work helped them to feel well-prepared to enter their work as education assistants. Feedback from sector experts also indicate that KPU graduates are ready to step into their roles in the field.

Strengths of the EDAS curriculum noted by students and alumni include opportunities to:

- consider and practice inclusive education.
- explore ways to support student learning and development in K-12 educational settings.
- learn about augmentative and alternative communication.
- participate in applied projects that connect to future work in the field.
- hear stories and experiences from instructors that help connect theory taught in coursework to practice in schools.

Many students and alumni also shared that their strong, professional, caring relationships with the KPU EDAS instructors contributed to their success. They shared that the EDAS faculty modeled program values including inclusion, effective communication and fostering diversity and belonging.

**RECOMMENDATIONS**

Students, alumni and faculty conveyed the need to ensure current issues in education are addressed in coursework. The department has been adding current content based on research findings and issues including those related to the BC K-12 curriculum, self-care, trauma informed practice, sexual orientation and gender identity (SOGI) and social and emotional learning; however, current issues are not directly connected to learning outcomes. **A suggestion is that the KPU EDAS department work with the Teaching and Learning Commons to develop learning outcomes that focus on current issues in education.**

Another area identified by the EDAS Department is the need to include Indigenous content more holistically into courses. **A recommendation is for faculty to connect with KPU Indigenous Services and elders in residence for guidance on Indigenizing curriculum.** The KPU faculty can also draw from their own learning and experience with the Squamish Nation pilot project.

The EDAS Department and alumni noted that several school districts are requiring education assistant applicants to have Crisis Prevention Intervention (CPI) training prior to employment. **The external team recommends that KPU explore this requirement with school districts.** If this is found to be a requirement and is impeding KPU EDAS graduates from being hired, **another recommendation is that EDAS faculty receive training in CPI or an equivalent crisis intervention program (e.g., MANDT). Alternatively, faculty could approach those trained in the field to offer crisis intervention workshops to KPU EDAS students.**

Through the survey, concerns were expressed about opportunities for students to gain a deeper understanding of and have experiences with various technological examples. During the external review, it

was shared that technology in the field changes frequently and school districts train education assistants with specific tools used by individual students. Faculty shared that they have had presentations from agencies such as Special Education Technology BC (SET-BC) in the past. **The external team recommends the department explore opportunities for guest presentations or professional development with agencies such as SET-BC. Another suggestion is that the department consider implementing tools such as an iPad cart with software that is frequently used in the field. Faculty training may also be needed to learn to use and teach these tools.** This will help enable EDAS students to graduate with the technical and digital literacy skills required to support students in the K-12 classroom.

The EDAS Department notes that more KPU EDAS faculty practicum supervision would benefit both practicum students and their host sites. Currently practicum supervision is one supervisor to fifteen students. This means that KPU supervisors see their practicum students two times and attend a final evaluation over four weeks. Having the opportunity to see practicum students at least one more time may help students feel more supported and offer opportunities for more enriched feedback and discussions. School teams will also feel more supported in practicum and evaluation processes. **A recommendation is that the EDAS department connect with the Dean's Office to investigate the possibility of adding more faculty supervision support to EDAS practicum.**

Finally, the external review team found that there is a need for EA candidates to graduate with content knowledge and skill development connected to autism spectrum disorder (ASD), challenging behaviours and positive behaviour-supports. This is being taught in EDAS coursework at KPU. To enrich what is already being taught, **external reviewers suggest either (a) adding a short course from an outside agency such as the Provincial Outreach Program for Autism and Related Disorders or (b) adding content to existing course(s). For the latter, consideration for faculty training in specific areas such as applied behaviour analysis (ABA) should be discussed with the Dean's office.**

## CHAPTER 4: Quality of Instructional Design

***Criteria:** This chapter adequately examines the quality of the program's instructional design and its current relevance to the discipline/sector. The assessment is supported by appropriate evidence and conclusions.*

### Standard for Assessing this Chapter:

- The programmatic strengths and weaknesses identified in this chapter are supported by data and on-site findings;
- The chapter has appropriate scope, as articulated by the Self-Study Guide;
- Recommendations are supported by data, a clear rationale and on-site findings

### Additional Recommendations Identified by the ERT—include a rationale for the recommendation:

#### KPU EDAS Department:

- prior to launching an online cohort, meet with the KPU Teaching and Learning Commons to discuss a common navigational structure to enhance access and accessibility.
- consider more forms of evaluation to assess individual performance, and work with the KPU Teaching and Learning Commons to develop rubrics that assess each group member's participation and contribution with project work.
- revisit grading practices from several perspectives:
  - Examine course assessments and criteria attributed to each letter grade
  - Examine competency-based criteria used in practicum for depth and breadth
  - Compare grades and assessment types with other EA public postsecondary programs
  - Work with the KPU Teaching and Learning Commons to assess rigour of current assessment tools to determine if they are assessing what is intended, and that they are culturally responsive.
- explore transition data related to students immediate versus delayed entry into their program to better understand the trends and patterns associated with student readiness within the full-time and part-time cohorts as it relates to student demographics.
- continue advocacy efforts for standards of practice with the Ministry of Advanced Education in partnership with the Education Assistant and Community Support (EACS) articulation sub-sector.
- explore the impact on student workload across the program since reducing the number of credits.
- invest time in more purposeful and professional relationship building activities such as a retreat or developing a workshop for alumni or the wider KPU community.
- revisit the rationale for full-time and part-time status for workload distribution.

**The External Reviewers:**

Validate the Chapter's findings and recommendations <b>X</b>	Do not validate the Chapter's findings and recommendations
--	--

**Rationale for this Determination:**
**DELIVERY MODES**

Since the previous review, the program has made significant changes. The transition to the Faculty of Arts in 2014 was a strategic move, enhancing the capacity of the program and expansion from one cohort to two full-time and two part-time cohorts. Prior to COVID-19, the primary mode of delivery was classroom based, with a lab course and two practicums in a closed cohort model. Many of the students and alumni commented on their positive experiences in belonging to a cohort. Students and alumni shared that small class sizes and opportunities for students to learn together helped support learning and growth. Alumni also found the cohort model conducive to maintaining a community of practice since working in the field. They reported that maintaining their connections provided opportunities to share resources, problem solve complex situations, and maintain professional relationships. These findings are consistent with the student survey which report 92% of the respondents being somewhat to very satisfied with this type of delivery.

With the move to online teaching and learning during the pandemic, the EDAS Department recognizes the opportunity to expand the range of delivery modes to include online asynchronous and synchronous classes. This has prompted an initiative by the department to pilot a fully online part-time cohort, with onsite practicum for Fall 2022. Providing multiple delivery options is identified as a way to (a) provide flexibility for part-time students challenged by current scheduling practices; (b) expand the geographic reach, while building EA capacity across the province; and (c) bolster enrollment patterns in the part-time cohorts. Although online delivery was not a specific focus in faculty responses, some of the full-time students suggested that consistency within and between courses would be helpful. **It is suggested that the EDAS Department meet with the Teaching and Learning Commons to discuss a common navigational structure used for EDAS online courses to enhance access and accessibility.** This step will align with best practices in educational technology and learning science research.

**ASSESSMENT METHODS**

A strength of the program is the strong focus on experiential learning as noted by students and alumni. Faculty indicated that emphasis on real world applications is a key focus and essential for translating theory to practice in complex settings and necessary for an applied field. To this end, multiple forms of assessment are used throughout the program. Applied assessments are viewed as a means to accommodate diverse learning needs, while also creating a safe and supportive learning environment to develop essential skills required in the field. Overall students and alumni indicated that the assessments were fair.

There is a strong emphasis on group work in the EDAS program, which is valued as a top priority for skill development by community partners. Some students appreciate the ability to collaborate with peers on assignments, finding it motivating and enriching. However, it was noted in the self-study document and during the external review meetings that the amount of group work and presentations throughout the program was excessive, and not an accurate representation of every student's level of achievement. It is suggested that the EDAS Department **consider more forms of evaluation to assess individual performance, and work with the KPU Teaching and Learning Commons to develop rubrics that assess each group member's participation and contribution with project work.**

#### GRADE DISTRIBUTION

Concerns about grade inflation were raised by faculty, alumni, and community partners, bringing into question the level of grading rigour. In discussion with the associate dean and faculty, letter grade comparisons between faculties are a common metric used to determine where grade inflation may be occurring; however, examining the context is also warranted. For example, Universal Design Learning (UDL) principles and guidelines are foundational concepts taught to students in the EDAS program as key strategies for responding to learner diversity in the K-12 system. The EDAS faculty integrate multiple forms of assessment to model these practices. This enables students to demonstrate their skills and knowledge in a form that highlights their strengths as learners, whereas a single assessment type may not. There may be some misinterpretation of these grading practices by those that use more traditional or standardized forms of assessment. At the same time, grading distributions that consistently reflect high grades (A+) for 50% or more of a cohort are not an accurate representation of the differences that exists between students. Some students may be at a disadvantage should they pursue further education in courses or programs that do not replicate these practices. Further, faculty that approach grading more critically experience more pushback from students than their counterparts as identified in this review. It is suggested that the EDAS Department explore grading practices from several perspectives:

- **Examine course assessments and criteria attributed to each letter grade.**
- **Compare grades and assessment types with other EA public postsecondary programs.**
- **Work with the Teaching and Learning Commons to assess rigour of current assessment tools to determine if they are assessing what is intended, and that they are culturally responsive.**
- **Examine competency-based criteria used in practicum for depth and breadth.**

#### STUDENT EXPERIENCE

##### RETENTION AND GRADUATION RATES

The EDAS program has a demonstrated record with recruitment, retention, and graduation rates to sustain their four cohorts, and the program is viewed an attractive option for prospective applicants who seek a career with high employment prospects and earning potential as their highest priority. The Associate Dean reports that KPU EDAS graduates are valued by community partners and perceived as being very well trained. The opportunity for practicum, in combination with the dedication directed towards students by faculty members, can help set them up for success. Students conveyed that the reputation of the program and ability to ladder into a degree were other factors that informed their decision to apply and complete the program at KPU. These findings are supported by the alumni survey which reported 57% of respondents have gone back to complete a bachelor's degree at post-secondary institutions since taking the KPU EA program.

There were some concerns raised by faculty about student readiness for entering the program and going out on practicum. **It is suggested that the department explore transition data related to students immediate versus delayed entry into the program to better understand the trends and patterns that exist within their program.** This can help inform programming decisions for the full and part-time cohorts and their respective student demographic. See Heslop, J. (2021). [Student transition project \(STP\): Transitions of B.C. high school graduates into B.C. public post-secondary education](#).

##### STUDENT OUTCOMES

KPU Education assistants are in high demand in the field and employment outcomes for EDAS students are extremely high. This is supported by the Alumni Survey report, 94% of survey respondents are employed, with 73% holding a full-time regular position, 11% holding a part-time position, and 16% on-call for those who took the KPU EDAS program during the period 2015 to 2019. The alumnus we interviewed reported being hired immediately after completion of the program.



As with other public post-secondary EA programs, one of the challenges for the KPU EDAS department is addressing the issue of supply and demand in the field. Both faculty and students raised this concern. Employers are unable to fulfill their hiring needs, and several school districts have resorted to developing four- to six-month in-house training programs as a recruitment strategy. This shift in the sector poses challenges for the program in two ways: 1) shorter programs are an attractive option for potential applicants in a sector that does not differentiate between wages, and may overlook the source of training; and 2) securing suitable practicum placements for four cohorts within the academic year becomes more labor intensive.

The EDAS program has established a competitive edge with transfer credit and pathways to a degree. They have also responded to the challenges by reducing the program to 34 credits to be more responsive to the hiring demands of the sector, while maintaining high standards for quality instruction. The dedication to maintaining high quality instruction is consistent with the provincial Education Assistant and Community Support (EACS) articulation sub-sector and work towards standards of practice. **It is recommended that the program continue advocacy efforts for standards of practice with the Ministry of Advanced Education in partnership with the EACS articulation sub-sector.**

#### STUDENT SATISFACTION WITH INSTRUCTION

A consistent theme throughout the external review and self-study indicates instruction is well structured, integrating experiential learning opportunities and establishing a strong connection between theory and practice. There is a heavy emphasis on collaborative learning and critical inquiry allowing for reflection and group discussion, which are essential skills in this applied field. The classes are structured to offer multiple ways to access information and demonstrate learning, reflecting principles of UDL. Not only does this increase accessibility to content, it models the type of instruction and support graduates will incorporate in their own practice. These findings align with the student survey which reported 87% of students being somewhat and very satisfied with instructors' presentation of courses materials. Further, 90% rated the overall instruction in the EDAS program as somewhat satisfied (29%) to very satisfied (61%).

One area of concern raised by some students was the heavy workload given the wide scope of subject matter that is covered in the program. As noted earlier in this report, there was a desire to increase the depth and breadth of some subject areas to better prepare students for the field. In consideration of other recommendations made in Chapter 3 about curriculum and issues surrounding group work in Chapter 4, **it is suggested the department explore the impact on student workload across the program since reducing the number of credits.**

#### FACULTY EXPERIENCE AND QUALIFICATIONS

##### FACULTY EXPERTISE AND QUALIFICATIONS

Faculty expertise and qualifications are relevant to the professional qualifications required for the field. Professional development activities reflect current trends and practices in the K-12 system. Evidence to support these claims was reiterated by students and alumni who indicated that the diversity of expertise prepared them for practicum and for work in the field after graduation. Real life examples integrated with theory and practices in the field helped to scaffold learning and understanding for students. Alumni reported that maintaining the focus on practical and relevant instruction was a central strength of EDAS faculty. As recommended in Chapter 3, the department may benefit from working with the KPU Teaching and Learning Commons to develop learning outcomes that focus on current issues in education.

## FACULTY SATISFACTION WITH INSTRUCTION

Overall, the department was satisfied with the program instruction and reiterated that their shared commitment toward student success and quality instruction was a strength. At the same time, they expressed concerns about lack of opportunities to support and celebrate their accomplishments or engage in more critical reflection about courses and the program outside of regular department meetings. Employment status may contribute to this reality with only one regularized full-time faculty member. The Associate Dean corroborated these findings and felt team building initiatives would be beneficial to support the health and wellbeing of the department, while also providing opportunities to explore ways of raising their strong profile at KPU or taking on new initiatives such as an international field school.

Given current the distribution of workload, it is suggested that **investing time in more purposeful and professional relationship building activities could be beneficial. Scheduling a retreat** is also suggested for time intensive initiatives, like planning speaker series as a way to raise the program's profile, or exploring new initiatives like international exchanges for practicum. **It is also recommended that with the growth of the program, the rationale for having only one full-time regularized faculty be reviewed.**

## CHAPTER 5: Quality of Services, Resources and Facilities

**Criteria:** *This chapter adequately assesses program resources, equipment, software, and facilities from both the student and instructor perspective. The assessment is supported by appropriate evidence and conclusions.*

### Standard for Assessing this Chapter:

- The programmatic strengths and weaknesses identified in this chapter are supported by data and on-site findings;
- The chapter has appropriate scope, as articulated by the Self-Study Guide;
- Recommendations are supported by data, a clear rationale and on-site findings

### Additional Recommendations Identified by the ERT—include a rationale for the recommendation:

#### KPU EDAS Department:

- work with administration and facilities to upgrade furniture for the classrooms on the Langley campus and explore opportunities for dedicated classrooms on the Surrey campus.
- expand the availability of hardware to EDAS students, which could include iPads or tablet carts, to help students gain familiarity with the technology in general. Allow for incorporation of new software as needed.
- consider exploring the potential for greater library liaison collaboration including expanding offerings of in-person and online library skills workshops for students.
- engage in discussion around ways to promote student participation in the KPU 100 and other workshops offered by the Learning Centre.
- consider mapping out the course progression pathway for full-time and part-time students on the program website.
- consider coordinating with advisors to host online information sessions that specifically target EDAS students and alumni interested in furthering their education, for example teacher training.
- consider connecting with English Department and Faculty Advisors to determine which English courses could be recommended to incoming students to help build English oral and written skills before starting the EDAS program.

**The External Reviewers:**

Validate the Chapter's findings and recommendations <b>X</b>	Do not validate the Chapter's findings and recommendations
--	--

**Rationale for this Determination:**

The external review team discussed the quality of services, resources and facilities available to EDAS students on the Surrey and Langley campuses with the EDAS Library Liaison, Faculty Adviser, Program Chair, faculty, alumni, and current students. Based on these meetings, the feedback from these groups substantiated the findings and recommendations of the EDAS Self Study Report.

**CLASSROOM RESOURCES**

The students and alumni we met with were satisfied with the classroom facilities in general. Those from the Langley campus reported having dedicated classrooms helped to create a comfortable learning environment that fostered a sense of belonging for the students. They appreciated having the instructors rotate through the classroom, while students stayed in familiar surroundings. Students, alumni and faculty all commented that the chairs in the dedicated classrooms are quite hard and uncomfortable. Classroom furniture on the Surrey campus was reported to be more comfortable but having dedicated space would be preferred. Given that students are in the classroom six to eight hours per day, **the EDAS department should work with administration and facilities to upgrade furniture for the classrooms on the Langley campus and explore opportunities for dedicated classrooms on the Surrey campus.**

Faculty, students and alumni all had mixed opinions on the need to improve technology resources and training in the EDAS program. They noted the importance for Education Assistants to be tech savvy in general, but there is not a standard set of learning technologies used in K-12 classrooms that they are aware of. As recommended in Chapter 3, we suggest that the department connect with SET-BC and school districts to see what specific technological competencies are used most frequently in the classroom. Once this has been assessed, **expand the availability of hardware to EDAS students, which could include iPads or tablet carts, to help students gain familiarity with the technology in general. Allow for incorporation of new software as needed.**

**LIBRARY RESOURCES**

The library liaison gave us a detailed report on the library facilities and resources available to students and faculty. Students have access to an extensive collection of print, eBook, and video Education related titles. They can access library resources on all five campuses, but also have online access to the library catalogue and most databases. The library liaison submits a list of preselected potential EDAS adoptions to the department for approval annually but would like to see more feedback or additional material requests from faculty. The students and alumni that met with the external review committee reported satisfaction with the library resources available to EDAS students. Students appreciated the availability of study and group meeting space in the campus libraries. Research skills workshops that have historically been provided to students did not transition to online offerings during the COVID-19 transition to online teaching. **The EDAS department might consider exploring the potential for greater library liaison collaboration including expanding offerings of in-person and online library skills workshops for students.**

**THE LEARNING CENTRES**

The students that met with the external review committee shared positive feedback regarding the resources available through the KPU Learning Centres. They appreciated the availability of online video resources to support students with self-learning. Several students noted challenges adapting to the different online teaching styles of their different instructors and found that taking the KPU 100 online course was extremely helpful for navigating online learning platforms such as Moodle and Big Blue Button. Students noted that they appreciated the availability of resources such as workshops, essay templates and access to online tutoring, but that these resources are underutilized. **The EDAS department could engage in discussion around ways to promote student participation in the KPU 100 and other workshops offered by the Learning Centre.**

#### ACADEMIC ADVISING

The representative from Faculty Advising indicated that most academic advising goes through the Surrey campus and is focused primarily on helping students transition into Bachelor of Arts degree programs. One concern expressed was that the EDAS program website is not very user friendly for students trying to map out their course progression through the program. The advisor suggested that publishing lists of course offerings for the full-time and part-time programs on the department website would help students with future planning. It was noted that this would be particularly helpful for clarifying the course progression through the part-time program. **If stable course offerings can be projected a year in advance, the department should consider mapping out the course progression pathway for full-time and part-time students on the program website.**

Many EDAS graduates are interested in continuing their education part-time once securing employment or returning to full-time education after a few years in the workforce. **The EDAS Department might consider inviting academic advisors to speak to students nearing the end of their program to help promote laddering opportunities into Teacher Education and Bachelor of Arts programs before graduation.**

The recent online Teacher Education information session conflicted with the schedules of students and alumni. To accommodate working alumni, consider late afternoon or evening sessions. **The EDAS Department and program advisors should consider coordinating to host online information sessions that specifically target EDAS students and alumni interested in furthering their education, for example teacher training.**

The transition to online info sessions for potential future students was generally seen as a positive change to provide flexibility for students considering entering the program. At least some online information sessions should be continued to be offered even after the general return to on-campus events following the end of COVID-19 safety protocols.

It was noted by faculty that some students would benefit from additional English language skills. **Consider connecting with English Department and Faculty Advising to determine which English courses could be recommended to incoming students to help build English oral and written skills before entering the EDAS program.**

Several students noted that the program application process was very straight-forward and that questions and concerns were addressed efficiently.

**CONCLUDING COMMENTS**

The External Review Team was impressed with the dedication of the faculty and the positive reviews of the students and alumni of the program. The support of the Associate Dean, Library Services and Faculty Advising reinforced the work that is being done to continue developing and delivering an exemplary program. Feedback shows that KPU EDAS graduates are being purposefully prepared to enter the field with knowledge and skills required to support students and their teams in the K-12 education setting.

It was also wonderful to work with the dedicated EDAS faculty who clearly care about student learning and well-being. Their contribution to the review process helped us see that they are carefully considering steps to support further development of their existing program.

We recognize that as a small department dominated by part-time faculty, implementing the recommendations in this document will be a challenging and time-consuming task. As such, we have attempted to be purposeful in our language to make space for the department to determine the most appropriate pathways to meet our recommendations. It will be important for the EDAS Department to work with administrative support to prioritize recommendations and design a manageable plan to address them.

We thank you for the opportunity to participate in the External Review. It has been a wonderful experience.

## APPENDIX 1: SITE VISIT AGENDA

**Kwantlen Polytechnic University**  
**Education Assistant Program**  
**External Review Virtual Site Visit Agenda**

November 25 & 26, 2021  
Via Microsoft Teams

Thanks to External Reviewers:  
Sandra Polushin  
Jennifer Erickson  
Nicole Tunbridge

### Day 1: November 25, 2021

9:00 - 9:50:	Introductions and Interview with Program Chair
9:50 - 10:00:	Break
10:00 - 11:00:	Meet with Program Faculty
11:00 - 11:10:	Break
11:10 - 12:00:	Meet with University Services Panel (Library Services/ Faculty Advising)
12:00 - 12:10:	Break
12:10 - 12:50:	Meet with Dean/Associate Dean

### Day 2: November 26, 2021

9:00 – 10:00:	Meet with Alumni
10:00 - 10:10:	Break
10:10 - 11:10:	Meet with Students
11:10 - 11:20:	Break
11:20 - 12:00:	Final Meeting with Program Chair
12:10 - 12:20:	Break
12:20-12:50:	External Review Team meets to discuss findings and coordinate their review.

REPORT: Education Assistant Program External Review Report

**OVERALL ASSESSMENT:**

*Please provide a brief assessment of the External Review Report under review and an overall recommendation.*

**Reviewer #1:** The External Review Report highlights the many strengths of the EDAS program, especially in terms of its respected reputation within the sector and the high satisfaction of KPU students and alumni. Faculty have built and maintained a strong program over the years that is inclusive in its practice and a stellar example of applied learning at KPU. Based on the External Reviewers' report with their helpful and concrete recommendations on a number of fronts, the program seems poised to build upon its many strengths and advance the quality of the student learning experience overall. I see many excellent recommendations, including (but not limited to) keeping the curriculum current to meet the changing needs (such as digital literacy) of the sector, Indigenizing the curriculum in collaboration with elders in residence and Indigenous Services, defining learning outcomes, revisiting grading practices and online delivery methods, establishing a strong PAC, and growing the EDAS alumni network and its engagement.

**Reviewer #2:** There was evidence the ERR was written with clarity of thought and within scope of the SSG and SSR. Conclusions and recommendations are also relevant with intent to support the program's future improvements.

**The Report:**

- ☒ Reviewer #1 & #2: Recommend for approval by the SSCPR as is
- ☐ Recommend for approval by the SSCPR pending suggested actions (see below)
- ☐ Recommend for rejection by the SSCPR

**MAJOR ISSUES AND SUGGESTED ACTIONS:**

While External Review Reports are not returned to the External Review Team for revisions, Reports may contain major issues which the SSCPR should address. These issues could include (but are not limited to): a) recommendations that go beyond the scope of program review; b) names or other identity information.

Complete the table below ONLY if you have identified major issues in the Report. Identify actions the SSCPR should take to address these issues. Suggested actions could include (but are not limited to): a) redacting names or other identity information; b) providing an SSCPR Response that provides the External Review Team's recommendations in context. Add or remove rows in the table below as needed.



Issue	Suggested Action for the SSCPR
Chapter Three: Recommendations regarding increased supervision for EDAS Practicums	The External Review Report suggests a discussion with the Dean's office on this matter, which is a good place to start. This recommendation may also have budget implications beyond the Faculty of Arts' current capacity so this discussion will likely ultimately involve more than the Dean's office in due course.
Chapter Three: Recommendations regarding adding short courses and/or workshops given by outside agencies in areas such as crisis prevention intervention; the Provincial Outreach Program for Autism and Related Disorders; Applied Behaviour Analysis	This recommendation will have to be considered carefully and in alignment with the collective agreement. Budgetary costs and any additional fees for students (beyond what students pay in tuition for the current requirements of the program) may also need to be considered in conversation with the Dean's office.

**MINOR EDITS (Spelling, syntax, word choice and other mechanical issues).**

Please list corresponding page numbers. Minor edits are NOT discussed at the SSCPR meeting. Add or remove rows as needed.

Minor Edits (page #)
Page 7: 3 <sup>rd</sup> last bullet: The report reads "explore the impact on student workload across the program since <b>reducing</b> the number of credits" >> I believe this should read <b>increasing</b> the number of credits, as the number of total credits required for the program increased from 34 to 34.5 credits as of fall 2021 for incoming students.
Page 10: 2 <sup>nd</sup> paragraph: The report mentions a reduction of the program to 34 credits but the program recently increased the total credits to 34.5 as of fall 2021.
Page 10: statement in bold face font that appears just above the header "Faculty Experience and Qualifications" – the credits were recently increased by 0.5, not decreased. As of fall 2021, incoming students require 34.5 credits to complete the EDAS program.
Bullet point sections throughout the document, while consistent and comprehensible, are not consistent with any one writing style guide (APA, Chicago, etc).

## SENATE STANDING COMMITTEE ON PROGRAM REVIEW

**Agenda Item:** 5.2

**Meeting Date:** February 16, 2022

**Presenter:** Jessica Bayntun, Andhra Goundrey

**Agenda Item**                      **Technical Apparel Design First Annual Follow-Up Report**

Action Requested	Motion
------------------	--------

<b>Recommended Resolution</b>	THAT the Senate Standing Committee on Program Review accept the Technical Apparel Design First Annual Follow-Up Report as attached.
-------------------------------	---

**Senate Standing Committee Report**                      For Senate Office Use Only

**Attachments**                      Technical Apparel Design First Annual Follow-Up Report

**Submitted by**                      *Melike Kinik-Dicleli, Manager of Quality Assurance*

**Date submitted**                      *January 27, 2022*



## Technical Apparel Design First Annual Follow-Up Report

**Date Self-Study Report approved by SSCPR:** January 18, 2020

**Date of External Review Site Visit :** September 24 & 25, 2020

**Date Quality Assurance Plan approved by SSCPR:** January 27, 2021

**Date First Annual Follow-Up Report submitted:** Jan 26, 2022

### **First Progress Report**

**MONTH/YEAR WHEN THE FIVE-YEAR ACTION PLAN BEGAN:** December 2020

STRATEGY 1: Update all existing course outlines and create course outlines for three new proposed courses.

GOAL(S) FROM THE QA PLAN THIS STRATEGY SUPPORTS: #1 - Update all current courses for relevancy and currency. Develop and implement three new courses into the Fall 2021 curriculum including a technical drawing course, an advanced pattern drafting and sewing course, and an optional career development/work experience course.

<b>Step(s) Required to Achieve this Strategy</b>	<b>Led by</b>	<b>Start on (M/YY)</b>	<b>Complete By (M/YY)</b>	<b>Progress to Date/Reasons for Lack of Progress</b>
Update all existing Technical Apparel Design courses for relevancy and currency.	Faculty	Dec 2020	Jan 2021	Complete (Jan 2021)
Create new course outlines for three new proposed courses: Technical Drawing, Career Prep, Work Experience.	Faculty and Chair	Dec 2020	Jan 2021	Complete (Feb 2021)
The Curriculum Committee approves all course updates and new course outlines.	Chair	Dec 2020	Feb 2021	Complete (Feb 17, 2021- Approved by the Design Curriculum Committee)
SSCC approves all updates and new courses.	Chair	Dec 2020	Mar 2021	Complete (March 10, 2021- Approved by SSCC committee)
Senate approves all updates and new courses.	Chair	Dec 2020	Mar 2021	Complete (March 22, 2021- Approved by Senate)
Update website and marketing materials to reflect curriculum changes for Fall 2021 cohort.	Program Assistant	Dec 2020	Mar 2021	Complete (March 2021)



## Technical Apparel Design First Annual Follow-Up Report

STRATEGY 2: Hire up to two new Instructors to join the Technical Apparel Design faculty.

GOAL(S) FROM THE QA PLAN THIS STRATEGY SUPPORTS: #2 - Diversify faculty by hiring up to two new Instructors to teach in the Technical Apparel Design program.

Step(s) Required to Achieve this Strategy	Led by	Start on (M/YY)	Complete by (M/YY)	Progress to Date/Reasons for Lack of Progress
Draft call out for new Instructors in the Technical Apparel Design program (internal search).	Chair	Feb 2021	Mar 2021	Complete (April 2021)
DETA Search Committee conducts interviews to vet possible new Instructors (internal search).	DETA Hiring Committee	Mar 2021	Apr 2021	Complete (May 2021)
Draft call out for new Instructors in the Technical Apparel Design program (external search).	Chair	Apr 2021	Apr 2021	Move to Feb 2022- The Internal search satisfied the needs of the possible new instructors for the workload needs for 2021-2022
DETA Search Committee conducts interviews to vet possible new Instructors (external search).	DETA Hiring Committee	May 2021	May 2021	Move to Feb 2022 - The Internal search satisfied the needs of the possible new instructors for the workload needs for 2021-2022
Technical Apparel Design hires up to two new Instructors to teach in the program starting in the Spring 2022 semester.	Chair, WSD Dean	Sep 2021	Sep 2021	Complete (Sept 2021) for the first year of the rollout

STRATEGY 3: Develop program initiatives that increase interaction between our Advisory Committee/tech apparel industry members and our students.

GOAL(S) FROM THE QA PLAN THIS STRATEGY SUPPORTS: #3 - Develop stronger connections between our Advisory Committee/tech apparel industry members and our students.

Step(s) Required to Achieve this Strategy	Led by	Start on (M/YY)	Complete by (M/YY)	Progress to Date/Reasons for Lack of Progress
Explore new ways to have our Advisory Committee/tech apparel industry engage with our students on a regular, consistent basis.	Chair	Jan 2021	Dec 2021	Complete (Dec 2021) Mentorship program created which pairs students with advisory board members on capstone development.
Assess the current Mentorship program and determine how to formalize and enhance it.	Chair	Jan 2021	Apr 2021	Complete (April 2021) Mentorship program format and expectations
Develop an acknowledgement program for the service of our Advisory Committee and industry members.	Chair	Jan 2021	Dec 2021	Extended to April 2022
Capture all activities between the Advisory Committee/industry to use for marketing initiatives.	Chair	Jan 2021	Dec 2021	Extended to April 2022: Align with AC1- possibilities to centralize in the dean's office

## Technical Apparel Design First Annual Follow-Up Report

STRATEGY 4: Launch Technical Apparel Design International Field School.

GOAL(S) FROM THE QA PLAN THIS STRATEGY SUPPORTS: #4 - Create a Technical Apparel Design International Field School by 2023.

Step(s) Required to Achieve this Strategy	Led by	Start on (M/YY)	Complete by (M/YY)	Progress to Date/Reasons for Lack of Progress
Research other Wilson School of Design field schools.	Chair	Sep 2021	Nov 2021	Complete (Dec 2021)
Draft Technical Apparel Design field school proposal.	Chair	Jan 2022	May 2022	On Track (Feb 2022) proposal for international field school experience
WSD Curriculum Committee approves course outline.	Chair	Feb 2022	Mar 2022	
SSCC approves course outline.	Chair	Mar 2022	Mar 2022	
Senate approves course outline.	Chair	Apr 2022	Apr 2022	
Update website and marketing materials to reflect curriculum changes for Fall 2021 cohort.	Program Assistant	May 2022	May 2022	

STRATEGY 5: Consult with all stakeholders affected by increased access and support to labs; develop and implement this plan.

GOAL(S) FROM THE QA PLAN THIS STRATEGY SUPPORTS: #5 - Increase access (longer hours) and support (prototype/production lab technicians available to help students, while labs are open) for students when they use the Wilson School of Design labs.

Step(s) Required to Achieve this Strategy	Led by	Start on (M/YY)	Complete by (M/YY)	Progress to Date/Reasons for Lack of Progress
Consult with other Wilson School of Design programs, the WSD Operations Committee, Faculty Council, and the Dean's Office to determine everyone's needs for increased access and support to labs.	Chair	Jan 2021	May 2021	Complete (May 2021)
Develop a plan with all relevant stakeholders that will increase access and support to labs for all WSD students.	Chair	Jan 2021	May 2021	Complete (Sept 2021) Online Student Training modules and increased number of equipment training sessions
Implement new plan via Dean's Office hiring process.	Chair	Sep 2021	Sep 2021	Complete (Sept 2021) Aligned with other WSD programs

## Technical Apparel Design First Annual Follow-Up Report

STRATEGY 6: Create pathways for our graduates to pursue their master's degree.

GOAL(S) FROM THE QA PLAN THIS STRATEGY SUPPORTS: #6 - Develop articulation agreements that define pathways for our graduates to pursue a related master's degree program with up to three academic institutions.

Step(s) Required to Achieve this Strategy	Led by	Start on (M/YY)	Complete by (M/YY)	Progress to Date/Reasons for Lack of Progress
Review previous communications with Heriot-Watt University. Evaluate whether they are still an appropriate post-Secondary University to form an articulation agreement with, that would enable our students to complete a master's degree at their institution.	Chair	Sep 2021	Sep 2021	Revised completed by date (March 2022): delayed due to changes in program chair and prioritization of initiatives
Research and identify up to three post-secondary institutions that offer related master's degree programs.	Chair	Sep 2021	Dec 2021	Completed (Dec 2021)
Develop articulation agreements with up to three academic institutions.	Chair, WSD Dean	Jan 2022	Sep 2022	
Develop communications strategy to inform students and potential applicants of this opportunity.	Chair	Sep 2022	Dec 2022	

STRATEGY 7: Increase enrolment using a new marketing strategy.

GOAL(S) FROM THE QA PLAN THIS STRATEGY SUPPORTS: #7 - Develop and implement a new marketing strategy that will result in increased enrolment.

Step(s) Required to Achieve this Strategy	Led by	Start on (M/YY)	Complete by (M/YY)	Progress to Date/Reasons for Lack of Progress
Further research whether a program name change is necessary.	Chair	Jan 2021	Apr 2021	Complete (April 2021)
List all program factors that would contribute to increased enrolment.	Chair	Jan 2021	Apr 2021	Complete (Dec 15, 2021) Faculty meeting
Develop a marketing strategy for the Technical Apparel Design program.	Chair	Sep 2021	Dec 2021	Completed (Jan 2022) Initial marketing strategy developed with FSO and International Recruitment
Review strategy and consult with the WSD Communications team and the KPU Marketing team.	Chair	Jan 2022	Mar 2022	On Track- Finalize marketing materials (Feb 2022) and host information sessions with International Recruitment (Feb 2022)



## SENATE STANDING COMMITTEE ON PROGRAM REVIEW

### Reviewers' Comments: Annual Follow-Up Report

PROGRAM UNDER REVIEW: Technical Apparel Design

#### **Instructions for Reviewers**

Your assessment should ensure that progress on the Goals and Planned Actions is clearly articulated. If no progress has occurred on a Goal and/or Planned Action, please ensure that a clear rationale has been provided.

#### **OVERALL ASSESSMENT:**

*Please provide a brief assessment of the Annual Follow-Up Report under review and an overall recommendation.*

**Reviewer #1:** Congratulations to the program on all you have accomplished this year. The goals from the QA plan were measurable and well-articulated, so it is easy to see what progress has been made. Since there are a few areas that have not been completed, I would recommend returning in one year with a follow up report on the outstanding items. Thank you for all your work on this.

**Reviewer #2:** The report provides a strong timeline of actions taken and goals to be accomplished. Progress is up to date and any discrepancy is addressed and re-evaluated. Steps that needed revision were given new action dates and proper explanation. Only one step needs to be addressed and revised. Overall, the report delivers a clear timeline and rationale for each step. Recommend for approval with revision.

#### **The Report (click on the box that corresponds to your recommendation):**

- ☒ Reviewer #1: Recommend for approval by the SSCPR as is
- ☒ Reviewer #2: Recommend for approval by the SSCPR pending suggested actions (see below)
- ☐ Recommend for rejection by the SSCPR

#### **MAJOR ISSUES AND SUGGESTED ACTIONS:**

Complete this section ONLY if you have identified the following major issues with the Annual Follow-Up:

- a) Progress to date is unclear.
- b) No clear rationale has been provided for why no progress has occurred.

Issue (page #)	Suggested Action
No progress or update for "Develop articulation agreements with up to three academic institutions" (page 4).	Provide information on what progress has been done so far for this step or provide update as to why it has been postponed/delayed.

#### **MINOR EDITS (Spelling, syntax, word choice and other mechanical issues).**

Please list corresponding page numbers. Minor edits are NOT discussed at the SSCPR meeting. Add or remove rows as needed.

Minor Edits (page #)



**Technical Apparel Design First Annual Follow-Up Report**

**Date Self-Study Report approved by SSCPR:** January 18, 2020

**Date of External Review Site Visit :** September 24 & 25, 2020

**Date Quality Assurance Plan approved by SSCPR:** January 27, 2021

**Date First Annual Follow-Up Report submitted:** Jan 26, 2022

**First Progress Report**

**MONTH/YEAR WHEN THE FIVE-YEAR ACTION PLAN BEGAN:** December 2020

STRATEGY 1: Update all existing course outlines and create course outlines for three new proposed courses.

GOAL(S) FROM THE QA PLAN THIS STRATEGY SUPPORTS: #1 - Update all current courses for relevancy and currency. Develop and implement three new courses into the Fall 2021 curriculum including a technical drawing course, an advanced pattern drafting and sewing course, and an optional career development/work experience course.

Step(s) Required to Achieve this Strategy	Led by	Start on (M/YY)	Complete By (M/YY)	Progress to Date/Reasons for Lack of Progress
Update all existing Technical Apparel Design courses for relevancy and currency.	Faculty	Dec 2020	Jan 2021	Complete (Jan 2021)
Create new course outlines for three new proposed courses: Technical Drawing, Career Prep, Work Experience.	Faculty and Chair	Dec 2020	Jan 2021	Complete (Feb 2021)
The Curriculum Committee approves all course updates and new course outlines.	Chair	Dec 2020	Feb 2021	Complete (Feb 17, 2021- Approved by the Design Curriculum Committee)
SSCC approves all updates and new courses.	Chair	Dec 2020	Mar 2021	Complete (March 10, 2021- Approved by SSCC committee)
Senate approves all updates and new courses.	Chair	Dec 2020	Mar 2021	Complete (March 22, 2021- Approved by Senate)
Update website and marketing materials to reflect curriculum changes for Fall 2021 cohort.	Program Assistant	Dec 2020	Mar 2021	Complete (March 2021)





## Technical Apparel Design First Annual Follow-Up Report

STRATEGY 2: Hire up to two new Instructors to join the Technical Apparel Design faculty.

GOAL(S) FROM THE QA PLAN THIS STRATEGY SUPPORTS: #2 - Diversify faculty by hiring up to two new Instructors to teach in the Technical Apparel Design program.

Step(s) Required to Achieve this Strategy	Led by	Start on (M/YY)	Complete by (M/YY)	Progress to Date/Reasons for Lack of Progress
Draft call out for new Instructors in the Technical Apparel Design program (internal search).	Chair	Feb 2021	Mar 2021	Complete (April 2021)
DETA Search Committee conducts interviews to vet possible new Instructors (internal search).	DETA Hiring Committee	Mar 2021	Apr 2021	Complete (May 2021)
Draft call out for new Instructors in the Technical Apparel Design program (external search).	Chair	Apr 2021	Apr 2021	Move to Feb 2022- The Internal search satisfied the needs of the possible new instructors for the workload needs for 2021-2022
DETA Search Committee conducts interviews to vet possible new Instructors (external search).	DETA Hiring Committee	May 2021	May 2021	Move to Feb 2022 - The Internal search satisfied the needs of the possible new instructors for the workload needs for 2021-2022
Technical Apparel Design hires up to two new Instructors to teach in the program starting in the Spring 2022 semester.	Chair, WSD Dean	Sep 2021	Sep 2021	Complete (Sept 2021) for the first year of the rollout

STRATEGY 3: Develop program initiatives that increase interaction between our Advisory Committee/tech apparel industry members and our students.

GOAL(S) FROM THE QA PLAN THIS STRATEGY SUPPORTS: #3 - Develop stronger connections between our Advisory Committee/tech apparel industry members and our students.

Step(s) Required to Achieve this Strategy	Led by	Start on (M/YY)	Complete by (M/YY)	Progress to Date/Reasons for Lack of Progress
Explore new ways to have our Advisory Committee/tech apparel industry engage with our students on a regular, consistent basis.	Chair	Jan 2021	Dec 2021	Complete (Dec 2021) Mentorship program created which pairs students with advisory board members on capstone development.
Assess the current Mentorship program and determine how to formalize and enhance it.	Chair	Jan 2021	Apr 2021	Complete (April 2021) Mentorship program format and expectations
Develop an acknowledgement program for the service of our Advisory Committee and industry members.	Chair	Jan 2021	Dec 2021	Extended to April 2022
Capture all activities between the Advisory Committee/industry to use for marketing initiatives.	Chair	Jan 2021	Dec 2021	Extended to April 2022: Align with AC1- possibilities to centralize in the dean's office

## Technical Apparel Design First Annual Follow-Up Report

STRATEGY 4: Launch Technical Apparel Design International Field School.

GOAL(S) FROM THE QA PLAN THIS STRATEGY SUPPORTS: #4 - Create a Technical Apparel Design International Field School by 2023.

Step(s) Required to Achieve this Strategy	Led by	Start on (M/YY)	Complete by (M/YY)	Progress to Date/Reasons for Lack of Progress
Research other Wilson School of Design field schools.	Chair	Sep 2021	Nov 2021	Complete (Dec 2021)
Draft Technical Apparel Design field school proposal.	Chair	Jan 2022	May 2022	On Track (Feb 2022) proposal for international field school experience
WSD Curriculum Committee approves course outline.	Chair	Feb 2022	Mar 2022	
SSCC approves course outline.	Chair	Mar 2022	Mar 2022	
Senate approves course outline.	Chair	Apr 2022	Apr 2022	
Update website and marketing materials to reflect curriculum changes for Fall 2021 cohort.	Program Assistant	May 2022	May 2022	

STRATEGY 5: Consult with all stakeholders affected by increased access and support to labs; develop and implement this plan.

GOAL(S) FROM THE QA PLAN THIS STRATEGY SUPPORTS: #5 - Increase access (longer hours) and support (prototype/production lab technicians available to help students, while labs are open) for students when they use the Wilson School of Design labs.

Step(s) Required to Achieve this Strategy	Led by	Start on (M/YY)	Complete by (M/YY)	Progress to Date/Reasons for Lack of Progress
Consult with other Wilson School of Design programs, the WSD Operations Committee, Faculty Council, and the Dean's Office to determine everyone's needs for increased access and support to labs.	Chair	Jan 2021	May 2021	Complete (May 2021)
Develop a plan with all relevant stakeholders that will increase access and support to labs for all WSD students.	Chair	Jan 2021	May 2021	Complete (Sept 2021) Online Student Training modules and increased number of equipment training sessions
Implement new plan via Dean's Office hiring process.	Chair	Sep 2021	Sep 2021	Complete (Sept 2021) Aligned with other WSD programs

## Technical Apparel Design First Annual Follow-Up Report

STRATEGY 6: Create pathways for our graduates to pursue their master's degree.

GOAL(S) FROM THE QA PLAN THIS STRATEGY SUPPORTS: #6 - Develop articulation agreements that define pathways for our graduates to pursue a related master's degree program with up to three academic institutions.

Step(s) Required to Achieve this Strategy	Led by	Start on (M/YY)	Complete by (M/YY)	Progress to Date/Reasons for Lack of Progress
Review previous communications with Heriot-Watt University. Evaluate whether they are still an appropriate post-Secondary University to form an articulation agreement with, that would enable our students to complete a master's degree at their institution.	Chair	Sep 2021	Sep 2021	Revised completed by date (March 2022): delayed due to changes in program chair and prioritization of initiatives
Research and identify up to three post-secondary institutions that offer related master's degree programs.	Chair	Sep 2021	Dec 2021	Completed (Dec 2021)
Develop articulation agreements with up to three academic institutions.	Chair, WSD Dean	Jan 2022	Sep 2022	<a href="#">On Track (Jan 2022) Reviewing program graduate outcomes, course offerings and program models in detail.</a>
Develop communications strategy to inform students and potential applicants of this opportunity.	Chair	Sep 2022	Dec 2022	

STRATEGY 7: Increase enrolment using a new marketing strategy.

GOAL(S) FROM THE QA PLAN THIS STRATEGY SUPPORTS: #7 - Develop and implement a new marketing strategy that will result in increased enrolment.

Step(s) Required to Achieve this Strategy	Led by	Start on (M/YY)	Complete by (M/YY)	Progress to Date/Reasons for Lack of Progress
Further research whether a program name change is necessary.	Chair	Jan 2021	Apr 2021	Complete (April 2021)
List all program factors that would contribute to increased enrolment.	Chair	Jan 2021	Apr 2021	Complete (Dec 15, 2021) Faculty meeting
Develop a marketing strategy for the Technical Apparel Design program.	Chair	Sep 2021	Dec 2021	Completed (Jan 2022) Initial marketing strategy developed with FSO and International Recruitment
Review strategy and consult with the WSD Communications team and the KPU Marketing team.	Chair	Jan 2022	Mar 2022	On Track- Finalize marketing materials (Feb 2022) and host information sessions with International Recruitment (Feb 2022)

## SENATE STANDING COMMITTEE ON PROGRAM REVIEW

**Agenda Item:** 5.3

**Meeting Date:** February 16, 2022

**Presenter:** Allyson Rozell, Elizabeth Worobec

**Agenda Item**                      **Mathematics Quality Assurance Plan**

Action Requested	Motion
------------------	--------

<b>Recommended Resolution</b>	THAT the Senate Standing Committee on Program Review accept the Mathematics Program Quality Assurance Plan as attached.
-------------------------------	---

**Senate Standing Committee Report**                      For Senate Office Use Only

**Attachments**                      Mathematics Quality Assurance Plan

**Submitted by**                      *Melike Kinik-Dicleli, Manager of Quality Assurance*

**Date submitted**                      *January 27, 2022*



## **Mathematics Quality Assurance Plan**

**Date submitted to SSCPR:** December 22, 2021

**Date Self-Study Report approved by SSCPR:** October 28, 2020

**Date of External Review:** March 10 & 11, 2021

### **SUMMARY**

The Bachelor of Science in Applications of Mathematics program has been a solid and useful program for students since its recent beginnings. The three concentrations each provide students with a good grounding in their areas of interest. The program is losing too many students before they get to third and fourth year courses. Some areas are in need of updating to maintain relevance for the students progressing through the program, and support for graduating students needs to be bolstered, to ease their transitions into the workplace or graduate school.

## QUALITY ASSURANCE GOALS

### ***GOAL 1: Attract and retain additional students***

RATIONALE FOR THIS GOAL: The BSc in Applications of Mathematics program needs to make its offerings more attractive and manageable for students; by attracting and keeping more students, the key courses could be offered more frequently, and a wider array of courses could be offered, making it even more useful and applicable for students.

Recommendation(s) this Goal Addresses	Report (page number)	Led by
<i>Short-term goals (within the first two years):</i>		
1a) Information Sessions should be reinstated in conjunction with an appropriate publicity strategy.	SS32	A. Rozell, T. Boboricken
1b) Replace CPSC 3110 with a MATH offering.	ER7	D. Anvari
1c) Address DFWs in first year courses.	SS32	T. Boboricken, M. Nyenhuis
1d) Explore costs and benefits of new delivery modes, online and blended, particularly with the aim of making courses more accessible, and providing better support to learners.	SS36	M. Nyenhuis
1e) Explore opportunities for students to participate in the governance of the department.	ER5	A. Rozell
<i>Medium-term goals (within the first three years):</i>		
1f) Address DFWs in MATH 1220 and MATH 2232, to increase retention of degree students.	SS32	V. Wei, A. Sanaei
1g) Offer key courses more frequently; MATH 3120, MATH 3315, MATH 3421, MATH 4240 should be offered at least once a year. Add additional sections for other degree courses as indicated by enrolment.	ER7	A. Rozell

1h) Make use of expertise from ACP to help struggling students in 1st year courses.	ER8	T. Boboricken
1i) Liaise with high school math teachers to understand incoming students and new curriculum better.	SS36	A. Rozell, T. Boboricken
1j) Increase experiential learning opportunities and expand opportunities to mentor student research.	SS33	T. Boboricken, A. Sanaei (student research)
1k) Implement more Universal Design for Learning (UDL).	SS33	A. Rozell, D. Anvari

### ***GOAL 2: Improve transitions for graduating students.***

RATIONALE FOR THIS GOAL: Alumni have indicated some difficulty with qualifying for graduate schools. Others had difficulty with finding relevant work after graduation. Some students were not aware of resources available for them at KPU. (Improvements to specific skills are listed under Goal 3.)

Recommendation(s) this Goal Addresses	Report (page number)	Led by
<i>Short-term goals (within the first two years):</i>		
2a) Increase student awareness of career services at KPU.	ER4	A. Rozell
<i>Medium-term goals (within the first three years):</i>		
2b) Improve students' soft skills, particularly in mathematics education concentration.	ER4	A. Rozell
2c) Implement a formal process to maintain connections with alumni.	SS32	A. Rozell
2d) Invite a panel of recent graduates to speak to current students about experiences.	ER5	A. Rozell
<i>Long-term goals:</i>		
2e) Add a work placement or co-op component to the program to build better connections to the discipline/sector.	SS32	A. Rozell
2f) Offer additional pure math courses.	ER2	M. Nyenhuis



## Mathematics Quality Assurance Plan

### ***GOAL 3: Update program to maintain relevance.***

RATIONALE FOR THIS GOAL: With the rapidly changing nature of technology, it is important to continually update and re-evaluate program offerings to ensure that the program continues to be beneficial for students and applicable as they move on to careers or further schooling.

<b>Recommendation(s) this Goal Addresses</b>	<b>Report (page number)</b>	<b>Led by</b>
<i>Short-term goals (within the first two years):</i>		
3a) Work with Math Liaison Librarian to identify courses to receive library instruction sessions.	ER9	A. Rozell
3b) Consult with university librarian regarding MathSciNet.	SS33	J. Bicep
3c) Reactivate and expand Program Advisory Committee.	SS33	A. Rozell
3d) Include more emphasis on lesson planning in MATH 3130.	ER5	A. Rozell
<i>Medium-term goals (within the first three years):</i>		
3e) Include Python programming.	ER5	A. Rozell, M. Nyenhuis
<i>Long-term goals:</i>		
3f) Add to program: additional courses in statistics and probability; data science; introductory courses on proofs and logic; and computational math.	SS32	A. Rozell
3g) Find ways to support instructors in keeping up-to-date.	ER8	A. Sanaei

### **RECOMMENDATIONS THE QUALITY ASSURANCE PLAN DOES NOT ADDRESS**

<b>Recommendations</b>	<b>Report (page number)</b>	<b>Rationale</b>
4th year students taking on some paid TA duties.	ER5	Inconsistent with KPU's culture of high instructor/student interaction.





## Mathematics Quality Assurance Plan

### QUALITY ASSURANCE FIVE-YEAR ACTION PLAN

**MONTH/YEAR WHEN THE FIVE-YEAR ACTION PLAN BEGINS:** September 2021

**STRATEGY 1a: Information Sessions should be reinstated in conjunction with an appropriate publicity strategy.**

**GOAL(S) THIS STRATEGY SUPPORTS:** 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Info session with International (online); discuss frequency.	A. Rozell	6/21	ongoing	
Hold yearly info session with FSO	A. Rozell	2/22	ongoing	
Increase visibility at outreach programs (Open Houses, Science Challenge, Science Rendezvous, etc.)	A. Rozell	2/22	ongoing	
Explore options regarding school visits	A. Rozell	3/22	5/22	
To increase numbers there needs to be a focus on promotion via social media, high school visits, and working closely with international and domestic recruiters (FSO & Int'l). Invite recruiters to attend classes to get a better feel for the program and the target students.				

Resource Implications
What are the resources required to achieve this Strategy? Live info sessions need refreshments. Outreach programs need supplies.
When are these resources required? 2/22



## Mathematics Quality Assurance Plan

### **STRATEGY 1b: Replace CPSC 3110 with new course: MATH 3XXX.**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Write course outline for MATH 3XXX.	D. Anvari	12/21	2/22	
Develop MATH 3XXX.	D. Anvari	1/22	9/22	To be offered September 2022

**Resource Implications: N/A**

### **STRATEGY 1c: Address DFWs in first year courses.**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Examine DFW data; particular emphasis on success rates based on students' preparation, including grade received in prereq courses, and admission from MPT	A. Rozell			
Improve placement testing: ALEKS implementation, determining cut scores	T. Boboricken, A. Rozell	1/22	4/22	
Consult with Teaching & Learning regarding matching assessments to outcomes.	A. Rozell			
Explore broadening MAC support.	M. Nyenhuis			
Use techniques from Decoding the Discipline workshop to better support students.	A. Rozell, J. Bicep, A. Rapa, M. Hosseinyazdi			

#### **Resource Implications**

What are the resources required to achieve this Strategy? Catherine Siermacheski in Assessment & Testing has been setting up access to ALEKS. Data analysis from OPA. Teaching and Learning support; including Decoding the Discipline workshop.

When are these resources required? By Summer 2022



## Mathematics Quality Assurance Plan

**STRATEGY 1d: Explore costs and benefits of new delivery modes, online and blended, particularly with the aim of making courses more accessible, and providing better support to learners.**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Review data from ad hoc faculty-administered surveys Spring 2020 and Fall 2021. Formulate recommendations.	M. Nyenhuis	5/22	9/23	

**Resource Implications:** Continued support from OPA.

**STRATEGY 1e: Explore opportunities for students to participate in the governance of the department.**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Invite student(s) to next PAC meeting.	A. Rozell	2/22	5/22	
Consider other options for student involvement, including possible Student Advisory Committee.	A. Rozell	3/22	6/22	

**Resource Implications:** N/A

## Mathematics Quality Assurance Plan

**STRATEGY 1f: Address DFWs in MATH 1220 and MATH 2232, to increase retention of degree students.**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
MATH 2232 support; from MAC or from collaboration of instructors	V. Wei	5/22	8/24	Decoding the Discipline workshop
MATH 1220 support; from MAC or from collaboration of instructors	A. Sanaei	5/22	8/24	Decoding the Discipline workshop
Examine DFW data; particular emphasis on success rates based on students' preparation, including grade received in prereq courses.	V. Wei	5/22	8/23	
Consult with Teaching & Learning regarding matching assessments to outcomes.	A. Sanaei	5/22	8/25	
Explore broadening MAC support.	M. Nyenhuis	5/22	8/24	

**Resource Implications: Support from** Teaching & Learning, the Learning Centre and OPA.



## Mathematics Quality Assurance Plan

### **STRATEGY 1g: Offer key courses more frequently.**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Rework schedule of course offerings, with increased course offerings: MATH 3120, MATH 3315, MATH 3421, MATH 4240 should be offered at least once a year (these are used in all concentrations). Add additional sections for other degree courses as indicated by enrolment.	A. Rozell	5/22	6/22	

Resource Implications
What are the resources required to achieve this Strategy? The program will require more FTE to put on additional courses. This will have to be balanced with attracting more students.
When are these resources required? 9/23
What Faculty and/or Institutional support is required? The program will require more FTE to put on additional courses.

### **STRATEGY 1h: Make use of expertise from ACP to help struggling students in 1st year courses.**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Explore ways of overcoming barriers, structuring assessment to better enable success, and other teaching methods to help students.	T. Boboricken	5/22	12/23	

Resource Implications: Support from Teaching & Learning
---



## Mathematics Quality Assurance Plan

**STRATEGY 1i: Liaise with high school math teachers to understand incoming students and new curriculum better.**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Meet with high school math teachers in Surrey, Langley, etc.	A. Rozell, T. Boboricken	5/22	9/24	

**STRATEGY 1j: Increase experiential learning opportunities and expand opportunities to mentor student research.**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Explore more experiential opportunities in current courses. Consult with Career Development Centre, Teaching & Learning experiential specialists, and Lin Hammill, emerita math faculty.	T. Boboricken	5/22	9/24	
Compile online resource relating to experiential and project-based learning in math.	A. Rozell	5/22	9/23	
Explore ways to support student research	A. Sanaei	5/22	9/24	

**Resource Implications:** Support from Career Development Centre, and Teaching & Learning.



## Mathematics Quality Assurance Plan

### **STRATEGY 1k: Implement more Universal Design for Learning (UDL).**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Consult with Teaching & Learning and FSH Teaching and Learning Committee regarding a workshop, particularly for 1 <sup>st</sup> and 2 <sup>nd</sup> year MATH courses.	D. Anvari, A. Rozell	5/23	9/23	

**Resource Implications:** Support from Teaching & Learning.

### **STRATEGY 2a: Increase student awareness of career services at KPU.**

GOAL(S) THIS STRATEGY SUPPORTS: Improve transitions for graduating students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Discuss with advisors to determine when orientations should be offered, at multiple stages of the program, to help prepare to find work or go to grad school.	A. Rozell	2/22	3/22	
Develop appropriate orientations.	A. Rozell	2/22	9/22	
Implement appropriate orientations.	A. Rozell	1/23	4/23	

#### **Resource Implications**

What are the resources required to achieve this Strategy? Room and refreshments

When are these resources required? TBD

What Faculty and/or Institutional support is required? Room and refreshments



## Mathematics Quality Assurance Plan

### **STRATEGY 2b: Improve students' soft skills, particularly in mathematics education concentration.**

GOAL(S) THIS STRATEGY SUPPORTS: Improve transitions for graduating students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Meet with academic advisors.	A. Rozell	2/22	3/22	
Develop appropriate supports.	A. Rozell	3/22	9/22	

### **STRATEGY 2c: Implement a formal process to maintain connections with alumni.**

GOAL(S) THIS STRATEGY SUPPORTS: Improve transitions for graduating students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Consult with Alumni Office and Alumni Association to set up tracking, and a process to maintain connections.	A. Rozell	11/22	2/23	

Resource Implications: N/A

### **STRATEGY 2d: Invite a panel of recent graduates to speak to current students about experiences.**

GOAL(S) THIS STRATEGY SUPPORTS: Improve transitions for graduating students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Set up a seminar with panel of recent graduates.	A. Rozell	12/22	2/23	

#### **Resource Implications**

What are the resources required to achieve this Strategy? Refreshments for meeting.



## Mathematics Quality Assurance Plan

**STRATEGY 2e: Add a work placement or co-op component to the program to build better connections to the discipline/sector.**

GOAL(S) THIS STRATEGY SUPPORTS: Improve transitions for graduating students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Revamp degree program to include optional Co-op	A. Rozell	2/22	6/23	

Resource Implications
What are the resources required to achieve this Strategy? Additional courses may be needed.

**STRATEGY 2f: Offer additional pure math courses.**

GOAL(S) THIS STRATEGY SUPPORTS: Improve transitions for graduating students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Explore sharing upper level, rarely offered courses with UFV, likely online.	M. Nyenhuis	9/21	12/22	
Consider offering courses that combine more than one course; e.g. a History of Math course that combines an introductory stream with a more advanced stream, so it can be listed as both a 1 <sup>st</sup> year and a 3 <sup>rd</sup> year course.	M. Nyenhuis, A. Rozell	5/22	9/23	
Develop new course "Topics in Combinatorics"	A. Sanaei	5/22	1/24	

Resource Implications
What are the resources required to achieve this Strategy? Course development support, and support coordinating with Registrar to facilitate course sharing.



## Mathematics Quality Assurance Plan

### **STRATEGY 3a: Work with Math Liaison Librarian to identify courses to receive library instruction sessions.**

GOAL(S) THIS STRATEGY SUPPORTS: 3. Update program to maintain relevance.

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Work with Math Liaison Librarian to identify courses to receive library instruction sessions.	A. Rozell	1/22	9/22	

**Resource Implications:** Support from Math Liaison Librarian.

### **STRATEGY 3b: Consult with university librarian regarding MathSciNet.**

GOAL(S) THIS STRATEGY SUPPORTS: 3. Update program to maintain relevance.

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Consult with university librarian regarding MathSciNet.	J. Bicep	12/21	1/22	

#### **Resource Implications**

What are the resources required to achieve this Strategy? License has been acquired.



## Mathematics Quality Assurance Plan

### **STRATEGY 3c: Reactivate and expand Program Advisory Committee.**

GOAL(S) THIS STRATEGY SUPPORTS: 3. Update program to maintain relevance.

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Set up PAC meeting.	A. Rozell	2/22	5/22	
Invite new members, guests.	A. Rozell	2/22	ongoing	
Ask for input on curriculum, as a whole, and cycling through individual courses.	A. Rozell	2/22	ongoing	

#### **Resource Implications**

What are the resources required to achieve this Strategy? Dean's office support to organize meeting; refreshments if face-to-face.

### **STRATEGY 3d: Include more emphasis on lesson planning in Math 3130.**

GOAL(S) THIS STRATEGY SUPPORTS: 3. Update program to maintain relevance.

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Include more emphasis on lesson planning in MATH 3130, giving specific lesson plan formats to better prepare students for teacher preparation programs.	A. Rozell	5/22	9/22	

#### **Resource Implications: N/A**



## Mathematics Quality Assurance Plan

### **STRATEGY 3e: Include Python programming.**

GOAL(S) THIS STRATEGY SUPPORTS: 3. Update program to maintain relevance.

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Explore whether Python can be incorporated into existing courses (probably into MATH 3140).	M. Nyenhuis	5/22	9/22	
If not, develop new course with Python programming.	M. Nyenhuis	5/22	9/23	

#### **Resource Implications**

What are the resources required to achieve this Strategy? Course development support may be needed

### **STRATEGY 3f: Add to program: additional courses in statistics and probability; data science; introductory courses on proofs and logic; and computational math.**

GOAL(S) THIS STRATEGY SUPPORTS: 3. Update program to maintain relevance.

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Revamp degree program to include stats/data analysis concentration	A. Rozell	5/22	6/23	
Develop Post-Bacc stats/data analysis	A. Rozell	5/22	6/24	
Develop Minor stats/data analysis	A. Rozell	5/22	6/25	
Suggestions: MATH 2XXX Operations Research, MATH 3XXX Probability, STAT 3XXX Machine Learning, STAT 3XXX Data Analysis, STAT 4XXX Statistical Theory, STAT 4XXX Biostatistics, STAT 4XXX Design and Analysis of Experiments				

#### **Resource Implications**

What are the resources required to achieve this Strategy? New courses will need to be developed; additional faculty will need to be hired in specialty areas. Clerical and administrative support for program development will be needed.

When are these resources required? 5/22, new instructors 9/22

What Faculty and/or Institutional support is required? New courses will need to be developed; additional faculty will need to be hired in specialty areas. Clerical and administrative support for program development will be needed.



## Mathematics Quality Assurance Plan

### **STRATEGY 3g: Find ways to support instructors in keeping up-to-date.**

GOAL(S) THIS STRATEGY SUPPORTS: 3. Update program to maintain relevance.

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Identify appropriate professional development opportunities and encourage instructors to apply for appropriate educational leaves and support.	A. Sanaei	5/22	9/25	

**Resource Implications:** Existing professional development and educational leave funds.

PLAN SUPPORTED BY:

Diane Purvey

Provost's Name

Provost's Signature

Date:

January 24, 2022

Elizabeth Worobec

Dean's Name

Dean's Signature

Date:

January 21, 2022

PROGRAM UNDER REVIEW: Mathematics

**Instructions for Reviewers**

Your assessment should ensure the Quality Assurance Plan does the following:

- address all the recommendations in the Self-Study and External Review reports (or provide a clear rationale when a recommendation is not addressed);
- provide clear, realistic plan of actions that are within the department's purview;
- clearly articulate how the Program will demonstrate Progress on a Goal, Strategy and/or Step in its One-Year Follow-Up Report.

**OVERALL ASSESSMENT:**

*Please provide a brief assessment of the Quality Assurance Plan under review and an overall recommendation.*

**Reviewer #1:** The Math program review team have written a good QA plan acting on recommendations from the Self-Study and External Review reports. Plans to attract and retain students, address DFW rates, find more supports, develop and offer more courses, and explore work placement options will serve students and the department well. The steps seem logical and manageable but some require start and end dates. I have a few comments and questions below.

**Reviewer #2:** This Quality Assurance Plan does a good job of addressing the major concerns facing the mathematics department. Each Self-study item has been addressed. I particularly liked the idea of collaborating with UFV for some courses, and the fact that you have already secured the MathSciNet resources from our library. I feel the report could be improved with a few additions which are reflected in the comments below.

**Reviewer #3:** The QAP is ambiguous enough that it doesn't quite give a full picture of what the Department will do to enact their strategies. There are some dates missing, some ideas that need a few extra words to be clear, and some steps that don't fully match the strategy. The report-as-written doesn't show all that Math does as well as it could.

**The Report (click on the box that corresponds to your recommendation):**

- ☐ Recommend for approval by the SSCPR as is
- ☒ Reviewer #1 & #2: Recommend for approval by the SSCPR pending suggested actions (see below)
- ☒ Reviewer #3: Recommend for rejection by the SSCPR

**MAJOR ISSUES AND SUGGESTED ACTIONS:**

Complete this section ONLY if you have identified the following major issues with the Plan:

- a) Recommendations made in the Self-Study Report and/or External Review Report are not appropriately addressed.
- b) Goals, Strategies, Steps and/or Resource Implications are not worded clearly.
- c) It is unclear how the Program will demonstrate Progress on a Goal, Strategy and/or Step in its One-Year Follow-Up Report.

Issue (page #)	Suggested Action
p. 4- 4 <sup>th</sup> year students taking on some paid TA duties, <i>Rationale: Inconsistent with KPU's culture of high instructor/student interaction.</i>	When compared to large universities, yes. KPU has smaller class sizes, so in theory there should be more instructor-student interaction. But I would say even in a class of 25 or 35, having a TA could help address some concerns, for example, supporting struggling students. Also, a paid TA job is like a work placement, which could make the program more attractive. I think this is a great idea!
p. 4	Under Recommendations the QA Plan does not Address- You could consider developing closer working relationships with KPU Math peer tutors as an alternative way to address this concern. These tutors are already in place, paid by the Learning Centre and could provide some supports to your classes, something like our former tutor navigator program offered to English students. If you think you would like to look into this, contact our Director, Lyn Benn.
p. 5	Strategy 1a- Because of the way the steps are worded, you have come up with completion dates of "ongoing". Consider re-wording these in order to state a clear completion date, so that you can track what has been accomplished. For example, you could say "Determine the frequency of Information sessions needed and set up a schedule".  Strategy 1a is mostly listed as ongoing without specific targets or comment. Some are too general to be meaningful – "explore options regarding school visits."
p. 5 Resource Implications	Add support from Marketing (flyers, posters...)
p. 5 3 <sup>rd</sup> column – avoid use of "ongoing."	Supply end dates. Think of One-year Follow-Up Report and what you want to report on.
p.6	What is the difference between writing a course and developing it?
p. 6 Write course outline for 3XXX.	Is this the pure math course referenced in ERP? Since it is already February, is this step close to being achieved or is more time needed?
p. 6	Strategy 1b- Resource Implication. There should be resources stated here. It will take faculty time to develop these resources and meeting time to obtain consensus amongst faculty. Strategy 1c- Dates to start and complete need to be entered here.
Develop MATH 3XXX – to be offered in Sept. 2022	Depending on how far along you are, is the timeline achievable?
p. 6 Strategy 1c –	Need start and end dates. Think about what is realistic

<p>-Examine DFW data</p> <p>Use techniques from workshop</p>	<p>to achieve and report on in 1 year?</p> <p>Has data been requested and received? If not, then first step would be to request data. Either way, dates are needed</p> <p>Need dates. Sounds like you will be trying to use the materials and techniques in class. Maybe, rephrase the action. -&gt; trial the techniques in class/develop teaching materials based on the workshop... And needs start and end date, even though you hope to use the techniques beyond the PR cycle, think of what is reportable in annual review.</p>
p. 8	Strategy 1f- this is just a comment. You might want to consider collaborating with the Learning Centre about setting up the workshops. We have a well-established system for registration with the admin support available for you if you would like to use us.
p. 9	Strategy 1h- Under Resource Implications, you should mention ACP (Academic and Career Prep) You do have Tanya working with you and she can be a great support for students.
p. 10	Strategy 1j- In the Resource Implications, because you have mentioned student research the Research Office should also be mentioned.
p.12	What are appropriate supports?
p.15	3c what are the targeted dates for at least parts of steps 2 and 3?
<p>p. 13 Strategy 2f Offering additional pure math courses</p> <p>Explore sharing upper level courses with UFV</p> <p>Offering courses that combine more than one course, an intro and advanced stream, so it can be listed as a 1<sup>st</sup> and 3<sup>rd</sup> year course.</p>	<p>I'm curious what this entails. Is Dept developing new pure math courses to share with UFV, or will they be sharing their courses with KPU?</p> <p>So would they be pure math courses? I'm not sure I get this. If you could clarify or explain at meeting, that would be appreciated.</p>
p.16	3f is about adding courses but I see two program development proposals – 3 if you count the concentration. Is this the best way to enact that strategy?





**SENATE STANDING COMMITTEE ON PROGRAM REVIEW**

Reviewers' Comments: Quality Assurance Plan

**MINOR EDITS (Spelling, syntax, word choice and other mechanical issues).**

Please list corresponding page numbers. Minor edits are NOT discussed at the SSCPR meeting. Add or remove rows as needed.

Minor Edits (page #)
p. 6 & 8 "MAC" I'm not sure what MAC refers to (Math Advisory Committee? Apple product? ).



## Mathematics Quality Assurance Plan

**Date submitted to SSCPR:** ~~December 22, 2021~~ February 11, 2022

**Date Self-Study Report approved by SSCPR:** October 28, 2020

**Date of External Review:** March 10 & 11, 2021

### **SUMMARY**

The Bachelor of Science in Applications of Mathematics program has been a solid and useful program for students since its recent beginnings. The three concentrations each provide students with a good grounding in their areas of interest. The program is losing too many students before they get to third and fourth year courses. Some areas are in need of updating to maintain relevance for the students progressing through the program, and support for graduating students needs to be bolstered, to ease their transitions into the workplace or graduate school.

## QUALITY ASSURANCE GOALS

### GOAL 1: Attract and retain additional students

RATIONALE FOR THIS GOAL: The BSc in Applications of Mathematics program needs to make its offerings more attractive and manageable for students; by attracting and keeping more students, the key courses could be offered more frequently, and a wider array of courses could be offered, making it even more useful and applicable for students.

Recommendation(s) this Goal Addresses	Report (page number)	Led by
<i>Short-term goals (within the first two years):</i>		
1a) Information Sessions should be reinstated in conjunction with an appropriate publicity strategy.	SS32	A. Rozell, T. Boboricken
1b) Replace CPSC 3110 with a MATH offering.	ER7	D. Anvari
1c) Address DFWs in first year courses.	SS32	T. Boboricken, M. Nyenhuis
1d) Explore costs and benefits of new delivery modes, online and blended, particularly with the aim of making courses more accessible, and providing better support to learners.	SS36	M. Nyenhuis
1e) Explore opportunities for students to participate in the governance of the department.	ER5	A. Rozell
<i>Medium-term goals (within the first three years):</i>		
1f) Address DFWs in MATH 1220 and MATH 2232, to increase retention of degree students.	SS32	V. Wei, A. Sanaei
1g) Offer key courses more frequently; MATH 3120, MATH 3315, MATH 3421, MATH 4240 should be offered at least once a year. Add additional sections for other degree courses as indicated by enrolment.	ER7	A. Rozell
1h) Make use of expertise from <u>Academic and Career Prep (ACP) instructors, who have joined the Math Department</u> , to help struggling students in 1st year courses.	ER8	T. Boboricken

1i) Liaise with high school math teachers to understand incoming students and new curriculum better.	SS36	A. Rozell, T. Boboricken
1j) Increase experiential learning opportunities and expand opportunities to mentor student research.	SS33	T. Boboricken, A. Sanaei (student research)
1k) Implement more Universal Design for Learning (UDL).	SS33	A. Rozell, D. Anvari

### ***GOAL 2: Improve transitions for graduating students.***

RATIONALE FOR THIS GOAL: Alumni have indicated some difficulty with qualifying for graduate schools. Others had difficulty with finding relevant work after graduation. Some students were not aware of resources available for them at KPU. (Improvements to specific skills are listed under Goal 3.)

<b>Recommendation(s) this Goal Addresses</b>	<b>Report (page number)</b>	<b>Led by</b>
<i>Short-term goals (within the first two years):</i>		
2a) Increase student awareness of career services at KPU.	ER4	A. Rozell
<i>Medium-term goals (within the first three years):</i>		
2b) Improve students' soft skills, particularly in mathematics education concentration.	ER4	A. Rozell
2c) Implement a formal process to maintain connections with alumni.	SS32	A. Rozell
2d) Invite a panel of recent graduates to speak to current students about experiences.	ER5	A. Rozell
<i>Long-term goals:</i>		
2e) Add a work placement or co-op component to the program to build better connections to the discipline/sector.	SS32	A. Rozell
2f) Offer additional pure math courses.	ER2	M. Nyenhuis

### ***GOAL 3: Update program to maintain relevance.***

RATIONALE FOR THIS GOAL: With the rapidly changing nature of technology, it is important to continually update and re-evaluate program offerings to ensure that the program continues to be beneficial for students and applicable as they move on to careers or further schooling.

Recommendation(s) this Goal Addresses	Report (page number)	Led by
<i>Short-term goals (within the first two years):</i>		
3a) Work with Math Liaison Librarian to identify courses to receive library instruction sessions.	ER9	A. Rozell
3b) Consult with university librarian regarding MathSciNet.	SS33	J. Bicep
3c) Reactivate and expand Program Advisory Committee.	SS33	A. Rozell
3d) Include more emphasis on lesson planning in MATH 3130.	ER5	A. Rozell
<i>Medium-term goals (within the first three years):</i>		
3e) Include Python programming.	ER5	A. Rozell, M. Nyenhuis
<i>Long-term goals:</i>		
3f) Add to program: additional courses in statistics and probability; data science; introductory courses on proofs and logic; and computational math.	SS32	A. Rozell
3g) Find ways to support instructors in keeping up-to-date.	ER8	A. Sanaei

### RECOMMENDATIONS THE QUALITY ASSURANCE PLAN DOES NOT ADDRESS

<i>Recommendations</i>	<i>Report (page number)</i>	<i>Rationale</i>
4th year students taking on some paid TA duties <u>as a way to allow faculty to have more time for professional development.</u>	ER5	Inconsistent with KPU's culture of high instructor/student interaction; <u>professional development time is included in the collective agreement.</u>



## Mathematics Quality Assurance Plan

### QUALITY ASSURANCE FIVE-YEAR ACTION PLAN

**MONTH/YEAR WHEN THE FIVE-YEAR ACTION PLAN BEGINS:** September 2021

**STRATEGY 1a: Information Sessions should be reinstated in conjunction with an appropriate publicity strategy.**

**GOAL(S) THIS STRATEGY SUPPORTS:** 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Info session with International (online); discuss frequency.	A. Rozell	6/21	<del>ongoing</del> 8/23	<u>6/21 orientation was cancelled due to lack of registration.</u>
Hold yearly info session with <u>Future Student Office (FSO)</u> <del>FSO</del>	A. Rozell	2/22	<del>ongoing</del> 3/22	<u>Scheduled as part of STEM info session with FSO Feb. 24, 2022.</u>
<del>Increase visibility at</del> Participate in annual outreach programs (Open Houses, Science Challenge, Science Rendezvous, etc.)	A. Rozell	2/22	<u>5/23</u> <del>ongoing</del>	
<del>Explore options regarding school visits</del> <u>Consult with local high schools regarding feasibility of in-school info sessions.</u>	A. Rozell	3/22	5/22	
To increase numbers there needs to be a focus on promotion via social media, high school visits, and working closely with international and domestic recruiters (FSO & Int'l). Invite recruiters to attend classes to get a better feel for the program and the target students.				

Resource Implications
What are the resources required to achieve this Strategy? <u>Live info sessions need refreshments. Support from FSO, International, and Marketing (flyers, posters, etc.).</u> Outreach programs need supplies.
When are these resources required? 2/22

## Mathematics Quality Assurance Plan

**STRATEGY 1b: Replace CPSC 3110 with new course: MATH ~~3XXX~~3110.**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Write course outline for MATH <del>3XXX</del> 3110.	D. Anvari	12/21	2/22	<u>In progress (CPSC 3110 Simulations will be replaced with a more math specific course, MATH 3110).</u>
Develop <u>the course</u> MATH <del>3XXX</del> 3110 (choose text, develop assignments, etc.).-	D. Anvari	1/22	9/22	To be offered September 2022

Resource Implications: N/A

**STRATEGY 1c: Address DFWs in first year courses.**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
<u>Request and e</u> Examine DFW data; particular emphasis on success rates based on students' preparation, including grade received in prereq courses, and admission from MPT	A. Rozell	<u>5/22</u>	<u>8/23</u>	
Improve placement testing: ALEKS implementation, determining cut scores	T. Boboricken, A. Rozell	1/22	4/22	
Consult with Teaching & Learning regarding matching assessments to outcomes.	A. Rozell	<u>5/23</u>	<u>8/24</u>	
Explore broadening MAC support.	M. Nyenhuis	<u>5/22</u>	<u>8/23</u>	
<u>Use-Develop and try out the</u> techniques from Decoding the Discipline workshop to better support students.	A. Rozell, J. Bicep, A. Rapa, M. Hosseinyazdi	<u>2/22</u>	<u>8/23</u>	



## Mathematics Quality Assurance Plan

Resource Implications
What are the resources required to achieve this Strategy? Catherine Siermacheski in Assessment & Testing has been setting up access to ALEKS. Data analysis from OPA. Teaching and Learning support; including Decoding the Discipline workshop.
When are these resources required? By Summer 2022

**STRATEGY 1d: Explore costs and benefits of new delivery modes, online and blended, particularly with the aim of making courses more accessible, and providing better support to learners.**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Review data from ad hoc faculty-administered surveys Spring 2020 and Fall 2021. Formulate recommendations.	M. Nyenhuis	5/22	9/23	

**Resource Implications:** Continued support from [Office of Planning & Accountability \(OPA\)](#).

**STRATEGY 1e: Explore opportunities for students to participate in the governance of the department.**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Invite student(s) to next PAC meeting.	A. Rozell	2/22	5/22	
Consider other options for student involvement, including possible Student Advisory Committee.	A. Rozell	3/22	6/22	

**Resource Implications:** N/A

## Mathematics Quality Assurance Plan

**STRATEGY 1f: Address DFWs in MATH 1220 and MATH 2232, to increase retention of degree students.**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
MATH 2232 support; from <a href="#">Math Assistance Centre (MAC)</a> or from collaboration of instructors	V. Wei	5/22	8/24	Decoding the Discipline workshop
MATH 1220 support; from MAC or from collaboration of instructors	A. Sanaei	5/22	8/24	Decoding the Discipline workshop
Examine DFW data; particular emphasis on success rates based on students' preparation, including grade received in prereq courses.	V. Wei	5/22	8/23	
Consult with Teaching & Learning regarding matching assessments to outcomes.	A. Sanaei	5/22	8/25	
Explore broadening MAC support.	M. Nyenhuis	5/22	8/24	

**Resource Implications:** Support from Teaching & Learning, the Learning Centre and OPA.

## Mathematics Quality Assurance Plan

### STRATEGY 1g: Offer key courses more frequently.

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Rework schedule of course offerings, with increased course offerings: MATH 3120, MATH 3315, MATH 3421, MATH 4240 should be offered at least once a year (these are used in all concentrations). Add additional sections for other degree courses as indicated by enrolment. <u>Consult with dean's office regarding adding sections or transferring sections from other courses.</u>	A. Rozell	5/22	6/22	

#### Resource Implications

What are the resources required to achieve this Strategy? ~~The program will require more FTE to put on additional courses. This will have to be balanced with attracting more students.~~ Consult with dean's office

When are these resources required? 9/23

~~What Faculty and/or Institutional support is required? The program will require more FTE to put on additional courses.~~

### STRATEGY 1h: Make use of expertise from Academic and Career Prep (ACP) instructors, who have joined the Math Department, to help struggling students in 1st year courses. ~~Make use of expertise from ACP to help struggling students in 1st year courses.~~

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Explore ways of overcoming barriers, structuring assessment to better enable success, and other teaching methods to help students.	T. Boboricken	5/22	12/23	

**Resource Implications:** Support from Teaching & Learning

**STRATEGY 1i: Liaise with high school math teachers to understand incoming students and new curriculum better.**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Meet with high school math teachers in Surrey, Langley, etc.	A. Rozell, T. Boboricken	5/22	9/24	

**STRATEGY 1j: Increase experiential learning opportunities and expand opportunities to mentor student research.**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Explore more experiential opportunities in current courses. Consult with Career Development Centre, Teaching & Learning experiential specialists, and Lin Hammill, emerita math faculty.	T. Boboricken	5/22	9/24	
Compile online resource relating to experiential and project-based learning in math.	A. Rozell	5/22	9/23	
Explore ways to support student research	A. Sanaei	5/22	9/24	

**Resource Implications:** Support from Career Development Centre, [Office of Research Services](#), and Teaching & Learning.



## Mathematics Quality Assurance Plan

### **STRATEGY 1k: Implement more Universal Design for Learning (UDL).**

GOAL(S) THIS STRATEGY SUPPORTS: 1. Attract and retain more students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Consult with Teaching & Learning and FSH Teaching and Learning Committee regarding a workshop, particularly for 1 <sup>st</sup> and 2 <sup>nd</sup> year MATH courses.	D. Anvari, A. Rozell	5/23	9/23	

**Resource Implications:** Support from Teaching & Learning.

### **STRATEGY 2a: Increase student awareness of career services at KPU.**

GOAL(S) THIS STRATEGY SUPPORTS: Improve transitions for graduating students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Discuss with advisors to determine when orientations should be offered, at multiple stages of the program, to help prepare to find work or go to grad school.	A. Rozell	2/22	3/22	
Develop appropriate orientations.	A. Rozell	2/22	9/22	
Implement appropriate orientations.	A. Rozell	1/23	4/23	

#### **Resource Implications**

What are the resources required to achieve this Strategy? Room and/or support for online orientation, refreshments

When are these resources required? TBD

What Faculty and/or Institutional support is required? Room and/or support for online orientation, Room and refreshments



## Mathematics Quality Assurance Plan

### **STRATEGY 2b: Improve students' soft skills, particularly in mathematics education concentration.**

GOAL(S) THIS STRATEGY SUPPORTS: Improve transitions for graduating students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Meet with academic advisors.	A. Rozell	2/22	3/22	
Develop appropriate supports.	A. Rozell	3/22	9/22	

### **STRATEGY 2c: Implement a formal process to maintain connections with alumni.**

GOAL(S) THIS STRATEGY SUPPORTS: Improve transitions for graduating students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Consult with Alumni Office and Alumni Association to set up tracking, and a process to maintain connections.	A. Rozell	11/22	2/23	

Resource Implications: N/A

### **STRATEGY 2d: Invite a panel of recent graduates to speak to current students about experiences.**

GOAL(S) THIS STRATEGY SUPPORTS: Improve transitions for graduating students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Set up a seminar with panel of recent graduates.	A. Rozell	12/22	2/23	

#### **Resource Implications**

What are the resources required to achieve this Strategy? Refreshments for meeting.

## Mathematics Quality Assurance Plan

**STRATEGY 2e: Add a work placement or co-op component to the program to build better connections to the discipline/sector.**

GOAL(S) THIS STRATEGY SUPPORTS: Improve transitions for graduating students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Revamp degree program to include optional Co-op	A. Rozell	2/22	6/23	
<u>Consult with Learning Centre regarding peer tutors getting credit for training received.</u>	<u>A. Rozell</u>	<u>5/23</u>	<u>8/24</u>	

Resource Implications
What are the resources required to achieve this Strategy? Additional courses may be needed.

**STRATEGY 2f: Offer additional pure math courses.**

GOAL(S) THIS STRATEGY SUPPORTS: Improve transitions for graduating students

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Explore sharing upper level, rarely offered courses with UFV, likely online.	M. Nyenhuis	9/21	12/22	
Consider offering courses that combine more than one course; e.g. a History of Math course that combines an introductory stream with a more advanced stream, so it can be listed as both a 1 <sup>st</sup> year and a 3 <sup>rd</sup> year course.	M. Nyenhuis, A. Rozell	5/22	9/23	
Develop new course "Topics in Combinatorics"	A. Sanaei	5/22	1/24	

Resource Implications
What are the resources required to achieve this Strategy? Course development support, and support coordinating with Registrar to facilitate course sharing.



## Mathematics Quality Assurance Plan

### **STRATEGY 3a: Work with Math Liaison Librarian to identify courses to receive library instruction sessions.**

GOAL(S) THIS STRATEGY SUPPORTS: 3. Update program to maintain relevance.

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Work with Math Liaison Librarian to identify courses to receive library instruction sessions.	A. Rozell	1/22	9/22	

**Resource Implications:** Support from Math Liaison Librarian.

### **STRATEGY 3b: Consult with university librarian regarding MathSciNet.**

GOAL(S) THIS STRATEGY SUPPORTS: 3. Update program to maintain relevance.

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Consult with university librarian regarding MathSciNet.	J. Bicep	12/21	1/22	

#### **Resource Implications**

What are the resources required to achieve this Strategy? License has been acquired.





## Mathematics Quality Assurance Plan

### **STRATEGY 3c: Reactivate and expand Program Advisory Committee.**

GOAL(S) THIS STRATEGY SUPPORTS: 3. Update program to maintain relevance.

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Set up PAC meeting.	A. Rozell	2/22	<del>5/22</del> 6/23	
Invite new members, guests.	A. Rozell	2/22	<del>ongoing</del> 6/23	
Ask for input on curriculum, as a whole, and cycling through individual courses.	A. Rozell	2/22	<del>ongoing</del> 6/23	

#### **Resource Implications**

What are the resources required to achieve this Strategy? Dean's office support to organize meeting; ~~refreshments if face-to-face.~~

### **STRATEGY 3d: Include more emphasis on lesson planning in Math 3130.**

GOAL(S) THIS STRATEGY SUPPORTS: 3. Update program to maintain relevance.

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Include more emphasis on lesson planning in MATH 3130, giving specific lesson plan formats to better prepare students for teacher preparation programs.	A. Rozell	5/22	9/22	

**Resource Implications:** N/A



## Mathematics Quality Assurance Plan

### **STRATEGY 3e: Include Python programming.**

GOAL(S) THIS STRATEGY SUPPORTS: 3. Update program to maintain relevance.

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Explore whether Python can be incorporated into existing courses (probably into MATH 3140).	M. Nyenhuis	5/22	9/22	
If not, develop new course with Python programming.	M. Nyenhuis	5/22	9/23	

#### **Resource Implications**

What are the resources required to achieve this Strategy? Course development support may be needed

### **STRATEGY 3f: Add to program: additional courses in statistics and probability; data science; introductory courses on proofs and logic; and computational math.**

GOAL(S) THIS STRATEGY SUPPORTS: 3. Update program to maintain relevance.

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Revamp degree program to include stats/data analysis concentration	A. Rozell	5/22	6/23	
Develop Post-Bacc stats/data analysis	A. Rozell	5/22	6/24	
Develop Minor stats/data analysis	A. Rozell	5/22	6/25	
Suggestions: MATH 2XXX Operations Research, MATH 3XXX Probability, STAT 3XXX Machine Learning, STAT 3XXX Data Analysis, STAT 4XXX Statistical Theory, STAT 4XXX Biostatistics, STAT 4XXX Design and Analysis of Experiments				

#### **Resource Implications**

What are the resources required to achieve this Strategy? New courses will need to be developed; additional faculty will need to be hired in specialty areas. Clerical and administrative support for program development will be needed.

When are these resources required? 5/22, new instructors 9/22

What Faculty and/or Institutional support is required? New courses will need to be developed; additional faculty will need to be hired in specialty areas. Clerical and administrative support for program development will be needed.



## Mathematics Quality Assurance Plan

### **STRATEGY 3g: Find ways to support instructors in keeping up-to-date.**

GOAL(S) THIS STRATEGY SUPPORTS: 3. Update program to maintain relevance.

Step(s) Required to Achieve this Strategy	To be Led by	To Start on (M/YY)	To be Completed By (M/YY)	Notes
Identify appropriate professional development opportunities and encourage instructors to apply for appropriate educational leaves and support.	A. Sanaei	5/22	9/25	

**Resource Implications:** Existing professional development and educational leave funds.

PLAN SUPPORTED BY:

Provost's Name

Provost's Signature

Date

Dean's Name: Elizabeth Worobec

Dean's Signature

Date:

January 14, 2022

## SENATE STANDING COMMITTEE ON PROGRAM REVIEW

**Agenda Item:** 7.1

**Meeting Date:** February 16, 2022

**Presenter:** Melike Kinik-Dicleli

### Agenda Item

### Manager's Report on Status of Program Reviews

Action Requested	Information
------------------	-------------

Recommended Resolution	N/A
------------------------	-----

### Senate Standing Committee Report

For Senate Office Use Only

Support is currently being provided to 32 programs (or cluster of related programs) that are at various stages in the program review process.

### Context & Background

<i>As of February 11, 2022</i>	<i>Number of Programs</i>
Phase 1: Self-Study	8
Phase 2: External Review	4
Phase 3: Quality Assurance Plan	3
Phase 4: Annual Follow-Up	17
Total	32

### Key Messages

N/A

### Consultations

N/A

### Attachments

Manager's Report\_Status of Program Reviews\_Details for Feb 2022 SSCPR Meeting

### Submitted by

*Melike Kinik-Dicleli, Manager of Quality Assurance, Office of Planning & Accountability*

### Date submitted

*February 11, 2022*

Faculty	Program	Self-Study				External Review			QA Plan		Annual Follow-up			Progress Update The table includes only the reviews in progress.
		Planning Began	Data Collection Concluded	Report Due	Report Approved	Site Visit Deadline	Date of Site Visit	Report Received	QA Plan Due	QA Plan Approved	Report Due	1st Report Approved	2nd Report Approved	
ACP	English Upgrading	Dec-18 re-start: Sep-21	Admin Data: Feb-19	Aug-22		Oct-22			Mar-23		Mar-24			
Arts	Anthropology	Sep-18	Admin Data: Feb-19 Survey Data: Feb-19	Sep-20	Apr-21	Nov-20	Oct 18/19, 2021	Nov-21	Jun-21		Jun-22			The program is working on the quality assurance plan.
Arts	Criminology	Jan-19	Admin Data: Feb-19 Rev. Admin Data: Feb-20 Survey Data: May-20	Dec-20		Feb-21			Jun-21		Jun-22			Self-study report was due in <b>December 2020</b> . It is expected in <b>March 2022</b> .
Arts	Creative Writing	May-21	Admin Data: Nov-21 Survey Reports: Nov-21	May-22		Jul-22			Oct-22		Nov-23			Self-study report is due by <b>June 1, 2022</b> .
Arts	Education Assistant	Sep-19	Admin Data: Oct-19 Survey Data: June-20	Feb-21	May-21	Mar-21	Nov 25/26, 2021	Jan-22	Sep-22		Sep-22			External Review Report is in.
Arts	Minor in Counselling	Feb-18	Admin Data: April-18 Survey Data: April-18	x	Apr-19	x	31-Oct-21	Jan-20	Sep-20	Oct-20	Sep-21	Oct-21		SSCPR asked program to report on their progress a second time in <b>October 2022</b> .
Arts	English	May-20	Admin Data: Jan-21 Survey Data: April-21	Sep-21	Nov-21	Nov-21	Feb 10/11, 2022		Apr-22		Apr-23			External review report is due on <b>March 11, 2022</b> .
Arts	History	Dec-18	Admin Data: Feb-19 Survey Data: March-20	Aug-20	Feb-21	Oct-20	June 17/18, 2021	Jul-21	May-21	Jan-22	May-22			First annual follow-up is due in <b>January 2023</b> .
Arts	Languages & Culture	Dec-21		Aug-22		Nov-22			Apr-23		Apr-24			The program is working on the curriculum review portion of the self-study report.
Arts	Philosophy	Sep-17	Admin Data: Sep-18 Survey Data: Dec-17 (Discipline Survey: Mar-18)	x	Apr-19	x	Jul-19	Jul-19	Jan-20	Apr-21	Jan-21			First Annual follow-up is due in <b>April 2022</b> .
Arts	Political Science	Dec-19	Admin Data: Dec-19 Survey Data: June-20	Jan-21		Mar-21			Sep-21		Sep-22			Revised self-study report is due in <b>April 2022</b> .
Arts	Psychology	Dec-16	Admin Data: Oct-17 Survey Data: Apr/Jun-17	x	Apr-18	x	Jun-18	Jul-18	x	May-20	May-21	May-21		SSCPR asked program to report on their progress one more time in <b>May 2022</b> .
Arts	Sociology	Sep-15	Admin Data: Nov-17 Survey Data: May-16	x	Dec-17	x	Apr-18	May-18	x	Oct-18	Oct-19	Apr-20	May-21	SSCPR asked program to report on their progress a third time in <b>May 2022</b> .
Business	Accounting	Nov-17	Admin Data: Jun-18 Survey Data: Jan-18	x	Sep-18	x	Jan-19	Feb-19	x	Feb-20	Feb-21	Feb-21		SSCPR asked program to report on their progress one more time in <b>February 2022</b> .
Business	Computer Science and Information Technology	Apr-19	Admin Data: May-19 Survey Data: Jan-20	Aug-20	Nov-20	Nov-20	Mar 1/2, 2021	Mar-21	Aug-21	Oct-21	Aug-22			First Annual Follow-Up is due in <b>October 2022</b> .
Business	Business Management	Sep-15	Admin Data: Jun-18 Survey Data: Mar-18	x	Jun-18	x	Jul-18	Jul-18	x	Mar-20	Mar-21	Oct-21		SSCPR asked program to report on their progress a second time in <b>October 2022</b> .
Business	Human Resource Management	May-14	Admin Data: Sept-16 Survey Data: Mar-17	x	Jun-17	x	Nov-18	Dec-18	x	Sep-19	Sep-20	Oct-20		SSCPR asked program to report on their progress a third time in <b>November 2022</b> .
Design	Fashion Design & Technology	Sep-20	Admin Data: Feb-21 Survey Data: Mar-21	Jun-21		Oct-21	Sep 28/29, 2021	Oct-21	Jun-22		Jun-23			QA Plan is on the agenda for the <b>May 2022</b> meeting.
Design	Foundation in Design Certificate	Oct-17 re-start: Oct-19	Admin Data: Aug-17 Survey Data: Nov-17 (Student Data: Feb-18) Revised Admin Data: Oct-19 Survey Data: Aug-20	Sep-20	Apr-21	Oct-20	June 29/30, 2021	Jul-21	May-21	Jan-22	May-22			First annual follow-up is due in <b>January 2023</b> .
Design	Interior Design	Sep-18	Admin Data: Nov-18 Admin Data: Sep-19 Survey Data: Nov-18	x	Jan-20	Jan-20	Jun-20	Aug-20	Jun-20	Feb-21	Jun-21			First annual follow-up is due in <b>February 2022</b> .
Design	Product Design	Feb-19	Admin Data: Feb-19 Survey Data: Oct-19	Feb-20	Jun-20	Apr-20	Feb 24/25, 2021	Apr-21	Oct-20	Nov-21	Oct-21			First annual follow-up is due in <b>November 2022</b> .

Faculty	Program	Self-Study				External Review			QA Plan		Annual Follow-up			Progress Update The table includes only the reviews in progress.
		Planning Began	Data Collection Concluded	Report Due	Report Approved	Site Visit Deadline	Date of Site Visit	Report Received	QA Plan Due	QA Plan Approved	Report Due	1st Report Approved	2nd Report Approved	
Design	Technical Apparel Design	Jun-18	Admin Data: Dec-18 Admin Data: Oct-19 Survey Data: Dec-18	x	Jan-20	Sep-20	Sep-20	Oct-20	Jun-21	Jan-21	Jun-22			First annual follow-up is in.
Health	Bachelor of Psychiatric Nursing	Sep-18	Admin Data: Feb-19 Survey Data: Feb-19	x	Oct-20	x	Feb-20	Mar-20	Aug-20	Nov-20	Aug-21	Jan-22		SSCPR asked program to report on their progress a second time in <b>January 2023</b> .
Health	BSN - New BSN - Revised	Sep-16	Admin Data: Jan-18 Survey Data: Faculty: Jan-17 Discipline: Feb-17 Student + Alumni: Sep-17	x	Feb-18	x	Mar-18	May-18	x	Feb-20 Dec-18	Feb-21 Dec-19	Feb 21 Feb 20		SSCPR asked New BSN program to report on their progress one more time in <b>February 2022</b> . The program is given extension to submit the report in May 2022. Note that the Revised BSN review has been completed.
Health	Health Care Assistant Certificate	May-19	Admin Data: Jun-19 Survey Data: Sep-19	x	Jan-20	Sep-20	Dec 9/10, 2020	Feb-21	Jun-21	Jun-21	Jun-22			First annual follow-up report is due in <b>June 2022</b> .
Health	Health Unit Coordinator Certificate	Jan-18	Admin Data: Jun-18 Survey Data: Discipline + Alumni: Mar-18 Student + Faculty: Aug-18	x	Dec-18	x	Jun-19	Jul-19	x		x			All intakes are suspended. The review is on hold until the future of the program is determined.
Science	Biology	Oct-19	Admin Data: Nov-19	Oct-21	Oct-21	Jan-22	Feb 24/25, 2022		Sep-22		Sep-23			External review site visit will take place on <b>February 24 &amp; 25, 2021</b> .
Science	Brewing and Brewery Operations	Nov-21		Aug-22		Nov-22			May-23		May-24			Program received the new guides and curriculum mapping template in November 2021.
Science	Bachelor of Horticulture Science	Jan-18	Admin Data: Jun-18 Survey Data: Apr/Jun-18	x	Mar-19	x	Apr-19	May-19	Aug-19	Apr-21	Aug-20			Annual follow-up is due in <b>April 2022</b> .
Science	Horticulture Technology Diploma	Nov-21		Jun-22		Oct-22			Feb-23		Feb-24			Program received the new guides and the curriculum mapping template in November 2021.
Science	Mathematics	May-19	Admin Data: Jul-19 Survey Data: Faculty: Jul-19 Alumni: Sep-19 Discipline/Sector: Sep-19	Sep-19	Oct-20	Nov-19	Mar 10/11, 2021	Apr-21	May-20		May-21			QA Plan is in.
Science	Physics for Modern Technology	May-21		Jan-22		Mar-22			Sep-22		Oct-23			Surveys are being conducted..
Science	Sustainable Agriculture	Oct-19	Admin Data: Nov-19 Revised Admin Data: Feb-21 Survey Data: Student: Aug-20 Faculty & Alumni: Jan-21 Discipline/sector: Feb-21	Aug-20	Sep-21	Oct-20 or Nov-20	March 7/9, 2022		May-21		May-22			External review is to take place on March 7 & 9, 2022.
Science	Turf Management Diploma	May-19	Admin Data: May-19 Survey Data: Sep-19	Oct-19		Jan-20			Sep-20		Sep-21			Turf Management will be reviewed as part of Horticulture Technology program review.