



SENATE AGENDA

Regular Meeting

Monday, May 28, 2018

4:00 PM - 7:00 PM

Surrey Campus, Cedar 2110

1. Call to Order Alan Davis 4:00
2. Approval of Agenda
3. Approval of Minutes, April 30, 2018
4. Chair's Report
 - 4.1. Board's Response to Senate Budget Recommendations..... Doug Beaton 4:05
 - 4.2. President's Report to Senate Alan Davis 4:10
 - 4.2.1. VISION 2023 Alan Davis, Lori McElroy
 - 4.3. Provost's Report to Senate Salvador Ferreras 4:20
 - 4.3.1. KPU Academic Plan 2023
5. Senate Standing Committee on Curriculum (no report) David Burns
 - 5.1. Program Change: Fashion Marketing Diploma Carolyn Robertson 4:30
6. Senate Executive Committee Alan Davis 4:35
7. Senate Governance Committee..... Patrick Donahoe 4:40
 - 7.1. Proposal for Senate Governance Nominating Committee
 - 7.2. AC13 Minimum Qualifications: Counsellors
 - 7.3. AC13 Minimum Qualifications: Learning Specialists
8. Senate Nominating Committee Kimberley McMartin 4:50
 - 8.1. Senate Standing Committee: Nominations
 - 8.2. Senate Standing Committee: Appointments

| | | |
|---|-------------------|------|
| 9. Senate Standing Committee on University Budget | Jane Fee | 5:00 |
| 9.1. Senate Budget Development Process and 2019 / 2020 Key Dates | | |
| 10. Senate Standing Committee on Academic Planning and Priorities | Jane Fee | 5:10 |
| 10.1. Program Suspension: Public Safety Communications Certificate | | |
| 10.2. Program Discontinuance: Career Choices and Life Success Citation | | |
| 10.3. Program Concept: Graduate Certificate in Sustainable Food Systems and Food Security | | |
| 10.4. VISION 2023 | | |
| 10.5. KPU Academic Plan 2023 | | |
| 11. Senate Standing Committee on the Library (no report) | Chris Traynor | |
| 12. Senate Standing Committee on Policy Review (no report) | Bob Davis | |
| 13. Senate Standing Committee on Program Review (no report) | Stan Kazymierchuk | |
| 14. Senate Standing Committee on Research | David Burns | 5:25 |
| 15. Senate Standing Committee on Teaching and Learning | David Burns | |
| 16. Office of the Registrar | Zena Mitchell | 5:30 |
| 16.1. Approval of Graduates to May 28, 2018 | | |
| 17. Items for Discussion | Alan Davis | 5:35 |
| 18. Adjournment | | 5:40 |



SENATE

MINUTES OF REGULAR MEETING

Monday, April 30, 2018

4:00 PM –7:00 PM

Surrey Campus Boardroom, Cedar 2110

| Present: Quorum 16 members | | Non-voting Members |
|---|---|---|
| Herbie Atwal Stefanie Broad David Burns (Vice-Chair) Chamkaur Cheema Alan Davis (Chair) Bob Davis Harleen Deol Patrick Donahoe Jane Fee Wayne Fenske Sal Ferreras David Florkowski Paola Gavilanez Amanda Grey | Tahir Joseph Todd Mundle Denise Nielson Diane Purvey Carolyn Robertson Angela Ryan Wayne Tebb Chris Traynor Tom Westgate Elizabeth Worobec | Zena Mitchell (Secretary) Suzanne Pearce |
| Regrets: | Senate Office | Guests: |
| Renu Seru Murdoch De Mooy Stan Kazymierchuk Kimberley McMartin Leeann Waddington Michael Wong | Sarah Dolling, Confidential Assistant Stephen Yezerinac, Associate Registrar Rita Zamluk, Administrative Assistant | Steve Cardwell Lori McElroy Ken Stark |

1. Call to Order

David Burns, the Vice-Chair of Senate, chaired the meeting and called the meeting to order at 4:00 p.m.

2. Approval of Agenda

Carolyn Robertson moved the agenda be confirmed as circulated.

The motion carried.

3. Approval of Minutes, March 26, 2017

Patrick Donahoe moved the minutes be accepted as circulated.

The motion carried.

4. Chair's Report

The Chair, Alan Davis, submitted a brief verbal report

4.1. President's Report to Senate

The President provided a brief verbal report that Vision 2023 is on track and comments are welcome on the blog page <https://blogs.kpu.ca/vision2023/>

4.1.1. VISION 2023

Lori McElroy and Ken Stark presented VISION 2023. They highlighted the main theme of the KPU distinction as an evolving and progressive university. They presented the Mission and Vision and the 4 interconnected themes – Experience, Sustainability, Creativity and Quality. The committee discussed the importance of KPU programs to have continual alignment with industry/employers and to keep constant lines of communication open. Vision 2023 will be measured continually and draft metrics are in place. The scope of student well-being beyond campus facilities will be reflected in the draft. Vision 2023 will be presented to Senate for approval at the May 2018 meeting.

4.2. Provost's Report to Senate

The Provost, Sal Ferreras, submitted his report and in particular acknowledged the work of Nancy Armitage, Manager Alumni Affairs and Marlyn Graziano, VP of External Relations on the publication of KPU's first Alumni Magazine.

4.2.1. KPU Academic Plan 2023 Draft

Sal Ferreras presented draft Version 1, 1d of the Academic Plan. The Academic Plan aligns and reflects the wording of Vision 2023 and has benefited from the metrics and significant impact of Vision 2018. The Provost highlighted the main elements of the plan which have global cross campus themes and which will have a direct effect on educational delivery: Student Success, Teaching Excellence, Teaching and Learning, Internationalization, Indigenization, Open Education, BC K-12 Curriculum Transformation, Bridging Trades and the Academy, Research, Graduate Studies and Quality. This plan is an evolving and live document that has benefited from positive and instructive feedback which has been incorporated into its content. There will be a further opportunity on May 14 on each campus to discuss directly with the Provost the content of the plan and draft version 1e which is available on the Office of the Provost Sharepoint site. Metrics and impact measures are currently being developed. The Academic Plan 2023 will be put forward for Senate approval at the May 2018 meeting.

5. Senate Standing Committee on Curriculum

David Burns, Chair of the Committee, gave a brief report.

5.1. Consent Agenda, April 4, 2018

Paola Gavilanez moved that Senate approve the revised list of new, revised, and discontinued courses.

The motion carried.

5.2. Program Change: Bachelor of Technology in Information Technology

Wayne Tebb provided background and noted that a transition plan will be developed and provided in advance for in-progress students who are affected.

Wayne Tebb moved that Senate approves the changes to the Bachelor of Technology in Information Technology effective September 1, 2018.

The motion carried.

6. Senate Executive Committee

No report.

7. Senate Governance Committee

Patrick Donahoe presented his report. The wording of the recommended resolution on page 65 of the Senate package and agenda item 7.1 should read 'Health Foundations certificate (HEAL courses)'.

7.1. AC13 Minimum Qualifications: Faculty of Health Health Foundations Certificate

Lauriel Tien and David Florkowski provided context and answered questions on the motion.

The committee discussed:

- clarification on the wording of minimum qualifications;
- the degree required to teach;
- wording regarding 'demonstrated ability to teach' or engagement in teaching so that other 'teaching' experiences can be considered;
- qualifications for a teaching university.

Wayne Fenske moved that Senate request the wording "Bachelor's Degree BSN/BPN (Master's degree preferred)" be revised to "Bachelor of Science in Nursing or Bachelor of Psychiatric Nursing (or a Masters degree in either is preferred)".

The motion was carried

Bob Davis moved that Senate return the AC13: Minimum Qualifications: Faculty of Health Foundations Certificate documents to the Faculty of Health for further consideration.

The motion was defeated

11 in favour, 12 opposed

After debate and amendment, Tom Westgate moved that Senate return the addition of the HEAL courses to the Health Foundations Certificate AC13 Minimum Qualifications, with an explanation of the Senate discussion, back to the faculty for further discussion.

The motion was carried

1 abstention

8. Senate Nominating Committee

8.1. Senate Standing Committees: Nominations

Kimberley McMartin moved that Senate approves the following appointments:

Senate Executive Committee

- **Murdoch de Mooy, Senator and Student
(September 1, 2018 – August 31, 2019)**

- Amy Jeon, Senator
(September 1, 2018 – August 31, 2021)

Senate Governance Committee

- Rawan Ali, Senator and Student
(September 1, 2018 – August 31, 2019)
- Robert Dearle, Senator
(September 1, 2018 – August 31, 2021)
- Andre Iwanchuk, Senator
(September 1, 2018 – August 31, 2021)

Senate Nominating Committee

- Carlos Calao, Senator
(September 1, 2018 – August 31, 2021)
- Amy Jeon, Senator
(September 1, 2018 – August 31, 2021)
- Christina Wilcox, Senator and Student
(September 1, 2018 – August 31, 2019)

Senate Standing Committee on Academic Planning and Priorities

- Xing Liu, faculty Member, School of Business
(September 1, 2018 – August 31, 2021)
- Lincoln Saugstad, Senator and Student
(September 1, 2018 – August 31, 2019)
- Sholto Scruton, faculty Member, School of Design
(May 1, 2018 – August 31, 2021)
- Lindsay Wood, faculty Member, Faculty of Educational Support and Development
(September 1, 2018 – August 31, 2021)

Senate Standing Committee on Library

- John Belisle, faculty Member, School of Design
(May 1, 2018 – August 31, 2021)
- John Shepherd, faculty Member, School of Business
(May 1, 2018 – August 31, 2021)

Senate Standing Committee on Program Review

- Michael Cober, faculty Member, School of Design
(May 1, 2018 – August 31, 2021)

Senate Standing Committee on Research

- Victor Martinez, faculty Member, School of Design
(May 1, 2018 – August 31, 2021)
- Karen Meijer-Kline, faculty Member, Faculty of Educational Support and Development (May 1, 2018 – August 31, 2021)
- Mandeep Pannu, faculty Member, School of Business
(May 1, 2018 – August 31, 2021)
- Lincoln Saugstad, Senator and Student
(September 1, 2018 – August 31, 2019)

Senate Standing Committee on Teaching and Learning

- Helen Vallee, faculty Member, School of Business
(May 1, 2018 – August 31, 2021)

Senate Standing Committee on Tributes

- Carlos Calao, Senator
(September 1, 2018 – August 31, 2021)
- Andre Iwanchuk, Senator
(September 1, 2018 – August 31, 2021)

Senate Standing Committee on University Budget

- Stephanie Philips, faculty Member, School of Design
(May 1, 2018 – August 31, 2021)
- Christina Wilcox, Student
(September 1, 2018 – August 31, 2019)

The motion carried.

8.2. Senate Standing Committees: Appointments

Kimberley McMartin moved that Senate approves the following appointments:

Senate Standing Committee on Curriculum

Herbie Atwal, Academic Advisor

(September 1, 2018 – August 31, 2021)

Appointed by Academic Advising Council on April 9, 2018

Senate Standing Committee on Policy Review

Jennifer MacArthur, Representative, Student Services

(September 1, 2018 – August 31, 2021)

Appointed by Jane Fee, Vice Provost, Students and Dean, Faculty of Educational Support and Development, on March 28, 2018

Interim Associate Dean, Faculty of Health

Dr. Harjit Dhesi

(May 22, 2018 – November 22, 2018)

The motion carried.

9. Senate Standing Committee on University Budget

David Burns, Interim Chair, presented his report. He highlighted improvements in identifying the strategic priorities of the Senate.

10. Senate Standing Committee on Academic Planning and Priorities

Jane Fee presented her report.

10.1. Proposal for the Administration of Graduate Studies at Kwantlen Polytechnic University

Steve Cardwell and Louella Mathias presented the proposal and provided background. Steve Cardwell acknowledged the work of his team, the task force and KPU community in the development process.

He highlighted the inclusion of advice from community partners and other institutions, providing graduate certificates, diplomas and masters degrees, creating an office of Graduate Studies within the Office of the AVP Research and Scholarship and expanding the Senate Standing Committee on Research to include membership from all faculties.

David Burns, Vice-Chair of Senate, noted that it is not the responsibility of Senate to approve the opening of an office, but that this is an important sign of the importance of the role of

Senate. Sal Ferreras acknowledged Steve Cardwell and his team's work on this proposal and informing the decisions with sector knowledge and ensuring it relates directly to the Academic Plan.

The committee discussed the inclusion of the *Task Force on Academic Rank and Advancement Final Report to Senate 06 2013* in the report, financial requirements, the membership of the Graduate Studies Task Force, and the role of the newly formed Senate Research committee.

Amanda Grey moved that Senate endorses the recommendations of the Graduate Studies Task Force contained in the Proposal for the Administration of Graduate Studies at Kwantlen Polytechnic University (March 8, 2018).

The motion carried.

11. Senate Standing Committee on the Library

David Burns thanked Chris Traynor, Chair of the Senate Standing Committee on the Library, for his service on the Senate Standing Committee on Program Review, on which he will be nominated Chair.

12. Senate Standing Committee on Policy Review

David Burns, Vice-Chair of Senate, provided a report.

13. Senate Standing Committee on Program Review

No report.

14. Office of the Registrar

14.1. Approval of Graduates to April 30, 2018

Jane Fee moved that Senate approve the list of graduates to April 30, 2018.

The motion carried.

14.2. Election of Vice-Chair of Senate

The term of office is from September 1, 2018 to August 31, 2019.

Zena Mitchell, the University Registrar, conducted the election and called for nominations:

- First call: Alan Davis nominated David Burns. David Burns accepted the nomination.
- Second call: no nominations
- Third call: no nominations

David Burns, was acclaimed as the Vice-Chair of Senate. He will assume the position on September 1, 2018 for a one-year term ending August 31, 2019.

14.3. Senate Election Results

Zena Mitchell reported the Senate Election results and confirmed a byelection in fall will be held for vacant seats.

FACULTY SENATORS

Term: September 1, 2018 – August 31, 2021

Faculty of Arts

David Burns (acclaimed)

Robert Dearle (acclaimed)

Faculty of Educational Support and Development

Andre Iwanchuk (acclaimed)
Faculty of Science and Horticulture

Amy Jeon (acclaimed)
School of Business

Carlos Calao (acclaimed)
PROFESSIONAL SUPPORT STAFF SENATOR

Term: September 1, 2018 – August 31, 2021
Stefanie Broad (elected)

STUDENT SENATORS

Term: September 1, 2018 – August 31, 2019
Rawan Ali (elected)
Murdoch de Mooy (elected)
Lincoln Saugstad (elected)
Christina Wilcox (elected)

15. Items for discussion

15.1. Public Sector Accounting Board Requirements: Financial Statements

Joe Sass, Executive Director, Financial Services, provided background and context for the discussion. The committee discussed the relevance and rationale for Senators completing the disclosure statements. The Senators present, who had not already completed the form, provided Joe Sass with a completed form.

16. Adjournment

The meeting adjourned at 5.51 pm.



MEMORANDUM

TO: Rita Zamluk / Administrative Assistant, Senate

CC: David Burns / Vice Chair, Senate

FROM: Keri van Gerven / University Secretary

DATE: May 24, 2018

SUBJECT: Board Response to Senate Budget Recommendations

Please find attached the Board Response to Senate's Budget Recommendation for distribution to Senators for the May 28, 2018 Senate Meeting.

I also confirm that Doug Beaton, Chair of the Board Audit & Finance Committees and Jon Harding, VP, Finance & Administration will attend the meeting to present the Board Response to Senate Budget Recommendations.

Keri van Gerven
University Secretary

MEMORANDUM

TO: SENATE
CC: Senate Standing Committee on University Budget (SSCUB)
FROM: Doug Beaton, Chair, Board Finance Committee
DATE: May 28, 2018
SUBJECT: SSCUB's Recommendations to Senate for Transmittal to the Board of Governors

Dear Senate Members:

KPU's Board of Governors thanks Senate and the Senate Standing Committee on University Budget (SSCUB) for their work in reviewing the University's draft 2018-19 budget, and for the advice they provided to the President. The Governors recognize that SSCUB worked diligently on the task and appreciate receiving the Committee's comments through Senate. Furthermore, the Governors support the collaborative and transparent process that was present during this budget cycle.

The Board has asked Administration to continue moving forward with the work that has been completed to date as it relates to the Task Force Budget Allocation Sub-Committee (BASC) Plan. The Board supports the need for Administration, in consultation with SSCUB, to review and re-evaluate the timelines and tasks established by the BASC's report and recommendations of 2014, in order to continue progressing and adapting to the evolving post-secondary landscape. With the advent of greater fiscal uncertainty in post-secondary education, the movement towards a more strategic approach to budgeting is essential. It is important that the university continues to transition to a hybrid-based budget model and to work collaboratively with the Senate.

Observation: 2018/2019 Budget Development Process and Consultations

Recommendation: Senate recommends that KPU continues to enhance the transparency, level of detail and timeliness related to the draft budget development process and consultations with the University community.

Board Response: The Board asks Administration to continue to enhance the level of transparency and detail, and refine the timeliness, of the budget development process. Furthermore, the Board asks for the continuation of transparent consultations with stakeholder groups and collaboration with SSCUB.

Observation: New Budget Model

Recommendation: Senate recommends that the timelines and tasks established by the Budget Allocation Subcommittee report and recommendation of 2014 be updated, and that SSCUB receive regular progress updates. Senate recommends continued support for moving forward with the new budget model.

Board Response: The Board asks Administration to review the timelines and tasks established by the

Budget Allocation Subcommittee's report and recommendations of 2014 to ensure that timelines meet the needs of the organization and key stakeholders. Furthermore, the Board asks that Administration continue to collaborate with SSCUB.

Observation: Balancing the Budget

Recommendation: Senate supports a balanced budget, the inclusion of an increased contingency, and investment of annual surpluses into a prosperity fund. SSCUB recommends that work continue on the articulation and implementation of KPU's Strategic Enrolment Management Plan and that SSCUB be updated on its progress.

Senate strongly supports the articulation and implementation of an effective Strategic Enrolment Management (SEM) plan that allows the institution to ensure a regular and balanced flow of incoming students and tuition revenue matched by an equally strong drive to retain and graduate learners. Deans, in particular, should be empowered to use their budget in anticipation of coming challenges and opportunities.

Board Response: In support of a balanced budget, the Board recognizes the need for the inclusion of a contingency and a strategy to invest annual surpluses. The Board asks Administration to continue the development of KPU's Strategic Enrolment Management Plan and that SSCUB be updated on its progress.



SENATE

Agenda Item: 4.2
Meeting Date: May 28, 2018
Presenter: Alan Davis

President's Report to Senate

May 28th, 2018

Vision 2023: in this period between Senate meetings, I continued to meet with governance groups and hold hallway discussion sessions on each campus. A blog option for feedback provided some useful comments during this discussion of draft 2. The Final draft is now under discussion by governance committees, and will be put to Senate at this meeting for endorsement.

From April 28th to May 1st I was in Victoria for the College and Institute Canada annual conference and meetings. This included a workshop on the role of higher education in building social infrastructure, and presentations on innovation, paleofuturism, leadership and change, trends and issues in higher education, Indigenous education and our own ZedCred team of Dr. Rajiv Jhiangiani, Dean Diane Purvey and University Librarian Todd Mundle.

On May 3rd, I was pleased to introduce Minister of Finance Carol James to the Richmond Chamber of Commerce at a breakfast which KPU sponsored. She spoke about the highlights of the recent budget, and there was much engagement about factors affecting the economy, including the role of high education in the innovation agenda.

Later the same day I was pleased to meet with Dr Deng Zemin who is Deputy Secretary General of Chinese Academy of Vocational & Technical Education, who was interested in understanding how KPU meets its polytechnic mandate.

From May 14th to 16th, I attended Polytechnics Canada Annual conference and Board meeting in Brampton, Ontario.

May 17th was the KPU Foundation's annual golf tournament: another sold out event, held at the Morgan Creek Golf Course, and on May 18th, I attended the PSEA Presidents' Strategic Planning Session in Vancouver.



Final: May 17, 2018

The KPU Distinction

As KPU looks to its next five years, the future of our society is under considerable discussion. It is a future where:

- as a result of digital transformation, the nature of work and ways of life are quickly evolving;
- awareness of and demands for action around social injustice are heightened;
- environmental impacts such as global climate change are requiring significant adaptation in the way we work and live; and
- decolonization of institutions and full inclusion of Indigenous peoples is a priority.

To respond to these challenges and to make the world a better place, **access to lifelong, meaningful education for all** is fundamental.

As a polytechnic university, KPU has the unique opportunity to evolve in a way that anticipates this future by:

- reflecting and serving our diverse, dynamic and growing region by providing a wide range of offerings, services and activities;
- defining, developing and teaching the essential new competencies needed by our graduates, encompassing both technical and human literacies, creativity, adaptability, and social awareness;
- ensuring that our graduates are prepared for a life time of learning and re-learning, and providing them with opportunities to adapt to their changing needs; and
- practising what we preach as we evolve as a unique, progressive and highly regarded polytechnic university which fosters innovative teaching and learning and relevant research and scholarship.

KPU's Mission, Vision and Goals

Mission: By thinking and acting together, we transform lives and empower positive change

Vision: In 2023, KPU is a learning ecosystem rooted in a culture of sustainability, creativity and quality that inspires our people and our communities

Goals: KPU's 12 goals are organized into four interconnected themes:

A. Experience: We will

- A1. Enhance the experience of our students
- A2. Enrich the experience of our employees
- A3. Delight our friends in their KPU experience

B. Sustainability: We will

- B1. Embrace all cultures and promote a renewed, authentic approach to Indigenization
- B2. Foster environmental sustainability through our offerings, research and operations
- B3. Integrate planning to ensure KPU operations are aligned with our resources, thus sustaining quality and institutional health

C. Creativity: We will

- C1. Increase the levels of activity, funding and intensity of research and scholarship
- C2. Increase innovation in teaching, learning and curriculum
- C3. Embolden creative problem solving across KPU's operations

D. Quality: We will

- D1. Ensure continuous improvement of all KPU programs and services
- D2. Hold each other responsible for our promises and our expectations
- D3. Be accountable to our partners, governments and communities

The Details

A. Experience: Students, employees and friends enjoy rich, engaging and supportive educational and working experiences

A1. Goal: We will enhance the experience of our students

Progress on this goal will be made by ensuring our students have access to:

- The courses they need to graduate in a timely manner
- Experiential learning opportunities in all programs
- Campus resources to support their learning and development
- Campus facilities and services to support their well being

Experiential learning includes, for example, co-ops, practica, field work and other work-integrated learning, as well as service learning, and research.

A2. Goal: We will enrich the experience of our employees

Progress on this goal will be made by providing our employees with access to:

- Appropriate professional development opportunities
- Appropriate opportunities to advance internally
- Celebration and recognition of employees' achievements and service
- The resources necessary to do their job effectively
- The resources necessary to support their well-being
- An inclusive workplace where people are treated with dignity and respect and are free from discrimination, bullying and harassment

A3. Goal: We will delight our friends in their KPU experience

Progress on this goal will be made by:

- Regularly engaging our friends to actively contribute to KPU
- Ensuring our friends have a positive experience when they visit KPU
- Respecting and valuing the contributions of our friends to KPU
- Engaging with our partners in ways that benefit our communities

By "friends" we mean alumni, retirees, visitors, donors, members of advisory boards, the KPU Foundation Board, partner organizations and all members of the communities we serve.

What this means for KPU:

By making the perspectives of students, employees and friends our priority, we will improve their experiences at KPU. KPU will be an inclusive and safe learning and working environment that values, supports, and benefits from the diversity of all its people.

B. Sustainability: Cultural, social, environmental and institutional sustainability are advanced

B1. Goal: We will embrace all cultures and promote a renewed, authentic approach to Indigenization

Progress on this goal will be made by:

- Demonstrating value and respect for the diverse cultures and backgrounds of our students and employees
- Demonstrating value and respect for the richness of cultures and traditions of Indigenous peoples
- Engaging Indigenous peoples and organizations through active and community-focused KPU partnerships
- Continuing to develop more Indigenous academic content and integrating Indigenous culture into our learning environment

B2. Goal: We will foster environmental sustainability through our offerings, research and operations

Progress on this goal will be made by:

- Offering formal education programs and courses that address sustainability
- Conducting research that addresses sustainability issues
- Ensuring our operations are environmentally sustainable

B3. Goal: We will integrate planning to ensure KPU operations are aligned with our resources, thus sustaining quality and institutional health

Progress on this goal will be made by:

- Creating an integrated planning culture whereby:
 - institutional priorities to guide planning and decision-making are established annually and reviewed quarterly
 - divisions create operations plans that address institutional priorities, given available resources, and are accountable for the results
 - the need to make difficult decisions to ensure quality and institutional health is recognized
 - decisions are fully-informed and transparent
- Developing institutional mechanisms to align all planning and approval processes with available resources and institutional priorities
- Employing a budget model that ensures the strategic allocation of available resources to address institutional priorities
- Providing planners and decision-makers with the tools and training required to align operations with priorities and resources
- Strategic enrolment management (SEM) planning that aligns recruitment, admission and retention processes with our capacity to meet demand and support student success

What this means for KPU:

The 2015 Truth and Reconciliation Commission's Call for Action suggests how Indigenous communities and cultures can be sustained. KPU will meet its commitments to this Call.

KPU's commitment to environmental sustainability through cross-university engagement and co-ordination will continue, and external validation will be sought.

Integrated planning will ensure that academic offerings and services are aligned with our resources so that quality, financial and institutional stability are sustained.

C. Creativity: KPU's innovation, scholarship and research benefit KPU, its students and society.

C1. Goal: We will expand innovation in teaching, learning and curriculum

Progress on this goal will be made by:

- Ensuring students receive quality instruction and a meaningful learning experience
- Ensuring educators are well supported to innovate in teaching, learning and curriculum

C2. Goal: We will expand activity, funding, intensity and impact of research and scholarship

Progress on this goal will be made by:

- Increasing support for research and scholarship activities
- Increasing the amount of funding for research and scholarship activities conducted by KPU employees
- Increasing the intensity of research and scholarly activity
- Increasing the amount of research and scholarly activity
- Increasing the impact of KPU research
- Engaging local industry, NGOs, community organizations and businesses to address economic and social needs for the prosperity of our communities

Scholarship and Research at KPU encompasses discovery, application, engagement, creation, integration and the scholarship of teaching and learning.

C3. Goal: We will embolden creative problem solving across KPU's operations

Progress on this goal will be made by:

- Anticipating the rapid changes occurring in work and society, and increasing our ability to respond accordingly
- Ensuring employees are empowered to take calculated and creative risks without fear
- Providing employees with the resources to incorporate diverse and creative problem solving into their daily operations

What this means for KPU:

KPU links thought to action, appreciating and embracing creativity and innovation in all forms, big and small.

KPU will do more to recognize and celebrate the innovation, research and scholarship already underway.

We will invest more in all types of creative activity, both formal and informal, especially in the context of the digital transformation in our society.

D. Quality: Continuous improvement builds confidence and reputation.

D1. Goal: Through continuous improvement of all KPU programs and services, we will ensure that our graduates are well prepared for work and for life.

Progress on this goal will be made by:

- Conducting regular reviews of all KPU programs to ensure continued relevance, alignment with institutional priorities, and efficient and effective use of resources, and implementing recommendations as appropriate
- Conducting regular reviews of all KPU support services to ensure continued relevance, alignment with institutional priorities, and efficient and effective use of resources, and implementing recommendations as appropriate
- Conducting regular reviews of all KPU operations to ensure continued relevance, alignment with institutional priorities, and efficient and effective use of resources, and implementing recommendations as appropriate

D2. Goal: We will hold each other responsible for our promises and our expectations

Progress on this goal will be made by:

- Ensuring employees understand their role in achieving KPU's mission, mandate and vision
- Ensuring employees have clear expectations that guide their work
- Ensuring employees receive effective feedback on how well they meet those expectations
- Promoting a culture of shared responsibility, and accountability to each other

D3. Goal: Be accountable to our partners, governments and communities

Progress on this goal will be made by:

- Ensuring effective and efficient use of resources
- Ensuring appropriate access to educational programming
- Ensuring students receive a quality education to ensure their success
- Ensure KPU is regarded favorably by the community we serve
- Ensuring we fulfill our commitments to our partners

Holding each other responsible is fundamental to a collegial organization. As peers, we are all vested in KPU's quality and reputation, and we must be open to respectfully giving and receiving constructive feedback.

What this means for KPU:

KPU's mandate is to add value by contributing to the social, economic and cultural life of our region and beyond.

We do this by providing the right mix of offerings and services, and undertaking research and innovation of many types. These can all be improved through regular cycles of thoughtful and collegial reflection, evaluation and subsequent change.

This attention to continuous improvement is key to building the long term reputation of KPU and thus its ability to attract and retain motivated students and talented employees, and to increase respect within the community.



Senate
Agenda Item: 5.1
Meeting Date: May 28, 2018
Presenter: Carolyn Robertson

Agenda Item: Program Change: Fashion Marketing Diploma

| | |
|--------------------------|--|
| Action Requested: | <input checked="" type="checkbox"/> Motion to Approve <input type="checkbox"/> Discussion <input type="checkbox"/> Information <input type="checkbox"/> Education |
|--------------------------|--|

| | |
|--------------------------------|---|
| Recommended Resolution: | THAT Senate approves the changes to admission requirements for the Fashion Marketing Diploma for implementation September 1, 2019. |
|--------------------------------|---|

Senate Standing Committee Report:

On May 2, 2018, Senate Standing Committee on Curriculum recommended that Senate approves the amended changes to admission requirements for the Fashion Marketing Diploma for implementation September 1, 2019.

Context & Background:

Recent results from program review surveys/interviews indicate the rate of attrition in the Fashion Marketing program may be connected to student misinterpretation regarding the nature and rigor in this field of study. By adding a mandatory information session component to the current application process, applicants will gain a more explicit understanding of the Fashion Marketing Diploma Program. In addition, faculty will have an opportunity to gain insight with prospective students in an informal, informative environment.

Key Messages:

1. The current application process does not fully reflect the rigor of the diploma program.
2. The information session process will increase understanding of the program for applicants, and allow faculty to become familiar with the applicants to the program, on an interpersonal level.

Consultations:

1. Fashion Marketing faculty and Student Experience Committee (SEC) members of the Fashion Marketing program
2. Wilson School of Design Curriculum Committee
3. Dean of Wilson School of Design
4. Senate Standing Committee on Curriculum

Attachments:

D-7. Fashion Marketing Diploma

Submitted by:

Jimmy Choi

Date submitted:

May 11, 2018

This form is to be used for:

- changes to any Senate-approved degree and non-degree programs at KPU
- addition of Honours designation to a Major program currently offered at KPU
- creation of a Minor degree for which a cognate Major program is currently offered at KPU

For more information on how to complete this form, please contact the Chair of the Senate Standing Committee on Curriculum (SSCC).

This completed form should be submitted to Senate@kpu.ca at least 15 days before the Senate Standing Committee on Curriculum (SSCC) meeting along with any new, revised, or discontinued course outlines associated with the proposal; associated course outlines must have already been formally approved by the Faculty.

| | |
|------------------------|------------------------------|
| Faculty: | Wilson School of Design |
| Program Name: | Diploma in Fashion Marketing |
| Department: | N/A |
| Effective date: | Fall 2019 |

| | |
|-----------------------------|-------------------|
| Dean/Associate Dean: | Carolyn Robertson |
| Chair/Coordinator: | Jimmy Choi |
| Submission Date: | 22-Mar-18 |

| Consultations | Person Consulted | Consultation Date |
|-----------------------------------|------------------|-------------------|
| Office of the Provost: | | |
| Vice Chair of Senate: | David Burns | February 9, 2018 |
| Office of the Registrar: | Nadia Henwood | February 16, 2018 |
| Other(s)* (if applicable): | | |

* For more complex consultations, please attach the Curriculum Consultation Forms. If you have any inquiries regarding the completion of the above Consultations section or the Curriculum Consultation Forms, please contact the Chair of the Senate Standing Committee on Curriculum.

| | Date on which this proposal was approved |
|---|--|
| Faculty Curriculum Committee: | March 21, 2018 |
| Faculty Council (if required): | <i>(Not needed if the Faculty Curriculum Committee has delegated authority to approve program revisions on behalf of their Faculty Council.)</i> |
| SSC on Curriculum: | May 2, 2018 |
| SSC on University Budget (if required): | n/a |
| SSC on Academic Planning and Priorities (if required): | n/a |
| Senate: | |

| | |
|----------------------------|--|
| Proposed Change(s): | Adding attendance at an information session to the admission process |
| Rationale: | Recent results from program review surveys/interviews indicate the rate of attrition in the Fashion Marketing program may be connected to student misinterpretation regarding the nature and rigor in this field of study. By adding a mandatory information session component to the current application process, applicants will gain a more explicit understanding of the Fashion Marketing Diploma Program. In addition, faculty will have an opportunity to gain insight with prospective students in an informal, informative environment. |
| URL(s): | http://www.kpu.ca/calendar/2017-18/design/fashionmarketing/fashionmarketing-dip.html |

| | |
|----------------------------|--|
| Impact on Students: | <p>Check all that apply:</p> <p><input checked="" type="checkbox"/> The changes alter the admission, declaration or continuance requirements <i>If yes, provide both the current calendar entry and new calendar entry in full (see below).</i></p> <p><input type="checkbox"/> The changes alter the curricular requirements <i>If yes, provide both the current calendar entry and new calendar entry in full (see below).</i></p> <p><input type="checkbox"/> The changes change the total number of required credits <i>If yes, state the current number of total credits: _____</i> <i>and proposed number of total credits: _____</i></p> <p><input type="checkbox"/> The changes introduce new, revised or discontinued courses <i>If yes, indicate the Faculty approval date and list the courses below _____</i></p> <p><input type="checkbox"/> The changes alter the credential awarded <i>If yes, indicate the proposed credential: _____</i></p> |
|----------------------------|--|

| | |
|---|---|
| <p>Current Requirements with Proposed Changes <i>(Cut and paste the relevant section(s) in full from the current Calendar website. Use <u>track changes</u> to show the proposed changes.</i> <i>(For a new Minor degree for which a cognate Major program is currently offered at KPU, insert the following text below "This is a new Minor degree program for which a cognate Major degree program already exists at KPU. There is no existing curriculum for the minor, and as per Policy AC11 there is no requirement for a Concept Paper or FPP.")</i></p> | <p>New Requirements <i>(Provide a <u>clean copy</u> to show how the new Calendar entry will appear. List courses in alpha/numeric order.)</i></p> |
| <p>Admission Requirements In addition to the Faculty's Admission Requirements, which consist of KPU's undergraduate English Proficiency Requirement, the following program admission requirements apply:</p> <ul style="list-style-type: none"> • <u>Letter of Interest package</u> • <u>Fashion Marketing information session</u> <p>Letter of Interest The letter of interest and accompanying documents will be used to evaluate each applicant for suitability for admission. For detailed information about the letter of interest, visit the department's website at kpu.ca/design/fashion-marketing The letter of interest must include:</p> <ul style="list-style-type: none"> • A summary of knowledge about the field of fashion marketing. • A statement of personal goals for applying to the program. • A brief write-up including personal examples related to as many of the following skills as possible (2-3 paragraphs for each): working in a team, working independently, problem-solving, developing personal management, organizational and stress management skills. Examples could come from school, work, play, sports activities etc. <p>The letter of interest must be accompanied by:</p> <ul style="list-style-type: none"> • A current resume. • Two letters of reference. It is recommended applicants ask people to write about an applicant's ability to carry out one or more of the skills listed. • Transcripts from high school and any post-secondary institutions attended (Note: transcripts sent with your application for admission are not available to faculty.) | <p>Admission Requirements In addition to the Faculty's Admission Requirements, which consist of KPU's undergraduate English Proficiency Requirement, the following program admission requirements apply:</p> <ul style="list-style-type: none"> • Letter of Interest package • Fashion Marketing information session <p>For further details about the letter of interest package and information session process, including submission specifics, visit the department's website at: kpu.ca/fashionmarketing</p> |

For further details about the letter of interest package and information session process, including submission specifics, visit the department's website at: kpu.ca/fashionmarketing

List any new, revised or discontinued courses associated with this program change

| Course Subject Code | Course Number | Descriptive Title, hyperlinked to course outline | New, Revised, or Discontinued |
|---------------------------|------------------|---|----------------------------------|
| | | | |
| | | | |
| | | | |



SENATE

Agenda Item: 7.1
Meeting Date: May 28, 2018
Presenter: Patrick Donahoe

Agenda Item: Proposal for Senate Governance Nominating Committee

| | |
|--------------------------------|--|
| Action Requested: | <input checked="" type="checkbox"/> Motion to Approve <input type="checkbox"/> Discussion <input type="checkbox"/> Information <input type="checkbox"/> Education |
| Recommended Resolution: | THAT Senate approves the Senate Nominating Committee [SNC] be disbanded, and that the attached changes be made to the mandate and membership of the Senate Governance Committee [SGC], which will concurrently be renamed the Senate Governance and Nominating Committee [SGNC], effective September 1, 2018. |

**Senate Standing
Committee Report:**

On April 23, 2018, the Senate Nominating Committee recommended that the Senate Nominating Committee [SNC] be disbanded, and that the attached changes be made to the mandate and membership of the Senate Governance Committee [SGC], which will concurrently be renamed the Senate Governance and Nominating Committee [SGNC].

On May 7, 2018 the Senate Governance Committee recommended that Senate approves the Senate Nominating Committee [SNC] be disbanded, and that the attached changes be made to the mandate and membership of the Senate Governance Committee [SGC], which will concurrently be renamed the Senate Governance and Nominating Committee [SGNC].

Key Messages:

1. The 1st and 2nd Terms of Reference of the Senate Nominating Committee will be absorbed by the Senate Governance Committee in order to create the Senate Governance and Nominating Committee [SGNC].
2. In the 2017-2018 academic year, there have thus far been no contested nominations brought to the Senate Nominating Committee. If put on a consent agenda, Terms of Reference 1 and 2 of the Senate Nominating Committee would add minimal additional time to the meetings of the Senate Governance Committee (which, themselves, rarely occupy their scheduled time).



SENATE

Agenda Item: 7.1
Meeting Date: May 28, 2018
Presenter: Patrick Donahoe

Attachments:

1. Appendix A: Mandate for Proposed SGNC
2. Appendix B: Composition of Proposed SGNC

Submitted by:

Patrick Donahoe, Chair, Senate Governance Committee

Date submitted:

May 9, 2018

Appendix A – Mandate for Proposed SGNC

| Existing Mandates for Senate Nominating Committee and Senate Governance Committee | Proposed Senate Nominating and Governance Committee Mandate |
|---|---|
| <p>Senate <u>Governance and</u> Nominating Committee Mandate</p> <ol style="list-style-type: none"> 1. Ensure that nominations are made for all elections for Senate 2. As directed by Senate, nominate members to serve on Senate committees <u>and Senate Selection/Search Advisory Committees</u> 3. Other duties as assigned by Senate <p>Senate Governance Committee Mandate</p> <ol style="list-style-type: none"> 3. 1. Advise Senate on all matters related to the ways it conducts the business of Senate, its meetings and its proceedings 4. 2. Coordinate the work of Senate committees, especially where consultation between standing committees is required 5. 3. Review regularly the by-laws of Senate and recommend revisions to Senate 6. 4. Advise Senate on matters related to duties of members and conflict of interest 7. 5. Advise Senate on procedures for the recommendation and selection of candidates for president, deans, librarians, the registrar and other senior academic administrators 8. 6. Advise Senate on matters related to Senate and Board of Governors elections 9. 7. Review at least once every three years the configuration of standing committees of Senate, their membership, terms of reference, and their consultation and reporting relationships, and propose to Senate any recommendations for change 10. 8. Establish such subcommittees as needed to fulfill the Committee's responsibilities 11. 9. Other duties as assigned by Senate | <p><u>Senate Governance and Nominating Committee Mandate</u></p> <ol style="list-style-type: none"> <u>1. Advise Senate on all matters related to the ways it conducts the business of Senate, its meetings and its proceedings</u> <u>2. 1.</u>—Ensure that nominations are made for all elections for Senate <u>3. 2.</u>—As directed by Senate, nominate members to serve on Senate committees and Senate Selection/Search Advisory Committees 3. Advise Senate on all matters related to the ways it conducts the business of Senate, its meetings and its proceedings <u>4. 4.</u>—Coordinate the work of Senate committees, especially where consultation between standing committees is required <u>5. 5.</u>—Review regularly the by-laws of Senate and recommend revisions to Senate <u>6. 6.</u>—Advise Senate on matters related to duties of members and conflict of interest <u>7. 7.</u>—Advise Senate on procedures for the recommendation and selection of candidates for president, deans, librarians, the registrar and other senior academic administrators <u>8. 8.</u>—Advise Senate on matters related to Senate and Board of Governors elections <u>9. 9.</u>—Review at least once every three years the configuration of standing committees of Senate, their membership, terms of reference, and their consultation and reporting relationships, and propose to Senate any recommendations for change <u>10. 10.</u>—Establish such subcommittees as needed to fulfill the Committee's responsibilities <u>11. 11.</u>—<u>Other duties as assigned by Senate</u> |

Appendix B –Composition of Proposed SGNC

| | Current SGC Composition | Current SNC Composition | Proposed SGNC Composition |
|-----------------------|--|--|---|
| Voting Members | Chancellor | Chancellor | Chancellor |
| | President | President | President |
| | Vice-Chair of Senate | | Vice-Chair of Senate |
| | One dean | | One dean |
| | One professional support staff senator | | One professional support staff senator |
| | One student senator | One student senator | One student, normally a senator |
| | Two additional senators | Four senators (representing 3 Faculties) | Three senators (when taken with the Senate Vice-Chair, representing 3 Faculties)* |

| | Current SGC Composition | Current SNC Composition | Proposed SGNC Composition |
|------------------------------|--|--------------------------------|--|
| Ex-Officio Non-Voting | Provost and Vice-President Academic (or designate) | Vice-Chair of Senate | Provost and Vice-President Academic (or designate) |
| | Registrar (or designate) | | University Registrar (or designate) |
| | University Secretary (or designate) | | University Secretary (or designate) |
| | Associate Registrar, Senate and Curriculum | | Associate Registrar, Senate and Curriculum |
| | | | |
| | | | |
| | | | |

*While faculty members serving as senators or representatives serve 3 year terms on a committee, one of these three seats for senators shall be, in the interests of increasing opportunity for students, posted as a 1 year term.



Senate

Agenda Item: 7.2

Meeting Date: May 28, 2018

Presenter: Patrick Donahoe

Agenda Item: AC13 Minimum Qualifications: Counsellors

| | |
|--------------------------|--|
| Action Requested: | <input checked="" type="checkbox"/> Motion to Approve <input type="checkbox"/> Discussion <input type="checkbox"/> Information <input type="checkbox"/> Education |
|--------------------------|--|

| | |
|--------------------------------|---|
| Recommended Resolution: | THAT Senate approves the amended qualifications for counsellors in AC13 <u>Table - Minimum Qualifications - Faculty Positions</u>. |
|--------------------------------|---|

Senate Standing Committee Report:

On May 7, 2018, the Senate Governance Committee recommended that Senate approves the amended qualifications for counsellors in AC13 Table - Minimum Qualifications - Faculty Positions.

Context & Background:

The minimum faculty qualifications for counsellors have not been reviewed and updated in recent years. The Counselling Search Committee met in 2017 and reviewed the minimum qualifications for counsellors with respect to faculty hiring. As a result, the Counselling Search Committee made revisions to the minimum qualifications for Counsellors being hired at KPU (see attachment).

Key Messages:

1. The current minimum faculty qualifications for counsellors in AC13 Table - Minimum Qualifications - Faculty Positions are outdated.
2. Minimum qualifications for Counsellors have been reviewed and updated by the Counselling Search Committee in 2017 (see attachment).

Consultations:

- Counselling Search Committee



Senate

Agenda Item: 7.2

Meeting Date: May 28, 2018

Presenter: Patrick Donahoe

Attachments: Page 3 of 10, *Table - Minimum Qualifications - Faculty Positions* (revised qualifications for Counsellor in track change mode).

Submitted by: *Patrick Donahoe, Chair, Senate Governance Committee*

Date submitted: *May 9, 2018*

| Discipline / Program | Academic | Professional | Teaching (Where not a requirement, it is a preference) | Experience |
|--|--|---|--|--|
| Career Choices & Life Success (CCLS) | Master's Degree preferred in: Adult Education, Social Work or related discipline | | Experience teaching adult learners. Post-secondary preferred | Related work experience and personal history of successful career transition. Experience in administration of standardized assessment instruments |
| Community Service Support Worker | On Hiatus | | | |
| Computer Business Systems (CBSY) | Master's Degree required | Appropriate professional designation in computing | 3 years related work experience | 3 years directly related work experience |
| Computing Sciences and Information Systems (CSIS) | Master's Degree in Computer Science or related discipline (PhD preferred) | | Post-secondary preferred | Related professional experience |
| Co-operative Education | Bachelor's Degree (Master's preferred) | | | Related work experience |
| Counsellor | Master's Degree in Counselling Psychology <u>or Social Work from a recognized university, registration with the relevant professional body as required (BCCSW, BCPA) or certification with either the BC Association of Clinical Counsellors (RCC) or the Canadian Counselling and Psychotherapy Association (CCC); and five years of relevant counselling work/clinical practice.</u> Specialist positions require Master's in the specialty area | | | <u>Recent counselling experience in a post-secondary institution</u> <u>Experience in successfully navigating and engaging with institutional systems, services and support within a post-secondary institution is preferred.</u> |



Senate

Agenda Item: 7.3

Meeting Date: May 28, 2018

Presenter: Patrick Donahoe

Agenda Item: AC 13 Minimum Qualifications: Learning Specialists

| | |
|--------------------------------|--|
| Action Requested: | <input checked="" type="checkbox"/> Motion to Approve <input type="checkbox"/> Discussion <input type="checkbox"/> Information <input type="checkbox"/> Education |
| Recommended Resolution: | THAT Senate approves the addition of qualifications for Learning Specialists (Services for Students with Disabilities) in AC13 <u>Table - Minimum Qualifications - Faculty Positions</u>. |

Senate Standing Committee Report:

On May 7, 2018 the Senate Governance Committee recommended Senate approves the addition of qualifications for Learning Specialists (Services for Students with Disabilities) in AC13 Table - Minimum Qualifications - Faculty Positions.

Context & Background:

The minimum faculty qualifications for learning specialists in Services for Students with Disabilities (SSD) have not been formally determined and established. The Learning Specialist Search Committee met in 2017 to determine and establish the minimum qualifications for learning specialists for faculty hiring (see attachment).

Key Messages:

1. The minimum faculty qualifications for learning specialists in Services for Students with Disabilities are not listed in AC13 Table - Minimum Qualifications - Faculty Positions.
2. Minimum qualifications for Learning Specialists in SSD have been established by the Learning Specialist Search Committee in 2017 (see attachment).

Consultations:

- Learning Specialist Search Committee (Services for Students with Disabilities) (which includes all Faculty in the SSD Department)



Senate

Agenda Item: 7.3

Meeting Date: May 28, 2018

Presenter: Patrick Donahoe

Attachments:

Page 9 of 10, *Table - Minimum Qualifications - Faculty Positions* (added qualifications for Learning Specialists in SSD, in track change mode).

Submitted by:

Patrick Donahoe, Chair, Senate Governance Committee

Date submitted:

May 9, 2018

| Discipline / Program | Academic | Professional | Teaching (Where not a requirement, it is a preference) | Experience |
|--|--|---|--|---|
| <u>Services for Students with Disabilities</u> | <u>Masters in Disability Studies, Education, Psychology, Social Work, Counseling, Rehabilitation, Occupational Therapy, or related field</u> | | <u>Experience in research or teaching</u> | <u>Experience determining or planning accommodations, preferably in a post-secondary setting</u> |
| Science | Master's Degree in appropriate specialization | Appropriate professional designation (where applicable) | Post-secondary | |
| Sociology | Graduate Degree in Sociology, PhD preferred | | | |
| Special Education Teacher Assistant (SETA) | Master's Degree preferred; Bachelor's required for education focused courses | Teacher's certificate preferred or Provincial Instructor Diploma | | Teaching experience in K-12 system; post-secondary or related teaching experience |
| Technical Apparel, Post-Baccalaureate Diploma | Master's Degree in Apparel Design, Product Design, Industrial Design, or related disciplines or Academic credentials and experience appropriate to areas of responsibility (Master's Degree preferred for full-time faculty) | Eligible for professional designation | Post-secondary teaching experience preferred | Minimum of 8 – 10 years diverse experience related to technical Apparel Design AND Evidence of Experience of expertise appropriate to specific course contact AND Demonstrate a clear understanding or related fields |
| Traditional Chinese Medicine – Acupuncture Diploma Program (TCM-AD) | TCM practitioner required; Master's or a Doctor of TCM preferred. | For Acupuncture and Herbology related courses, must be registrant of CTCMA. | Post-secondary teaching preferred. | Related work experience. |



SENATE

Agenda Item: 8.1
Meeting Date: May 28, 2018
Presenter: Kimberley McMartin

Agenda Item: Senate Standing Committees: Nominations

| | |
|--------------------------|--|
| Action Requested: | <input checked="" type="checkbox"/> Motion to Approve <input type="checkbox"/> Discussion <input type="checkbox"/> Information <input type="checkbox"/> Education |
|--------------------------|--|

| | |
|--------------------------------|---|
| Recommended Resolution: | <p>THAT Senate approves the following appointments:</p> <p><u>Senate Standing Committee on Appeals</u></p> <ul style="list-style-type: none">• Murdoch de Mooy, Student Senator (September 1, 2018 – August 31, 2019) <p><u>Senate Standing Committee on Policy Review</u></p> <ul style="list-style-type: none">• Stefanie Broad, Professional Support Staff (September 1, 2018 – August 31, 2021)• Murdoch de Mooy, Student (September 1, 2018 – August 31, 2019) <p><u>Senate Standing Committee on Research</u></p> <ul style="list-style-type: none">• Philomena Kaan, faculty Member Faculty of Academic Career and Advancement (June 1, 2018 – August 31, 2021) <p><u>Senate Standing Committee on Teaching and Learning</u></p> <ul style="list-style-type: none">• Melody Geddert, faculty Member Faculty of Academic Career and Advancement (June 1, 2018 – August 31, 2021)• Amanda Grey, Student (June 1, 2018 – August 31, 2019) <p><u>Senate Standing Committee on University Budget</u></p> <ul style="list-style-type: none">• Stefanie Broad, Professional Support Staff (September 1, 2018 – August 31, 2021) |
|--------------------------------|---|

Senate Standing Committee Report: On May 23, 2018, the Senate Nominating Committee recommended that Senate approves the above nominations.

Context & Background: The Senate Nominating Committee has the mandate to nominate members to serve on Senate Standing Committees.



SENATE

Agenda Item: 8.1
Meeting Date: May 28, 2018
Presenter: Kimberley McMartin

Key Messages:

1. The term of office for faculty members, students, and professional support staff is three years, one year, and three years, respectively.
2. The Senate Nominating Committee recommends Senate approves nominees for appointment to Senate standing committees.

Consultations:

- Elected senators – for nominations to serve on a minimum of two Senate committees per Senate Bylaw 1.10
- Librarians and Counsellors – Chair of Librarians and Department of Counsellors, respectively
- Faculty Councils – for all other faculty nominations
- Provost and Vice President, Academic – for nominations involving Deans
- Students – for nominations involving students
- Professional support staff– for nominations involving professional support staff

Submitted by: *Kimberley McMartin, Chair, Senate Nominating Committee*

Date submitted: *May 24, 2018*



SENATE

Agenda Item: 8.2
Meeting Date: May 28, 2018
Presenter: Kimberley McMartin

Agenda Item: Senate Standing Committees: Appointments

| | |
|--------------------------|--|
| Action Requested: | <input type="checkbox"/> Motion to Approve <input type="checkbox"/> Discussion <input checked="" type="checkbox"/> Information <input type="checkbox"/> Education |
|--------------------------|--|

**Context &
Background:**

Senate Standing Committees have representatives, and designates from different units or sectors within KPU. The representatives or designates are a distinct class of committee members and are appointed.

The following appointments are provided for information only.

Senate Standing Committee on the Library

Chris Burns, Librarian
(July 1, 2018 – August 31, 2021)
Appointed by Lisa Hubick, Chair of the Librarians

Senate Standing Committee on Program Review

Steve Cardwell, Deputy Provost
(May 1, 2018 – no end date)
Appointed by Provost

Senate Standing Committee on Research

Appointments:

Diane Purvey, Dean
(May 1, 2018 – no end date)
Appointed by Provost

Elizabeth Worobec, Dean
(May 1, 2018 – no end date)
Appointed by Provost

Senate Standing Committee on Teaching and Learning

Patrick Donahoe, Dean
(May 1, 2018 – no end date)
Appointed by Provost



SENATE

Agenda Item: 8.2
Meeting Date: May 28, 2018
Presenter: Kimberley McMartin

Carolyn Robertson, Dean
(May 1, 2018 – no end date)
Appointed by Provost

Submitted by: *Kimberley McMartin, Chair, Senate Nominating Committee*

Date submitted: *May 24, 2018*



SENATE

Agenda Item: 9.1
Meeting Date: May 28, 2018
Presenter: Jane Fee

Agenda Item: Senate Budget Development Process and 2019 / 2020 Key Dates

| | |
|--------------------------------|--|
| Action Requested: | <input checked="" type="checkbox"/> Motion to Approve <input type="checkbox"/> Discussion <input type="checkbox"/> Information <input type="checkbox"/> Education |
| Recommended Resolution: | THAT Senate approves the Senate Budget Development Process and 2019 / 2020 Key Dates and forward to KPU Finance for inclusion in their planning documents. |

Standing Committee Report:

On April 13, and April 20, the Senate Standing Committee on Academic Planning and Priorities and the Senate Standing Committee on the University Budget reviewed the proposed Generic Budget Development Process and Key Dates.

On May 18, 2018, the Senate Standing Committees on Academic Planning and Priorities and on University Budget recommended that Senate approves the Senate Budget Development Process and 2019 / 2020 Key Dates and forward to KPU Finance for inclusion in their planning documents.

Context & Background:

University Act, Section 62 (2): *The president must prepare and submit to the board an annual budget in consultation with the appropriate standing committee of the senate.*

SSC Academic Planning and Priorities Mandate: *Advise the Senate Standing Committee on the University Budget on the academic priorities for the allocation of funds.*

SSC University Budget Mandate: *On behalf of Senate, and in consultation with the Senate Standing Committee on Academic Planning and Priorities, advise the President and Vice-Presidents on the review and development of academic budgetary priorities, major capital plans, and the allocation of funds.*



SENATE

Agenda Item: 9.1
Meeting Date: May 28, 2018
Presenter: Jane Fee

Key Messages:

On December 19, 2017, and March 2, 2018, a working group met to clarify the Senate budget development process. To aid the discussions, the group developed a generic budget cycle and a list of tentative dates and activities.

Consultations:

Working Group:

- David Burns, Interim Chair, SSC University Budget
- Jane Fee, Chair, SSC Academic Planning and Priorities
- Sal Ferreras, Provost and Vice-President, Academic
- Wendy Ip, Director, Financial Planning, Reporting and Assurance
- Joe Sass, Executive Director, Financial Services
- Stefanie Singer, Manager, Budgeting and Planning
- Rita Zamluk, Administrative Assistant, University Senate

Attachments:

2018 05 18 Senate Budget Cycle and 2019 / 2020 Key Dates Draft V4

Submitted by:

Rita Zamluk, Administrative Assistant, KPU Senate

Date submitted:

May 22, 2018

| ROLE OF SENATE IN BUDGET DEVELOPMENT | | | | | |
|--------------------------------------|---|--|--|--|--|
| | KPU Executive | SSCUB / SSCAPP | | 2018 / 2019 Dates | Notes |
| May | Meets with SSC Academic Planning and Priorities and SSC University Budget to review allocation of budget to meet priorities set in 2018 / 2019 Budget Endorsement Memo. | SSCAPP / SSCUB form working groups to draft: b. principles and criteria for budget c. initial budget priorities | | May 11, 2018 SSCAPP May 18, 2018 Joint meeting May 28, 2018 Senate | For this year only, SSCAPP_SSCUB will ask Senate to approve the Senate Budget Development Process and Key Dates in May. In subsequent years, SSCAPP_SSCUB will ask Senate to approve these documents in January, for inclusion in the Senate meeting dates going forward for approval to the Senate Governance Committee in February. |
| June | 3. President receives initial budget priorities from Senate | 1. SSCAPP / SSCUB recommend that Senate approves: a. principles and criteria b. initial priorities | 2. Senate approves principles and criteria, and initial budget priorities and forwards to President. | June 8, 2018 Joint meeting June 15, 2018 SSCUB June 25, 2018 Senate | For this year, KPU Executive will provide the initial priorities to the joint meeting for review on June 8, 2018. |
| July | | | | | |
| August | | | | | |
| September | | SSCAPP / SSCUB meet to frame the budget presentations. | | September 7, 2018 SSCUB September 14, 2018 SSCAPP September 28, 2018 Joint Meeting | Joe Sass from KPU Finance will assist SSCAPP /SSCUB frame the budget presentations on September 28, 2018. |
| October | | Attend Budget presentations | | October 12, 2018 October 19, 2018 October 26, 2018 | SSCAPP and SSCUB members attend the presentations. |
| November | | SSCUB / SSCAPP receives pro forma budget from KPU Finance; confirms list of principles and criteria confirms list of priorities | Senate confirms final list of priorities Senate confirms final list of principles and criteria | November 9, 2018 SSCUB November 16, 2018 Joint meeting November 23, 2018 SSCAPP November 26, 2018: Senate confirms list of principles, criteria, and priorities | SSCAPP, SSCUB and Senate receive pro forma budget |
| December | President receives final list of priorities from Senate. | | Senate approves draft budget | December 7, 2018 SSCUB December 14, 2018 SSCAPP December 17, 2018 Senate | |
| January | | January 11, 2019: * SSCUB / SSCAPP collect feedback from members, form a writing group to draft budget endorsement letter * Review the draft key dates for the 2020 / 2021 Senate Budget Development Process January 18, 2019: *Joint meeting to review draft memo and send memo to Senate for endorsement and forwarding to Board of Governors before going forward to Senate for approval *Approve final dates for 2020 / 2021 budget development process and forward to Senate Office for inclusion in 2019 / 2020 Senate Meeting Date Calendar that goes forward to the Senate Governance Committee | 3. Senate sends Budget Endorsement Memo to Board of Governors | January 11, 2019 Joint Meeting January 18, 2019 Joint Meeting January 25, 2019 Joint Meeting (Reserved - may not be needed) January 28, 2019 Senate | Put joint meeting on the second Friday of January to ensure work is done before going to Senate January 2019. The third week can be used if needed. |
| February | | | Senate Governance Committee and Senate approve 2019 / 2020 Senate Meeting Calendar that includes the budget development key dates. | | |
| March | | | | | |
| April | | | | | |



SENATE

Agenda Item: 10.1
Meeting Date: May 28, 2018
Presenter: Jane Fee

Agenda Item: Program Suspension: Public Safety Communications Certificate

| | |
|--------------------------------|--|
| Action Requested: | <input checked="" type="checkbox"/> Motion to Approve <input type="checkbox"/> Discussion <input type="checkbox"/> Information <input type="checkbox"/> Education |
| Recommended Resolution: | THAT Senate approves the suspension of the Public Safety Communications Certificate program, effective May 28, 2018. |

**Senate Standing
Committee Report:**

On May 2, 2018 the Senate Standing Committee on Curriculum endorsed the suspension of the Public Safety Communications Certificate, effective May 28, 2018.

On May 11, 2018, the Senate Standing Committee on Academic Planning and Priorities recommended that Senate approves the suspension of the Public Safety Communications Certificate program, effective May 28, 2018.

**Context &
Background:**

Despite ongoing marketing campaigns and promotional efforts, the Certificate in Public Safety Communications program (PSCM) has had a steady decline in qualified applicants since Fall 2014. Enquiries directed to the public safety industry found that both the RCMP and E-com organizations hire directly and use a psychometric assessment tool for screening applicants. Discussions were also held with students and PAC members with broad representation of industry stakeholders including E-com, RCMP, BC Ambulance, Municipal Police, Fire and others. As a result, all intakes have been cancelled due to lack of qualified applicants since 2016.

The declining applications and enrolment for the PSCM program is illustrated by a set of data provided by the Office of Registrar, which is also included in the Proposal to Suspend the Certificate in Public Safety Communications program (see attached).

Given the declining number of qualified applicants and the unknown reasons for the decline, a proposal to suspend the PSCM program was endorsed by Faculty of Trades and Technology Faculty Council on April 18, 2018. The Proposal has also received endorsement by the Provost and Vice President Academic.



SENATE

Agenda Item: 10.1
Meeting Date: May 28, 2018
Presenter: Jane Fee

Key Messages:

1. Since 2016 all intakes have been canceled due to lack of qualified applicants.
2. Enrolment is insufficient to make the program viable.
3. Per Policy AC10, and in consultation with and endorsement by the Faculty of Trades and Technology Faculty Council, we are requesting the Certificate in Public Safety Communications program be suspended, with a completed review of the suspension in May 2020.

Implications / Risks:

No impact on and/or reorganization of curriculum in other programs at KPU.

Consultations:

1. Faculty of Trades and Technology, Faculty Council, April 18, 2018.
2. Provost and VP Academic
3. Office of the Registrar

Attachments:

Proposal to Suspend the Certificate in Public Safety Communications Program, April 20, 2018

Submitted by:

*Jane Fee, Chair,
Senate Standing Committee on Academic Planning and Priorities*

Date submitted:

May 11, 2018



SENATE

Agenda Item: 10.2
Meeting Date: May 28, 2018
Presenter: Jane Fee

Agenda Item: Program Discontinuance: Career Choices and Life Success Citation

| | |
|--------------------------|--|
| Action Requested: | <input checked="" type="checkbox"/> Motion to Approve <input type="checkbox"/> Discussion <input type="checkbox"/> Information <input type="checkbox"/> Education |
|--------------------------|--|

| | |
|--------------------------------|--|
| Recommended Resolution: | THAT Senate approves the discontinuance of the Career Choices and Life Success Citation, effective August 31, 2018. |
|--------------------------------|--|

Senate Standing Committee Report:

On May 2, 2018, the Senate Standing Committee on Curriculum recommended Senate approves the discontinuance of the Career Choices and Life Success Citation, effective August 31, 2018.

On May 11, 2018, the Senate Standing Committee on Academic Planning and Priorities recommended that Senate approves the discontinuance of the Career Choices and Life Success Citation, effective August 31, 2018.

Context & Background:

Career Choices and Life Success (CCLS) is a one-term cohort program, offering a Citation that is not transferable and does not ladder into other KPU programs. It became tuition-bearing in the fall of 2016, but that intake was cancelled due to low enrollment. Despite marketing efforts supported by ACA, and despite the possibility of accessing Adult Upgrading Grant funding, only 12 students enrolled for the spring 2017 intake.

Key Messages:

1. This discontinuance is brought forward in accordance with the procedures outlined in KPU Policy AC10 as per the attached memo.
2. The Provost/VP Academic has endorsed this discontinuance as per the attached memo.

Implications / Risks:

1. This discontinuance has no implication for other KPU programs.
2. There are no students currently enrolled in the program.



SENATE

Agenda Item: 10.2
Meeting Date: May 28, 2018
Presenter: Jane Fee

Consultations:

1. Faculty in the CCLS program
2. ACA Standing Committee on Academic Planning and Priorities
3. ACA Faculty Council
4. Provost/VP Academic

Attachments:

1. Proposal to ACA Faculty Council to discontinue the Career Choices and Life Success Program
2. Endorsement memo from Provost

Submitted by:

*Jane Fee, Chair,
Senate Standing Committee on Academic Planning and Priorities*

Date submitted:

May 11, 2018



MEMORANDUM

TO: Faculty Council, Faculty of Academic and Career Advancement

CC: Patrick Donahoe, Dean, Faculty of Academic and Career Advancement

FROM: Aimee Begalka, Associate Dean, Faculty of Academic and Career Advancement

DATE: April 20, 2018

SUBJECT: Proposal to Discontinue the Career Choices and Life Success Program

In accordance with the procedure outlined in KPU Policy AC10, Section B.2.f, the Dean of ACA proposes to discontinue the Career Choices and Life Success program, effective August 31, 2018.

ALL IMPACTED CREDENTIALS AND SPECIFIC DISCIPLINE OR FIELD OF STUDY

Citation in CCLS program.

LOCATION(S) OF THE PROGRAM

Langley campus

FACULTY, DEPARTMENT, OR SCHOOL OFFERING THE PROGRAM

The Faculty of Academic and Career Advancement

ANTICIPATED FINAL DATE OF DISCONTINUANCE

August 31, 2018

REASONS FOR DISCONTINUANCE OF THE PROGRAM

- The CCLS program has been under enrolled since it became tuition-bearing for the 2016-17 academic year. The September, 2016, intake was cancelled due to low enrollment.

MEMORANDUM

- At the recommendation of ACA Faculty Council and AP&P Committee, the Dean's office provided a section of release time in the fall of 2016 to support marketing efforts to fill the January, 2017, intake. These efforts resulted in the program running in the spring 2017 term with a cohort of 12 students.
- The program faculty/coordinator was directed to use accountable time to continue marketing and outreach to potential students and related agencies from May-August, 2017. These efforts resulted in two students registered for the fall intake.
- When Adult Basic Education and ESL became tuition-free for domestic students in fall 2017, tuition remained in effect for CCLS. Faculty in the program reported that prospective students who do not meet requirements for the Adult Upgrading Grant are not willing to pay tuition and fees amounting to over \$2200 for the program, which does not lead to a recognized credential or ladder into other KPU programs.

PLAN FOR PHASING OUT THE PROGRAM

1) Steps taken to consult with faculty and staff regarding phasing out

September 9, 2016 AP&P Motion: **That ACA fund a CCLS ¼ time faculty release to enhance recruitment strategies for the January 2017 CCLS intake.** Carried

November 4, 2016 AP&P minutes: "reports on recruitment efforts were provided to AP&P by CCLS program faculty."

January 13, 2017 AP&P minutes: "CCLS enrolment update provided; program faculty requested that the spring cohort be allowed to run despite under enrolment."

In consultation with the Provost, ACA Dean approved the request.

May to August, 2017: The program faculty/coordinator was directed to use accountable time to continue marketing and outreach to potential students and related agencies.

September 8, 2017 AP&P minutes: Enrolment trends in CCLS were provided. An update of the fall 2017 enrolment of 2 students was acknowledged. The impact of the program being a tuition bearing program was acknowledged.

Information about policy AC10, Establishment, Revision, Suspension and/or Discontinuance of Programs was outlined.

MEMORANDUM

Dean Donahoe has met with the faculty member and the KFA to advise them of the concern of the state of CCLS and possible strategies to address the concerns.

Motion: That AP&P accept notification of suspension of Career Choices & Life Success enrolments for the Fall 2017 and Spring 2018 semesters. Carried

September 22, 2017 Faculty Council minutes: AP&P report accepted including notification of suspension of CCLS intakes for fall 2017 and spring 2018. FC requested CCLS update at next FC meeting.

October 20 2017 FC minutes indicate that the ACA 2017/18 budget was approved without a provision for CCLS. Concern expressed that the suspension of the CCLS program has not gone through the formal process, citing policy AC10. Reply was that intakes for CCLS have been suspended based on enrollment, not the program itself. Assoc. Dean was asked to request data from IAP re: CCLS students continuing in KPU programs.

Feb 23, 2018 FC: IAP data re: CCLS students who continue in other KPU programs were presented.

2) Steps taken to consult with students regarding phasing out:

April 4, 2017: Focus group held with the spring 2017 CCLS cohort to ask students about their experience in the program and what audiences the program should market to. Almost all the students in the cohort were receiving AUG funding. One student was self-funded. The group said they felt the self-exploration components of the program would benefit students coming to KPU straight out of high school; however, program faculty had reservations about this because the program expects a high level of maturity in its students.

3) Steps taken to ensure students in the program have the opportunity to complete the program:

No students are currently enrolled in the program. No students will return to complete the program because all students completed the program when it was offered.

4) Steps taken to consult with other impacted departments, Faculties and units:

As outlined above, other ACA departments have been consulted on this decision.



MEMORANDUM

In addition, an internal CCLS advisory group meeting was held April 21, 2017 to consider the future of the program.

5) Impact on and/or reorganization of curriculum in cognate disciplines:

Discussion was held at the March 16, 2018, FC meeting regarding the possibility of moving CCLS programming into another ACA department in order to preserve some of the self-exploration content that aligns with the mission of ACA. However, the Provost's recommendation to move the ABTY program into ACA should alleviate those concerns as ABTY contains content related to workplace and HR practices as well as skill-based content in communications, accounting and business software.

6) Timeline of Activities

CCLS faculty member was given notice of layoff September 1, 2017, effective January 31, 2018

NAME, TITLE, PHONE NUMBER AND EMAIL ADDRESS OF THE INSTITUTIONAL CONTACT PERSON

Patrick Donahoe, Dean, Faculty of Academic and Career Advancement

Telephone: 604-599-2388; email: Patrick.Donahoe@kpu.ca

POTENTIAL LEGAL IMPLICATIONS OF THE PROGRAM DISCONTINUANCE

None

TO: Patrick Donahoe, Dean, Faculty of Academic and Career Advancement

CC: Aimee Begalka, Associate Dean, Faculty of Academic and Career Advancement

FROM: Salvador Ferreras, Provost & Vice President Academic

DATE: April 18, 2018

SUBJECT: Proposal to Discontinue the Career Choices and Life Success (CCLS) Program

In accordance with KPU [Policy AC10, Establishment, Revision, Suspension and/or Discontinuance of Programs](#) and requirements outlined in Section B.2.f. of the supporting [Procedures](#), I have reviewed your detailed proposal (attached) to discontinue the Career Choices and Life Success (CCLS) Program.

This memo confirms my full support and endorsement on the *Proposal to Discontinue the Career Choices and Life Success (CCLS) Program*.



SENATE

Agenda Item: 10.3
Meeting Date: May 28, 2018
Presenter: Jane Fee

Agenda Item:

Program Concept:
Graduate Certificate in Sustainable Food Systems and Food Security

| | |
|--------------------------------|--|
| Action Requested: | <input checked="" type="checkbox"/> Motion to Approve <input type="checkbox"/> Discussion <input type="checkbox"/> Information <input type="checkbox"/> Education |
| Recommended Resolution: | THAT Senate endorses the concept paper for the Graduate Certificate in Sustainable Food Systems and Food Security and recommends the Board of Governors grant approval to proceed with development of the full program proposal with an implementation date of January 1, 2019. |

Senate Standing Committee Report:

On May 18, 2018, the Senate Standing Committee on Academic Planning and Priorities and the Senate Standing Committee on the University Budget recommended that Senate approves the program concept for the Graduate Certificate in Sustainable Food Systems and Food Security with an implementation date of January 1, 2019.

Context & Background:

The proposed program is an 18-credit Graduate Certificate composed of courses in an online delivery format spanning one academic year. Additionally, this program of study will be formally articulated with the Royal Roads University Master of Arts – Integrated Studies program and required of those RRU students who want to pursue this graduate degree with a Sustainable Food System and Food Security emphasis. The interdisciplinary curriculum comprises two parts: a comprehensive interdisciplinary examination of contemporary food systems and food security from environmental, social and economic perspectives, elucidating the resultant multi-faced and deep challenges to humanity and the rest of creation; and envisioning and facilitating an alternate food system future.

Key Messages:

1. To impart a comprehensive understanding of the sustainability challenges in our contemporary food system.
2. To imbue graduates with an understanding of emerging research and knowledge around sustainable food systems.



SENATE

Agenda Item: 10.3
Meeting Date: May 28, 2018
Presenter: Jane Fee

3. Train change-makers; prepare builders and leaders to implement effective and innovative strategies to advance sustainable food systems.

**Resource
Requirements:**

As the program may be taken part-time, it is suitable for working professionals. All courses will be offered online, which will allow interested individuals from all around the world to enroll in the proposed program.

Implications / Risks:

Overall, the evidence suggests that there will be very good demand for KPU's proposed Graduate Certificate in Sustainable Food Systems and Security.

Consultations:

1. Arts Subcommittee on Academic Planning and Priorities (ASCAPP)
2. Arts Subcommittee on Curriculum (ASCC)
3. Arts Faculty Council (AFC)

Attachments:

Concept proposal with feasibility assessment that includes Faculty of Arts and Sustainable Horticulture and Food

Submitted by:

*Jane Fee, Chair,
Senate Standing Committee on Academic Planning and Priorities*

Date submitted:

May 21, 2018

Proposal for Kwantlen Polytechnic University

Graduate Certificate – Sustainable Food Systems and Food Security

Prepared by: **Dr. Kent Mullinix**
Dr. Faith Auton-Cuff

Table of Contents

| | |
|---|------------|
| Summary..... | 1 |
| Budgetary Impact of Curriculum | 4 |
| IAP Program Proposal Feasibility Assessment Request Form | 9 |
| IAP Feasibility Assessment Report | 17 |
| Library Impact Assessment..... | 41 |
| Letters of Support | 43 |
| Course Outlines..... | 74 |
| SFSS 6100 | 74 |
| SFSS 6110 | 80 |
| SFSS 6120 | 87 |
| SFSS 6130 | 93 |
| SFSS 6140 | 99 |
| SFSS 6180 | 106 |

This form is to be used for all proposed non-degree programs that are going to Senate for approval. Please submit the completed concept form, including all supplementary documentation, to Senate Office at Senate@kpu.ca at least two weeks before the next meeting of the Senate Standing Committee on Academic Planning and Priorities. For more information on how to complete this concept form, or to submit a completed concept paper for approval by Senate and the Board, please contact the Vice Chair of Senate.

Please include the following completed documents:

- ☒ Budgetary Impact of Curriculum Proposal Form
- ☒ Cost and Revenue Form
- ☒ Institutional Analysis and Planning Program Feasibility Assessment Request Form
- ☒ Institutional Analysis and Planning Program Feasibility Assessment Report Library
- ☒ Impact Assessment

CONTACT INFORMATION

| | | | |
|--------------|--|--------|---|
| Faculty: | Arts | | |
| Department: | Sustainable Food Systems and Food Security | | |
| Developer: | Kent Mullinix | Phone: | 604-612-1252 |
| | | Email: | kent.mullinix@kpu.ca |
| Dean/A Dean: | Dr. Diane Purvey Dr. Faith Auton-Cuff | Phone: | 604-599- 2052/3076 |
| | | Email: | Diane.Purvey@kpu.ca ; faith.auton-cuff@kpu.ca |

PROGRAM INFORMATION

| | |
|---------------------------|---|
| Name of proposed program: | Graduate Certificate- Sustainable Food Systems and Food Security |
|---------------------------|---|

SUMMARY OF THE PROPOSED PROGRAM

The proposed program is an 18 credit Graduate Certificate entitled Sustainable Food Systems and Food Security. Courses will be developed for on-line delivery over the course of one academic year. Additionally this program of study will be formally articulated with the Royal Roads University Master of Arts- Integrated Studies program and required of those RRU students who want to pursue this graduate degree with a Sustainable Food System and Food Security emphasis (option). The multidisciplinary curriculum comprises two parts:

Part one focuses on a comprehensive multidisciplinary examination of contemporary food systems and food security from environmental, social and economic perspectives, elucidating the resultant multi-faceted and deep challenges to humanity and the rest of creation. Courses developed are: SFSS 6100 *Our Food System and Sustainability* (1 credit); SFSS 6110 *Environment and Food* (4 credits); SFSS 6120 *Food System Economics* (3 credits); SFSS 6130 *Food Systems and Society* (4 credits).

Part two focuses on envisioning and facilitating an alternate food system future. SFSS 6140 *Creating Our Food System Future* (4 credits) will examine alternate food system paradigms and their objectives, consider such things as innovative models, design approaches, appropriate technologies, business/ economic models, bottom-up vs top-down approaches/ actions, policy and social activism and will utilize case studies. SFSS 6180 *Capstone Project* will require students to identify, analyze and devise a comprehensive strategy to mitigate a food

CONCEPT PAPER
(Graduate Certificate- Sustainable Food Systems and Food Security)

system/ food security challenge or advance a sustainable food/ food security element in their life place. Per our discussion/ pending agreement with RRU this project can serve as preparatory to thesis research and writing.

ALIGNMENT WITH KPU MISSION AND MANDATE, STRATEGIC PLAN AND ACADEMIC PLAN

Please provide evidence of how the proposed program aligns with KPU's Mission and Mandate, Strategic Plan, and Academic Plan (250 words max):

The proposed program aligns with the KPU mission (2018), Strategic Plan and Academic Plan in numerous relevant ways:

1. It contributes to the diversity of educational programming and represents KPU's inauguration into graduate level programming. It will constitute an additional education path that KPU learners can take.
2. The curriculum is designed to blend theory and application and is intended to facilitate an examination and understanding of contemporary, dominant food systems thus imbuing a critical understanding and social and ethical awareness of sustainable food systems and food security as a fundamental and integral element of sustainable society.
3. The proposed program targets professionals and aspiring professionals engaged in a locally embedded but globally relevant issue. It has potential to bring professionals and learners with a common interest and focus, from around the world, together.
4. Sustainability is unequivocally at the heart of this program. Focused on the issue of food system sustainability it will build on and will advance KPU's success and distinct and growing reputation as a Canadian leader in sustainable agriculture and food system education, outreach and applied research.
5. By attracting and accommodating students from around the world (via on-line programming) this program will enhance KPU's internationalization; it will be accessible and support learners beyond the classroom and afford levels of education flexibility.
6. This program will link to KPU's research programming focused on sustainable food systems and food security. It will foster and support purposeful applied research and community engagement.

PROPOSED IMPLEMENTATION SCHEDULE

Please provide the intended implementation schedule for the new program. Please include evidence of the appropriateness of the schedule, given the timing of the proposal and readiness of the institution to offer the program. (250 words max)

It is intended for this program to be implemented Spring or Fall 2019 and delivered through the 2019-20 academic year.

*Please see the proposed Implementation Schedule Table below

Graduate Certificate in SFSS Approval Process 2018-19 – Faculty of Arts

| APPROVER | SUBMISSION DATE | MEETING DATE | ATTENDANCE REQUIRED BY |
|---|--|--|------------------------------------|
| | | | |
| ASCAPP | Feb. 20 th , 2018 | March 2 nd , 2018 | Kent Mullinix |
| | | | |
| ASCC | April 11 th , 2018*all courses need to be ready for submission on this date | April 20 th , 2018 | Kent & Course Developers if needed |
| | | | |
| AFC | April 20 th , 2018 | April 26 th , 2018 | Kent/Assoc. Dean |
| | | | |
| Provost | May 2 nd , 2018 | May 9 th , 2018 | Dean/Assoc Dean |
| | | | |
| PUE | | May 9 th , 2018 | Provost/Kent/Assoc. Dean |
| | | | |
| SSCAPP | May 11 th , 2018 | May 18 th , 2018 | Dean/Assoc Dean |
| | | | |
| SSCUB | May 11 th , 2018 | May 18 th , 2018 | Dean/Assoc Dean |
| | | | |
| Senate | May 18 th , 2018 | May 28 th , 2018 | Dean/Assoc Dean |
| | | | |
| Board finance and Audit Committee; Board Governance Committee; and Board of Governors | May 30 st , 2018 | June 12 th /13 th , 2018 | Dean/Assoc Dean |
| | June 15 th , 2018 | June 27 th , 2018 | |
| | | | |
| Provost | Gives permission to proceed to develop FPP | | Kent Mullinix |
| | | | |
| Internal/External Consultations | June, 2018 | | Kent |
| | | | |
| Verification with Provost on alignment of the FPP with the Concept Paper | June/July 2018 | | Dean/Assoc Dean |
| | | | |
| AFC | September 2018 | September 2018 | Kent/Assoc Dean |
| | | | |

| | | | |
|--|-------------------------------|---------------------------|------------------------|
| SSCC | September 2018 | September 2018 | Kent/Assoc Dean |
| | | | |
| SSCAPP | October 2018 | October 2018 | Kent/Assoc Dean |
| | | | |
| Senate | October 2018 | October 2018 | <u>Kent/Assoc Dean</u> |
| | | | |
| Board Governance Committee & Board of Governors | November 2018 | November 2018 | Kent/Assoc Dean |
| | | | |
| PSIPS X 30 days | November/December 2018 | November/December 2018 | Provost's Office |
| | | | |
| Response to PSIPS comments | December 2018/January 2019 | | Kent/Assoc Dean |
| | | | |
| Board of Governors decision regarding implementation | January or September 2019 | | |
| | | | |

Legend:

| | |
|---------------|--|
| ASCAPP | Arts Standing Committee on Academic Planning and Priorities |
| ASCC | Arts Standing Committee on Curriculum |
| AFC | Arts Faculty Council |
| SSCAPP | Senate Subcommittee on Academic Planning and Priorities |
| SSCC | Senate Subcommittee on Curriculum |
| SSCUB | Senate Subcommittee on University Budget |
| PUE | Polytechnic University Executive |
| PSIPS | Post-Secondary Institution Proposal System |
| FPP | Full Program Proposal |



Budgetary Impact of Curriculum Proposals

From:

Date:

| | |
|---------------------|--------------------------|
| Dept./Program: SFSS | Faculty: Faculty of Arts |
| Phone: | E-mail: |

Program(s)/Course change(s) that this form applies to:
(one form may be used for multiple changes with similar budgetary impact)

Graduate Certificate in Sustainable Food Systems and Security (SFSS)

Indicate the budgetary impact or implications of the proposed curriculum changes and provide a brief explanation of additional resources, if required (please attach if lengthy):
(Please contact Financial Services at Budget.Accing@kpu.ca for assistance with completing this form.)

Starting 2018-19 academic year. The only major costs are for instructors and program coordination. There are no capital requirements and no miscellaneous goods and services costs. Faculty (NR-1)=\$36,000/year; Coordination=\$25,000/year; Goods and Services/Operations=\$5000/year. See attached financials.

Select from one of the following two choices:

- ☐ NO. The Faculty does NOT require additional budget to implement the proposed curriculum changes.
- ☒ YES. Additional budget IS required to implement this curriculum change. A brief explanation is requested.
- ☐ Additional budget is required by the proposing Faculty.
- ☐ Additional budget is required by other Faculties outside of the proposing Faculty. Signatures of Deans from other Faculties offering service courses are required.

Signature of Department Chair:

Kent Mullin

Date: Jan. 23, 2018

Signature of Faculty Council Chair:

Kent Mullin

Date: _____

Signature of Faculty Dean:

David Thompson

Date: April 30, 2018

Signature of Deans Offering Service Courses:

No service courses needed.

Date: April 30, 2018

Date: _____

Signature of University Librarian
(if additional library resources required)

*see Library Impact Assessment Form

Date: _____

Signature from Financial Services:

Joe Sass
Joe Sass, Executive Director

Date: January 22, 2018

Signature of Provost:

(mandatory for all new program proposals and for significant changes that may have a budgetary impact)

Salvador Ferreras
Salvador Ferreras

Date: _____

May 9, 2018

Signature from Polytechnic
University Executive:

(mandatory for all new program proposals)¹:

Alan Davis
Alan Davis

Date: _____

May 9, 2018

¹ Please note that new programs include degrees and non-degree programs that are under the purview of the Senate.

Financial Assessment Template
Summary Financial Information

Course/Program Name:

Completion Notes

| | Total Credits | Year 1 | Year 2 | Year 3 | Year 4 | Stable State |
|--|---------------|----------|---------|---------|---------|--------------|
| Student Mix Expectations per year | | | | | | |
| Full-Time Delivery | | | | | | |
| Domestic Students | 18 | 7 | 12 | 17 | 21 | 25 |
| International Students | 18 | 2 | 3 | 4 | 5 | 5 |
| Part-Time Delivery | | | | | | |
| Domestic Students | 9 | 0 | 0 | 0 | 0 | 0 |
| International Students | 9 | 0 | 0 | 0 | 0 | 0 |
| Total Students per year | | 9 | 15 | 21 | 26 | 30 |
| Number of Intended Intakes | | | | | | |
| | | 1 | 1 | 1 | 1 | 1 |
| Number of Intended Cohorts per intake | | | | | | |
| | | 1 | 1 | 1 | 1 | 1 |
| Revenues: | | | | | | |
| Operating | 83,599 | 138,899 | 194,198 | 240,498 | 276,498 | |
| One-time Only/Start-up | - | - | - | - | - | - |
| Total Revenues: | 83,599 | 138,899 | 194,198 | 240,498 | 276,498 | |
| Expenses: | | | | | | |
| One-time Only/Start-up Operating | 46,000 | - | - | - | - | - |
| One-time Only/Start-up Capital | - | - | - | - | - | - |
| Ongoing Operating Costs | 110,838 | 110,838 | 110,838 | 110,838 | 110,838 | 110,838 |
| Total Expenses: | 156,838 | 110,838 | 110,838 | 110,838 | 110,838 | 110,838 |
| 40% Overhead | 62,735 | 44,335 | 44,335 | 44,335 | 44,335 | 44,335 |
| Net Income/(Loss) | (135,973) | (16,274) | 39,026 | 85,326 | 121,326 | |
| Budget required | | | | | | |
| Operating Budget | 61,000 | 61,000 | 61,000 | 61,000 | 61,000 | 61,000 |
| Capital Budget | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Budget Required | 61,000 | 61,000 | 61,000 | 61,000 | 61,000 | 61,000 |

What fiscal year will budget be required? If broken across multiple years please identify:

Starting 2018-19 academic year. The only major costs are for instructors and program coordination. There are no capital requirements and no miscellaneous goods and services costs. Faculty (NR-1)= \$36,000/ year; Coordination= \$25,000/ year; Goods and Services/ Operations= \$5000/ year.

| | |
|---------------------------------|----------|
| Total Investment/Start-up Costs | (27,896) |
| Stable State Net Income | 121,326 |

Payback Period (in stable state years)

0.23 *assumes a 2% inflation

Break-even # of Domestic Students

18

based on multi-cohorts
18 per cohort

Financial Services sign-off:

Please note that Financial Services Sign-off does not indicate budget allocation.

Executive Director, Financial Services

Date: 01/22/18

VP, Finance and Admin

Date: _____

Is program/course profitable?

If no, please provide rationale of why the program should be financially supported by the University

Faculty Sign-off:

Course/Program Developer

Date: _____

Dean

Date: _____

Step 1. Student Mix Expectations and Course Summary Information

| Student Mix Expectations per intake | | Year 1 | Year 2 | Year 3 | Year 4 | Stable State | Comments (where relevant or helpful please include notes about what is included in revenues) |
|-------------------------------------|------------------------|--------|--------|--------|--------|--------------|---|
| | | | | | | | |
| Full-Time Delivery | | | | | | | |
| | Domestic Students | 7 | 12 | 17 | 21 | 25 | |
| | International Students | 2 | 3 | 4 | 5 | 5 | |
| Part-Time Delivery | | | | | | | |
| | Domestic Students | | | | | | |
| | International Students | | | | | | |
| Total Students per intake | | 9 | 15 | 21 | 26 | 30 | |
| Number of Intended Intakes | | 1 | 1 | 1 | 1 | 1 | |
| Total Cohorts per intake | | 1 | 1 | 1 | 1 | 1 | |

| Faculty Delivery Mix Expectations | | Year 1 | Year 2 | Year 3 | Year 4 | Stable State | Comments (where relevant or helpful please include notes about what is included in revenues) |
|-----------------------------------|--|--------|--------|--------|--------|--------------|---|
| Full-Time Delivery | | | | | | | |
| | % of courses delivered by Regular/NR/2 | 50% | 50% | 50% | 50% | 50% | |
| | % of courses delivered by NR/1 | 50% | 50% | 50% | 50% | 50% | |
| Part-Time Delivery | | | | | | | |
| | % of courses delivered by Regular/NR/2 | 0% | 0% | 0% | 0% | 0% | |
| | % of courses delivered by NR/1 | 0% | 0% | 0% | 0% | 0% | |

Course Summary information

[illegible]

Financial Assessment Template

Step 2. Projected Revenues

| | Year 1 | Year 2 | Year 3 | Year 4 | Stable State | Comments (where relevant or helpful please include notes about what is included in revenues) |
|----------------------------|--------|--------|--------|--------|--------------|---|
| Number of Intended Intakes | 1 | 1 | 1 | 1 | 1 | |
| Total Cohorts per intake | 1 | 1 | 1 | 1 | 1 | |

Student Mix Expectations per year (# of intakes * students per intake)

| | | | | | | |
|-------------------------|---|----|----|----|----|---|
| Full-Time Delivery | | | | | | |
| Domestic Students | 7 | 12 | 17 | 21 | 25 | |
| International Students | 2 | 3 | 4 | 5 | 5 | dents to enroll in this program with no expectation of or desire to obtain a work permit. They will be professi |
| Part- Time Delivery | | | | | | |
| Domestic Students | 0 | 0 | 0 | 0 | 0 | |
| International Students | 0 | 0 | 0 | 0 | 0 | |
| Total Students per year | 9 | 15 | 21 | 26 | 30 | |

| | | | | | | |
|-----------------------------------|--------|---------|---------|---------|---------|--|
| Operating Revenues | | | | | | |
| Domestic Tuition Fees | 63,000 | 108,000 | 153,000 | 189,000 | 225,000 | |
| International Tuition Fees | 20,599 | 30,899 | 41,198 | 51,498 | 51,498 | |
| Material Fees | - | - | - | - | - | |
| Other Fees | - | - | - | - | - | |
| Other Revenues (Grants, etc.) | - | - | - | - | - | |
| Total Operating Revenues | 83,599 | 138,899 | 194,198 | 240,498 | 276,498 | |
| One-time Only /Start- Up Revenues | | | | | | |
| Other Fees | | | | | | |
| Other Revenues (Grants, etc.) | | | | | | |
| Total One-time Only Revenues | - | - | - | - | - | |
| Total Revenues | 83,599 | 138,899 | 194,198 | 240,498 | 276,498 | |

Intake frequency:

Intake frequency will impact annual revenues calculated above. If there are multiple intakes each year please describe and ensure that the impact on section requirements is captured above

One intake per year.

Is this a cohort based program?

If yes, please outline the attrition mitigation strategy i.e. multiple entrance points, common core first year, etc.

No.

Assumptions

International Tuition fee revenue in 2017/18 \$ 572.20 *Assumption will be updated in template annually. Please use rate provided

Financial Assessment Template
Step 3. Projected Expenses

1. A) Academic Non-recurring estimated start-up costs (e.g. equipment costs/other)

| One-time Only/Start-up Operating | | | | | | Comments (where relevant or helpful please include notes about what is included in costs) |
|--|--------|--------|--------|--------|--|--|
| Item | Year 1 | Year 2 | Year 3 | Year 4 | | |
| Program Development | | - | - | - | | |
| Curriculum Development (can be costs related to externally or internally developed materials) | 36,000 | - | - | - | | |
| Staff- PD/Enrichment | | - | - | - | | |
| Marketing - Start-up | 10,000 | - | - | - | | |
| Masters Articulation | - | - | - | - | | |
| Sub-total | 46,000 | - | - | - | | |

| Capital Costs (Equipment and Renovations) | | | | | | Comments |
|---|--------|--------|--------|--------|--|----------|
| Item | Year 1 | Year 2 | Year 3 | Year 4 | | |
| | - | - | - | - | | |
| | | | | | | |
| Sub-total | - | - | - | - | | |

| Total Non-recurring Costs | | | | | | Comments |
|----------------------------------|--------|--------|--------|--------|---|----------|
| Item | Year 1 | Year 2 | Year 3 | Year 4 | | |
| One-time Only/Start-up Operating | 46,000 | - | - | - | - | |
| One-time Only/Start-up Capital | - | - | - | - | - | |
| Total Non-recurring Costs | 46,000 | - | - | - | - | |

On-going Operating Costs

Faculty Delivery Mix Expectations

| Full-Time Delivery | Year 1 | Year 2 | Year 3 | Year 4 | Stable State | Comments |
|-------------------------------|---------------------------------------|--------|--------|--------|--------------|----------|
| | | | | | | |
| | % of courses delivered by Regular/NR2 | 50.0% | 50.0% | 50.0% | 50.0% | |
| % of courses delivered by NR1 | 50.0% | 50.0% | 50.0% | 50.0% | 50.0% | |

Part-Time Delivery

| | | | | | | |
|---------------------------------------|------|------|------|------|------|--|
| % of courses delivered by Regular/NR2 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | |
| % of courses delivered by NR1 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | |

| | Year 1 | Year 2 | Year 3 | Year 4 | Stable State | Comments |
|----------------------------|--------|--------|--------|--------|--------------|----------|
| Number of Intended Intakes | 1 | 1 | 1 | 1 | 1 | |
| Total Cohorts per intake | 1 | 1 | 1 | 1 | 1 | |
| Total Cohorts | 1 | 1 | 1 | 1 | 1 | |

Operating Costs - Variable and Fixed Costs

| Item | Year 1 | Year 2 | Year 3 | Year 4 | Stable State | Comments |
|--|---------|---------|---------|---------|--------------|------------------------------------|
| <u>Direct Program Costs</u> | | | | | | |
| Faculty | | | | | | |
| Regular/NR2 Salaries and Benefits | 42,938 | 42,938 | 42,938 | 42,938 | 42,938 | |
| NR1 Salaries and Benefits | 20,400 | 20,400 | 20,400 | 20,400 | 20,400 | |
| Total Faculty Salaries and Benefits | 63,338 | 63,338 | 63,338 | 63,338 | 63,338 | |
| Advisor | | | | | | |
| Lab Operating Salary and Benefits (Program specific) | | | | | | |
| Ongoing Research Costs | | | | | | |
| Travel | | | | | | |
| Professional Development | | | | | | |
| Supplies | | | | | | |
| Orientation | | | | | | |
| Other | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | Non- faculty Program Administrator |
| Other | | | | | | |
| Other | | | | | | |
| <u>Administrative Support (Program Specific)</u> | | | | | | |
| * If the expectation is that program needs can be met with existing resources please include this assumption in comments | | | | | | |
| Lab Operating Costs -Salary | | | | | | |
| Lab Operating Costs -Non-Salary | | | | | | |
| Specialized IT (software/hardware) | | | | | | |
| Specialized IT Support | | | | | | |
| Library (see Library Assessment Template -Appendix B) | | | | | | |
| Marketing - Ongoing specific to Program | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | |
| Admin Support Staff | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | |
| Other | | | | | | |
| Capital | | | | | | |
| Total Ongoing Operating Costs | 110,838 | 110,838 | 110,838 | 110,838 | 110,838 | |

Program Proposal Feasibility Assessment Request Form

Please note this request form, when completed, will be part of the Concept document submitted to Senate, and part of the submission to the Ministry of Advanced Education (AVED).

Please complete each cell in the right hand column. If you have any questions, please contact IAP at <iap@kpu.ca>.

When completed, please email a copy to <iap@kpu.ca> & <lori.mcelroy@kpu.ca>.

| | |
|---|---|
| Date assessment required <i>Note: IAP generally needs at least a month notice to do a feasibility assessment.</i> | August 23 rd , 2017 |
| Name of person to contact for additional information | Kent Mullinix, Institute for Sustainable Food Systems # 604-612-1252 |
| OVERVIEW | |
| Academic unit offering proposed program <i>Specify Faculty and department or unit within the Faculty that will deliver the program</i> | Faculty of Arts |
| Name of proposed program <i>(include all related programs, such as minors)</i> | Graduate Certificate in Sustainable Food Systems and Security (SFSS) |
| Classification of Instructional Program (CIP) http://www23.statcan.gc.ca/imdb/p3VD.pl?Function=getVDPPage1&db=imdb&dis=2&adm=8&TV=127939 <i>(Please provide a 6-digit number. Contact IAP for assistance if required)</i> | 30.3301 - - Sustainability studies |
| Program development/revision status <i>Indicate whether this is a new program or a revision of an existing program</i> | New Program |

PROGRAM DESCRIPTION & STRUCTURE

Description of discipline

In two or three sentences, provide an overview of the discipline.

Food systems and issues of food security have, in recent times, risen to the forefront of sustainability discourse, research and community based action. This has occurred in response to the grievous outcomes from the imposition of neo-liberal globalization of the food system (inputs, production, processing, storage, distribution, sales and waste). Our food system has become, over the last six decades, increasingly industrialized, input and capital intensive, consolidated, and under the hegemonic control of a few transnational corporations. Outcomes include the production of enough food for every person on earth while 1/6th of the population is undernourished and another 1/6th is overfed leading to epidemic of food related disease (e.g. starvation, obesity, coronary heart disease, childhood onset diabetes), unsustainable dependence on fossil fuels, profligate greenhouse gas emissions and other forms of environmental destruction, and the economic and social marginalization of agriculture, agriculturists and agriculture communities. It has not alleviated food insecurity in Canada or elsewhere. Additionally it is fully recognized that climate change as well as resource (arable land, water, energy) limits will have a profound effect on agriculture and food security. Twenty-first century food systems must respond to these challenges. This graduate certificate focuses on understanding the social, environmental and economic dimensions of sustainable food systems appropriate to meet the challenges of the 21st century and preparation of sustainable food system and food security advocates, leaders and builders, who work or will work in a myriad of professional capacities concerned directly and indirectly with this foundational and fundamentally critical element of our society and economy.

| | |
|--|--|
| <p>Program description</p> <p><i>In approximately 300-500 words, provide an overview of the proposed program, including:</i></p> <ul style="list-style-type: none">• <i>its relationship to the discipline (i.e. focus of program),</i>• <i>program objectives (list 3-5), and</i>• <i>key learning outcomes (list 3-5)</i> <p><i>Please be specific.</i></p> | <p>The Sustainable Food Systems and Security (SFSS) program is a research informed curriculum with sustainability at its core. This program is a multi-disciplinary program geared to train change-makers. The curricula will be dynamic, up to date and adaptable to new ideas and needs. It is led by faculty with terminal degrees in their fields of expertise and actively involved in applied knowledge creation and mobilization.</p> <p>This 18-credit program is for a breadth of professionals seeking professional development as well as for entry level professionals; anyone seeking to learn about the food, environment and society from a systems perspective.</p> <p>The key program objectives are-</p> <ul style="list-style-type: none">• To impart a comprehensive understanding of the sustainability challenges in our contemporary food system.• To imbue students with an understanding of emerging research and knowledge around sustainable food systems.• Train change-makers; prepare builders and leaders to implement effective and innovative strategies to advance sustainable food systems. |
|--|--|

| | |
|---|--|
| <p>Program concentrations</p> <p><i>Provide an overview of the number of credits in the subject concentration(s) that will be included in the program.</i></p> <p>Total number of credits in the subject concentration (s) – please specify the subject concentration(s)</p> <ul style="list-style-type: none"> • Number of credits in the subject concentration(s) that will be taken at the lower levels (level 1 & 2) • Number of credits in the subject concentration(s) that will be taken at the upper levels (level 3 & 4) <p><i>Note: A program may have more than one subject concentration – for example, an equal number of general management/ leadership courses and supply chain management courses.</i></p> <p>Optional: If available, a list of required and elective courses for the program may be included.</p> | <p>Total program credits: 18</p> <p>Part 1 (12 credits)</p> <p>A Our Food System and Sustainability: 1 credit</p> <p>B Environment and Food Systems: 4 credits</p> <p>C Food System Economics: 3 credits</p> <p>D Food Systems and Society: 4 credits</p> <p>Part 2 (6 credits)</p> <p>E Creating Our Food System Future: 4 credits</p> <p>F Capstone Project: 2 credits</p> |
| <p>PROGRAM INFORMATION</p> | |
| <p>Proposed credential(s) to be granted</p> | <p>Graduate Certificate</p> |
| <p>Expected time to complete (in terms)</p> | <p>1 Year</p> |
| <p>Total number of credits required</p> | <p>18 credits</p> |
| <p>Type of intake</p> <p><i>Open intake (Faculty admission) or Limited intake (Program/cohort admission)</i></p> | <p>Limited Intake</p> |
| <p>Entry options</p> <p><i>Please describe the alternate ways to enter the program with advanced standing, such as bridging, transfer credit and Prior Learning Assessment & Recognition (PLAR).</i></p> | <p>None</p> |
| <p>Laddering options</p> <p><i>Does this program ladder from, or to, other KPU programs? Y/N. If yes, please specify.</i></p> | <p>No</p> |
| <p>Program delivery options</p> <p><i>Please indicate Y/N for the below options. If Y, please provide a brief description (i.e. all core courses scheduled for the weekday evenings)</i></p> <p>Part-time delivery</p> | <p>Yes- courses must be taken sequentially but are not required to be taken all at the same time. This will allow working professionals to complete the certificate program at their own pace.</p> |

| | |
|--|--|
| Evening/weekend delivery | No |
| Online delivery (complete or partial) | Yes – All courses will be developed for online delivery |
| Other alternate delivery | No |
| Co-op education program / practicum / clinical practice, etc. available? <i>Y/N. If yes, please specify.</i> | No |
| Community engagement / experiential learning opportunities for students? <i>Y/N. If yes, please specify.</i> | Yes – Capstone project |
| Certification of graduates / accreditation of program? <i>Y/N. If yes, please name the agency and describe the standards which must be met.</i> | No |
| Cost-recovery program? <i>Y/N. If yes, provide proposed tuition for domestic and international students. (If this information is not available at this stage, IAP can provide a draft assessment which will be updated upon receipt of tuition information).</i> | No |
| INFORMATION FOR COMPETITIVE ASSESSMENT <i>(Please note the information provided in this section will be used by IAP in the assessment of the proposed program.)</i> | |
| Related programs at other postsecondary institutions <i>Please provide the name(s) of related/most closely related program(s) and institution(s)</i> | <ul style="list-style-type: none"> • Integrated Studies in Land & Food Systems (MSc & PhD); UBC • Master of Land and Water Systems (Professional Masters); UBC • M.Sc. Food, Agriculture and Resource Economics; University of Guelph |

| | |
|---|---|
| <p>Unique aspects of the program/ program strengths</p> <p><i>Describe the unique aspects of the program (in terms of curriculum, unique experiential learning options, delivery, etc.). Why would potential students want to take the program at KPU? Please be specific.</i></p> | <ul style="list-style-type: none"> • Builds on the reputation KPU has built over the last 10 years as a Canadian academic leader in sustainable agriculture and food systems and our unique, cutting edge education, applied research and extension programming (BSc Sustainable Agriculture, Tsawwassen Farm School, Richmond Farm School, and Institute for Sustainable Food Systems). • Will focus on broad range of professionals including planning, economic development, community activist, NGOs, education (all levels), business, health, social work, food sector business etc. • Will focus on professional entry level preparation as well as professional development for established professions. • Will articulate with the Royal Roads University (RRU) Master of Arts- Interdisciplinary Studies program (affording opportunity to earn an MA degree). • Is constructed and taught by an interdisciplinary team focused on systems and holistic perspectives. • Capstone course will require place-based community engagement which can tie directly into the RRU MA degree research requirement. • All courses will be coherently designed for online delivery. Students around the world will be able to enroll in this program. |
|---|---|

INFORMATION FOR STUDENT DEMAND ASSESSMENT

(Please note the information provided in this section will be used by IAP in the assessment of the proposed program.)

| | |
|---|---|
| <p>Current KPU Students</p> <p><i>Would current students at KPU be interested in the program? Y/N. If yes, what programs are those students currently in? Why would they be interested in the program?</i></p> | <p>Yes – graduates of sustainable agriculture, policy studies, NGO and non-profit studies, design, health sciences, geography, horticulture, social sciences. Interest in and the advancement of sustainable food systems and food security far transcends agriculture (agronomy, horticulture and animal science). Much of the work and movement is led by persons/ professionals educated and working outside of agriculture per say. The food system is a foundational and cross cutting aspect of sustainable society, and as such many food systems leaders and builders have training in disciplines within Arts and other Faculties- that is to say there is (and is needed) a breadth of expertise being brought to bear on this challenge of sustainable food systems and food security.</p> |
| <p>Related programs at KPU</p> <p><i>Provide the name(s) of related program(s) offered at KPU (regardless of credential), even those that the proposed program will replace.</i></p> | <p>Bachelor of Applied Science in Sustainable Agriculture, Bachelor of Horticulture, Major in Urban Ecosystems, or any relevant Bachelor of Arts degree (e.g., Geography, Anthropology, Sociology, Psychology, Economics, etc.)</p> |

| | |
|---|--|
| <p>Programs that could articulate with proposed program</p> <p><i>List programs (and institution) that you anticipate could articulate with the proposed program</i></p> | <p>This program will be formally articulated with the Royal Roads University's Master of Arts Interdisciplinary Studies program. RRU will require MAIS- Sustainable Food Systems and Food Security option degree seeking students to complete this KPU certificate to satisfy requirements for the degree.</p> |
| <p>INFORMATION FOR LABOUR MARKET ASSESSMENT</p> <p><i>(Please note the information provided in this section will be used by IAP in the assessment of the proposed program.)</i></p> | |
| <p>Main skills graduates will have upon completion of the program (be specific)</p> | <p>Graduates will leave the program with the ability to –</p> <ul style="list-style-type: none"> • Understand the sustainability challenges of our current food system. • Appreciate the difference between a reductionists approach and a holistic approach to food systems. • Implement effective and innovative strategies to advance sustainable food systems. • Link and integrate environmental science and environmental stewardship with food systems. • Define and analyze monetary flows, economic drivers and economic models inherent in and impacting the sustainability of food systems and food security. • Understand the health, community, culture and security aspects of food systems. • Understand and be able to develop effective policies and conceive of community/ region/ nation based solutions to advance suitability in all aspects of food system. |
| <p>Sectors/ types of employers that would <u>most likely</u> hire new graduates (list at least 3 and please be specific – e.g. municipal government, biotechnology firms, conservation agencies, etc.)</p> | <ul style="list-style-type: none"> • Planners/policy makers • Public educators and academics • NGOs • Chefs • Private sector innovators • People working in the new food system technology sectors • Economic development agencies • Agriculture/ food system business • Municipal and provincial government agencies focused on agriculture, food and economic/ community development |

| | |
|---|--|
| <p>Occupations and job titles for which <u>new graduates</u> of the program would be qualified <i>(What jobs are the program preparing students for? Please list 5-10 specific occupations).</i></p> | <ul style="list-style-type: none">• Municipal/ Regional District Planner• Policy Analyst• Agriculture/ Food System Consultant• Educator- K-12• Academic/ researcher- post-secondary• Entrepreneur• NGO staff• Government staff (e.g. Ministry of Agriculture, Ministry of Trade, Jobs and Economic Development)• Extension agent• Social/ Community Development professional• Food system professional |
|---|--|

Feasibility Assessment for the Proposed Graduate Certificate in Sustainable Food Systems and Security (SFSS)

Prepared by the Office of Institutional Analysis & Planning
Kwantlen Polytechnic University
December 12, 2017
Revised on April 19, 2018

Table of Contents

| | |
|---|-----------|
| Summary of Assessment | 1 |
| Description of KPU's Proposed Program | 1 |
| Labour Market Demand Assessment..... | 1 |
| Competitive Assessment | 3 |
| Student Demand Assessment | 3 |
| 1. Labour Market Demand..... | 6 |
| Meeting the World's Food Needs..... | 6 |
| Demographic and Structural Trends in B.C. Agriculture | 9 |
| Farm Numbers and Size..... | 9 |
| Age of Farm Operators | 9 |
| Real Estate Speculation of Farmland | 9 |
| Employment Outlook..... | 10 |
| Labour Market Demand Assessment..... | 11 |
| 2. Competitive Environment | 13 |
| Competitive Assessment | 14 |
| 3. Student Demand | 15 |
| The Changing Post-secondary Education Landscape..... | 15 |
| The Importance of Agriculture in the KPU Region..... | 16 |
| KPU Region Population | 18 |
| KPU Faculty of Arts and Faculty of Science and Horticulture Enrolments..... | 19 |
| Headcounts | 19 |
| Headcounts of Related Programs in the Faculty of Arts and the Faculty of Science and Horticulture | 20 |
| Student Demand Assessment..... | 20 |

List of Abbreviations

ALR: Agricultural Land Reserve

ATD: The Association for Talent Development

FAO: Food and Agriculture Organization of the United Nations

GHG: Greenhouse gases

IoT: The Internet of things

ISFS: Institute for Sustainable Food Systems

KPU: Kwantlen Polytechnic University

MA: Master of Arts

MOOCs: Massive Open Online Courses

RRU: Royal Roads University

SFSS: Graduate Certificate in Sustainable Food Systems and Security

SOIL: STEWARDS OF IRREPLACEABLE LAND

SWBC: Southwest British Columbia

UBC: The University of British Columbia

Summary of Assessment

The purpose of this report is to assess the labour market need, competitive environment, and student demand for the proposed Graduate Certificate in Sustainable Food Systems and Security (SFSS). Conclusions provided at the end of each chapter are duplicated below.

Description of KPU's Proposed Program¹

The proposed Graduate Certificate in Sustainable Food Systems and Security is an 18-credit program designed for individuals from a range of academic and professional backgrounds. Students of the program will have the opportunity to explore the complex issues and relationships between food, environment, and society from a systems perspective. As such, the program will serve anyone with a keen interest in food issues, alleviation of food insecurity, sustainable food systems, and food policy.

The key objectives of the program are:

- To impart a comprehensive understanding of the sustainability challenges in our contemporary food system.
- To imbue graduates with an understanding of emerging research and knowledge around sustainable food systems.
- Train change-makers; prepare builders and leaders to implement effective and innovative strategies to advance sustainable food systems.

As the program may be taken part-time, it is suitable for working professionals. All courses will be offered online, which will allow interested individuals from all around the world to enroll in the proposed program.

The proposed program will be formally articulated with the Master of Arts in Interdisciplinary Studies program at Royal Roads University, giving graduates of the program the opportunity to earn credits toward an MA degree.²

Labour Market Demand Assessment

The trends toward a global economy has changed the food production and distribution patterns remarkably in the second half of the 20th century. For the past 60 years, growing demand for food has been satisfied through intensifying and industrializing production systems and expanding farming areas.³ Today, the majority of farmland is dominated by modern industrial agriculture, a system of chemically intensive food production, featuring massive single-crop farms and animal production facilities. Although the food system⁴ that feeds us today produces more than enough calories to feed

¹ Source: Program Proposal Feasibility Assessment Form.

² Applicants from the Graduate Certificate in Sustainable Food Systems and Security will be eligible to transfer credits into the Master of Arts in Interdisciplinary Studies program at RRU, provided all other program admission criteria are met and space remains available.

³ Kent Mullinix. (August 12, 2015). KPU-Science World Speaker Series: Building Sustainable Food Systems for the 21st Century.

⁴ "A food system is an interconnected web of activities, resources and people that extends across all domains involved in providing human nourishment and sustaining health, including production, processing, packaging, distribution, marketing, consumption and

the world, 1.2 billion people are still food insecure and 1 million children starve to death annually⁵ because of the inequitable production and distribution systems of the modern industrial agriculture.⁶

Modern industrial agriculture techniques are taking a huge toll on the environment by destroying bio diverse habitats, polluting waterways, depleting ground water supplies, degrading soil, and contributing to global warming.⁷ In addition, every year, one-third of the global food production is lost or wasted post-harvest.⁸ Moreover, modern industrial agriculture exposes farmers to more risk and decreases profits because the cost of production is much higher.⁹

The agriculture sector in B.C. is characterized by limited land base, high number of small, family-owned farms, and an aging farmer population. Urban population growth as well as the real estate speculation of farmland put significant pressures on B.C.'s family-owned farms. Moreover, B.C.'s farmers have to compete with overseas producers for the B.C. and Canadian markets.¹⁰ In addition to the growing farmland access challenges and increasing global competition, there has been an ongoing decline in the number of farmers under 35, which indicates that there is an insufficient number of upcoming farmers to replace an aging farming population in B.C.

Approximately 3,720 job openings are forecasted between 2015 and 2025 for agriculture jobs that require at least some post-secondary education such as managers in agriculture/horticulture, agriculture service contractors and farm supervisors, and agricultural representatives, consultants, and specialists. Of these job openings, 97% will be due to replacement demand as a result of retiring workers and death and 3% will be due to new jobs that result from economic growth.¹¹ Note that this forecast is based on the needs of today's modern industrial agriculture. According to Heinberg (2006), a minimum of 40 to 50 million additional farmers will be needed in Canada and the USA over the next 20 to 30 years as oil and gas availability declines and transformation to small scale, ecologically intensive, alternate market, and community-focused farming occurs.¹²

The movement for sustainable agriculture and regional food systems is gaining momentum as people are increasingly paying attention to where their food comes from and what it is doing to their bodies and the planet and advocacy groups are increasingly influencing policy makers. The Food and Agriculture Organization (FAO) of the United Nations as well as several other international non-governmental organizations are calling for a paradigm shift towards sustainable agriculture and family farming to put agriculture, forestry, and fisheries on a more sustainable and productive long term path.¹³

disposal of food." The Future of Our Food System: Summary of the Southwest BC Bioregion Food System Design Project © 2016 by Institute for Sustainable Food Systems at Kwantlen Polytechnic University.

⁵ Kent Mullinix. (August 12, 2015). KPU-Science World Speaker Series: Building Sustainable Food Systems for the 21st Century.

⁶ Chloe Farand. (March 7, 2017). 'Aggressive' firms peddling myth pesticides are needed to feed world condemned by UN. <http://www.independent.co.uk/news/science/pesticides-feed-world-lobby-un-human-rights-council-report-a7615931.html>

⁷ Lester R. Brown. (2012). Full Planet, Empty Plates: The New Geopolitics of Food Scarcity. <http://www.earth-policy.org/books/fpep>

⁸ The Economist Intelligence Unit. (nd). Fixing Food: Towards a More Sustainable Food System.

⁹ Kent Mullinix. (August 12, 2015). KPU-Science World Speaker Series: Building Sustainable Food Systems for the 21st Century.

¹⁰ Business Council of British Columbia. (2009). Profile and Outlook for the BC Agri-food Industry.

¹¹ BC 2025 Labour Market Outlook. <https://www.workbc.ca/getmedia/00de3b15-0551-4f70-9e6b-23ffb6c9cb86/LabourMarketOutlook.pdf.aspx>

¹² Richard Heinberg. (2006). Fifty Million Farmers. <http://www.resilience.org/stories/2006-11-17/fifty-million-farmers/>

¹³ FAO. (2016). The State of Food and Agriculture: Climate Change, Agriculture, and Food Security.

Food security is a complex sustainable development issue, linked to health, but also to sustainable economic development, environment, and trade.¹⁴ Ensuring food security requires cooperation between the private and public sectors, civil society, and across multiple disciplines. There will be a growing need for specialists from the various areas that impact food security as well as professionals who can facilitate cooperation across multiple stakeholders to tackle the many barriers to feeding the world. As demand for food is projected to increase by 60 percent over the next 30 years, opportunities for individuals with a multi-disciplinary background and a graduate degree in sustainable food systems and food security are expected to be on the rise.¹⁵

Small scale, locally oriented, ecologically sound, and economically viable farms are integral to the advancement of a sustainable food system.¹⁶ The aging and declining farmer population, growing land use pressures, the projected growth in demand for food and diminishing resources indicate that the agriculture sector in B.C. will need experts and leaders trained to address the challenges posed by the modern industrial agriculture and implement food systems that maximize regional self-reliance, skills KPU's proposed program is designed to provide.

Overall, the information suggests graduates from KPU's proposed Graduate Certificate in Sustainable Food Systems and Security will have very good employment prospects upon graduation.

Competitive Assessment

No public or private postsecondary education institution in B.C. offers a *graduate certificate* with a focus on sustainable food systems and food security. The University of British Columbia's Faculty of Land and Food Systems offers a M.Sc. in Integrated Studies in Land & Food Systems with a focus similar to that of the proposed program. However, the UBC program is more theoretical than the proposed program, does not offer flexible delivery options, and takes longer to complete, given it's a masters degree. There are no other similar programs in B.C.

The proposed program is unique both provincially and nationally and will contribute to the economic strength of the province by producing graduates with *applied skills* and expertise not provided by existing programs. Overall, the information examined suggests that KPU's proposed Graduate Certificate in Sustainable Food Systems and Security, with its strong emphasis on sustainable food systems and food security, which is considered to be one of the greatest challenges of the 21st century, focus on working professionals, and online delivery option would fill unmet workforce needs that cannot be addressed by other programs in B.C.

Student Demand Assessment

The existing body of knowledge in almost every field is expanding at an accelerating rate. Half of what we know today was not known 10 years ago. Human knowledge is currently doubling every 13 months

¹⁴ Columbia University Career Services. (2015). Career Opportunities in Food Security.

¹⁵ Columbia University Career Services. (2015). Career Opportunities in Food Security.

¹⁶ Kent Mullinix. (August 12, 2015). KPU-Science World Speaker Series: Building Sustainable Food Systems for the 21st Century.

but it is soon expected to double every 11 hours with the expansion of the Internet of Things (IoT).¹⁷ Similarly, the speed at which today's economy, and by extension the job market, is developing is also faster than ever before. In many occupations it has become integral to acquire new knowledge and skills as established ones become obsolete.¹⁸ To remain competitive, today's professionals need career-focused education throughout their working lives.

Between 2011 and 2016 censuses, the population in the KPU region grew by 8%, compared to 6% in B.C. as a whole.¹⁹ According to BC Stats, the KPU region is projected to grow by 16% between 2017 and 2027, compared to 12% for B.C. By 2037, the difference in growth rates will be even greater, with an increase of 31% in the KPU region compared to 22% in B.C.²⁰ The growth rate for 30-34, 35-39, and 40-44 age groups is expected to be significantly greater than the younger age groups. This trend indicates that the attention of post-secondary institutions will need to shift toward meeting the needs of the growing older adult population because of the increasing number of mid-career adults seeking specific learning to help advance or change their careers. In order to meet this growing demand for lifelong reskilling, post-secondary education institutions are being forced to rethink their program offerings and to connect education and employment in new ways such as offering new types of credentials and low-cost online versions of on-campus graduate programs.

B.C. with its varied topography and climatic zones is the most agricultural diverse region in Canada producing over 200 major primary agriculture products.²¹ The agriculture sector plays a significant role in the KPU Region. There are 60,554 hectares of ALR land within the Greater Vancouver Regional District;²² 47,092 hectares or 78% is within the KPU Region.²³ ALR land makes up a significant portion of the land mass in the KPU region, ranging from 78% in the Township of Langley to 39% in Richmond.

Food security is a complex sustainable development issue and one of the biggest challenges of the 21st century and it is increasingly being recognized as vital to humanity's sustainability. The movement for sustainable agriculture and regional food systems is gaining momentum as people are increasingly paying attention to where their food comes from and what it is doing to their bodies and the planet and advocacy groups are increasingly influencing policy makers. Local food systems maximize regional food self-reliance, enhance the economy, and address environmental issues such as GHGs, biodiversity, etc.²⁴ There is public support and a growing demand for locally grown food in B.C. A 2014

¹⁷ Jeffrey J. Selingo. (2017). The Future of the Degree: How Colleges Can Survive the New Credential Economy. The Chronicle of Higher Education.

¹⁸ The Economist Special Report: Lifelong learning is becoming an economic imperative. <https://www.economist.com/news/special-report/21714169-technological-change-demands-stronger-and-more-continuous-connections-between-education>

¹⁹ The population growth in the KPU region has slowed down between 2011 and 2016 censuses. Between 2006 and 2011, the population in the KPU region grew by 13%, compared to 7% in BC as a whole.

²⁰ The July 2016 Population Forecast provides a forecast of the size as well as the age and structure of the population of British Columbia from 2015 to 2041. The base population for the forecast is the July 1, 2015 postcensal population estimate by sex and single year of age for British Columbia, prepared by Statistics Canada.

²¹ Government of British Columbia. (2017). Agriculture & Seafood. <https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood>

²² BC Ministry of Agriculture. (2013). Land Use Inventory Report: Township of Langley. https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/agricultural-land-and-environment/strengthening-farming/land-use-inventories/tol_lui2010rprt_2013-08-20_final_v2.pdf

²³ Government of British Columbia Land Use Inventory Reports for Surrey, the Township of Langley, the Corporation of Delta and City of Richmond website.

²⁴ Jeffrey K. O'Hara. (2011). Market Forces: Creating Jobs Through Public Investment in Local and Regional Food Systems. <http://sustainableagriculture.net/wp-content/uploads/2011/08/market-forces-report.pdf>

survey reported that 92% of B.C. residents believe local food production and reduction of food imports is very important and that respondents considered food and farming to be the second most important land use in the province after natural fresh water systems.²⁵ There are many policy and investment decisions to be made to lead B.C. and the world in the direction of food security. The fact that there is limited food systems programming in B.C. and Canada indicates an increasing need for employees with the skills KPU's proposed program designed to provide, which should contribute to the positive demand for the program.

Working professionals in need of upgrading/reskilling are target audience for the proposed program. These students often face unique challenges, including juggling work, family, and study. The online course delivery option²⁶ makes the proposed program ideal for working professionals.

The proposed program offers significant benefits not only for future students, but also for existing KPU students, who want to work in the rapidly expanding field of food security, by providing them the option to continue their studies at the graduate level at KPU.

Overall, the evidence suggests that there will be very good demand for KPU's proposed Graduate Certificate in Sustainable Food Systems and Security.

²⁵ McAllister Opinion Research. (2012). BC Public Attitudes Toward Agriculture and Food 2014. <http://www.refbc.com/sites/default/files/BC-Poll-Agriculture-and-Food-Detailed-Topline-Report-Aug-2014-PUBLIC.pdf>

²⁶ All of the courses will be offered on-campus and online. Students may complete the program full-time or part-time.

1. Labour Market Demand

Food security is a complex sustainable development issue, linked to health, but also to sustainable economic development, environment, and trade.²⁷ Ensuring food security requires cooperation between the private and public sectors, civil society, and across multiple disciplines. There will be a growing need for specialists from the various areas that impact food security as well as professionals who can facilitate cooperation across multiple stakeholders to tackle the many barriers to feeding the world. As demand for food is projected to increase by 60 percent over the next 30 years, opportunities for individuals with a multi-disciplinary background and a graduate degree in sustainable food systems and food security are expected to be on the rise.²⁸

Graduates of food security programs generally find work with the following:²⁹

- domestic and international agencies as well as non-governmental organizations
- community development organizations
- public health agencies
- university-based research institutes and centres

The most current occupational classification system does not include employment projections specific to occupations in sustainable agriculture and food security. In addition, due to the multi-disciplinary nature of the field, there are a wide range of occupational groups that may be relevant to this program. Hence, rather than focus on specific occupations, this section discusses the drawbacks of modern industrial agriculture, the state of agriculture in B.C., and the overall labour market demand in B.C. in the coming decade.

Meeting the World's Food Needs

It is generally accepted that the history of agriculture began around 11,000 years ago when humans transitioned from a nomadic hunter-gatherer lifestyle to agrarian societies by settling and farming in the regions of the world with stable climate and high quality soil.³⁰ The trends toward a global economy has changed the food production and distribution patterns remarkably in the second half of the 20th century. For the past 60 years, growing demand for food has been satisfied through intensifying and industrializing production systems and expanding farming areas. These changes have led to the creation and growth of huge multinational corporations that have replaced the hundreds of thousands of small businesses and farmers in the agriculture sector all around the world.³¹ Today, the majority of farmland is dominated by modern industrial agriculture, a system of chemically intensive food production, featuring massive single-crop farms and animal production facilities. Although the food

²⁷ Columbia University Career Services. (2015). Career Opportunities in Food Security.

²⁸ Columbia University Career Services. (2015). Career Opportunities in Food Security.

²⁹ Ryerson University. The Chang School of Continuing Education. Career Resources. <http://ce-online.ryerson.ca/ce/default.aspx?id=2109>

³⁰ Lester R. Brown. (2012). Full Planet, Empty Plates: The New Geopolitics of Food Scarcity. <http://www.earth-policy.org/books/fpep>
Tia Ghose (July 5, 2013). Evidence of Ancient Farming in Iran Discovered. <https://www.livescience.com/37963-agriculture-arose-eastern-fertile-crescent.html>

³¹ Kent Mullinix. (August 12, 2015). KPU-Science World Speaker Series: Building Sustainable Food Systems for the 21st Century.

system³² that feeds us today produces more than enough calories to feed the world, 1.2 billion people are still food insecure and 1 million children starve to death annually³³ because of the inequitable production and distribution systems of the modern industrial agriculture.³⁴ “We now have a global food system that is impervious to true consumer interests. Food is produced, processed and distributed almost entirely to meet the short-term business interests of the global food firms.”³⁵

The current food system is facing unprecedented challenges. Food production needs to grow by 60% by 2050 to meet the expected demand from an anticipated population of 9 billion.³⁶ “In British Columbia, Canada, as elsewhere, there is a growing awareness that the combined effects of peak oil, peak water, climate change, rapid urbanization, continued population growth, loss of farms and farmers as well as the current status, configuration and dominance of conventional industrial agriculture may threaten food security and ultimately result in an agri-food system that is unsustainable.”³⁷

Modern industrial agriculture techniques are taking a huge toll on the environment by destroying bio diverse habitats, polluting waterways, depleting ground water supplies, degrading soil, and contributing to global warming.³⁸ One of the reasons for the current food system's unsustainability is the damage modern industrial agriculture does to the soil. It relies heavily on chemical inputs such as synthetic fertilizers and pesticides. Synthetic fertilizers boost farm yields but kill beneficial microorganisms in the soil and destroy soil's natural makeup, resulting in less nutritious fruits and vegetables.³⁹ Lands used for farming have been substantially affected by soil erosion due to overgrazing, urbanization, deforestation, techniques and machinery used by modern industrial agriculture. “Now, nearly a third of the world's cropland is losing topsoil faster than new soil is forming, reducing the land's inherent fertility.”⁴⁰

In addition, the earth's climate is now in a constant state of flux, making it both unreliable and unpredictable. The earth's temperature has increased by about 0.8° Celsius (1.4° Fahrenheit) since 1880. Two-thirds of the warming has occurred since 1975, at a rate of 0.15-0.20°C per decade.⁴¹ The earth's average temperature is projected to rise between 2 and 9.7°F (1.1 to 5.4°C) by the end of this century mainly because of the carbon dioxide and other heat-trapping greenhouse gases (GHG) that

³² “A food system is an interconnected web of activities, resources and people that extends across all domains involved in providing human nourishment and sustaining health, including production, processing, packaging, distribution, marketing, consumption and disposal of food.” The Future of Our Food System: Summary of the Southwest BC Bioregion Food System Design Project © 2016 by Institute for Sustainable Food Systems at Kwantlen Polytechnic University.

³³ Kent Mullinix. (August 12, 2015). KPU-Science World Speaker Series: Building Sustainable Food Systems for the 21st Century.

³⁴ Chloe Farand. (March 7, 2017). ‘Aggressive’ firms peddling myth pesticides are needed to feed world condemned by UN. <http://www.independent.co.uk/news/science/pesticides-feed-world-lobby-un-human-rights-council-report-a7615931.html>

³⁵ F. Kirshenmann. (2003). Leopold Center for Sustainable Agriculture Iowa State University in Mullinix. (2011). Toward a Viable 21st Century Agri-food System. https://www.kpu.ca/sites/default/files/downloads/Towards_a_Viable_21st_Century_Agri-Food_System20153.pdf

³⁶ FAO. (2016). The State of Food and Agriculture: Climate Change, Agriculture, and Food Security.

³⁷ Kent Mullinix (January 22, 2010). HEAL Chat: Bio regional Food Systems and Municipal Enabled Agriculture.

³⁸ Lester R. Brown. (2012). Full Planet, Empty Plates: The New Geopolitics of Food Scarcity. <http://www.earth-policy.org/books/fpep>

³⁹ Richard Douthwaite. (1996). Short Circuit. https://archive.org/stream/Short_Circuit/Short_Circuit_djvu.txt

⁴⁰ Lester R. Brown. (2012). Full Planet, Empty Plates: The New Geopolitics of Food Scarcity. <http://www.earth-policy.org/books/fpep>

⁴¹ NASA Earth Observatory. (n.d.). Global Temperatures.

<https://earthobservatory.nasa.gov/Features/WorldOfChange/decadaltemp.php>

human activities produce.⁴² Higher temperatures result in melting of mountain glaciers, bring more drought, and fuel wildfires. Unfortunately, modern industrial agriculture is a major contributor to global warming through GHG from activities such as methane emission from livestock, soil treatment, and deforestation. One-fifth of greenhouse gas emissions are generated by agriculture, forestry, and land-use change.⁴³ It is also one of the main users of fossil fuels, thus contributing further to GHG emissions. Oil and other fossil fuels used extensively in modern agriculture are non-renewable. Several alternative energy options are available; however, these options are yet to reach a level of efficiency that can compete with fossil fuels.⁴⁴ In any case, the depletion of underground water supplies poses a greater threat to humanity than the depletion of oil resources. There is no substitute for water and the food production is exceedingly water-intensive. “As adults, each of us drinks nearly 4 liters of water a day in one form or another. But it takes 2,000 liters of water—500 times as much—to produce the food we consume each day.”⁴⁵

In addition, every year, one-third of the global food production is lost or wasted post-harvest. “There is nowhere else in society where we tolerate 40% inefficiency in anything,” says John Mandyck, the chief sustainability officer for United Technologies Corporation, an American conglomerate. “And yet we have come to accept 40% loss in something so important: food, the thing that sustains the human race. We need to try to help people to understand the scale and that this is an issue we can solve.”⁴⁶ Reducing food loss and waste would improve the efficiency of the food system and reduce greenhouse gas emissions and the pressure on natural resources.⁴⁷

Moreover, modern industrial agriculture exposes farmers to more risk and decreases profits because the cost of production is much higher.⁴⁸

The Food and Agriculture Organization (FAO) of the United Nations as well as several other international non-governmental organizations are calling for a paradigm shift towards sustainable agriculture and family farming to put agriculture, forestry, and fisheries on a more sustainable and productive long term path. Such a transformative change in agriculture and food systems will require drastic changes in policy frameworks in every country and international cooperation to facilitate information and knowledge sharing and to conserve agro biodiversity.⁴⁹

⁴² David Herring. (March 6, 2012). Climate Change: Global Temperature Projections. <https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature-projections>

⁴³ FAO. (2016). The State of Food and Agriculture: Climate Change, Agriculture, and Food Security.

⁴⁴ Richard Heinberg. (2006). Fifty Million Farmers.

<http://www.centerforneweconomics.org/publications/lectures/heinberg/richard/fifty-million-farmers>

⁴⁵ Lester R. Brown. (2012). Full Planet, Empty Plates: The New Geopolitics of Food Scarcity. <http://www.earth-policy.org/books/fpep>

⁴⁶ The Economist Intelligence Unit. (nd). Fixing Food: Towards a More Sustainable Food System.

⁴⁷ FAO. (2016). The State of Food and Agriculture: Climate Change, Agriculture, and Food Security.

⁴⁸ Kent Mullinix. (August 12, 2015). KPU-Science World Speaker Series: Building Sustainable Food Systems for the 21st Century.

⁴⁹ FAO. (2016). The State of Food and Agriculture: Climate Change, Agriculture, and Food Security.

Demographic and Structural Trends in B.C. Agriculture

Farm Numbers and Size

The Canadian agriculture sector has experienced a decline in number of farms and farm operators over time. The 2016 Census of Agriculture counted 17,528 farms in British Columbia, down 11% from 2011 and almost double (-6%) the decline nationally. In 2016, British Columbia ranked fifth among the provinces in number of farms, accounting for 9% of the total farms in Canada.

B.C. is unique in that it has a significantly higher portion of small farms compared to Canada. In 2016, over 40% of farms were small (less than \$10,000 in receipts), which is more than double the national average for this size of farm.⁵⁰

The farming population constituted a small proportion of the total population at 1.5% in B.C. compared to 2% in Canada in 2011.⁵¹

Age of Farm Operators

The average age of farm operators has been increasing; in 2016, 59% of B.C. farm operators⁵² were over 55 years old – up from 54% in 2011 – while only 7% were under 35.⁵³ The knowledge, experience and assets of existing farmers are an extremely valuable resource. However many farmers are now nearing retirement and there are insufficient new entrants into the industry to replace them.

The future of farming in B.C. is dependent on the next generation of farmers. The young people who want to venture into farming are generally interested in ecological farming and producing food for local markets⁵⁴ and would be interested in KPU's proposed program. Moreover, well-trained young farm managers could improve the efficiency of agricultural resources that are in the hands of an ageing population who are unable to fully capitalise on the sustainable approaches to farming and the increasing pace of technical change.

Real Estate Speculation of Farmland

The Agricultural Land Reserve (ALR) was established in 1973 to protect 4.6 million hectares of farmland across the province. The ALR policy has restrictions on land use but it does not have any mechanisms

⁵⁰ Statistics Canada 2016 Census of Agriculture (May 2017). Small farms and direct marketing play a large role in British Columbia. <http://www.statcan.gc.ca/pub/95-640-x/2016001/article/14809-eng.htm>

⁵¹ Statistics Canada (March 2016). 2011 Census of Agriculture Highlights and Analysis. <http://www.statcan.gc.ca/eng/ca2011/ha>

⁵² There are limitations to using census data for farm demographics because it is inclusive of farm operators - persons responsible for the management decisions made for an agricultural operation- and does not capture everyone working in agriculture.

⁵³ Statistics Canada 2016 Census of Agriculture (May 2017). Small farms and direct marketing play a large role in British Columbia. <http://www.statcan.gc.ca/pub/95-640-x/2016001/article/14809-eng.htm>

⁵⁴ BC Farms & Food. (June 2017). Who Are the 21st Century Farmers? <http://bcfarmsandfood.com/who-are-the-21st-century-farmers/>
National Observer. (March 2016). Vandana Shiva's organic food advocacy inspires BC farmers. <https://www.nationalobserver.com/2016/03/05/opinion/vandana-shivas-organic-food-advocacy-inspires-bc-farmers>

to make sure that the protected land is used primarily for farming.⁵⁵ Even the perception that land might be removed from ALR can drive the price of farmland beyond the reach of farmers.

According to an agricultural land use inventory conducted by the B.C. Ministry of Agriculture in 2010 and 2011, only 56% (34,147 hectares) of ALR in Metro Vancouver⁵⁶ were being used for farming,⁵⁷ The cost of farmland has risen above its agricultural value in Metro Vancouver due to non-farm uses and speculative holdings of farmland for future urban development, which pose a significant hurdle to the next generation of farmers entering the business.⁵⁸

Census data on farmland shows a rising proportion of land that is rented by farmers and a declining proportion of land that is owned by farmers in B.C. and across Canada. The report attributes this shift to the rising value of farmland, increasingly capital intensive agriculture, and the growing number of retired farmers.⁵⁹

Employment Outlook⁶⁰

The Canadian labour force is aging rapidly with the result that skill shortages due to replacement demand are expected in all sectors of the Canadian economy. Between 2015 and 2025, 934,000 job openings are expected to be created in B.C.;⁶¹ 69% of these will be to replace retiring workers. Replacement demand will be important in every major occupational group in B.C. As older employees retire, B.C. employers will face an “experience gap” – a loss of managerial and supervisory capacity.⁶² Over this time period, market growth is expected, reflecting a robust and diverse economy.

Of the 934,000 job openings projected in B.C. by 2025, 42% are expected to be in occupations requiring a diploma, certificate, or apprenticeship training. Over a third (36%) are expected to be in occupations that require a bachelor's, graduate or first professional degree,⁶³ and/or significant work experience. While 78% of expected job openings will most likely require a post-secondary credential, only 65% of B.C. residents between the ages of 25 and 64 have obtained a post-secondary credential.⁶⁴

Between 2015 and 2025, the overall employment growth in the agriculture industry is projected to be 0.2% compared to 1.2% for all industries. Note that productivity enhancing technologies and better equipment enable medium to large agricultural companies to increase output while decreasing employment for general farm workers. Approximately 3,720 job openings are forecasted between

⁵⁵ Provincial Agricultural Land Commission. <http://alc.gov.bc.ca>

⁵⁶ The study took place in 18 of the 24 local authorities that comprise Metro Vancouver.

⁵⁷ The BC Ministry of Agriculture. (March 2014). Growing Knowledge: Land Use Inventory Report

⁵⁸ Graeme Wood. (April 22, 2016). Richmond News: Real Estate Speculation threatens future of Metro Vancouver Farmland.

⁵⁹ Statistics Canada. (2012a). 2011 Census of Agriculture Highlights and Analysis: Get to know Canadian farmers and their families. <http://www.statcan.gc.ca/eng/ca2011/ha#a1-1>

⁶⁰ Government of British Columbia. British Columbia 2025 Labour Market Outlook. (Accessed March 2017).

⁶¹ The forecast does not include the impact of potential future LNG investments.

⁶² The Conference Board of Canada (2015). Skills for Success. (Accessed March 2017).

⁶³ Educational skill level descriptions in BC Labour Market Outlook report were recently changed to align with the terminology used in the post-secondary education system. The skill level “usually requiring a university degree” was changed to “usually requiring a bachelor's, graduate, or first professional degree” and the skill level “usually requiring a college education or apprenticeship training” was changed to “usually requiring diploma, certificate, or apprenticeship training.”

⁶⁴ Statistics Canada. (December 15, 2016). Education indicators in Canada: An international perspective, 2016. <http://www.statcan.gc.ca/daily-quotidien/161215/dq161215b-eng.htm>

2015 and 2025 for agriculture jobs that require at least some post-secondary education such as managers in agriculture/horticulture, agriculture service contractors and farm supervisors, and agricultural representatives, consultants, and specialists. Of these job openings, 97% will be due to replacement demand as a result of retiring workers and death and 3% will be due to new jobs that result from economic growth.⁶⁵ This forecast is based on the needs of today's modern industrial agriculture. According to Heinberg (2006), a minimum of 40 to 50 million additional farmers will be needed in Canada and the USA over the next 20 to 30 years as oil and gas availability declines and transformation to small scale, ecologically intensive, alternate market, and community-focused farming occurs.⁶⁶

Labour Market Demand Assessment

The trends toward a global economy has changed the food production and distribution patterns remarkably in the second half of the 20th century. For the past 60 years, growing demand for food has been satisfied through intensifying and industrializing production systems and expanding farming areas.⁶⁷ Today, the majority of farmland is dominated by modern industrial agriculture, a system of chemically intensive food production, featuring massive single-crop farms and animal production facilities. Although the food system⁶⁸ that feeds us today produces more than enough calories to feed the world, 1.2 billion people are still food insecure and 1 million children starve to death annually⁶⁹ because of the inequitable production and distribution systems of the modern industrial agriculture.⁷⁰

Modern industrial agriculture techniques are taking a huge toll on the environment by destroying bio diverse habitats, polluting waterways, depleting ground water supplies, degrading soil, and contributing to global warming.⁷¹ In addition, every year, one-third of the global food production is lost or wasted post-harvest.⁷² Moreover, modern industrial agriculture exposes farmers to more risk and decreases profits because the cost of production is much higher.⁷³

The agriculture sector in B.C. is characterized by limited land base, high number of small, family-owned farms, and an aging farmer population. Urban population growth as well as the real estate speculation of farmland put significant pressures on B.C.'s family-owned farms. Moreover, B.C.'s farmers have to compete with overseas producers for the B.C. and Canadian markets.⁷⁴ In addition to the growing farmland access challenges and increasing global competition, there has been an ongoing decline in

⁶⁵ BC 2025 Labour Market Outlook. <https://www.workbc.ca/getmedia/00de3b15-0551-4f70-9e6b-23ffb6c9cb86/LabourMarketOutlook.pdf.aspx>

⁶⁶ Richard Heinberg. (2006). Fifty Million Farmers. <http://www.resilience.org/stories/2006-11-17/fifty-million-farmers/>

⁶⁷ Kent Mullinix. (August 12, 2015). KPU-Science World Speaker Series: Building Sustainable Food Systems for the 21st Century.

⁶⁸ "A food system is an interconnected web of activities, resources and people that extends across all domains involved in providing human nourishment and sustaining health, including production, processing, packaging, distribution, marketing, consumption and disposal of food." The Future of Our Food System: Summary of the Southwest BC Bioregion Food System Design Project © 2016 by Institute for Sustainable Food Systems at Kwantlen Polytechnic University.

⁶⁹ Kent Mullinix. (August 12, 2015). KPU-Science World Speaker Series: Building Sustainable Food Systems for the 21st Century.

⁷⁰ Chloe Farand. (March 7, 2017). 'Aggressive' firms peddling myth pesticides are needed to feed world condemned by UN. <http://www.independent.co.uk/news/science/pesticides-feed-world-lobby-un-human-rights-council-report-a7615931.html>

⁷¹ Lester R. Brown. (2012). Full Planet, Empty Plates: The New Geopolitics of Food Scarcity. <http://www.earth-policy.org/books/fpep>

⁷² The Economist Intelligence Unit. (nd). Fixing Food: Towards a More Sustainable Food System.

⁷³ Kent Mullinix. (August 12, 2015). KPU-Science World Speaker Series: Building Sustainable Food Systems for the 21st Century.

⁷⁴ Business Council of British Columbia. (2009). Profile and Outlook for the BC Agri-food Industry.

the number of farmers under 35, which indicates that there is an insufficient number of upcoming farmers to replace an aging farming population in B.C.

Approximately 3,720 job openings are forecasted between 2015 and 2025 for agriculture jobs that require at least some post-secondary education such as managers in agriculture/horticulture, agriculture service contractors and farm supervisors, and agricultural representatives, consultants, and specialists. Of these job openings, 97% will be due to replacement demand as a result of retiring workers and death and 3% will be due to new jobs that result from economic growth.⁷⁵ This forecast is based on the needs of today's modern industrial agriculture. According to Heinberg (2006), a minimum of 40 to 50 million additional farmers will be needed in Canada and the USA over the next 20 to 30 years as oil and gas availability declines and transformation to small scale, ecologically intensive, alternate market, and community-focused farming occurs.⁷⁶

The movement for sustainable agriculture and regional food systems is gaining momentum as people are increasingly paying attention to where their food comes from and what it is doing to their bodies and the planet and advocacy groups are increasingly influencing policy makers. The Food and Agriculture Organization (FAO) of the United Nations as well as several other international non-governmental organizations are calling for a paradigm shift towards sustainable agriculture and family farming to put agriculture, forestry, and fisheries on a more sustainable and productive long term path.⁷⁷

Food security is a complex sustainable development issue, linked to health, but also to sustainable economic development, environment, and trade.⁷⁸ Ensuring food security requires cooperation between the private and public sectors, civil society, and across multiple disciplines. There will be a growing need for specialists from the various areas that impact food security as well as professionals who can facilitate cooperation across multiple stakeholders to tackle the many barriers to feeding the world. As demand for food is projected to increase by 60 percent over the next 30 years, opportunities for individuals with a multi-disciplinary background and a graduate degree in sustainable food systems and food security are expected to be on the rise.⁷⁹

Small scale, locally oriented, ecologically sound, and economically viable farms are integral to the advancement of a sustainable food system.⁸⁰ The aging and declining farmer population, growing land use pressures, the projected growth in demand for food and diminishing resources indicate that the agriculture sector in B.C. will need experts and leaders trained to address the challenges posed by the modern industrial agriculture and implement food systems that maximize regional self-reliance, skills KPU's proposed program is designed to provide.

Overall, the information suggests graduates from KPU's proposed Graduate Certificate in Sustainable Food Systems and Security will have very good employment prospects upon graduation.

⁷⁵ BC 2025 Labour Market Outlook. <https://www.workbc.ca/getmedia/00de3b15-0551-4f70-9e6b-23ffb6c9cb86/LabourMarketOutlook.pdf.aspx>

⁷⁶ Richard Heinberg. (2006). Fifty Million Farmers. <http://www.resilience.org/stories/2006-11-17/fifty-million-farmers/>

⁷⁷ FAO. (2016). The State of Food and Agriculture: Climate Change, Agriculture, and Food Security.

⁷⁸ Columbia University Career Services. (2015). Career Opportunities in Food Security.

⁷⁹ Columbia University Career Services. (2015). Career Opportunities in Food Security.

⁸⁰ Kent Mullinix. (August 12, 2015). KPU-Science World Speaker Series: Building Sustainable Food Systems for the 21st Century.

2. Competitive Environment

The main purpose of this section is to identify the public post-secondary education institutions in British Columbia that offer similar programs to the proposed Graduate Certificate in Sustainable Food Systems and Security.

No public or private postsecondary education institution in B.C. offers a *graduate certificate* with a focus on sustainable food systems and food security.

The proposed program is unique in that:

- It will be the only *graduate certificate* in B.C. and Canada that addresses complex food security issues.
- It places strong emphasis on *applied skills* and training change-makers who can implement initiatives to advance sustainable food systems. Graduates of the proposed program will develop an understanding of the challenges of the current food system as well as the emerging research and knowledge about sustainable food systems.
- It is designed to meet the needs of working professionals. The program may be completed full-time or part-time. All courses will be offered online.
- It will articulate with Royal Roads University's (RRU) Master of Arts in Interdisciplinary Studies program allowing students to progress toward a Master of Arts degree.

The Faculty of Land and Food Systems (LFS) at the University of British Columbia (UBC) offers research focused M.Sc. and Ph.D. programs in the following discipline areas: Applied Animal Biology, Food Science, Human Nutrition, Plant Science, Soil Science, and Integrated Studies in Land & Food Systems. The LFS also offers three masters level professional programs in Food and Resource Economics, Food Science, and Land and Water Systems.

Among these programs, the program that is most similar to the KPU's proposed graduate certificate is the M.Sc. in Integrated Studies in Land & Food Systems. Students of the program focus on global food security issues, creation of a sufficient, healthy, safe, culturally relevant and economically accessible food system for everyone. The program offers students the opportunity to focus on key global food security issues and encourages them to use holistic approaches that integrate knowledge from across disciplines and are relevant to diverse communities.⁸¹ Some of the major differences between UBC's M.Sc. in Integrated Studies in Land & Food Systems and KPU's proposed graduate certificate are:

- The masters degree at UBC is more theoretical than the proposed certificate program.
- It does not offer an online delivery option.
- The minimum course requirements for the masters degree at UBC are 30 credits whereas the total number of credits required for the proposed graduate certificate is 18 credits.

⁸¹UBC. Faculty of Land and Food Systems. Integrated Studies in Land & Food Systems (MSc, PhD). <http://landfood.ubc.ca>

Royal Roads University's Master of Arts in Interdisciplinary Studies program allows graduate students to pursue an interdisciplinary course of study shaped by their unique interests. Students have the flexibility to choose from two or more areas of study, one of which is Environment and Management. Masters of Arts in Environment and Management graduates develop leadership and management skills in the context of environmental sustainability. RRU also offers a Master of Science in Environment and Management program. Both of these programs give students the opportunity to explore the applicability of environmental sustainability concepts in developing a sustainable society. Both programs are 36 credits in length and may be completed online or on campus. KPU's proposed program is more specialized with a focus on sustainable agriculture and food security than the two RRU programs and shorter in length.

The shorter program completion time makes KPU's proposed certificate program more desirable for working professionals with competing priorities.

Competitive Assessment

No public or private postsecondary education institution in BC offers a *graduate certificate* with a focus on sustainable food systems and food security. The University of British Columbia's Faculty of Land and Food Systems offers a M.Sc. in Integrated Studies in Land & Food Systems with a focus similar to that of the proposed program. However, the M.Sc. in Integrated Studies in Land & Food Systems degree at UBC is more theoretical than the proposed program, does not offer flexible delivery options, and takes longer to complete. There are no other similar programs in B.C.

The proposed program is unique both provincially and nationally and will contribute to the economic strength of the province by producing graduates with applied skills and expertise not provided by existing programs. Overall, the information examined suggests that KPU's proposed Graduate Certificate in Sustainable Food Systems and Security, with its strong emphasis on sustainable food systems and food security, which is considered to be one of the greatest challenges of the 21st century, focus on working professionals, and online delivery option would fill unmet workforce needs that cannot be addressed by other programs in B.C.

3. Student Demand

The purpose of this section is to explore the extent of student demand for the proposed program mainly by examining the historic participation rates in related programs in B.C. The proposed program is unique in content provincially and nationally; therefore, it is not possible to assess the student demand for the proposed program by examining participation rates in related programs. Hence, this section presents the recent changes in the post-secondary education environment, the importance of agriculture in the KPU Region, and an analysis of the KPU Region's population including population growth and population projections to provide an understanding of the size of the adult market in the KPU Region. Also discussed in this section are the enrolments in KPU's Faculty of Arts and Faculty of Science and Horticulture.

The Changing Post-secondary Education Landscape

The existing body of knowledge in almost every field is expanding at an accelerating rate. Half of what we know today was not known 10 years ago. Human knowledge is currently doubling every 13 months but it is soon expected to double every 11 hours with the expansion of the Internet of Things (IoT).⁸² Similarly, the speed at which today's economy, and by extension the job market, is developing is also faster than ever before. In many occupations it has become integral to acquire new knowledge and skills as established ones become obsolete.⁸³ Thomas Friedman⁸⁴ identifies the current education system as one of the biggest challenges of the 21st century. According to Friedman (2016), "another big challenge is the way we educate our population. We go to school for twelve or more years during our childhoods and early adulthoods, and then we're done. But when the pace of change gets this fast, the only way to retain a lifelong working capacity is to engage in lifelong learning."⁸⁵ Friedman also argues that survival in the 21st century depends on one's ability to comprehend three major interacting forces that are transforming workplace, politics, geopolitics, and community continuously: "Moore's law (technology), the Market (globalization), and Mother Nature (climate change, biodiversity losses and population growth)."⁸⁶

To remain competitive, today's professionals need career-focused education throughout their working lives. However, over the years, employers have become less willing to invest in training their employees.⁸⁷ According to a 2016 survey conducted by Manpower Group, 93% of millennials consider ongoing skills development important and are willing to pay for additional training and skills

⁸² Jeffrey J. Selingo. (2017). The Future of the Degree: How Colleges Can Survive the New Credential Economy. The Chronicle of Higher Education.

⁸³ The Economist Special Report: Lifelong learning is becoming an economic imperative. <https://www.economist.com/news/special-report/21714169-technological-change-demands-stronger-and-more-continuous-connections-between-education>

⁸⁴ Thomas L. Friedman is an internationally renowned author, reporter, and, columnist—the recipient of three Pulitzer Prizes and the author of six bestselling books, among them *From Beirut to Jerusalem* and *The World Is Flat*.

⁸⁵ Thomas L. Friedman. (2016). *Thank You for Being Late: An Optimist's Guide to Thriving in the Age of Accelerations*.

⁸⁶ Thomas L. Friedman. (2016). *Thank You for Being Late: An Optimist's Guide to Thriving in the Age of Accelerations*.

⁸⁷ The Economist Special Report: Lifelong learning is becoming an economic imperative. <https://www.economist.com/news/special-report/21714169-technological-change-demands-stronger-and-more-continuous-connections-between-education>

development.⁸⁸ The decline in employer-led training combined with the growing need for lifelong reskilling are changing the post-secondary education landscape.⁸⁹

Canadian post-secondary education institutions have experienced tremendous growth in participation rates between 1980 and 2010 and demography has not been the principal driver of this growth. In fact, the 18 to 24 age group has shrunk three percent between 1980 and 2010. During the same time period, the number of graduate students has grown significantly faster than the undergraduate students. The primary driver for the growth of university participation rates was the increasing demand for a highly skilled and educated labour force.⁹⁰ Over the coming decade, the 30 to 44 age group will have grown significantly, and a greater number will possess bachelor's degrees. This combined with the expected growth in labour market demand for employees with graduate degrees is likely to put upward pressure on universities to expand their graduate programs.⁹¹

In order to meet this growing demand for lifelong reskilling, post-secondary education institutions are being forced to rethink their program offerings and to connect education and employment in new ways such as offering new types of credentials and low-cost online versions of on-campus graduate programs. For example, providers of massive open online courses (MOOCs) and some traditional universities are starting to adopt microcredentials to keep up with changing needs of some professions. Microcredentials – also often called badges, nanodegrees, or MicroMasters – package new knowledge into short programs that can stand on their own or as an add-on to an existing degree.⁹²

The Importance of Agriculture in the KPU Region.

B.C. with its varied topography and climatic zones is the most agricultural diverse region in Canada producing over 200 major primary agriculture products.⁹³ The primary agriculture sector in B.C. is made up of almost 20,000 farms, using 2.6 million hectares of land.⁹⁴

The agriculture sector plays a significant role in the economy of the KPU Region. There are 60,554 hectares of ALR land within the Greater Vancouver Regional District;⁹⁵ 47,092 hectares or 78% is within the KPU Region.⁹⁶

⁸⁸ Manpower Group (2016). Millennial Careers: 2020 Vision. <http://www.manpowergroup.com/millennials>

⁸⁹ The Economist Special Report: Lifelong learning is becoming an economic imperative. <https://www.economist.com/news/special-report/21714169-technological-change-demands-stronger-and-more-continuous-connections-between-education>

⁹⁰ The Association of Universities and Colleges of Canada. (2011). Trends in Higher Education Volume 1: Enrolment <https://www.univcan.ca/wp-content/uploads/2015/11/trends-vol1-enrolment-june-2011.pdf>

⁹¹ The Association of Universities and Colleges of Canada. (2011). Trends in Higher Education Volume 1: Enrolment <https://www.univcan.ca/wp-content/uploads/2015/11/trends-vol1-enrolment-june-2011.pdf>

⁹² Jeffrey J. Selingo. (2017). The Future of the Degree: How Colleges Can Survive the New Credential Economy. The Chronicle of Higher Education.

⁹³ Government of British Columbia. (2017). Agriculture & Seafood. <https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood>

⁹⁴ Government of British Columbia. (nd). The B.C. Agrifood and Seafood Strategic Growth Plan. <https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/strategic-growth-plan.pdf>

⁹⁵ BC Ministry of Agriculture. (2013). Land Use Inventory Report: Township of Langley. https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/agricultural-land-and-environment/strengthening-farming/land-use-inventories/tol_lui2010rprt_2013-08-20_final_v2.pdf

⁹⁶ Government of British Columbia Land Use Inventory Reports for Surrey, the Township of Langley, the Corporation of Delta and City of Richmond website.

In Delta, 53% of the land area (9,403 hectares) is in the ALR. Almost 69% of the ALR is farmed and 12% is still available for farming.

Approximately 4,993 hectares (39%) of Richmond's land base is within the ALR. 3,072 hectares (62% of the ALR) is farmed by 211 farms. The remaining lands in the ALR are either vacant or occupied by non-farm uses.⁹⁷

In Surrey, over one third of the land area (9,290 hectares) is within the ALR. A total area of 4,827 hectares (52% of the ALR) is actively farmed and an additional 27% of the ALR is available for farming.⁹⁸

In the Township of Langley, 78% (23,406 hectares) of the land area is in the ALR.⁹⁹ Approximately 12,970 hectares (55% of the ALR) are farmed by 1,292 farms.¹⁰⁰ In the Township of Langley, more land is available for farming (not being currently farmed) than anywhere else in the Fraser Valley.

In B.C. and across Canada, young and beginning farmer networks and programs have emerged in the past two decades. These networks, such as the BC Young Farmers (BCYF) and The Young Agrarians, and programs, such as 4H-BC, and BC Outstanding Young Farmers, aim to increase participants' knowledge of the agriculture industry and provide positive tools to aid young farmers in successful farm management with a focus on agro-ecology.¹⁰¹ In addition, SOIL (STEWARDS OF IRREPLACEABLE LAND), KPU, and UBC offer farm apprenticeship and training programs for beginning farmers.

There is public support and a growing demand for locally grown food in B.C. A 2014 survey reported that 92% of B.C. residents believe local food production and reduction of food imports is very important and that respondents considered food and farming to be the second most important land use in the province after natural fresh water systems.¹⁰² There is also a growing interest in farmers' markets. According to a study conducted by the BC Association of Farmers' Markets, there was a rise in the number of farmers' markets and in the number of people attending between 2006 and 2012. Farmers' market sales across B.C. rose 147% from 2006 to 2012.¹⁰³

Local food systems maximize regional food self-reliance, enhance the local economy, and address environmental issues such as GHGs, biodiversity, etc.¹⁰⁴ KPU's Institute for Sustainable Food Systems (ISFS) is leading a project to explore the economic, environmental stewardship and food self-reliance

⁹⁷ City of Richmond. (2017). About Agriculture in Richmond. <https://www.richmond.ca/plandev/planning2/agriculture/about.htm>

⁹⁸ BC Ministry of Agriculture. (2013). Land Use Inventory Report: The City of Surrey. <http://www.surrey.ca/files/SurreyLUI2010Rprt.pdf>

⁹⁹ BC Ministry of Agriculture. (2013). Land Use Inventory Report: Township of Langley. https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/agricultural-land-and-environment/strengthening-farming/land-use-inventories/tol_lui2010rprt_2013-08-20_final_v2.pdf

¹⁰⁰ Township of Langley. (nd). Agriculture Viability Strategy. <https://www.tol.ca/your-township/plans-reports-and-strategies/agricultural-viability-strategy/>

¹⁰¹ Agro-ecology is defined as the science of agricultural system design and management based on biological processes and ecological systems principles. Kent Mullinix. (August 12, 2015). KPU-Science World Speaker Series: Building Sustainable Food Systems for the 21st Century.

¹⁰² McAllister Opinion Research. (2012). BC Public Attitudes Toward Agriculture and Food 2014.

<http://www.refbc.com/sites/default/files/BC-Poll-Agriculture-and-Food-Detailed-Topline-Report-Aug-2014-PUBLIC.pdf>

¹⁰³ BC Association of Farmers' Markets. (2012). 2012 Economic and Social Benefits Assessment.

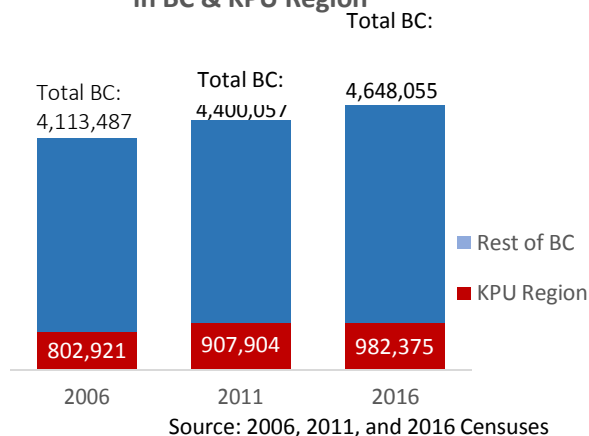
<https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/strategic-growth-plan.pdf>

¹⁰⁴ Jeffrey K. O'Hara. (2011). Market Forces: Creating Jobs Through Public Investment in Local and Regional Food Systems. <http://sustainableagriculture.net/wp-content/uploads/2011/08/market-forces-report.pdf>

potential of a bioregional food system¹⁰⁵ in Southwest BC (SWBC). The project is endorsed by the Agricultural Land Commission and a growing list of municipalities, regional districts, and other organizations and funded by the Real Estate Foundation of British Columbia, R. Howard Webster Foundation, Vancity Community Foundation and enviroFundTM, Vancouver Foundation, and a growing list of regional and municipal governments. The goal of the project is to develop a vision for a regional food system for 2050, by exploring the potential of under-farmed land in the region to complement the existing agri-food system and small scale, low-input, environmentally conscious and sustainable agriculture methods.¹⁰⁶

KPU Region Population¹⁰⁷

Figure 3.1: Population Growth in BC & KPU Region



Between 2011 and 2016 censuses, the population in the KPU region grew by 8%, compared to 6% in B.C. as a whole.¹⁰⁸ KPU Region accounted for 30%

of the province's overall population growth in this five year period. Growth varied across the region, ranging from 13% in the Township of Langley to 2% in Delta.¹⁰⁹

According to BC Stats, the KPU region will continue to grow at a faster rate than the population of B.C. The KPU region is projected to grow by 16% between 2017 and 2027, compared to 12% for BC. By 2037, the difference in growth rates will be even

greater, with an increase of 31% in the KPU region compared to 22% in B.C.¹¹⁰

¹⁰⁵ "Bioregions are areas that share similar topography, plant and animal life, and human culture. They are largely based on eco-regions but also incorporate human settlement areas and political boundaries. The SWBC Bioregion includes Metro Vancouver, the Fraser Valley, Sunshine Coast, Squamish Lillooet, and Powell River Regional Districts, and the traditional territories of the Coast Salish People." Source: The Southwest BC Bioregion Food System Design Project, KPU Institute for Sustainable Food Systems.

¹⁰⁶ KPU ISFS. (2014) Southwest BC Bio-Regional Food System Design and Planning Project Progress Report.

https://www.newwestcity.ca/council_minutes/0407_14_Regular/ON%20TABLE%207.%20Handout%20re%20Southwest%20BC%20Bio-Regional%20Food%20System.pdf

¹⁰⁷ The KPU Region is comprised of the City of Richmond, the Corporation of Delta, the City of Surrey, the City of White Rock, and the City and Township of Langley, as well as the Tsawwassen First Nation, the Kwantlen First Nation, and the Semiahmoo First Nation.

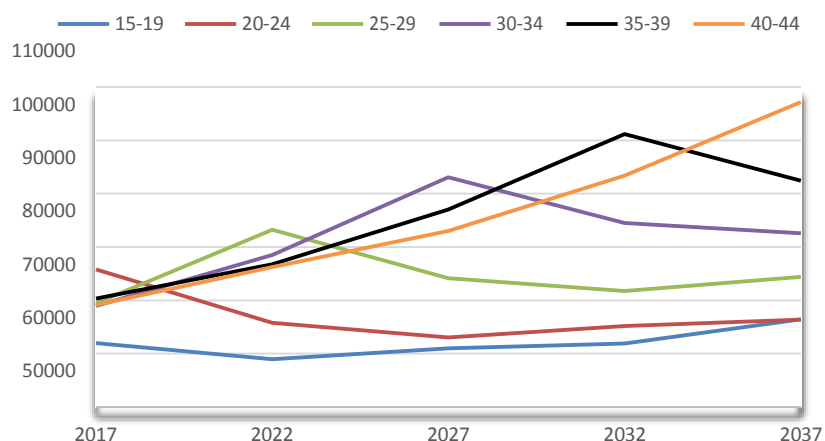
¹⁰⁸ The population growth in the KPU region has slowed down between 2011 and 2016 censuses. Between 2006 and 2011, the population in the KPU region grew by 13%, compared to 7% in BC as a whole.

¹⁰⁹ All population data is from Statistics Canada's 2006, 2011, and 2016 Census and National Household Survey, which replaced the long form of the Census.

¹¹⁰ The July 2016 Population Forecast provides a forecast of the size as well as the age and structure of the population of British Columbia from 2015 to 2041. The base population for the forecast is the July 1, 2015 postcensal population estimate by sex and single year of age for British Columbia, prepared by Statistics Canada.

Population projections for KPU Region over the next 20 years for selected age groups are portrayed in Figure 3.2. Although different age groups are projected to grow at different rates, the growth rate for 30-34, 35-39, and 40-44 age groups is expected to be significantly greater than for 15-19, 20-24, and 25-29 age groups. The population of 45 to 54 year olds is also expected to increase steadily until 2037.

Figure 3.2: Population Projections by Selected Age Groups for KPU Region 2017-2037



Source: BC Stats P.E.O.P.L.E. 2016

The increasing number of mid-career adults indicate that the

attention of post-secondary institutions will need to shift toward meeting the needs of the growing adult population who are more likely to be interested in shorter programs due to work responsibilities, family and financial obligations to advance or change careers.

KPU Faculty of Arts and Faculty of Science and Horticulture Enrolments

Headcounts

Headcounts in KPU's Faculty of Arts decreased by 16% over the five year period from 2012/13 to 2016/17 academic years. During the same period, headcounts in KPU's Faculty of Science and Horticulture increased by 44% , as shown in Exhibit 3.3.

Exhibit 3.3: KPU Faculty of Arts and Faculty of Science and Horticulture Headcounts, 2012/13 to 2016/17

| Total Unduplicated Headcount ¹ | Academic Year | | | | |
|---|---------------|---------|---------|---------|---------|
| | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 |
| Faculty of Arts | 6,872 | 6,507 | 6,258 | 5,825 | 5,762 |
| Faculty of Science and Horticulture | 1,723 | 1,757 | 1,885 | 2,059 | 2,478 |

Source: KBIT

¹Total number of individual students enrolled in each faculty.

Headcounts of Related Programs in the Faculty of Arts and the Faculty of Science and Horticulture

Exhibit 3.4, on the next page, presents enrolments in related bachelor degree programs in the Faculty of Arts and Faculty of Science and Horticulture. Students in these programs are target audiences for the proposed graduate certificate. Enrolments in all four programs have grown between 2012/13 and 2016/17 academic years.

Exhibit 3.4: KPU Headcounts of Bachelor Degree Programs in Horticulture and Sustainable Agriculture, 2012/13 to 2016/17

| Program ¹ | Academic Year | | | | |
|---|---------------|---------|---------|----------------------|---------|
| | 2012/13 | 2013/14 | 2014/15 | 2015/16 ² | 2016/17 |
| Bachelor of Arts, Major in Policy Studies | 17 | 21 | 18 | 20 | 19 |
| Bachelor of Applied Science in Sustainable Agriculture | 9 | 27 | 39 | 28 | 21 |
| Bachelor of Horticulture Science, Major in Plant Health | 3 | 3 | 3 | 3 | 9 |
| Bachelor of Horticulture Science, Major in Urban Ecosystems | 4 | 6 | 16 | 16 | 16 |

Source: KBIT

¹Headcounts are unduplicated within each program. A student may be counted across more than one program, if they changed programs in the year.

² KPU implemented a new admissions framework effective September 2015. KPU now admits new students to a Faculty instead of a program. New students are reported under the 'undeclared' credential category until they meet program declaration requirements (exception are students enrolled in a limited entry program). This can make it appear that enrolments have declined when it is just an artifact of the new admissions framework.

Student Demand Assessment

The existing body of knowledge in almost every field is expanding at an accelerating rate. Half of what we know today was not known 10 years ago. Human knowledge is currently doubling every 13 months but it is soon expected to double every 11 hours with the expansion of the Internet of Things (IoT).¹¹¹ Similarly, the speed at which today's economy, and by extension the job market, is developing is also faster than ever before. In many occupations it has become integral to acquire new knowledge and skills as established ones become obsolete.¹¹² To remain competitive, today's professionals need career-focused education throughout their working lives.

¹¹¹ Jeffrey J. Selingo. (2017). The Future of the Degree: How Colleges Can Survive the New Credential Economy. The Chronicle of Higher Education.

¹¹² The Economist Special Report: Lifelong learning is becoming an economic imperative. <https://www.economist.com/news/special-report/21714169-technological-change-demands-stronger-and-more-continuous-connections-between-education>

Between 2011 and 2016 censuses, the population in the KPU region grew by 8%, compared to 6% in B.C. as a whole.¹¹³ According to BC Stats, the KPU region is projected to grow by 16% between 2017 and 2027, compared to 12% for B.C. By 2037, the difference in growth rates will be even greater, with an increase of 31% in the KPU region compared to 22% in B.C.¹¹⁴ The growth rate for 30-34, 35-39, and 40-44 age groups is expected to be significantly greater than the younger age groups. This trend indicates that the attention of post-secondary institutions will need to shift toward meeting the needs of the growing older adult population because of the increasing number of mid-career adults seeking specific learning to help advance or change their careers. In order to meet this growing demand for lifelong reskilling, post-secondary education institutions are being forced to rethink their program offerings and to connect education and employment in new ways such as offering new types of credentials and low-cost online versions of on-campus graduate programs.

B.C. with its varied topography and climatic zones is the most agriculturally diverse region in Canada producing over 200 major primary agriculture products.¹¹⁵ The agriculture sector plays a significant role in the KPU Region. There are 60,554 hectares of ALR land within the Greater Vancouver Regional District;¹¹⁶ 47,092 hectares or 78% is within the KPU Region.¹¹⁷ ALR land makes up a significant portion of the land mass in the KPU region, ranging from 78% in the Township of Langley to 39% in Richmond.

Food security is a complex sustainable development issue and one of the biggest challenges of the 21st century and it is increasingly being recognized as vital to humanity's sustainability. The movement for sustainable agriculture and regional food systems is gaining momentum as people are increasingly paying attention to where their food comes from and what it is doing to their bodies and the planet and advocacy groups are increasingly influencing policy makers. Local food systems maximize regional food self-reliance, enhance the economy, and address environmental issues such as GHGs, biodiversity, etc.¹¹⁸ There is public support and a growing demand for locally grown food in B.C. A 2014 survey reported that 92% of B.C. residents believe local food production and reduction of food imports is very important and that respondents considered food and farming to be the second most important land use in the province after natural fresh water systems.¹¹⁹ There are many policy and investment decisions to be made to lead B.C. and the world in the direction of food security. The fact that there is limited food systems programming in B.C. and Canada indicates an increasing need for employees with the skills KPU's proposed program designed to provide, which should contribute to the positive demand for the program.

¹¹³ The population growth in the KPU region has slowed down between 2011 and 2016 censuses. Between 2006 and 2011, the population in the KPU region grew by 13%, compared to 7% in BC as a whole.

¹¹⁴ The July 2016 Population Forecast provides a forecast of the size as well as the age and structure of the population of British Columbia from 2015 to 2041. The base population for the forecast is the July 1, 2015 postcensal population estimate by sex and single year of age for British Columbia, prepared by Statistics Canada.

¹¹⁵ Government of British Columbia. (2017). Agriculture & Seafood. <https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood>

¹¹⁶ BC Ministry of Agriculture. (2013). Land Use Inventory Report: Township of Langley. https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/agricultural-land-and-environment/strengthening-farming/land-use-inventories/tol_lui2010rprt_2013-08-20_final_v2.pdf

¹¹⁷ Government of British Columbia Land Use Inventory Reports for Surrey, the Township of Langley, the Corporation of Delta and City of Richmond website.

¹¹⁸ Jeffrey K. O'Hara. (2011). Market Forces: Creating Jobs Through Public Investment in Local and Regional Food Systems. <http://sustainableagriculture.net/wp-content/uploads/2011/08/market-forces-report.pdf>

¹¹⁹ McAllister Opinion Research. (2012). BC Public Attitudes Toward Agriculture and Food 2014.

<http://www.refbc.com/sites/default/files/BC-Poll-Agriculture-and-Food-Detailed-Topline-Report-Aug-2014-PUBLIC.pdf>

Working professionals in need of upgrading/reskilling are target audience for the proposed program. These students often face unique challenges, including juggling work, family, and study. The online course delivery option makes the proposed program ideal for working professionals.

The proposed program offers significant benefits not only for future students, but also for existing KPU students, who want to work in the rapidly expanding field of food security, by providing them the option to continue their studies at the graduate level at KPU.

Overall, the evidence suggests that there will be very good demand for KPU's proposed Graduate Certificate in Sustainable Food Systems and Security.

Please attach this form to the concept paper.

Kwantlen Polytechnic University

Library Impact Assessment
Support for Program Proposal/Change

Name of Program

Date: August 16, 2017

**Graduate Certificate in Sustainable Food Systems and
Food Security**

The Library supports the development of a program in Sustainable Food Systems and Food Security. It is anticipated that impact on the collection will be minimal. In general, the library collection is well developed in the areas students enrolled in this program will require.

Summary of Start-up and Subsequent Costs:

Total Estimated Start-up Costs (one time):

Reference Materials

Monographs

Audio-visual Materials

Subtotal: n/a

Total Estimated Annual Costs (on-going):

Periodicals

Databases and Indexes

Subtotal: n/a

TOTAL: n/a

Assessment Prepared by:

SSCC Liaison Librarian – Linda Rogers

Linda Rogers

Date

16/8/2017

Assessment Reviewed by:

[Signature]

University Librarian

August 17, 2017

Date

Please attach this form to the concept paper.

I support this collection assessment: Yes ☐ No ☐*

Program Developer:

Name/Title

Date

**Please provide reasons for non-support of assessment*

4 December 2017

Dr Kent Mullinix
Director, Institute for Sustainable Food Systems
Richmond Campus, Kwantlen Polytechnic University

By email to kent.mullinix@kpu.ca

Dear Kent,

RE: proposed graduate certificate in Sustainable Food Systems and Security

Thank you for contacting us regarding your proposed graduate certificate program for 2018. We support your program description as a good fit with our mission. We especially appreciate the emphasis on sustainability, the commitment to applied research, and the affiliation with Royal Roads University and its demonstrated strength in mid-career advanced education.

Major program areas at the BC Food Systems Network, particularly the Community of Practice related to connecting local governments with food systems, show us that your goal of preparing professionals (such as planners or public health officials) to advance sustainable food systems knowledge and action is relevant and valuable.

We want to support all institutions that train agri-food system professionals to work across and within civil society, industry and government with strong competencies to foster equitable and sustainable agri-food systems and food landscapes. There are some aspects of food systems that we hope you will include in your syllabus. These include matters related to social justice in food from anti-oppression, decolonization and cultural diversity perspectives. We would be happy to elaborate on this if you wish.

We look forward to further conversations about career pathways for food systems graduates. Thank you for taking this initiative.

Very truly yours,



Kathleen Gibson, Co-Chair
BC Food Systems Network Steering Committee

Cc BCFSN Steering Committee
Natalie Cushing, Tides Canada



c/o 4979 Falcon Drive, Fairmont Hot Springs, BC VoB 1L1

Cell: 250-688-0650 | Email: akblg@shaw.ca

November 14, 2017

Kent Mullinix, PhD., P.Ag.
Director, Institute for Sustainable Food Systems
Kwantlen Polytechnic University
Via Email: kent.mullinix@kpu.ca

Hello Kent,

On behalf of the Executive of the AKBLG, I convey our support for your proposal to develop a graduate certificate in *Sustainable Food Systems and Security* for the fall Semester 2018. As you are aware from our feedback following your 2016 keynote to our members, your approach to building sustainable food systems was well received. Our members represent many small rural communities with varied agricultural capacity. There is a common interest in ensuring quality food with high nutritional value being available to all residents in the region.

Communities within our region which can produce excess food for export struggle to establish cost effective, efficient networks to store and distribute their products to nearby communities. Local businesses are inclined to ship their products further afield to compete in larger markets with a lower net return. These food distribution systems of today are geared to big business models. Our members remain committed to assisting our communities with improving local distribution and marketing systems.

Your proposal to offer training on sustainable food systems and food security which will foster and support purposeful applied research and community engagement would be of benefit to our smaller communities.

Sincerely

Rob C. Gay, President
Association of Kootenay & Boundary Local Governments



November 14, 2017

Kent Mullinix, PhD
Director, Institute for Sustainable Food Systems
Kwantlen Polytechnic University
8771 Lansdowne
Richmond, BC

Dear Kent,

As the publishers of *BC Farms & Food* online magazine, we cover agriculture in British Columbia and encourage its development along sustainable lines.

We recently had the pleasure of reporting on KPU's Institute for Sustainable Food Systems' ground breaking 2013 study on the economic potential of local agriculture: "**Can Local Agriculture Drive Economic Development?**"

With that background, we were delighted to hear that KPU is developing a graduate program in Sustainable Food Systems and Security. We are impressed by the outline of the proposed program. The first four courses will supply students with a strong conceptual understanding of contemporary food systems. This will allow the second part (*Creating Our Food System Future*) to energize and inspire them into their Capstone Project, which will surely see the launching of many worthwhile enterprises.

KPU's targeted audience of professionals, teachers, planners, NGO and economic development staff is very judicious. These will be the people struggling with the transition from a non-sustainable to a sustainable agriculture in the near term. They need all the help they can get, and will likely prove a grateful alumni.

Finally, let me congratulate KPU and the ISFS on the prescience and intellectual audacity of this proposed project. You will be an early adapter and producer of a dynamic new graduate field which is literally about to take off like a rocket. As such you can expect to enjoy the benefits which accrue to successful pioneers.

We look forward to the program and assisting you in any practical way.

With best wishes,
Larry Kimmett

Publisher, *BC Farms & Food*

November 23rd, 2017

From: Heather O'Hara – Executive Director
BC Association of Farmers' Markets

To: Kent Mullinix - Director
KPU, Institute of Sustainable Food Systems

RE: Letter of Support KPU Graduate Certificate in Sustainable Food Systems and Security

To Whom it May Concern,

On behalf of the BC Association of Farmers' Markets (BCAFM), please accept our letter of support for the development of a Graduate Certificate in Sustainable Food Systems and Security at Kwantlen Polytechnic University. KPU is a valued collaborator of the BCAFM and a leader in strengthening food systems. We sincerely value the unique and practical work of the Institute of Sustainable Food Systems.

The BC Association of Farmers' Markets is a unique voice and key stakeholder in the agricultural sector of BC, representing 145+ farmers' markets across all regions of BC. Our purpose is to develop, support, strengthen and promote farmers' markets, a growing economic driver in the ag industry and an alternative food economy represented across the province.

Under the leadership of Kent Mullinix, the Institute with its focus on *practical, sustainable* and *alternative* agriculture practices is both innovative and meeting the growing demand of students and practitioners everywhere who take the long view, seeking an approach in sustaining our food system which is different than a conventional, industrial and commodity driven agricultural model. There are literally 1,000s of small scale farmers and food processors across BC who grow and make food according to the philosophy of the Institute. These agri-food entrepreneurs rely on alternative sales and distribution channels, including BC Farmers' Markets to make a living and support local food security in diverse communities across BC. The BCAFM and our 145+ farmers' market members and 1,000s of agri-food entrepreneurs acknowledge the importance of educating food system thinkers and knowledge seekers with the most innovative and progressive learning such as that offered by KPU.

The BC Association of Farmers' Markets is pleased to offer our letter of support for this Graduate Certificate Program.

Sincerely,



Heather O'Hara

THE SOURCE FOR LOCAL FOOD

November 14, 2017

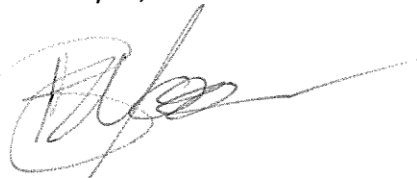
Dear Mr Mullinix,

I am writing this letter in my capacity as District Principal of Inquiry and Innovation for the Delta School District to communicate my support for the proposed graduate studies in Sustainable Food Systems and Security.

The content of the certificate program, as described to me, is both valuable and necessary. To have a program such as the one proposed would go a long distance in increasing our own local food security and encourage our communities to design increasingly sustainable food systems.

We need more of this scholarship and I am pleased that Kwantlen Polytechnic University could be at the forefront of this work.

Thank you,



Brooke Moore



November 6, 2017

To Whom It May Concern:

It is with great pleasure that I write this letter today to enthusiastically support Kwantlen University's graduate certificate in Sustainable Food Systems and Security.

My name is Marc Schutzbank and I am the Executive Director of Fresh Roots. Fresh Roots is a charity that grows Good Food For All. Fresh Roots envisions a world where everyone has access to healthy food, land, and community. Our mission is to cultivate engaging gardens and natural spaces that catalyze healthy eating, ecological stewardship, and community celebration. We do that through our Schoolyard Market Gardens and food forests, educational farms where the food we grow is brought into the school community: into the cafeteria, food access programs, and to our neighbours. Fresh Roots facilitates outdoor experiential learning with teachers and students, mentor youth leaders through our garden club and summer programming, and empower residents in Delta, Coquitlam, and Vancouver to grow their own through our volunteer programs. Over 5,000 students work with the schoolyard market gardens, eating 'schoolgrown' produce, and learning about experiential learning. Fresh Roots also works with organizations to develop their own market gardens and associated garden programming. We are a thought leader in institutional food systems change and outdoor experiential learning.

This work in food systems is deep, meaningful, and important – and it requires all of us to have a deep understanding of our current food system, both the benefits, but also, and more importantly the losses, particularly for those whom the system has failed. Further learning, and ongoing entrepreneurialism in the food space is critical to solving the compounding problems of food security, global climate change, changing land use, and waste.

KPU has the opportunity to advance the agenda towards a sustainable food system and I am pleased to lend my support to the development of this new graduate program.

Should you have any questions, please do not hesitate to be in touch.

Marc Schutzbank
Executive Director, Fresh Roots
778.872.KALE (5253)
marc@freshroots.ca

cultivatinghealthyplaces

cultivatinghealthyplaces.com

canada / united states

403-151 1st Ave West
Vancouver, BC V5Y 0A5
604.836.6900

November 17, 2017

Kent Mullinix, PhD., P.Ag.
Director, Institute for Sustainable Food Systems
Kwantlen Polytechnic University
t 604.612.1252 (mobile)
e kent.mullinix@kpu.ca

RE: Letter of Support – Kwantlen Polytechnic University Graduate Certificate in Sustainable Food Systems and Security

Dear Dr. Kent Mullinix,

It is my pleasure to write this letter in unequivocal support for the creation of a KPU graduate certification program in Sustainable Food Systems and Security. In my professional capacity as a food systems planner and health professional working in communities across the U.S. and Canada, this proposed program of study is of great value and pertinent.

This program will not only advance KPU's growing reputation as a Canadian leader in sustainable agriculture and food system education, outreach and applied research, but will provide a much needed certificate program for professionals wanting more technical and topical knowledge and expertise on this issue. The combination of focusing on environmentally sustainability, as well as the social and ethical components of food systems and food security provides a comprehensive foundation for a complex, multifaceted, and multidisciplinary topic. The certification program will provide the venue for teachers, planners, economic development staff, non---governmental staff, and consultants to engage in a locally embedded but globally relevant issue.

This program has potential to bring together professionals and learners with a common interest and focus from around the world.

Sincerely,



Kimberley Hodgson, MURP, MS, AICP, RD
Co---Investigator, Growing Food Connections, <http://growingfoodconnections.org/>
Principal, Cultivating Healthy Places, <https://cultivatinghealthyplaces.com/>



November 15, 2017

Kent Mullinix, PhD, PAg
Director, Institute for Sustainable Food Systems
Kwantlen Polytechnic University
kent.mullinix@kpu.ca

RE: Development of a *Sustainable Food Systems and Security* Graduate Certificate Program

Dear Dr. Mullinix,

On behalf myself as the Director of Interior Health's Healthy Communities Portfolio, Population Health, I am pleased to provide my endorsement of your application for the development of a graduate certificate program in Sustainable Food Systems and Security.

Under the Healthy Families BC Policy Framework, health authorities are supporting a Ministry of Health mandate to act collectively to implement a comprehensive common agenda that improves healthy eating outcomes in BC. This work includes promoting public policy that supports healthy eating, engaging with the food sector to provide healthy food choices, and advancing food security as a foundational component of healthy eating. It is broadly understood that complex approaches involving multiple sectors are necessary to address complex health issues and reduce burden of disease.

Opportunities for graduate education with theoretical and applied elements will greatly advance the technical knowledge and expertise needed to understand food system complexity and how we can work collectively to re-orient for healthier populations. The development of a graduate certificate program in sustainable food systems and security is particularly relevant not only in the BC context, but nationally and globally as we continue to understand the profound influence of our food system on individual and population health. Graduates will bring tremendous value to our collective discussion and contribute to the innovative solutions needed for alternate food systems in the future.

Sincerely,

Heather Deegan
Director, Population Health

Bus: 250-469-7070, 12788 Fax: 250-868-7760
Email: heather.deegan@interiorhealth.ca
Web: www.interiorhealth.ca

POPULATION HEALTH
505 Doyle Ave
Kelowna, BC V1Y 6V8



LANGLEY ENVIRONMENTAL PARTNERS SOCIETY

#201- 4839- 221 Street, Langley, B.C. Canada V3A 2P1 (604) 532.3511 Fax (604) 534.6593

Revenue Canada Charitable Number: 14057 9962 RR 0001

www.leps.bc.ca

December 14, 2017

Re: Sustainable Food Systems and Security

I am writing this letter of endorsement for the proposed Kwantlen Polytechnic University Sustainable Food Systems and Security Graduate Program.

LEPS is a non-profit, partnership-based society dedicated to protecting and restoring Langley's natural environment through education, cooperation and action. As 75% of the land base of Langley is within the Agricultural Land Reserve, a strong component of LEPS' work consists of public education and awareness of local agriculture and engaging citizens in building a sustainable food system.

The proposed program of study is valuable and pertinent. A graduate program to prepare professionals to advance sustainable food systems knowledge and action is an integral step in developing a local, sustainable food systems and would put KPU on the forefront of advancing food security both regionally and globally.

The opportunity for this proposed program to link to KPU's research programming focused on sustainable food systems and food security fosters and supports purposeful applied research and community engagement.

LEPS looks forward to the benefits and opportunities this graduate program would provide.

Sincerely,

Nichole Marples,
Executive Director

November 8, 2017

Dear Kent Mullinix,

As a field of study, sustainable food systems and food security have received increasing attention through academic teaching and research. This trend has paralleled the growth of practical initiatives attempting to finding solutions to the growing economic, ecological and social challenges presented by the global industrial food system. Increasingly, young people and professionals are searching for graduate programs that can facilitate development of more topical knowledge and expertise to participate in these valuable initiatives. There is a need for new programs that enable students to delve deeper into the wide range of relevant issues including sustainable agriculture and fishing, Indigenous food sovereignty, poverty and food insecurity, and food systems education, to name only a few. More importantly, these issues cannot be studied in isolation but demand an integration of theory and practice, applied research and community engagement. To create real solutions, it is vital that new graduate programs find ways to train students to develop critical knowledge through partnerships with practitioners.

I am very excited to learn about the proposed graduate certificate in *Sustainable Food Systems and Security* at Kwantlen Polytechnic University. In my teaching and research capacity as Canada Research Chair in Sustainable Food Systems, it has become clear that there is an immense need in Canada for programs like this at the graduate level. I look forward to hearing more about the development of this much needed program and would be happy to support this endeavor in any way I can.

Sincerely,



Charles Z. Levkoe

Canada Research Chair in Sustainable Food Systems

Director, Centre for Sustainable Food Systems, Research and Engagement

November 21, 2017

Via E-mail: kent.mullinix@kpu.ca

Kwantlen Polytechnic University
Institute for Sustainable Food Systems
8771 Landsdowne Road
Richmond, B.C. V6X 3X7

Attention: Dr. Kent Mullinix, Ph.D., P.Ag.
Director, Institute for Sustainable Food Systems

Dear Sir:

RE: SUSTAINABLE FOOD SYSTEMS AND SECURITY – GRADUATE PROGRAM

On behalf of the City of Langley, I would like to offer my support for the proposed new graduate certificate program in Sustainable Food Systems and Security. I believe this program will be of benefit to professionals seeking a greater understanding of sustainable agriculture and food systems. I can assure you the subject area is of growing interest today in urban regions pursuing more sustainable forms of development. Based on the City's experience working with the Institute for Sustainable Food Systems, I know that KPU and its staff will bring outstanding knowledge and dedication to the new program. I wish you all the best with this exciting new venture.

Yours truly,



Roy M. Beddow, MCIP, RPP
Deputy Director of Development Services
& Economic Development

RMB/



December 4, 2017

Dr. Kent Mullinix
Director, Institute for Sustainable Food Systems
Kwantlen Polytechnic University

Dear Kent,

I am writing to indicate my enthusiastic support for the development of a graduate certificate in Sustainable Food Systems and Security at Kwantlen Polytechnic University. Kwantlen has the expertise and resources needed to offer the proposed 18 credit certificate, given the breadth and strength of the Bachelor of Applied Science in Sustainable Agriculture, as well as the excellent research programming and capacity of the Institute for Sustainable Food Systems. Furthermore, as an academic at the University of Alberta working in the area of sustainable agri-food systems, I believe there is a definite need for more graduate level training in sustainable agri-food systems, particularly in Western Canada, that takes a multi-disciplinary approach and is grounded in applied research and community engagement. The on-line delivery format will make it accessible to interested individuals from across Canada.

There is growing public awareness of the need to develop more resilient and equitable food systems; the introduction of this certificate is both timely and germane. The certificate will be of value to recent graduates of undergraduate degrees as well as to professionals already working in agriculture and food systems who want to deepen their knowledge and skills. I congratulate you and others at Kwantlen for taking the initiative to develop this well-conceived proposal and I fully recommend its approval.

Sincerely,

Mary A. Beckie
Associate Professor
Director, Community Engagement Studies
Faculty of Extension
University of Alberta
mary.beckie@ualberta.ca
780-492-5153



**LILLOOET
AGRICULTURE &
FOOD SOCIETY**

PO Box 217, Lillooet BC V0K 1V0
lillooetagricultureandfood.org

October 9, 2017

To whom it may concern,

The Lillooet Agriculture & Food Society's (LAFS) Board of Directors would like to offer our support for Kwantlen Polytechnic University's new graduate certificate in Sustainable Food Systems and Security.

One of the main goals of our society is "to promote awareness, education and research around local agriculture and food security." It is important to have professionals that are familiar with the issues and ways to implement actions toward a secure food system especially in rural areas. Our region has specific challenges related to water and infrastructure that are unique.

Our Board welcomes a program such as this especially the opportunities to collaborate on projects, share knowledge and research.

Sincerely,

A handwritten signature in black ink, appearing to read "Tristan Banwell".

Tristan Banwell, Chair
LAFS Board of Directors
250-256-1620



November 20, 2017

Dr. Kent Mullinix
Director, Institute for Sustainable Food Systems
Room 1810, KPU Richmond Campus
8771 Lansdowne Road
Richmond, BC V6X 3X7

Dear Dr. Mullinix:

Re: Okanagan-Similkameen Healthy Living Coalition Support for Graduate Certificate

On behalf of the Okanagan-Similkameen Healthy Living Coalition (the Coalition), I am pleased to offer this letter of support for the University's graduate certificate in Sustainable Food Systems and Security. The Coalition works to support and foster community groups in the Regional District of Okanagan Similkameen who are working on healthy community initiatives.

While traditional in-class learning sessions are important, the Coalition believes that agriculture studies must provide a blending of theory and practical work; thus, we are pleased to learn the curriculum for this certificate will include both coursework and applied studies. Further, the proposed curriculum for this graduate credential, the collaboration with Royal Roads University, and the on-line delivery model demonstrate why KPU can claim a growing reputation as a Canadian leader in sustainable agriculture and food system education.

The commitment by the University to the social and ethical aspects of sustainable food systems and food security align with the Coalition's support for a food system study in the Okanagan Valley. We feel that as climate change continues to negatively impact our existing food system, the move to a more self-reliant model will prove to be critically important for the health and wellbeing of Valley communities.

In my professional capacity as Chair of the Okanagan-Similkameen Healthy Living Coalition, and as a local government elected official, I see both value and timeliness in KPU's proposed certificate in Sustainable Food Systems and Security.

Sincerely,

Toni Boot, Chair
Okanagan Similkameen Healthy Living Coalition
/tb



SIMON FRASER
UNIVERSITY
AT HARBOUR CENTRE

Urban Studies Program
2nd Floor, 515 West Hastings Street
Vancouver, British Columbia
Canada V6B 5K3

Tel: 778.782.7887
Fax: 778.782.5297

6 November 2017

To Whom It May Concern:

I write to enthusiastically support implementation of the proposed graduate certificate in *Sustainable Food Systems and Security*, being considered at Kwantlen Polytechnic University. The need for such a graduate program - focused on this critical dimension of human sustainability is increasingly apparent.

As Professor of Urban Studies and Political Science, I am increasingly reminded that food systems are foundational to and at the heart of the urban metabolism and ultimate sustainability of Canada's substantially urbanized populace. Food systems are increasing at the front and center of political and civil society debates. I am pleased to see that a graduate program focused on food systems targeting the preparation and development of professionals is proposed in western Canada. Some of my graduate students focused their work on various aspects of our food system, attesting to the appetite for such knowledge in advanced education.

The proposed graduate program of study is both timely and well-conceived. We most certainly need professionals such as municipal planners, NGO staff and educators who are sufficiently knowledgeable about sustainable food systems so that they can effectively encourage and nurture them. As such, I am pleased that KPU is exhibiting academic leadership by developing this graduate certificate.

Sincerely,

Anthony Perl
Professor of Urban Studies and Political Science

BOARD OF GOVERNORS

Mandy Hansen
Chair

Ramona Faust
Vice-Chair

Anna Warwick Sears

Hanne Selby

Jim Rempel

Robert Goertz

Roberta Stewart

Jack Wong
Chief Executive Officer

November 3, 2017

Dr. Kent Mullinix, PhD., P.Ag.
Director, Institute for Sustainable Food Systems
Kwantlen Polytechnic University
Room 1810, [KPU Richmond Campus](#)
8771 Lansdowne Road
Richmond, B.C. V6X 3X7

Dear Kent,

Re: New KPU graduate program

The Real Estate Foundation of British Columbia (REFBC) is pleased to write this letter of support for a graduate certificate in ***Sustainable Food Systems and Security***.

Our enabling legislation, the Real Estate Services Act, empowers us to support real estate and land use related research, public and professional education, and law reform, as well as other real estate and land use related initiatives intended for the public or professional good. Since we were established 30 years ago, we have funded over \$80 million in grants to non-profit and community groups across BC.

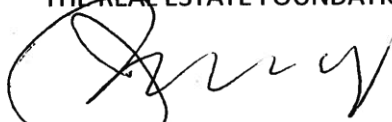
Local & sustainable food systems is one our priority grant program areas. Our interest is ensuring that land in BC is available and accessible for growing food and increasing food production. Our goal is land in BC is protected and enhanced to support thriving, local, sustainable food systems now and in the future.

We believe this proposed program can build on REFBC's previous support to KPU's Institute for Sustainable Food Systems' work that created a research framework and tool to help local governments, planners and organizations to develop regional food system plans. However, REFBC recognizes there is a gap between adoption of goals and on-the-ground implementation. Therefore, we support initiatives that will advance sustainable food systems knowledge and community engagement into action by targeting students and professionals engaged in local food systems and security. We see this graduate credential can be a valuable link to KPU's applied research programming.

Please feel free to contact me if you have any questions or concerns (tel 604.343.2624 direct / toll free 1.866.912.6800 / jack@refbc.com).

Sincerely,

THE REAL ESTATE FOUNDATION OF BC

A handwritten signature in black ink, appearing to read 'Jack Wong', is written over the printed name.

Jack Wong
Chief Executive Officer



To whom it may concern,

Please accept this letter in support of KPU's development of a graduate certificate in Sustainable Food Systems and Security. Both the subject matter and the format of this program will be of real interest to Food Security professionals.

As the Executive Director of a small but ambitious non profit, this program is of interest to me personally and professionally. We are actively inspiring a robust Richmond food system through education, advocacy, and community building initiatives, and continually being asked to comment on and engage in the interconnected local/ global, social, environmental, health, and economic issues arising from our broken food system. To boldly tackle this, for me as a professional, for us as an organization, and for the broader community requires deep knowledge of many topics.

The institute for Sustainable Food Systems has a strong reputation in the food security community as holders of this knowledge. The opportunity to study with them and continue my professional work concurrently is very exciting.

Please don't hesitate to contact me for further information.

Sincerely,

A handwritten signature in dark ink that reads "A. Georgy".

Anita Georgy
Executive Director
Richmond Food Security Society



2b VENTURES

117-3192 Gladwin Road, Abbotsford, BC V2T 6M9

P (604) 504 5537 F (604) 504 5883 e sandyblue@telus.net

*We build our business through the recommendations of our customers.
We'd be honoured to have yours.*

November 4, 2017

By email: kent.mullinix@kpu.ca

Kent Mullinix, PhD., P.Ag. Director,
Institute for Sustainable Food Systems - Kwantlen Polytechnic University

Dear Kent,

Re: Support for KPU graduate certificate in Sustainable Food Systems and Security

As an internationally certified economic development professional and having served on the KPU Sustainable Food Systems Advisory since its inception I am pleased to provide this letter of support for KPU's proposed Graduate certificate in ***Sustainable Food Systems and Security***.

This program is especially important as the curriculum has the potential to bring together professionals and learners with a common interest and focus from around the world to engage in this locally embedded but globally relevant issue.

With the forecast growth in the Lower Mainland and pressures on communities to provide safe, nutritious, affordable local food this topic is more timely, relevant and critical to the conversation than ever before.

Since being elected to Abbotsford City Council in 2014 I have advocated for including Sustainable Food Systems and Security in our **Official Community Plan** and **AgRefresh** (the comprehensive review of our Ag lands). Not only is Abbotsford the largest geographic municipality in BC, 75% of our land is in the ALR. We face growing pressure on both our urban and agricultural land as we prepare to welcome a forecast 60,000 new residents. To accommodate this growth we will densify existing neighbourhoods and seek ways to increase productivity on 'food lands' to feed them. This KPU graduate program will help provide elected officials, planners and other professionals the information they need to help us 'do it right'.

I believe this graduate program will not only advance KPU's distinct and growing reputation as a Canadian leader in sustainable agriculture and food system education, outreach and applied research; but it will foster and support purposeful applied research and (*of great personal interest to me*) **community engagement**.

A handwritten signature in black ink, appearing to read 'S Blue', with a stylized flourish at the end.

Sandy Blue, CECD EM, Ec.D, ABC

2b VENTURES – design solutions for business & home

117 – 3192 Gladwin Road, Abbotsford BC V2T 6M9

sandyblue@telus.net 604 504 5537 (h) 604 866 0415 (m)



October 31, 2018

To Whom It May Concern:

Re: Letter of Support for Kwantlen Polytechnic University's (KPU) implementation of a graduate certificate program in *Sustainable Food Systems and Security* for the Fall 2018 semester.

The Surrey Board of Trade (SBOT) supports KPU and its application to develop and implement a graduate certificate program in ***Sustainable Food Systems and Security*** for the Fall 2018 semester.

Sustainability is unequivocally at the heart of this program it builds on and will advance KPU's distinct and growing reputation as a Canadian leader in sustainable agriculture and food system education, outreach, and applied research.

This program is intended to facilitate examination and understanding of contemporary, dominant food systems thus imbuing a critical understanding and social and ethical awareness of sustainable food systems and food security. It is also intended to prepare professionals to advance their knowledge on sustainable food systems. Courses will be developed for on-line delivery and therefor the certificate will be accessible to place-bound students. As such the program has the potential to bring together professionals and learners with a common interest and focus from around the world.

Additionally, the SBOT represents 2,400 members and has over 6,000 business contacts with over 60,000 employees. The purpose of the organization, on behalf of its members, is to advocate at all levels of government, facilitate networking opportunities, and provide cost-saving benefits and marketing opportunities. We are a not-for-profit organization with a common goal of furthering the interests of businesses in our region. We have demonstrated, through our projects and initiatives, a commitment to enhancing the local economy.



Lastly, this innovative graduate program will directly link to KPU's research program focused on sustainable food systems and food security and will foster and support purposeful applied research and community engagement.

Sincerely,

A handwritten signature in black ink, appearing to read 'A. Huberman', is positioned above the printed name.

H. Captain (Navy) Anita Huberman
CEO, Surrey Board of Trade



Box 219, 1350 Aster Street
Pemberton, BC V0N 2L0
P. 604-894-6371 TF. 800-298-7753
F. 604-894-6526
info@slrd.bc.ca www.slrd.bc.ca

November 14, 2017

Kent Mullinix
Director, Institute for Sustainable Food Systems
Kwantlen Polytechnic University

Dear Mr. Mullinix:

RE: GRADUATE CERTIFICATE IN SUSTAINABLE FOOD SYSTEMS AND SECURITY

I am writing this letter in support of the graduate certificate in Sustainable Food Systems and Security. I have reviewed the proposed curriculum and in my professional capacity I believe that such a program will help to prepare professionals from various disciplines to address the food challenges that are and will continue to face this country in the face of a changing climate and energy paradigm.

I have seen the work that you've done at Kwantlen Polytechnic University with respect to food systems research and I believe that you'll be more than capable of delivering a comprehensive program that will advance food systems knowledge and facilitate positive change.

Regards,

Kim Needham
Director of Planning and Development Services, Squamish-Lillooet Regional District

309-1930 West 3rd Avenue
Vancouver, B.C. V6J 1L1

November 12, 2017

Dr. Kent Mullinix
Institute of Sustainable Food Systems
Kwantlen Polytechnic University
12666 72 Avenue Surrey, BC
V3M 2M8

Dear Dr. Mullinix,

I provide this letter in support of the KPU plan to develop and implement a graduate certificate in Sustainable Food Systems and Security.

As a policy analyst working for the City of Vancouver I can attest to local government interest in, and need for access to, sustainable food system theory, knowledge and application. Urban agriculture, food production and local food security are topics that span land use, transportation, social and cultural planning and policy making. In my experience, few municipal planners and policy analysts have specific training or education in sustainable food systems and security. A certificate program such as the one proposed by KPU offers a much needed opportunity for interested and aspiring professionals to access an appropriately curated curriculum. The proposed on-line delivery model increases accessibility for working professionals.

I whole heartedly endorse the content of the proposed program of study. For certificate students who work in planning and policy development, sustainability theory coupled with applied knowledge of sustainable agriculture and food security will provide the basis for effective, practical, progressive policy and plan making.

Sustainable food systems and food security are central to local and global ecological sustainability. I believe the proposed KPU program will make a valuable contribution.

With kind regards,

A handwritten signature in black ink, appearing to read 'Cornelia Sussmann', with a long horizontal flourish extending to the right.

Cornelia Sussmann Ph



November 1, 2017

Re: Letter of Endorsement – Sustainable Food Systems and Security

To Whom it May Concern,

The Township of Langley (Township) is pleased to provide this letter of endorsement for a new graduate certificate program in *Sustainable Food Systems and Security* at Kwantlen Polytechnic University (KPU).

Building a robust and environmentally-focused food system in our region is critical to ensuring a sustainable and food-secure future for our residents. More research, education, and community engagement is needed to understand the very complex and multifaceted ways the current food system impacts the environment, the economy, and our society. As a municipality with 75% of our land in the Agricultural Land Reserve (ALR), the Township is particularly aware and affected by the broad impacts of our food system, ranging from the economic benefits of local food production to the environmental impacts of organic food waste disposal.

The proposed program at KPU would help ensure a more sustainable future by preparing students and professionals to advance food systems knowledge and action in our region. The new program has our full support.

Yours truly,

A handwritten signature in blue ink, appearing to read 'K. Daniszewski', is written over a light blue horizontal line.

Krista Daniszewski
Sustainability Programs Specialist
Township of Langley
604.533.6090 X2208
kdaniszewski@tol.ca



UNIVERSITY OF TORONTO
DALLA LANA SCHOOL OF PUBLIC HEALTH

2017 Nov 8

To: Dr. Kent Mullinix, Director, Institute for Sustainable Food Systems
Kwantlen Polytechnic University
Re: Proposed graduate certificate program in *Sustainable Food Systems and Security*

Dear colleague:

It is with pleasure to hear about the proposed new certificate program that builds on KPU's growing reputation as a Canadian leader in sustainable agriculture and food system applied research, outreach and education. In my participation in meetings with you, both F2F workshops and virtual teleconferences, I have been most impressed by your eminently practical research program around sustainability and the food system in the Fraser River valley and beyond.

Teaching in a graduate Masters in Public Health program on food systems, sustainability and Ecological Public Health, I share your view that a large group of aspiring professionals want to learn more about locally embedded but globally relevant aspects of food systems, but need substantially more topical and technical knowledge and skills. Bringing a mix of social, natural and health science lenses to an informed, critical understanding of food systems is crucial to change towards healthier food systems, as much in Canada as globally. I particularly like the mix of core courses, a future looking course (something I encourage my students to do in group project work), and a capstone project. A select group of our MPH students do a capstone, ones who want to deepen their work in a particular area, very much like a major research project or mini-thesis at the masters' level.

The proposed certificate complements existing undergraduate level Canadian certificates which I know e.g. Ryerson University's excellent one on Food Security, Seneca College's Sustainable Local Food certificate, and University of Guelph's on Sustainable Urban Agriculture. Similar on-line certificates exist in the USA e.g. Stockbridge University of Massachusetts' certificate in Sustainable Food and Farming (Portland, Tufts and Minnesota as well). However, none of these are formally at a graduate level, nor link with a graduate program as does the proposed graduate certificate i.e. with Royal Roads University Master of Arts- Integrated Studies. The latter linkage will enable students interested in additional study to smoothly move on to a formal MA degree.

So I wish you well in your certificate's development and launch!

Sincerely

Donald C Cole MD, MSc, FRCP(C)
Professor



November 21, 2017

Re: Letter of Support for KPU's Sustainable Food Systems and Security Graduate Certificate

Dear Sir or Madam,

UBC Botanical Garden is delighted to provide this letter of support for KPU's development and implementation of a graduate certificate in Sustainable Food Systems and Security.

The UBC Botanical Garden works locally and internationally to safeguard the future of plants and supports community learning and engagement with nature. Specifically, our work in critical food literacy aims to provide skills, knowledge and expertise to advance just and sustainable food systems. We are pleased to see Kwantlen expand and grow its programming in this direction.

My personal experience with Kwantlen was very positive. I was a Postdoctoral Fellow in a collaborative project between UBC and Kwantlen's Institute for Sustainable Food Systems. This project, funded by the Pacific Institute for Climate Solutions allowed me to work closely with Kwantlen staff to advance my thinking and research objectives. The supervision received was valuable to my training and educational experiences.

I think there is significant value of a graduate program targeted to aspiring professionals to help understand the complex challenges that our food system faces. The online delivery format for the certificate ensures an inclusive program for residents not living in Metro Vancouver. Thank you for considering our letter of support and we wish this program a successful outcome.

Sincerely,

Tara

Dr. Tara Moreau

Associate Director, Sustainability and Community Programs
UBC Botanical Garden and Nitobe Memorial Garden
6804 SW Marine Drive | Vancouver, BC Canada V6T 1Z4
Phone [604 690 5375](tel:6046905375) | Fax [604 822 2016](tel:6048222016)
tara.moreau@ubc.ca



Geography and Environmental Studies

November 15, 2017

To Members of the Kwantlen Polytechnic University Senate,

I am writing to express my enthusiastic support for the proposed graduate certificate in ***Sustainable Food Systems and Security***.

As the Director for the Wilfrid Laurier University Centre for Sustainable Food Systems and the Principal Investigator for the Canada-wide and internationally networked 'Food: Locally Embedded Globally Engaged' (FLEdGE) Social Sciences and Humanities Research Council funded Partnership Grant I am well-positioned to assess the merits of the proposed certificate.

Given this context, I am confident that the proposed graduate certificate in ***Sustainable Food Systems and Security*** is the ideal flagship for graduate studies at KPU. Sustainable food studies is an exploding field and the proposed program will fill an educational void. I will provide two examples as context for this position. First, in 1991 there were no food policy councils in the world. As of 2016, according to Johns Hopkins University, there are more than 58 food policy councils in Canada with more than 320 across North America. Second, food is an important part of the United Nations Sustainable Development Goals (SDGs) and offers a much-needed synthetic lens for linking together the seventeen priorities established in 2015. However, to realize this potential demands professionals who can think across multiple disciplines and sectors to capture the multiple benefits that sustainable food systems offer including ecological regeneration, improved health, and more robust local economies. The well-rounded curriculum being proposed will offer people access to a degree that will prepare them to work in the field using a holistic food system sustainability lens and work in policy and other practitioner positions, for example in education, planning and economic development. This is critical both to the practice of and advancement of sustainable food systems.

This certificate would be unique in Canada, and one of a handful of opportunities in the world. That it is offered online makes it at once accessible, and using online teaching platforms, also allows for opportunities to build communities of practice.

The proposed graduate certificate in ***Sustainable Food Systems and Security*** would position KPU as a leader here at home and internationally. I cannot urge you strongly enough to support this innovative and much needed proposal. Please do not hesitate to contact me if you require more information or have any questions.

Best regards



Alison Blay-Palmer, PhD

Centre for International Governance Innovation Chair in Sustainable Food Systems

SUMMARY

Acronym and Number: SFSS 6100

Credits: 1

Implementation date: 1-Jan-2019

Descriptive Title: Our Food System and Sustainability

Banner Title: Food Systems & Sustainability

Course Developer(s): Jan Thompson; Kent Mullinix

Course Reviser(s):

☒ New Course / Replacement Course

☐ Course number/acronym change

Has the course rubric (both the acronym and number) been approved by the Registrar?

Yes

Indicate when the course rubric was approved and by whom:

Program title and acronym approved Feb. 28, 2018; Terri Taylor, Zena Mitchell. Course number approved Mar. 26, 2018; S. Yezerinac.

☐ Credit Change

Does this course replace another course? **No**

If “Yes”, specify which course it’s replacing:

☐ **Revisions for approval by Faculty Curriculum**

Committee

Changes involved:

☐ Descriptive Title

☐ Calendar Description

☐ Learning Outcomes

☐ Content

☐ Learning Activities

☐ Learning Resources

☐ Minor Assessments Consistent with Policies AR6 and/or AC4

☐ PLA

☐ Cross-listed, Equivalent, and Credit Exclusion Courses

☐ **This course is being discontinued.**

Effective date:

Brief rationale:

Does this course’s discontinuance impact programs or other courses?

No

If “Yes”, please specify the impacted programs and courses (e.g., courses that have the discontinued course as a prerequisite or corequisite):

☒ **Revisions for approval by Senate**

Changes involved:

☐ Discontinuance of this course

☐ Credits (triggers a new course)

☐ Prerequisites/Corequisites

☐ Required for credential

☐ Assessments inconsistent with Policies AR6 and/or AC4

☐ Impact on other programs or courses

☐ Course format

☐ Course level

☐ Attributes – Quantitative status, Writing intensive status

☐ Attributes – Pathway course

☒ This course is part of a new or revised program submission

Specify the program(s):

Graduate Certificate- Sustainable Food Systems and Food Security

Have the above program(s) been approved by Senate?

No

Course level? Graduate**Cross-listed Courses**

- ☐ This course is cross-listed with another course

Specify the cross-listed course(s):

Has the other Department been consulted? No

Equivalent Courses

- ☐ This course has equivalent course(s)

Specify the equivalent course(s):

Credit Exclusion Courses

- ☐ This course has credit exclusion course(s)

Specify the credit exclusion course(s):

Transfer Credit

- ☐ This revision affects transfer credit status (for sending purposes only)

Attributes

Requested Attributes:

- ☐ Quantitative status
☐ Writing Intensive status
☐ Pathway course

Approved Attributes:

- ☐ Quantitative status
☐ Writing Intensive status
☐ Pathway course

Tuition Category?

<http://www.kpu.ca/sites/default/files/Policies/Bylaw No. 4 Fees.pdf>



COURSE OUTLINE

© Copyright Kwantlen Polytechnic University

Faculty: Faculty of Arts
Department Name: Arts
Course Acronym and Number: SFSS 6100
Former Acronym and Number:
Equivalent Courses:
Cross-listed Courses:
Credit Exclusion Courses:
Credits: 1
Descriptive Title: Our Food System and Sustainability

Calendar Description:

In this course, students will investigate the meaning of food systems and sustainability. The theoretical underpinnings of food system studies will be introduced and critically examined using interdisciplinary approaches (e.g., agriculture, anthropology, social sciences, planning, community nutrition, food security, economics, environmental resource management). Students will learn the importance of sustainability models pertaining to global resource limitations, ecosystem degradation, and societal well-being, function and development.

Required for the following credentials:

Graduate Certificate- Sustainable Food Systems and Security

| | |
|-----------------------|--|
| Prerequisites: | |
| Corequisites: | |

External Accreditation:

☐ This course is externally accredited
Specify the external accreditation groups:

Implementation Date: 1-Jan-2019

To be Reviewed Date: 1-Jan-2024

Discontinued Date:

Learning Outcomes:

A student who successfully completes the course will have reliably demonstrated the ability to:

**Critically examine systems theory as a basis of research and study.
Explore and critically examine the concept of sustainability and its applicability to the human enterprise/ economy.
Apply the concepts of sustainability to food system studies.
Examine the interdisciplinary approach as a means to study food systems.**

Content:

Content will include, but is not restricted to, the following:

**Fundamental concepts of systems theory.
Fundamental elements inherent in the concept of sustainability.
Sustainability models and their importance in the face of global resource limitations and ecosystem degradation.
Sustainability models and their importance in regard to societal well-being, function and development.
Key research methods used in interdisciplinary studies such as food system studies.**

Learning Activities:

Learning activities should be appropriately related to learning outcomes.

Activities may include, but are not restricted to, the following:

**Asynchronous lectures
Discussion forums
Review of grey and peer-reviewed literature
Group projects
Online presentations**

Assessment Methods:

Grading system used:

Letter Grade

Per Policy AC4, the minimum passing grade in a course using the letter grade system for assessment is a D grade unless otherwise specified on the course outline. If this course requires a minimum grade other than a D grade for the purposes of graduation,

☒ Please indicate the program(s) to which this applies: Graduate Certificate- Sustainable Food Systems and Food Security

☐ Please indicate the minimum grade required:

Assessment plans comply with KPU policy and may resemble the following:

| Assessment Type* | Value |
|--------------------------|-------|
| Learning Contribution | 10%% |
| Term project/ paper | 30%% |
| Weekly reading responses | 30%% |
| Quizzes | 30%% |
| | % |
| | % |
| | % |
| Total | 100% |

*Learning contribution may be used as an assessment type. Learning contributions may include, but are not restricted to, the following: Active listening, oral contribution and elaboration in discussion/debate, course related volunteer opportunities, peer critique, leadership activities, mentorship, scribing for others, etc.

If "learning contribution" is listed as an assessment type, the course developer should provide guidelines below for how learning contribution is assessed.

elaboration in discussion/debate, peer critique, leadership activities

Methods for Prior Learning Assessment:

The following PLA methods will be used:

- ☐ Challenge exam
- ☐ Standardized test
- ☐ Product / Portfolio
- ☐ Demonstration
- ☐ Interview
- ☐ Worksite assessment
- ☐ Self-assessment
- ☐ External evaluation

Course Format:

Instruction types and delivery methods: (e.g., classroom-related, lab, practicum, field school, experiential/contextual delivery, simulation, online, face-to-face, hybrid delivery, interdisciplinary delivery, team-teaching, etc.)

| |
|--------|
| Online |
|--------|

Learning Resources:

Textbooks, Lab, or Shop Manuals, Equipment, etc., such as:

| |
|--|
| Various grey and peer-reviewed literature, books, book chapters, documentary films |
|--|

Do library resources in this area need more development?

Yes

Approval Process Signatures

This course outline complies with the relevant KPU policies. It follows the guidelines set out in the KPU Course Outline Manual. Department or program learning outcomes that have been identified in this course outline can be reasonably achieved through this course.

| | | | |
|-----------------------------|--|---------------------|--|
| Course Developer(s): | | Signed Date: | |
| Department Chair: | | Signed Date: | |
| Dean/Associate Dean: | | Signed Date: | |
| Senate Vice Chair: | | Signed Date: | |

SUMMARY

Acronym and Number: SFSS 6110
Credits: 4
Implementation date: 1-Jan-2019

Descriptive Title: Environment and Food Systems
Banner Title: Environment & Food Systems

Course Developer(s): Mike Bomford; Jan Thompson
Course Reviser(s): Kent Mullinix

☒ New Course / Replacement Course

☐ Course number/acronym change

Has the course rubric (both the acronym and number) been approved by the Registrar?

Yes

Indicate when the course rubric was approved and by whom:

Program title and acronym approved Feb. 28, 2018; Terri Taylor, Zena Mitchell. Course number approved Mar. 26, 2018; S. Yezerinac.

☐ Credit Change

Does this course replace another course? **No**

If “Yes”, specify which course it’s replacing:

☐ **Revisions for approval by Faculty Curriculum**

Committee

Changes involved:

☐ Descriptive Title

☐ Calendar Description

☐ Learning Outcomes

☐ Content

☐ Learning Activities

☐ Learning Resources

☐ Minor Assessments Consistent with Policies AR6 and/or AC4

☐ PLA

☐ Cross-listed, Equivalent, and Credit Exclusion Courses

☐ **This course is being discontinued.**

Effective date:

Brief rationale:

Does this course’s discontinuance impact programs or other courses?

No

If “Yes”, please specify the impacted programs and courses (e.g., courses that have the discontinued course as a prerequisite or corequisite):

☒ **Revisions for approval by Senate**

Changes involved:

☐ Discontinuance of this course

☐ Credits (triggers a new course)

☐ Prerequisites/Corequisites

☐ Required for credential

☐ Assessments inconsistent with Policies AR6 and/or AC4

☐ Impact on other programs or courses

☐ Course format

☐ Course level

☐ Attributes – Quantitative status, Writing intensive status

☐ Attributes – Pathway course

☒ This course is part of a new or revised program submission

Specify the program(s):

Graduate Certificate- Sustainable Food Systems and Food Security

Have the above program(s) been approved by Senate?

No

Course level? Graduate**Cross-listed Courses**

- ☐ This course is cross-listed with another course

Specify the cross-listed course(s):

Has the other Department been consulted? No

Equivalent Courses

- ☐ This course has equivalent course(s)

Specify the equivalent course(s):

Credit Exclusion Courses

- ☐ This course has credit exclusion course(s)

Specify the credit exclusion course(s):

Transfer Credit

- ☐ This revision affects transfer credit status (for sending purposes only)

Attributes

Requested Attributes:

- ☐ Quantitative status
☐ Writing Intensive status
☐ Pathway course

Approved Attributes:

- ☐ Quantitative status
☐ Writing Intensive status
☐ Pathway course

Tuition Category?

<http://www.kpu.ca/sites/default/files/Policies/Bylaw No. 4 Fees.pdf>



COURSE OUTLINE

© Copyright Kwantlen Polytechnic University

Faculty: Faculty of Arts
Department Name: Arts
Course Acronym and Number: SFSS 6110
Former Acronym and Number:
Equivalent Courses:
Cross-listed Courses:
Credit Exclusion Courses:
Credits: 4
Descriptive Title: Environment and Food Systems

Calendar Description:

In this course, students will investigate the underlying requirements for food production, including land, water, and resources, and how the production of food has impacted these in turn. Students will learn about the relationship between food production and the environment, including the impact of climate change on food systems.

Required for the following credentials:

Graduate Certificate- Sustainable Food Systems and Security

| | |
|-----------------------|-----------|
| Prerequisites: | SFSS 6100 |
| Corequisites: | |

External Accreditation:

☐ This course is externally accredited
Specify the external accreditation groups:

Implementation Date: 1-Jan-2019

To be Reviewed Date: 1-Jan-2024

Discontinued Date:

Learning Outcomes:

A student who successfully completes the course will have reliably demonstrated the ability to:

- **Examine the interrelationships among human culture, food systems, and natural environment.**
- **Recognize ways in which changing food systems have shaped historical trends in key environmental indicators.**
- **List the nine planetary boundaries, and identify food system influences on each.**
- **Distinguish between major food system components and explain how their contributions to planetary boundaries differ.**
- **Compare and contrast emerging food system paradigms -- such as industrial, organic, bioregional, and eco-modernist -- in terms of their potential environmental impacts.**
- **Rank proposed food system changes according to their likely impacts on key environmental indicators.**
- **Propose food policy measures with potential for positive environmental outcomes.**

Content:

Content will include, but is not restricted to, the following:

- **Food system paradigms, history, and analysis**
- **Lifecycle analysis**
- **Environmental indicators**
- **Environmental impacts on the food system**
- **Climate change**
- **Food policy measures**
- **Culture, food systems, and the environment**
- **Planetary boundaries**
- **Food system paradigms**

Learning Activities:

Learning activities should be appropriately related to learning outcomes.

Activities may include, but are not restricted to, the following:

- **Critical analysis of scientific writing**

- **Viewing multimedia resources critically**
- **Analyzing, discussing, and solving problems in an online chat format**
- **Reflecting on issues through discussions or writing assignments**
- **Working collectively on a presentation**
- **Conducting library and online research**
- **Giving a research-based online presentation**
- **Researching and writing a term paper**

Assessment Methods:

Grading system used:

Letter Grade

Per Policy AC4, the minimum passing grade in a course using the letter grade system for assessment is a D grade unless otherwise specified on the course outline. If this course requires a minimum grade other than a D grade for the purposes of graduation,

☒ Please indicate the program(s) to which this applies: Graduate Certificate- Sustainable Food Systems and Security

☐ Please indicate the minimum grade required:

Assessment plans comply with KPU policy and may resemble the following:

| Assessment Type* | Value |
|-----------------------|-------|
| Learning Contribution | 20%% |
| Online Presentation | 15%% |
| Midterm exam | 15%% |
| Final Exam | 25%% |
| Term Paper | 25%% |
| | % |
| | % |
| Total | 100% |

*Learning contribution may be used as an assessment type. Learning contributions may include, but are not restricted to, the following: Active listening, oral contribution and elaboration in discussion/debate, course related volunteer opportunities, peer critique, leadership activities, mentorship, scribing for others, etc.

If "learning contribution" is listed as an assessment type, the course developer should provide guidelines below for how learning contribution is assessed.

elaboration in online discussions/debates, peer critique, leadership activities

Methods for Prior Learning Assessment:

The following PLA methods will be used:

- ☐ Challenge exam
- ☐ Standardized test
- ☐ Product / Portfolio
- ☐ Demonstration
- ☐ Interview
- ☐ Worksite assessment
- ☐ Self-assessment
- ☐ External evaluation

Course Format:

Instruction types and delivery methods: (e.g., classroom-related, lab, practicum, field school, experiential/contextual delivery, simulation, online, face-to-face, hybrid delivery, interdisciplinary delivery, team-teaching, etc.)

online

Learning Resources:

Textbooks, Lab, or Shop Manuals, Equipment, etc., such as:

Various grey and peer-reviewed literature, books, documentary films

Do library resources in this area need more development?

Yes

Approval Process Signatures

This course outline complies with the relevant KPU policies. It follows the guidelines set out in the KPU Course Outline Manual. Department or program learning outcomes that have been identified in this course outline can be reasonably achieved through this course.

| | | | |
|----------------------|--|--------------|--|
| Course Developer(s): | | Signed Date: | |
| Department Chair: | | Signed Date: | |

| | | | |
|-----------------------------|--|---------------------|--|
| Dean/Associate Dean: | | Signed Date: | |
| Senate Vice Chair: | | Signed Date: | |

SUMMARY

Acronym and Number: SFSS 6120

Credits: 3

Implementation date: 1-Jan-2019

Descriptive Title: Food System Economics

Banner Title: Food System Economics

Course Developer(s): Kent Mullinix;Wallapak Polasub

Course Reviser(s): Kent Mullinix

☒ New Course / Replacement Course

☐ Course number/acronym change

Has the course rubric (both the acronym and number) been approved by the Registrar?

Yes

Indicate when the course rubric was approved and by whom:

Program title and acronym approved Feb. 28, 2018; Terri Taylor, Zena Mitchell. Course number approved Mar. 26, 2018; S. Yezerinac.

☐ Credit Change

Does this course replace another course? **No**

If “Yes”, specify which course it’s replacing:

☐ **Revisions for approval by Faculty Curriculum**

Committee

Changes involved:

☐ Descriptive Title

☐ Calendar Description

☐ Learning Outcomes

☐ Content

☐ Learning Activities

☐ Learning Resources

☐ Minor Assessments Consistent with Policies AR6 and/or AC4

☐ PLA

☐ Cross-listed, Equivalent, and Credit Exclusion Courses

☐ **This course is being discontinued.**

Effective date:

Brief rationale:

Does this course’s discontinuance impact programs or other courses?

No

If “Yes”, please specify the impacted programs and courses (e.g., courses that have the discontinued course as a prerequisite or corequisite):

☒ **Revisions for approval by Senate**

Changes involved:

☐ Discontinuance of this course

☐ Credits (triggers a new course)

☐ Prerequisites/Corequisites

☐ Required for credential

☐ Assessments inconsistent with Policies AR6 and/or AC4

☐ Impact on other programs or courses

☐ Course format

☐ Course level

☐ Attributes – Quantitative status, Writing intensive status

☐ Attributes – Pathway course

☒ This course is part of a new or revised program submission

Specify the program(s):

Graduate Certificate- Sustainable Food Systems and Food Security

Have the above program(s) been approved by Senate?

No

Course level? Graduate**Cross-listed Courses**

- ☐ This course is cross-listed with another course

Specify the cross-listed course(s):

Has the other Department been consulted? No

Equivalent Courses

- ☐ This course has equivalent course(s)

Specify the equivalent course(s):

Credit Exclusion Courses

- ☐ This course has credit exclusion course(s)

Specify the credit exclusion course(s):

Transfer Credit

- ☐ This revision affects transfer credit status (for sending purposes only)

Attributes

Requested Attributes:

- ☐ Quantitative status
☐ Writing Intensive status
☐ Pathway course

Approved Attributes:

- ☐ Quantitative status
☐ Writing Intensive status
☐ Pathway course

Tuition Category?

<http://www.kpu.ca/sites/default/files/Policies/Bylaw No. 4 Fees.pdf>



COURSE OUTLINE

© Copyright Kwantlen Polytechnic University

Faculty: Faculty of Arts
Department Name: Arts
Course Acronym and Number: SFSS 6120
Former Acronym and Number:
Equivalent Courses:
Cross-listed Courses:
Credit Exclusion Courses:
Credits: 3
Descriptive Title: Food System Economics

Calendar Description:

In this course, students will critically examine the economic underpinnings and outcomes of the industrial, global food system through a food security and food system sustainability lens. The economic foundation and environment required for a robust, sustainable food system will be gauged and requisite policy and regulatory strategy be explored. Through case studies, students will learn about the applicability and limitations of a variety of economic analysis tools used in food system studies.

Required for the following credentials:

Graduate Certificate- Sustainable Food Systems and Security

| | |
|-----------------------|-----------|
| Prerequisites: | SFSS 6100 |
| Corequisites: | |

External Accreditation:

☐ This course is externally accredited
Specify the external accreditation groups:

Implementation Date: 1-Jan-2019

To be Reviewed Date: 1-Jan-2024

Discontinued Date:

Learning Outcomes:

A student who successfully completes the course will have reliably demonstrated the ability to:

Explain the economic system underpinnings of the production paradigm food system.
Describe and explain the various outcomes of the production paradigm food system and their economic causes and ramifications.
Explain the economic foundations required for a sustainable food system.
Identify economic obstacles to global and local/regional food system sustainability and food security.
Describe and explain integrated policy required to create an economic environment fostering a sustainable food system and broad food security.
Use a variety of economic analysis tools used in food system study- e.g. cost benefit analysis, cost effectiveness analysis, economic impact analysis, economic multiplier effect.

Content:

Content will include, but is not restricted to, the following:

Economic precepts and characteristics of the transnational, industrial food system.
Corporate hegemony in the food system; vertical and horizontal integration.
Socio-economic outcomes of the contemporary North American food system: e.g. rural communities, direct and indirect food s, food security/ insecurity, food access, externalized costs, farms and farming, subsidization.
Sustainable economic theory and sustainable food systems.
Economic analysis tools/ methods application to food systems study.
Policy for food system economics change.

Learning Activities:

Learning activities should be appropriately related to learning outcomes.

Activities may include, but are not restricted to, the following:

Asynchronous lectures
Discussion forums
Review of literature
Reading and proven written analysis/response
Case study analysis
Online presentations

Assessment Methods:

Grading system used:

Letter Grade

Per Policy AC4, the minimum passing grade in a course using the letter grade system for assessment is a D grade unless otherwise specified on the course outline. If this course requires a minimum grade other than a D grade for the purposes of graduation,

☒ Please indicate the program(s) to which this applies: Graduate Certificate- Sustainable Food Systems and Security

☐ Please indicate the minimum grade required:

Assessment plans comply with KPU policy and may resemble the following:

| Assessment Type* | Value |
|------------------------|-------|
| Learning Contributions | 10%% |
| Written assignments | 20%% |
| Team project | 15%% |
| Presentation | 10%% |
| 3 Quizzes (15% each) | 45%% |
| | % |
| | % |
| Total | 100% |

*Learning contribution may be used as an assessment type. Learning contributions may include, but are not restricted to, the following: Active listening, oral contribution and elaboration in discussion/debate, course related volunteer opportunities, peer critique, leadership activities, mentorship, scribing for others, etc. If "learning contribution" is listed as an assessment type, the course developer should provide guidelines below for how learning contribution is assessed.

elaboration in discussion/debate, peer critique, leadership activities

Methods for Prior Learning Assessment:

The following PLA methods will be used:

- ☐ Challenge exam
 - ☐ Standardized test
 - ☐ Product / Portfolio
 - ☐ Demonstration
 - ☐ Interview
 - ☐ Worksite assessment
 - ☐ Self-assessment
 - ☐ External evaluation
-

Course Format:

Instruction types and delivery methods: (e.g., classroom-related, lab, practicum, field school, experiential/contextual delivery, simulation, online, face-to-face, hybrid delivery, interdisciplinary delivery, team-teaching, etc.)

| |
|--------|
| online |
|--------|

Learning Resources:

Textbooks, Lab, or Shop Manuals, Equipment, etc., such as:

| |
|---|
| Various grey and peer-reviewed literature, books, documentary films |
|---|

Do library resources in this area need more development?

Yes

Approval Process Signatures

This course outline complies with the relevant KPU policies. It follows the guidelines set out in the KPU Course Outline Manual. Department or program learning outcomes that have been identified in this course outline can be reasonably achieved through this course.

| | | | |
|----------------------|--|--------------|--|
| Course Developer(s): | | Signed Date: | |
| Department Chair: | | Signed Date: | |
| Dean/Associate Dean: | | Signed Date: | |
| Senate Vice Chair: | | Signed Date: | |

SUMMARY

Acronym and Number: SFSS 6130

Credits: 4

Implementation date: 1-Jan-2019

Descriptive Title: Food System and Society

Banner Title: Food System & Society

Course Developer(s): Kent Mullinix; Payal Batra

Course Reviser(s):

☒ New Course / Replacement Course

☐ Course number/acronym change

Has the course rubric (both the acronym and number) been approved by the Registrar?

Yes

Indicate when the course rubric was approved and by whom:

Program title and acronym approved Feb. 28, 2018; Terri Taylor, Zena Mitchell. Course number approved Mar. 26, 2018; S. Yezerinac.

☐ Credit Change

Does this course replace another course? **No**

If “Yes”, specify which course it’s replacing:

☐ **Revisions for approval by Faculty Curriculum**

Committee

Changes involved:

☐ Descriptive Title

☐ Calendar Description

☐ Learning Outcomes

☐ Content

☐ Learning Activities

☐ Learning Resources

☐ Minor Assessments Consistent with Policies AR6 and/or AC4

☐ PLA

☐ Cross-listed, Equivalent, and Credit Exclusion Courses

☐ **This course is being discontinued.**

Effective date:

Brief rationale:

Does this course’s discontinuance impact programs or other courses?

No

If “Yes”, please specify the impacted programs and courses (e.g., courses that have the discontinued course as a prerequisite or corequisite):

☒ **Revisions for approval by Senate**

Changes involved:

☐ Discontinuance of this course

☐ Credits (triggers a new course)

☐ Prerequisites/Corequisites

☐ Required for credential

☐ Assessments inconsistent with Policies AR6 and/or AC4

☐ Impact on other programs or courses

☐ Course format

☐ Course level

☐ Attributes – Quantitative status, Writing intensive status

☐ Attributes – Pathway course

☒ This course is part of a new or revised program submission

Specify the program(s):

Graduate Certificate- Sustainable Food Systems and Food Security

Have the above program(s) been approved by Senate?

No

Course level? Graduate**Cross-listed Courses**

☐ This course is cross-listed with another course

Specify the cross-listed course(s):

Has the other Department been consulted? No

Equivalent Courses

☐ This course has equivalent course(s)

Specify the equivalent course(s):

Credit Exclusion Courses

☐ This course has credit exclusion course(s)

Specify the credit exclusion course(s):

Transfer Credit

☐ This revision affects transfer credit status (for sending purposes only)

Attributes

Requested Attributes:

- ☐ Quantitative status
- ☐ Writing Intensive status
- ☐ Pathway course

Approved Attributes:

- ☐ Quantitative status
- ☐ Writing Intensive status
- ☐ Pathway course

Tuition Category?

<http://www.kpu.ca/sites/default/files/Policies/Bylaw No. 4 Fees.pdf>

Faculty: Faculty of Arts
Department Name: Arts
Course Acronym and Number: SFSS 6130
Former Acronym and Number:
Equivalent Courses:
Cross-listed Courses:
Credit Exclusion Courses:
Credits: 4
Descriptive Title: Food System and Society

Calendar Description:

Students will examine the nexus of food system, community and household health, food insecurity, food sovereignty, culture and food policy and politics in order to acquire a conceptual understanding of the links between the modern industrialized food system and community and population health. Students will cover topics related to the social, cultural, and health impacts of food systems as well as the effects of the socioeconomic, political, cultural and psychological factors on food choices and health. Students will evaluate current agricultural policies, examine policy barriers to alternative food systems and explore policy development and policy change.

Required for the following credentials:

Graduate Certificate- Sustainable Food Systems and Security

| | |
|-----------------------|-----------|
| Prerequisites: | SFSS 6100 |
| Corequisites: | |

External Accreditation:

☐ This course is externally accredited
Specify the external accreditation groups:

Implementation Date: 1-Jan-2019

To be Reviewed Date: 1-Jan-2024

Discontinued Date:

Learning Outcomes:

A student who successfully completes the course will have reliably demonstrated the ability to:

Recognize how food related health issues result from the interplay between complex social, cultural, political and historical factors.
Understand the basic principles of food access and discern dilemmas at household, local, national and international levels.
Examine the role of food availability, food access, food utilization and stability on food security.
Distinguish how different sustainable food production systems are in terms of food access and availability for everyone.
Identify the role of actors and activities to achieve food security at different levels (international, national, local, household, and individual level).
Examine the diverse initiatives and thought focused on food security and food justice.
Evaluate current agricultural policies, policy barriers to alternative food systems.
Propose food and agricultural policy strategies for food security, food justice, and food sovereignty.

Content:

Content will include, but is not restricted to, the following:

Causes and consequences of urban and rural food insecurity across Canada.
Issues and concepts underpinning food security at various levels and actors.
Political, social, cultural, economic and ecological elements shaping our health via the food system.
Intersection of food justice with other social inequities involving race, class, gender and governance.
Political debates and policy impacting various levels of our food system.

Learning Activities:

Learning activities should be appropriately related to learning outcomes.

Activities may include, but are not restricted to, the following:

Asynchronous lectures
Discussion forums
Reading reflections
Research papers
Case study assessment
Online presentations

Assessment Methods:

Grading system used:

Letter Grade

Per Policy AC4, the minimum passing grade in a course using the letter grade system for assessment is a D grade unless otherwise specified on the course outline. If this course requires a minimum grade other than a D grade for the purposes of graduation,

☒ Please indicate the program(s) to which this applies: Graduate Certificate- Sustainable Food Systems and Food Security

☐ Please indicate the minimum grade required:

Assessment plans comply with KPU policy and may resemble the following:

| Assessment Type* | Value |
|------------------------|-------|
| Learning Contributions | 10%% |
| Reading assessments | 30%% |
| Team assignment | 30%% |
| Presentation | 30%% |
| | % |
| | % |
| | % |
| Total | 100% |

*Learning contribution may be used as an assessment type. Learning contributions may include, but are not restricted to, the following: Active listening, oral contribution and elaboration in discussion/debate, course related volunteer opportunities, peer critique, leadership activities, mentorship, scribing for others, etc.

If "learning contribution" is listed as an assessment type, the course developer should provide guidelines below for how learning contribution is assessed.

elaboration in discussion/debate, peer critique, leadership activities

Methods for Prior Learning Assessment:

The following PLA methods will be used:

- ☐ Challenge exam
 - ☐ Standardized test
 - ☐ Product / Portfolio
 - ☐ Demonstration
 - ☐ Interview
 - ☐ Worksite assessment
 - ☐ Self-assessment
 - ☐ External evaluation
-

Course Format:

Instruction types and delivery methods: (e.g., classroom-related, lab, practicum, field school, experiential/contextual delivery, simulation, online, face-to-face, hybrid delivery, interdisciplinary delivery, team-teaching, etc.)

| |
|--------|
| online |
|--------|

Learning Resources:

Textbooks, Lab, or Shop Manuals, Equipment, etc., such as:

| |
|---|
| various grey and peer-reviewed literature, books, documentary films |
|---|

Do library resources in this area need more development?

Yes

Approval Process Signatures

This course outline complies with the relevant KPU policies. It follows the guidelines set out in the KPU Course Outline Manual. Department or program learning outcomes that have been identified in this course outline can be reasonably achieved through this course.

| | | | |
|----------------------|--|--------------|--|
| Course Developer(s): | | Signed Date: | |
| Department Chair: | | Signed Date: | |
| Dean/Associate Dean: | | Signed Date: | |
| Senate Vice Chair: | | Signed Date: | |

SUMMARY

Acronym and Number: SFSS 6140

Credits: 4

Implementation date: 1-Jan-2019

Descriptive Title: Creating Our Food System Future

Banner Title: Creating Our Food Future

Course Developer(s): Rebecca Harbut;Iryna Karaush

Course Reviser(s):

☒ New Course / Replacement Course

☐ Course number/acronym change

Has the course rubric (both the acronym and number) been approved by the Registrar?

Yes

Indicate when the course rubric was approved and by whom:

Program title and acronym approved Feb. 28, 2018; Terri Taylor, Zena Mitchell. Course number approved Mar. 26, 2018; S. Yezerinac.

☐ Credit Change

Does this course replace another course? **No**

If “Yes”, specify which course it’s replacing:

☐ **Revisions for approval by Faculty Curriculum**

Committee

Changes involved:

☐ Descriptive Title

☐ Calendar Description

☐ Learning Outcomes

☐ Content

☐ Learning Activities

☐ Learning Resources

☐ Minor Assessments Consistent with Policies AR6 and/or AC4

☐ PLA

☐ Cross-listed, Equivalent, and Credit Exclusion Courses

☐ **This course is being discontinued.**

Effective date:

Brief rationale:

Does this course’s discontinuance impact programs or other courses?

No

If “Yes”, please specify the impacted programs and courses (e.g., courses that have the discontinued course as a prerequisite or corequisite):

☒ **Revisions for approval by Senate**

Changes involved:

☐ Discontinuance of this course

☐ Credits (triggers a new course)

☐ Prerequisites/Corequisites

☐ Required for credential

☐ Assessments inconsistent with Policies AR6 and/or AC4

☐ Impact on other programs or courses

☐ Course format

☐ Course level

☐ Attributes – Quantitative status, Writing intensive status

☐ Attributes – Pathway course

☒ This course is part of a new or revised program submission

Specify the program(s):

Graduate Certificate- Sustainable Food Systems and Food Security

Have the above program(s) been approved by Senate?

No

Course level? Graduate**Cross-listed Courses**

- ☐ This course is cross-listed with another course

Specify the cross-listed course(s):

Has the other Department been consulted? No

Equivalent Courses

- ☐ This course has equivalent course(s)

Specify the equivalent course(s):

Credit Exclusion Courses

- ☐ This course has credit exclusion course(s)

Specify the credit exclusion course(s):

Transfer Credit

- ☐ This revision affects transfer credit status (for sending purposes only)

Attributes

Requested Attributes:

- ☐ Quantitative status
☐ Writing Intensive status
☐ Pathway course

Approved Attributes:

- ☐ Quantitative status
☐ Writing Intensive status
☐ Pathway course

Tuition Category?

<http://www.kpu.ca/sites/default/files/Policies/Bylaw No. 4 Fees.pdf>



Faculty: Faculty of Arts
Department Name: Arts
Course Acronym and Number: SFSS 6140
Former Acronym and Number:
Equivalent Courses:
Cross-listed Courses:
Credit Exclusion Courses:
Credits: 4
Descriptive Title: Creating Our Food System Future

Calendar Description:

This course explores the evolution and structure of food systems through economic, social, and ecological lenses. Students will develop an understanding of the dynamics between regional and global food systems and their respective paradigms. Through the application of design-thinking methodologies, students will apply design metrics to assess the sustainability of food systems.

Required for the following credentials:

Graduate Certificate- Sustainable Food Systems and Security

| | |
|-----------------------|-----------|
| Prerequisites: | SFSS 6100 |
| Corequisites: | |

External Accreditation:

☐ This course is externally accredited
Specify the external accreditation groups:

Implementation Date: 1-Jan-2019

To be Reviewed Date: 1-Jan-2024

Discontinued Date:

Learning Outcomes:

A student who successfully completes the course will have reliably demonstrated the ability to:

- **Assess the food system discourse from industrial to contemporary.**
 - **Compare the historical and traditional significance of local farms in the era of post-industrial globalization.**
 - **Assess markets for food production within specific environmental and economic contexts.**
 - **Articulate and apply design thinking methodologies to food systems.**
 - **Critical analysis of case studies focused on food system transformation.**
 - **Design metrics of success in sustainable food systems.**
 - **Comprehend and apply integrative design process to food system design.**
-

Content:

Content will include, but is not restricted to, the following:

1. **Historical discourse of food systems from industrial to post modern**
 - **Understand paradigms that informed the design of our current food system structure**
 - **Industrialism, post/modernism, post-industrial globalization**
 - **What were the social, economic, technological, ecological impacts during each period**
 - **Social disconnect from the food system**
 - **Analyzing contemporary trends and forecasting future context**

Design methodology

Understanding the design process that has informed contemporary food system
Design thinking as an innovative process
Role of creative thinking and critical thinking in design
Approaches to develop a more sustainable and democratic food system
Applying design thinking in the development of the our future food system
Metrics of a successful food system
Application of success metrics to analyze a case study - Action and Policy, Business and Technology Innovation
Case studies of existing alternate models (food hubs, vertical farming, urban agriculture, cooperatives, internet of things, community farms, education programs)
• Assessment of the success based on the metrics of success

Learning Activities:

Learning activities should be appropriately related to learning outcomes.

Activities may include, but are not restricted to, the following:

Asynchronous lectures
Discussion forums
Review of literature
Online presentations
Research papers
Design thinking team project
Case study assessments

Assessment Methods:

Grading system used:

Letter Grade

Per Policy AC4, the minimum passing grade in a course using the letter grade system for assessment is a D grade unless otherwise specified on the course outline. If this course requires a minimum grade other than a D grade for the purposes of graduation,

☒ Please indicate the program(s) to which this applies: Graduate Certificate- Sustainable Food Systems and Food Security

☐ Please indicate the minimum grade required:

Assessment plans comply with KPU policy and may resemble the following:

| Assessment Type* | Value |
|------------------------|-------|
| Learning Contributions | 10%% |
| Presentation | 30%% |
| Team Project | 30%% |
| Case Study Assignments | 30%% |
| | % |
| | % |
| | % |
| Total | 100% |

*Learning contribution may be used as an assessment type. Learning contributions may include, but are not restricted to, the following: Active listening, oral contribution and elaboration in discussion/debate, course related volunteer opportunities, peer critique, leadership activities, mentorship, scribing for others, etc.
If "learning contribution" is listed as an assessment type, the course developer should provide guidelines below for how learning contribution is assessed.

elaboration in discussion/debate, peer critique, leadership activities

Methods for Prior Learning Assessment:

The following PLA methods will be used:

- ☐ Challenge exam
- ☐ Standardized test
- ☐ Product / Portfolio
- ☐ Demonstration
- ☐ Interview
- ☐ Worksite assessment
- ☐ Self-assessment
- ☐ External evaluation

Course Format:

Instruction types and delivery methods: (e.g., classroom-related, lab, practicum, field school, experiential/contextual delivery, simulation, online, face-to-face, hybrid delivery, interdisciplinary delivery, team-teaching, etc.)

| |
|--------|
| online |
|--------|

Learning Resources:

Textbooks, Lab, or Shop Manuals, Equipment, etc., such as:

| |
|-----------------------|
| custom course package |
|-----------------------|

Do library resources in this area need more development?

Yes

Approval Process Signatures

This course outline complies with the relevant KPU policies. It follows the guidelines set out in the KPU Course Outline Manual. Department or program learning outcomes that have been identified in this course outline can be reasonably achieved through this course.

| | | | |
|-----------------------------|--|---------------------|--|
| Course Developer(s): | | Signed Date: | |
| Department Chair: | | Signed Date: | |
| Dean/Associate Dean: | | Signed Date: | |
| Senate Vice Chair: | | Signed Date: | |

SUMMARY

Acronym and Number: SFSS 6180

Credits: 2

Implementation date: 1-Jan-2019

Descriptive Title: Community Food System- Capstone Project

Banner Title: Community Capstone Project

Course Developer(s): Kent Mullinix

Course Reviser(s):

☒ New Course / Replacement Course

☐ Course number/acronym change

Has the course rubric (both the acronym and number) been approved by the Registrar?

Yes

Indicate when the course rubric was approved and by whom:

Program title and acronym approved Feb. 28, 2018; Terri Taylor, Zena Mitchell. Course number approved Mar. 26, 2018; S. Yezerinac.

☐ Credit Change

Does this course replace another course? **No**

If "Yes", specify which course it's replacing:

☐ **Revisions for approval by Faculty Curriculum**

Committee

Changes involved:

☐ Descriptive Title

☐ Calendar Description

☐ Learning Outcomes

☐ Content

☐ Learning Activities

☐ Learning Resources

☐ Minor Assessments Consistent with Policies AR6 and/or AC4

☐ PLA

☐ Cross-listed, Equivalent, and Credit Exclusion Courses

☐ **This course is being discontinued.**

Effective date:

Brief rationale:

Does this course's discontinuance impact programs or other courses?

No

If "Yes", please specify the impacted programs and courses (e.g., courses that have the discontinued course as a prerequisite or corequisite):

☒ **Revisions for approval by Senate**

Changes involved:

☐ Discontinuance of this course

☐ Credits (triggers a new course)

☐ Prerequisites/Corequisites

☐ Required for credential

☐ Assessments inconsistent with Policies AR6 and/or AC4

☐ Impact on other programs or courses

☐ Course format

☐ Course level

☐ Attributes – Quantitative status, Writing intensive status

☐ Attributes – Pathway course

☒ This course is part of a new or revised program submission

Specify the program(s):

Graduate Certificate- Sustainable Food Systems and Food Security

Have the above program(s) been approved by Senate?

No

Course level? Graduate**Cross-listed Courses**

- ☐ This course is cross-listed with another course

Specify the cross-listed course(s):

Has the other Department been consulted? No

Equivalent Courses

- ☐ This course has equivalent course(s)

Specify the equivalent course(s):

Credit Exclusion Courses

- ☐ This course has credit exclusion course(s)

Specify the credit exclusion course(s):

Transfer Credit

- ☐ This revision affects transfer credit status (for sending purposes only)

Attributes

Requested Attributes:

- ☐ Quantitative status
☐ Writing Intensive status
☐ Pathway course

Approved Attributes:

- ☐ Quantitative status
☐ Writing Intensive status
☐ Pathway course

Tuition Category?

<http://www.kpu.ca/sites/default/files/Policies/Bylaw No. 4 Fees.pdf>



COURSE OUTLINE

© Copyright Kwantlen Polytechnic University

Faculty: Faculty of Arts
Department Name: Arts
Course Acronym and Number: SFSS 6180
Former Acronym and Number:
Equivalent Courses:
Cross-listed Courses:
Credit Exclusion Courses:
Credits: 2
Descriptive Title: Community Food System- Capstone Project

Calendar Description:

In this course, students will engage in community-based learning. They will identify, study and assess the nature and basis of a sustainable food-system challenge or opportunity in their community. Students will develop, with input from stakeholders and/or participation of relevant food system actors, a program plan (inclusive of strategic activity/ actions, roles and relationships of food system actors, timelines, budgets and budgetary consideration, and anticipated limitation, pitfalls and outcomes) addressing the challenge/ opportunity. Faculty approval of the project is required.

Required for the following credentials:

Graduate Certificate- Sustainable Food Systems and Security

| | |
|-----------------------|--|
| Prerequisites: | All of SFSS 6100, 6110, 6120, 6130, and 6140 |
| Corequisites: | |

External Accreditation:

☐ This course is externally accredited
Specify the external accreditation groups:

Implementation Date: 1-Jan-2019

To be Reviewed Date: 1-Jan-2024

Discontinued Date:

Learning Outcomes:

A student who successfully completes the course will have reliably demonstrated the ability to:

Identify, examine and critically assess a community challenge/ problem relative to food system sustainability and food security.
Identify key actors and their role/ stake in the dynamic identified.
Work effectively with actors to develop strategic action plans to address the challenge.
Coherently present the plan, its basis and rationale and anticipated outcomes.
Develop a matrix for plan outcomes/ effectiveness assessment.

Content:

Content will include, but is not restricted to, the following:

Community engagement and collaboration
Problem identification and assessment
Strategic program planning
Technical report preparation/ presentation
Budgetary considerations

Learning Activities:

Learning activities should be appropriately related to learning outcomes.

Activities may include, but are not restricted to, the following:

Asynchronous lectures, discussion forums, plan preparation, report preparation, online presentation

Assessment Methods:

Grading system used:

Letter Grade

Per Policy AC4, the minimum passing grade in a course using the letter grade system for assessment is a D grade unless otherwise specified on the course outline. If this course requires a minimum grade other than a D grade for the purposes of graduation,

☒ Please indicate the program(s) to which this applies: Graduate Certificate- Sustainable Food Systems and Security

☐ Please indicate the minimum grade required:

Assessment plans comply with KPU policy and may resemble the following:

| Assessment Type* | Value |
|---|-------|
| Preliminary Community Problem Identification and Assessment report | 10%% |
| Preliminary Actor Identification Community engagement plan and report | 10%% |
| Preliminary Action Plan/Strategy | 10%% |
| Evaluation Matrix | 10%% |
| Final/Complete report | 50%% |
| Learning Contributions | 10%% |
| | % |
| Total | 100% |

*Learning contribution may be used as an assessment type. Learning contributions may include, but are not restricted to, the following: Active listening, oral contribution and elaboration in discussion/debate, course related volunteer opportunities, peer critique, leadership activities, mentorship, scribing for others, etc.

If “learning contribution” is listed as an assessment type, the course developer should provide guidelines below for how learning contribution is assessed.

elaboration in discussion/debate, peer critique, leadership activities

Methods for Prior Learning Assessment:

The following PLA methods will be used:

- ☐ Challenge exam
- ☐ Standardized test
- ☐ Product / Portfolio
- ☐ Demonstration
- ☐ Interview
- ☐ Worksite assessment
- ☐ Self-assessment
- ☐ External evaluation

Course Format:

Instruction types and delivery methods: (e.g., classroom-related, lab, practicum, field school, experiential/contextual delivery, simulation, online, face-to-face, hybrid delivery, interdisciplinary delivery, team-teaching, etc.)

| |
|---|
| online, experiential/ contextual |
|---|

Learning Resources:

Textbooks, Lab, or Shop Manuals, Equipment, etc., such as:

| |
|--------------------|
| assigned materials |
|--------------------|

Do library resources in this area need more development?

Yes

Approval Process Signatures

This course outline complies with the relevant KPU policies. It follows the guidelines set out in the KPU Course Outline Manual. Department or program learning outcomes that have been identified in this course outline can be reasonably achieved through this course.

| | | | |
|-----------------------------|--|---------------------|--|
| Course Developer(s): | | Signed Date: | |
| Department Chair: | | Signed Date: | |
| Dean/Associate Dean: | | Signed Date: | |
| Senate Vice Chair: | | Signed Date: | |



SENATE

Agenda Item: 10.4
Meeting Date: May 28, 2018
Presenter: Jane Fee

Agenda Item: VISION 2023

| | |
|--------------------------|--|
| Action Requested: | <input checked="" type="checkbox"/> Motion to Approve <input type="checkbox"/> Discussion <input type="checkbox"/> Information <input type="checkbox"/> Education |
|--------------------------|--|

| | |
|--------------------------------|---|
| Recommended Resolution: | THAT Senate endorses that the Board of Governors approves VISION 2023. |
|--------------------------------|---|

Senate Standing Committee Report:

On May 11, 2018 the Senate Standing Committee on Academic Planning and Priorities recommended that Senate endorses that the Board of Governors approves VISION 2023.

Context & Background:

KPU strategic plan, VISION 2018 is in its final year. After consultation with KPU students, employees and members of our community, the Strategic Planning Task Force, led by the President, has developed the new plan, VISION 2023, covering the period from 2018 to 2023.

Key Messages:

1. VISION 2023 includes a revised Mission and Vision statement from 2018 versions, and new goals for the next five years. Intended impacts for each goal are also included.
2. KPU's Strategic Plan VISION 2023 requires Senate endorsement to proceed to the Board of Governors for final approval at its June 2018 meeting.

Implications / Risks:

A strategic plan is a high-profile document for any organization. It provides our vision for the next five years, and hence can have an impact on our reputation. It also provides the high level direction for planning at KPU.

Consultations:

1. Initial consultation with KPU students and Employees through online platform called *ThoughtExchange*.
2. VISION 2023 Draft 1 was presented to Senate (including SSCAPP), Faculty Councils, and administrative committees for feedback. Feedback was also obtained from members of the community, as well as the Board of



SENATE

Agenda Item: 10.4
Meeting Date: May 28, 2018
Presenter: Jane Fee

Governors at the Board retreat. Based on this feedback, Draft 2 was created.

3. VISION 2023 Draft 2 was posted on an online blog where students and employees were invited to provide feedback. In addition, it was presented at Hallway Conversations on each campus where people could provide feedback personally to a member of the VISION 2023 Task Force. Draft 2 was also presented to Senate (including SSCAPP), Faculty Councils, and administrative committees.
4. The final draft (attached) is based on feedback on Draft 2 from all sources.

Attachments: VISION 2023, May 17 2018 version

Submitted by: *Jane Fee, Chair,
Senate Standing Committee on Academic Planning and Priorities*

Date submitted: *May 17, 2018*



SENATE

Agenda Item: 10.5
Meeting Date: May 28, 2018
Presenter: Jane Fee

Agenda Item: KPU Academic Plan 2023

| | |
|--------------------------------|--|
| Action Requested: | <input checked="" type="checkbox"/> Motion to Approve <input type="checkbox"/> Discussion <input type="checkbox"/> Information <input type="checkbox"/> Education |
| Recommended Resolution: | THAT Senate approves the KPU Academic Plan 2023 and forwards the Academic Plan as information to the Board of Governors. |

**Senate Standing
Committee Report:**

On March 5, 9, and 30, 2018, the Provost presented an initial high-level draft of the Academic Plan 2023 to the Senate Governance Committee, the Senate Standing Committee on Academic Planning and Priorities.

On April 9, 13, and 30, 2018, the Provost presented a revised second draft to the Senate Governance Committee, the Standing Committee on Academic Planning and Priorities, and Senate.

On May 7, 2018 the Provost presented a final draft to the Senate Governance Committee.

On May 18, 2018 the Senate Standing Committees on University Budget and on Academic Planning and Priorities recommended that Senate approves the KPU Academic Plan 2023 and forwards the Academic Plan as information to the Board of Governors.

**Context &
Background:**

The Provost and Vice-President, Academic is responsible for the academic direction and stewardship of KPU's programs. Reporting to the KPU President, the Provost has a mandate to facilitate exceptional learning experiences for KPU students by providing leadership in the development and implementation of a comprehensive education plan that is relevant to students' needs as well as KPU's external communities.

KPU's Academic Plan will define the character of our institution's mandate and align with the overarching principles and direction of KPU's VISION 2023 Strategic Plan.



SENATE

Agenda Item: 10.5
Meeting Date: May 28, 2018
Presenter: Jane Fee

Attachments: [Academic Plan 2023](#)
(you will need to sign into SharePoint to access)

Submitted by: *Jane Fee, Chair,
Senate Standing Committee on Academic Planning and Priorities*

Date submitted: *May 22, 2018*



SENATE

Agenda Item: 14.0
Meeting Date: May 28, 2018
Presenter: David P. Burns

Senate Standing Committee on Research Chair's Report to Senate

May 1, 2018

The inaugural meeting of the Senate Standing Committee on Research [SSCR] involved a discussion of the committee's mandate and membership. Notable in this first meeting were several discussions:

-After a presentation by Dr. Steve Cardwell, the committee began discussion of the ways in which the SSCR might play a role in the development of graduate programs at KPU.

-The committee discussed the need for a broader examination of the current research, and research supports, available at KPU. It is expected that this will be a central theme in the committee's coming meetings.

-Recognizing that a new AVP Research is expected in the coming months, the committee decided to begin regular meetings in September 2018.

David P. Burns, Acting Chair, SSC Research



SENATE

Agenda Item: 15.0
Meeting Date: May 28, 2018
Presenter: David P. Burns

Senate Standing Committee on Teaching and Learning Chair's Report to Senate

May 1, 2018

The inaugural meeting of the Senate Standing Committee on Teaching and Learning [SSCTL] involved a discussion of the committee's mandate and membership. Notable in this first meeting were several discussions:

- The need for a subcommittee to regularly consider the state of experiential learning at KPU.
- The possibility of a future partnership with Institutional Analysis and Planning to discuss the kinds of information student surveys might provide that would best support teaching and learning.
- The committee hopes to meet once more during the summer of 2018 before beginning regular meetings in the Fall.

David P. Burns, Acting Chair, SSC Teaching and Learning



SENATE

Agenda Item: 16.1
Meeting Date: May 28, 2018
Presenter: Zena Mitchell

Agenda Item: Approval of Graduates to May 28, 2018

| | |
|--------------------------|---|
| Action Requested: | <input checked="" type="checkbox"/> Motion to Approve |
| | <input type="checkbox"/> Discussion |
| | <input type="checkbox"/> Information |
| | <input type="checkbox"/> Education |

| | |
|--------------------------------|---|
| Recommended Resolution: | THAT Senate approves the list of graduates to May 28, 2018 |
|--------------------------------|---|

**Context &
Background:**

University Act, Section 7: The roll of the convocation must be continued and kept up to date by the registrar.

University Act, Section 9.2: The senate may add names to the roll of the convocation under section 5, (Composition of convocation)

Attachments: Grads for Senate Approval – May 28, 2018

Submitted by: Zena Mitchell, University Registrar

Date submitted: May 22, 2018

Graduates for Senate Approval

SENATE MEETING: Monday, 28-May-2018

Graduates from the Chip and Shannon Wilson School of Design

Baccalaureate Degree

Bachelor of Design in Fashion and Technology

Natasha Bajwa
Iris Chau
Connie Ming-Yeung Cheng
Erin Patricia Chisholm
Emmanuelle Laurence de Raucourt
Jasmin Kaur Dhillon
Sandy Katherine Escalante
Susana Hernandez Rojas
Camille Huang
Hochi Huang
 With Distinction
Lindsey Grace Martine Jenner
Joel Lawrence Parma Jhocson
Wing Han Emily Jiang
Joanna Ruth Lee
Janiece Lofstrom
Chelsea Megan Manansala
Sondra Louise McGaw
Sierra Rachel McNeill
Luyi Ning
Hannah Catherine Pascual
Josephine Robinson
Astha Sachdeva
Sierra Raine Southard
Naomi St. Cyr
My Linh Tran
Amelia Suzanne Justine Trofymow
Maria Patricia Taningco Victorino
Valeriya Volkova
Chelsey Wong
Sarah Wong
Sarah Elizabeth Woodburne
I-Hsuan Yang

Bachelor of Design in Graphic Design for Marketing

Nicola Taylor Butner
Natalie Angelina Fitzpatrick
Hannah Friesen
 With Distinction
Mackenzie Lee Gooch
Hillary Alene Halldorson
Kelly-Lin Shawn Harris
Natasha Elizabeth Irene Jenkins
Anna Jonsdottir
Cindy Hiu Yee Kong

Marlyse Marie Le Fort
Melissa Marlaine Lee
Dustin Andrew Matos
Brandon Gregory Ophus
Rosie Nicole Recavarren
Ethan Sztuhar
Melanie Wei Chen Tan
Stefanie Emma Tokarchuk
Feier Yuan

Bachelor of Design in Product Design

Ziyang Chai
Tien Thanh Doan
ShiNing Guo
Jerome Ivan Tang Medina
Eysht Sahota
Keith Mathai Thomas
Alisa Yin Meng Yao
With Distinction

Bachelor of Interior Design

Muriel Faifman
Teanna Louisa Rutledge Gibson
Romy Glaser
Mikayla Job
Sasha Spir Khouri
Taylor Jane Lamontagne
Hai Le
Carol Darleny Ortiz Contreras
Natalie Angelina Parade de la Feraude
Yasmin Sadeghi-Esfahlani
Maria Cristina Schonenberg De Llerena
With Distinction
Yat Ling Ting
Danielle Vetterli

Diploma

Diploma in Fashion Marketing

Carley Marina Bardaro
Megan Leigh Bourassa
With Distinction
Lauren Sylvia Boyd
Ashton Erika Cicierski
Jasmine Dhaliwal
Lara Elisabeth Dube
Kristina Arthbrine Gadiana
Niki Mckenzie
Nathan Kristopher Peralta
Talía Jevan Rayat
Jaclyn Ashley Lee Regier
Michelle Yang
Kayla Rita Zaurrini

Graduates from the Faculty of Academic & Career Advancement

Diploma

Diploma in English Language Proficiency

Fatimah Muhammed Buali

Developmental Credential

BC Adult Graduation Diploma

Alexandra Roudenskaia

Graduates from the Faculty of Arts

Baccalaureate Degree (Hons)

Bachelor of Arts (Honours) in Psychology

Shih-Chieh Chen

Chaufa Nguyen

With Distinction

Bachelor of Arts (Honours) in Psychology, Minor in Counselling

Kailie Christine Brown

With Distinction

Jennifer Lingbaoan

Katrina Lynn Walton

With Distinction

Baccalaureate Degree

Bachelor of Arts in Anthropology

Blythe Frances Vincent

With Distinction

Bachelor of Arts in Anthropology, Minor in Political Science

Jasmin Ganuelas Warkola

Bachelor of Arts in Applied Geography

Karanpreet Singh Dhaliwal

Arlena Cristina Street

Bachelor of Arts in Applied Geography, Minor in Anthropology

Kellie Ann Michels

Bachelor of Arts in Applied Geography, Minor in Criminology

Kelson Konowalchuk

Bachelor of Arts in Applied Geography, Minor in Policy Studies

Leah Alexandra Martin

Bachelor of Arts in Asian Studies

Alexander Yu Lei

Bachelor of Arts in Asian Studies, Minor in Language and Culture

Samantha Caryl Humphreys

Amanda Ilona Stern

Bachelor of Arts in Creative Writing

Savis Irandoost

Carol Christine Johnson

Tamara Reyes

Bachelor of Arts in Criminology

Nicole Lauren Allary

Ahmed Aqeel

Princepreet Singh Bains

Alisha Bhanote

Anat Blik

Heena Bola
Man Ho Michael Cheng
Braeden Alexander Copeland
Rahul Dhillon
Jarnell Singh Dosanjh
Amanpreet Garcha
Ravneet Kaur Ghangheri
Balkaran Singh Gill
Gurdhir Gill
Kirpaul Singh Gill
Satnam Kaur Gill
Sulakhan Gill
La-Chelle Henwood
Arjan Singh Johal
Gurvinder Singh Johal
Simi Saman Kaur Johal
Simran Kaur Johal

With Distinction

Brendan Michael Keigher
Robert Frank Kitasaka
Nicole Lai
Gary Leung
Guneet Kaur Maghera
Allison Elizabeth McMillan
Erik Philip Neville
Maria Anastasia Oxouzidis
Jotsroop Randhawa
Hayden Samuel Rossi
Shanel Lee Ruscheinsky
Hasret Singh Sidhu
Nikitta Thandi
Paige Danielle Toth
Shannon Anita Watson

Bachelor of Arts in Criminology, Minor in Counselling

Ramanteerth Kaur Ball

Bachelor of Arts in Criminology, Minor in Language and Culture

Troy Grant Takacs

Bachelor of Arts in Criminology, Minor in Psychology

Cameron Lawrence Gonneau

Bachelor of Arts in English

Prabhjot Kaur Bhamra
Kanwarjeet Singh Gill
Piper Alexandria Greekas
Benito Curtis Hobson-Dimas
Shannen Lee Johnson-Barker
Ashton Mantle
Emma Jayde Parhar
Danika Xiao Hong Yeng

Bachelor of Arts in English, Minor in Creative Writing

Mathew Raymond Cruickshank
Elizabeth Rosalie Hann

Bachelor of Arts in English, Minor in Journalism

Krista Michelle Reed

Bachelor of Arts in General Studies

Courtney Alycia Cawdell

Carly Dawn Shannon

Robyn Thompson

Tao Wen

Bachelor of Arts in General Studies, Minor in Asian Studies

Amanda Victoria Tolentino

Bachelor of Arts in General Studies, Minor in Counselling

Amina Lee Ben-Lyazid

Krysta Morgan Ivens

Marta Schietroma

Hieu Minh Tran

Bachelor of Arts in General Studies, Minor in Language and Culture

Patricia Ying Ting Mai

Siu Lung Tsang

Bachelor of Arts in General Studies, Minor in Sociology

Erika Thuy

Bachelor of Arts in History

Prem Ajay Singh Aulakh

Brian Evan Foley

Jacob Gordon Stoddart

Bachelor of Arts in History, Minor in English

Danielle Marie Paco

Bachelor of Arts in History, Minor in Political Science

Anthony David Johnson

With Distinction

Bachelor of Arts in History, Minor in Psychology

Dilraj Kaur Sidhu

Bachelor of Arts in Policy Studies, Minor in Philosophy

Jonathan Mathew Bucyk

Bachelor of Arts in Political Science

Salem Farhan Alshammari

Natasha Castela Lopes

Jennifer Preetika Perimal

Bachelor of Arts in Political Science, Minor in Sociology

Ahmad Hamed

Bachelor of Arts in Psychology

Sandeep Bains

Kirandeep Basi

With Distinction

Iris Gigi Cheung

Harkirat Kaur Chohan

Samson Choi

Triveni Dhir

Shaniah Lexus Edwards-Sewell

With Distinction

Margaret Mary Hermano

Iserieren Junior Idemudia

Darlene Grace Isaac
With Distinction
Manveer Kaur Kandola
Inderdeep Kaur Lidhar
With Distinction
Camille Abalos Natura
Consolata Niyizigama
Maria Cristina Penner
Sukhdeep Kaur Pooni
Paarusjit Sahi
Summer Shaar
Joey Chun Yin Tam
Hanna Tola
Vanessa Tran

Bachelor of Arts in Psychology, Minor in Anthropology

Laura Eileen MacWilliam
With Distinction

Bachelor of Arts in Psychology, Minor in Counselling

Tabata Arcaraz Cavazos
Chester Dion Balba
Kate Joan Barker
Supreet Kaur Chandi
Vanessa Lyn Elder
Cassandra Lee Hildebrand
Joanna Marlene Lara Torres
Gurkamal Mander
With Distinction
Kiranjot Kaur Mattu
Kristine Joyce Robles
Navneet Kaur Sandhu
Lawanyaa Vhinu Thavakumar
Amanda Vidovic
With Distinction

Bachelor of Arts in Sociology

Hanna Alen Blake
Marcus Austin Brear
Sukhdeep Kaur Litt
Arshjot Singh Mangat
Nischal Naresh
Navreet Kaur Nijjar

Bachelor of Arts in Sociology, Minor in Criminology

Victoria Anne Douglas

Bachelor of Arts in Sociology, Minor in Political Science

Nubwa Hamidu Wathanafa

Bachelor of Arts, Minor in Creative Writing and English

Liam Stephen Clarke

Bachelor of Fine Arts in Visual Arts

Kimberly Grace Ateah
Sara Ellen Grieve
Gurleen Kaur Virk
Kenneth Andrew Yuen

Bachelor of Journalism

Alexander John Clipsham
Ashley Caitlin Hyshka
Daniella Marie Javier
Alimotu Omowumi Jida
Louis Marta-Widjaja
Yaunna Rae Sommersby
Alexander Thaddeus Vaz
Mercedes Laurenne Wiebe

Bachelor of Journalism, Minor in Creative Writing

Kyrsten Marie Downton

Bachelor of Music in Musical Arts

E. David Edward Hopkins
Serguei Krakhmal
Kyle Ian Douglas McEwan
Joel Joshua Melnyk
With Distinction
Elyshia Erika Pucci
With Distinction
Morganne Lavoughn Woolley
With Distinction

Associate Degree**Associate of Arts in Anthropology**

Dominique Justin Thomas

Associate of Arts in Criminology

John Baron
Simran Chahal
Lianna Wing Kum Chung
Paulo Galang Francisco
Simranjeet Kaur Jhutti
Ryan Patrick Makar
Heechan Park
Sabneer Kaur Sandhu
Karnpaul Singh Shergill
Deanna Zarinna Yusuf

Associate of Arts in English

Nathan Randall Huebert

Associate of Arts in General Studies

Poonam Kalsi
Kyle Pawlychyn

Associate of Arts in Geography

Brock John Anderson
Erik Andrew von Minden

Associate of Arts in Psychology

Clara Benoliel
Kaylee Christine England
Alice Tiffany Joseph
Brittany Nanra
Palvi Sandhar
Chantelle Dawn St. Louis
Rachel Sin Yee Tung

Associate of Arts in Sociology

Nicole Morgan Yuen

Diploma**Diploma in Criminology**

Justin Vincent Aboga

Lyle Mark D'Souza

Manpreet Kaur

Tamanjeet Kaur

Manvir Pooni

Diploma in Fine Arts

Glenn Toshiyuki Nishi

Marissa Lynn Partridge

With Distinction

Nirmalpreet Singh

Diploma in General Studies

Ranvir Singh .

Nishant Arora

Supninder Deep Singh Bamrah

Jatin Bawa

Gurjot Singh Brar

Rajan Chhabra

Pak Man Chik

Aline Dias Camargo

With Distinction

Michael Thomas Dion

Manveer Singh Dulay

Harkirat Singh Ganda

Amardeep Kaur Gill

Balpreet Singh Gill

Abhishek Gupta

Gurpreet Kaur

Udit Kumar Jain

Collin Kataate

Kiranjot Kaur

Sandeep Kaur

Sukhjeet Kaur

Cheol Gweon Kim

Abhishek Kumar

Yi-Wei Kuo

Parminder Singh Lotay

Wenqian Lu

Manisha Mahay

Divanshi Makkar

Lan Mo

Navjot Singh Nandha

Hemant Narang

Anmol Puri

Ramanpreet Kaur

Rupinderjit Kaur Sangha

Harchet Singh Sidhu

Arvinder Singh

Damanjit Singh

Dilpreet Singh
Gavindeep Singh
Jagmeet Singh
Jaskaran Singh
Vineetpal Singh Sran
Sukhkiran Kaur
Xinyu Elaine Sun
Tianwei Tang
Drishti Trehan
Casey Walker
 With Distinction
Tian Wang
Ziyue Xu
Xueer Yan
Jiarui Yang
Muzi Zhang
Tianyi Zhang
Xiaotong Oliver Zhang
Ying Zheng

Diploma in Music

Sarah May Bell

Certificate

Certificate in Arts

Sebastian Javier Tapia Zapata

Certificate in Criminology

Eroll Cedric Rodriguez Agas

Kaitlyn Flack

Ashton Sangha Schafer

Certificate in Fine Arts

Zhe Tang

Certificate in Non-Governmental Organizations & Nonprofit Studies

Jessica Erin Sylvia Davis

 With Distinction

Gurkamal Mander

 With Distinction

Nubwa Hamidu Wathanafa

Graduates from the Faculty of Health

Baccalaureate Degree

Bachelor of Psychiatric Nursing

Thanh Phuong Nguyen

 With Distinction

Bachelor of Science in Nursing

Ashley Priya Chand

Rachel Kohar

Julia Patrycia Rukasz

Certificate

Certificate in Health Care Assistant

Cassidy Aster Barna

 With Distinction

Loretta Lynn Campbell
With Distinction
Kristin Carlson
With Distinction
Allyson Margaret Davies
With Distinction
Tara Marie Dobby
With Distinction
Laura Ernst
With Distinction
Henderika Theresa Feunekes
With Distinction
April Harrison
With Distinction
Ellen Elizabeth Hillick
With Distinction
Parmjot Kaur Hundal
With Distinction
Mandip Kaur Khela
With Distinction
Jou Yi Liu
With Distinction
Jenmy Michelle Moreno Fajardo
With Distinction
Albina Mullamisini
With Distinction
Juliane Theresa Nguyen
With Distinction
Asia Rahimi
Shuaichen Song
Krystal Lyne Sullivan
With Distinction
Bola Tawakalitu Taiwo
Tarnvir Kaur Takhar
Pardeep Kaur Thandi
With Distinction

Certificate in Health Unit Coordinator

Angelica Barros
Tanya Chohan
With Distinction
Maika Cruz
Rana El Ghalian
Larabe Hussain
Kaila Marie Kliewer
With Distinction
Kailey Mari Dawn Morris
With Distinction
Heather Brianne Raymond
With Distinction
Harleen Kaur Sandhu
Emily Saunderson

Carissa Amanda Verbong
With Distinction
Cassie Rae Vogt

Health Foundations Certificate

Danielle Christine DeCoste
With Distinction
Victoria Rose Nylander
With Distinction

Graduates from the Faculty of Science and Horticulture

Baccalaureate Degree (Hons)

Bachelor of Science (Honours) in Applications of Mathematics, Biomathematics, Minor in Biology

Skye Elizabeth Dore-Hall
With Distinction

Bachelor of Science (Honours) in Applications of Mathematics, Biomathematics, Minor in Plant Health

Todd Justin Davies

Bachelor of Science (Honours) in Applications of Mathematics, Computational

Peter Ryan Stevens
With Distinction

Bachelor of Science (Honours) in Applications of Mathematics, Mathematics Education

Chloe Chen Li
With Distinction

Bachelor of Science (Honours), Major in Health Science

Rimi Afroze
With Distinction

Baccalaureate Degree

Bachelor of Applied Science in Sustainable Agriculture

Jessica Hill
Emily Grace McEachern

Bachelor of Applied Science in Sustainable Agriculture, Minor in Policy Studies

Kirsten Jane Guest

Bachelor of Horticulture Science in Plant Health

Allison Mary Groenen
With Distinction

Samantha Marsh
With Distinction

Adriana Patricia Neels
With Distinction

John Piers Seppala

Bachelor of Horticulture Science in Urban Ecosystems

Richard Martyn Blackwell
Shaina Leigh Carter
With Distinction

Alisha Penner
Sarah Pucek
With Distinction

Glen Schaafsma

Bachelor of Science in Applications in Mathematics, Computational Mathematics

Jennifer Lynn Causey

Mengxin Su

Bachelor of Science in Biology

Rajneet Kaur Chana
Nada Ayman El-najjar
Megan Catherine Kenney
Conlan James Magel
Shaghayegh Raked
Maria-Dolor Vargas Santelices
Rebecca Elizabeth Williams

Bachelor of Science in Physics for Modern Technology

Sarah Kiyoko Yoshitomi

Associate Degree

Associate of Science in General Science

Harmanjot Kaur .
Harneet Kaur Gill
Aarushi Gupta
Haley Marie Halliday
With Distinction
Ashley Ann Michaela Ives
With Distinction
Michael Ke
With Distinction
Khadija Khalid
Robert Munsie
Raisna Pentiah

Diploma

Diploma in Brewing and Brewery Operations

Ruben Saul Berta
Adam Carleton Chittick
Gustavo Andruccioli De Moura
With Distinction
Francis DesCoteaux
Thade Doherty
Cameron Fergus George Grindrod-Millar
Taylor Johnson
With Distinction
Seungyeon Jung
Ryan Cloete Jurgens
Shaun David Kilby
Derek Andrew Ross Kindret
With Distinction
Jacquelyne Irene Loehndorf
James Walsh

Diploma in Computer Aided Design and Drafting

Dylan Bredenhof
With Distinction
Colin Jackson Job
With Distinction
Raynal Sumit Kumar

Diploma in Horticulture Technology, Landscape Horticulture Systems

Frank George Baksics

With Distinction

Michelle Edwardsen

With Distinction

Kari Ann Hammond

Morihiro Okada

Jordan Michael Rogers

Allisa Walters

Diploma in Horticulture Technology, Sustainable Crop Production

Jashandeep Kaur Brar

Elizabeth Ann Kitura

Diploma in Horticulture Technology, Sustainable Production Hort.

Heather Alexandra Borden

With Distinction

Diane Leslie Scott

With Distinction

Diploma in Horticulture Technology, Turf Management

Carolyn Ann Reitzel

With Distinction

Diploma in Science

Yang Guo

Harjot Kaur

Ziyu Liu

Diploma of Technology in Environmental Protection

Melissa Chelsea Calderwood

Diploma of Technology in Environmental Protection, Co-operative Education Option

Nida Asad

Jacob Nicholas Beers

With Distinction

Certificate

Certificate in Computer Aided Design and Drafting, Structural Drafting

Kyle Aaron Dawe

Hemat Singh Pannu

Certificate in Engineering

Jake Nils Alexander Bransford

With Distinction

Antony Jung Chao

With Distinction

Sean Haughian

Justin Henry Scott

With Distinction

Simon Wu

With Distinction

Graduates from the Faculty of Trades and Technology

Certificate

Certificate in Advanced Farrier Training

Sydney Channer

With Distinction

Ricki Raeleen Tudor

Certificate in Automotive Service Technician

Ishtraj Singh Bhui
With Distinction
Daniel John Botha
With Distinction
Anyce Boukioud
Mathew George Busch
With Distinction
Keith Delgado
Imraj Singh Garcha
Ali Humair Gondal
Lee Hughes Grant
With Distinction
Jeremy Glenn Grose
With Distinction
Aaron Lucier
With Distinction
Navjot Singh Sadhra
Hao Yu Wang
Jordan Dean Wright

Certificate in Welding Foundation

Aldous Lem Balatbat Ardez
With Distinction
Olivia Silvia Bagiu
Beatrice Baldueza
With Distinction
Jaymel Roger Bobb
Warren Wayne Efonoff
Amritpal Singh Lally
Calder Moore
With Distinction
Richard James Kade Mueller
Kristin Louise Olsen
Charles Joseph Samuel Schell
Jason Tyler Aman Sihota
With Distinction
Gurkirpal Singh
Timothy Noel Smith
With Distinction

Citation**Citation in Carpentry/Building Construction**

Sheldon Quo Xuan Chung
Kenneth James Culley
Jeremy Hawco
Geunsang Lee
Ian Patrick Lopez-Fuentes
Matthew Steven Meinen
Michael Lewis Pais

Citation in Construction Electrician

Cory Matthew Albert
Eric Christopher Andrada Antonson
With Distinction

Daniel Aylett
With Distinction
Liam Roy Briggs
Cole Vanhaverbeke Cryderman
With Distinction
Jogpal Singh Dhillon
Mohammad Hermas
Harminder Singh Jheont
Tyler Jones
With Distinction
Delane Lorrie Muench
With Distinction
Taufik Mohammed Murad
With Distinction
Josh Pageau-Odin
With Distinction
Rohan Panchawala
With Distinction
Gurkirat Singh Sanghera
With Distinction
Jonah Lee Hutchison Smith
With Distinction

Citation in Masonry

William Samuel Baldwin
Anthony Petru Belciug
With Distinction
Taylor James Chenier
Nicolas Richard Matthew Simms
Jackson Alan Smith
Russell Edward LaFleur Verrier
With Distinction

Citation in Piping

Josh Daniel Andrews
With Distinction
Russell Jacob Bremner
Matthew Kade Britton
Levi Andrew Ens
William Lyall Fraser
Erik Friis-Jensen
With Distinction
Sumeet Singh Ghuman
Jordan Christian Gosling
Nathan James Gosling
Dorian Richard Green
With Distinction
Ryley Hope Guimond
Jared John Hanson
With Distinction
Callum Robert Harris
With Distinction
Noah Lamont Howard
Gurman Johal

Jonas Erik Koellmel
Evan James Miller
Zackary Parkes
Joel David Ransier
Mathew James Rideout
With Distinction
Matthew Stuart Sage
Ryan Carl Schulz
With Distinction
Hayden Andrew Sunday
Trevor Robert Unruh
Jacob Wesley Young

Graduates from the School of Business

Post Baccalaureate Diploma

Post Baccalaureate Diploma in Human Resources Management

Georgina Konadu Amissah
Erin Kathleen Byers
Muntaha Khan

Baccalaureate Degree

Bachelor of Business Administration in Accounting

Brenda Okainemwen Adomi
Gurkeerit Bal
Jagjot Singh Bassi
Jatinder Bassi
Manroop Kaur Bassi
Shiran Canagaratnam
Kevin Cao
Man Nam Marcus Chan
Navita Kaur Chandi
Yannan Chen
Prabjot Singh Chouhan
Navin Gaunder
Jasmit Grewal
Ravkiran Kaur Grewal
Adnan Ahamed Hifzur Rahuman
Dashminderpal Kaur Khosa
Amrit Singh Kular
Eun Ji Lee
Jennifer Yi-Ting Lee
Song Cheong Lei
Sagarika Malhotra
Amritveer Singh Mann
Gesualdo Joseph Napoleone
Gurjeet Singh Pahal
Zhenhua Pan
Rosalee Pathammavong
Jason Nigel Pires
Zhan Yi Qiu
Gagandeep Sahota
Rizza Castanito San Mateo
Khushdeep Singh Sekhon

Harinder Sian
Skandakumar Sooriyakumaran
Harprateek Singh Thyar
Bhupinder Toor
Edward Wong
Joanne Barbara Wong
With Distinction
Michael Kwong Chung Wong
With Distinction
Yawen Xiao
Zhou Zhang
Yueyun Zhou
Jing Wen Zhu

Bachelor of Business Administration in Accounting, Co-operative Education Option

Marven Adriano
Gurjot Singh Bassi
Sanamjot Singh Gill
Chia-Hung Liu
Sandeep Singh Nagra
Bilal Tahir
With Distinction
Kirandeep Kaur Uppal

Bachelor of Business Administration in Entrepreneurial Leadership

Justin Mathew Bezubiak
Ryan Christopher Boivin
Braedon Stuart Campbell
Suhail Chandharh
Lianna Wing Kum Chung
Jeffrey Dunbar
Gurbir Singh Grewal
Daniel Sebastian Hinz
Harjasdip Jhaji
Bhamanjot Khaira
Garry Lee
Anum Mian
Jaskaran Kaur Mundi
Chad Michael Nehring
Aadil Mohammed Patel
Parminder Singh Rai
Yunyi Shen
Amir Mahmood Tariq
Ormanvir Singh Toor
Jasmine Toora
Bingjie Wang
Zhe Yu

Bachelor of Business Administration in Entrepreneurial Leadership, Co-operative Education Option

Darryl Vincent Kwee

Bachelor of Business Administration in Human Resources Management

Emily Ciavarella
Caylee Alena Coft
Harneet Kaur Deu

Devina Gill
Linda Hoang
Anna Dorothea Jones
Ramandeep Kaur
Alice Anne Lambert
Yu Hang Lau
Kelly Thuy Dzung Nguyen
Balpreet Kaur Nijjar
Shirin Faruk Patel
Alianna Mae Lee Peredo
Serisha Ramcharn
Aneeta Kaur Sandhar
Harpal Sangha
Amrita Sehra
Sukhmani Sidhu
Kalraj Singh Uppal

**Bachelor of Business Administration in Human Resources Management, Co-operative
Education Option**

Derek James Kitt
Alvin Naidu
With Distinction
Shameeta Nandan

Bachelor of Business Administration in Marketing Management

Fawaz Faye Alotaibi
Parambir Atwal
Cassandra Cody Bissett
Allison Jennifer Chow
Melanie Arlene Cordoviz
Chloe Brooke Craigen
Mehtab Singh Dhillon
Sarbir Singh Grewal
Dana Nichole Hawley
Tania Jo-Anne Kanigan
Porson Ho Ting Lee
Nora Shu Jing Li
Yang Liu
Farheen Rajani
Martin Thomas Ruiz
Madisen Louise Singer
Ping Ping Tan
Vanessa To
Bhavneet Kaur Toor
Yue Yu
Shumin Zheng

**Bachelor of Business Administration in Marketing Management, Co-operative Education
Option**

Niambi Cadiz
Krista Bo Chui Law
Raja Gurkartar Singh Sandal

Bachelor of Technology in Information Technology

Rupinder Kaur .
Meshari Ahmeda Almasrahi

Saud Jabr Alotaibi
Emre Berdan
Pushpinder Bhaika
Yijie Chen
Janesh Dhanji
Eric Alessandro Fantillo
Carlos Enrique Galindo
Ali Mohammedadnan Habiballah
Paolo Miguel Jardiolin
Thararat Jitwisutphong
Frank Chi-Chien Liu
Wei Zhen Liu
Binod Marahatta
Patreena May
Milan Merai
Mustafa Mohammed
Armaan Rajesh Raval
Matthew Thomas Shaw
Fan Yin Patrick Yu
With Distinction
Yang Zhou

Bachelor of Technology in Information Technology, Co-operative Education Option

Gurbir Johal
William Robert Morris
Vanna Thu Ngo

Associate Degree

Associate of Arts in Economics

Narongsak Jitwisutphong

Diploma

Diploma in Accounting

Navdeep Singh Bains
Melanie Ponce Banaag
Shannon Michelle Carnegie
With Distinction
Gurpreet Kaur Chahal
Shu Wing Chan
Tiande Chen
Alexander Wan Kit Chiu
Shivam Gaiind
Rubbervir Kaur
Kam Lun Ben Kwok
Shu Fei Liang
Tao Lu
With Distinction
Mohammad Masood
Sanju Monga
Manik Sharma
Harkaran Singh
Harsimran Singh
Jaideep Singh
Sukhdeep Kaur Sran
With Distinction

Sashveer Kaur Virk
Zhihao Xu
With Distinction
Wan Wen Yang
Hannah Chua Yu
With Distinction

Diploma in Business Administration

Tin Mai Trong Bui
Yicong Han
Yi Ping Lee
Guanlin Li
Runnan Li
Junjie Wen

Diploma in Business Management

Siddharth Kumar .
Karan Anand
Harpreet Kaur Bains
Nicholas Sohan Basran
Gurpreet Kaur Brar
Abdulrahman Sami Bubshait
Simerpreet Singh Dang
Karla Bianca Villon Dionisio
Prabhat Gargaria
Lanoy Gill
Pooja Jairath
Lovepreet Kaur Jawanda
Kyle Singh Johal
Kuljinder Kaur
Adam Peter Kreykenbohm
Leonardo Alexander Los
Luan Hong Nguyen
Harmit Kaur Panesar
Puneet Kaur Pooni
Sukhwinder Rai
Navdeep Singh Sandhu
Gagandeep Singh Sekhon
Alambir Singh
Harpreet Singh
Taylor-Ann Smith
Sandy Ta
Ke Xu
Sandra Yan
Jie Zheng

Diploma in Computer Information Systems

Cameron Nicholas Bauer
Gagandeep Kaur Brar
With Distinction
Nathan Cheng
Zachary Aland Cockle
Himmat Singh Gill
Jagmeet Singh Gill

Gurjot Kaur Grewal
With Distinction
Harpreet Kaur
Simrandeep Kaur
Gaganpreet Singh Maan
Divya Paudel
Anna Hoang Phan
Manjot Kaur Samra
Danial Aziz Shamim
Keerat Sharma
Harbaldeep Singh Sidhu
Harsirjan Singh

Diploma in Computer Information Systems, Co-operative Education Option

Anmol Singh Bains
With Distinction
Gabrielle Cabahug Balao
Balvir Singh Dhaliwal
Harman Singh Rattanpal
Jasdeep Kaur Sidhu
Jun Wang
With Distinction

Diploma in General Business Studies

Li Chen Chiang
Mandeep Dhanoa
Qianting Hao
Suzanne Khosla
Matthew Patz
Gursimran Singh

Diploma in Marketing Management

Beatriz Stephanie Chan
Patrick Fortaleza
Ana Grkinic
Ryan Thomas Kuo
Thi Uc Nguyen
Angela Siu Sei Tse

Diploma in Public Relations

Mikaela Joelle Abrams
With Distinction
Yammy Cheung
Ashley Marie Davies
Jennifer Duong
Kaitlin Madonna Frame
With Distinction
Kleyra Gonzalez
Ryley Jean Anna Ingram
Miguel Blair Keough
Sahar Khyabani
Cassia Lachance
Matthew McKinnon
Sharon Neb
Robert Jet Plummer
Jayde Helena Reuser

Nataliia Sabanska
Danielle Sachar
Caitlin Leigh Sylvestri
Charleene Towe
Haley Ann Wark

Certificate

Certificate in Accounting

Maxim Gryadunov
Noriko Imai
Gurpreet Kaur Mann
Jasmine Victoria Mengede
With Distinction
Nasrin Mouladad
Melissa Tomkins
With Distinction

Certificate in Business Management

Elizabeth Cullimore
Simran Ajay Kalsi
Arshdeep Kaur
Gurminderjit Kaur
Roopkaran Kaur
Daniela Zepeda Ordaz

Certificate in General Business Studies

Wenxiao Jia
Fernanda Alves Gomes de Mattos
Kelvin Jack Miller

Certificate in Legal Administrative Studies

Zoe Atkinson
Leah Bootsma
Holly Vanessa Bork
With Distinction
Sharon Bourdon
Donekia Buchanan
Alysha Reena Chand
Kaitlin Dale
Jeremy Douglas Davis
With Distinction
Priya Dhillon
Agnes Di Castri
With Distinction
Alicia Brianne Dien
Andrea Lisa D'Mello
With Distinction
Brooke Doherty
Leilani Eckert
Kirstin Marie Farrand
Suvd Ganduulga
Monica Bui Hoang
Ming Feng Fiona Huang
With Distinction
Amanat Kaur Johal
Ashley Dawn Jurick

Julia Theresa Kappeli
Rachael Sarah Kwiatkowski
Brittany Lyn Leslie
 With Distinction
Tanner Lyon
 With Distinction
Natasha Minhas
Shima Nateghi
 With Distinction
Duyen Thuy Ngo
Esther Osei
Trisha Kajal Patel
Taylor Wendy Penner
Nelly Protasovitski
 With Distinction
Dharshana Moneeka Ramfal
 With Distinction
Kausar Rehman
Olivia Reid
 With Distinction
Alisha Rimmer
Ravneet Sahota
Candace Sevigny
Alicia Sinclair
 With Distinction
Jennifer Sandra Smith
Shannon Smith
 With Distinction
Tania Christine Straiton
 With Distinction
Sze Hon Sun
Yun Wei
Yue Zhao
 With Distinction

Certificate in Marketing

Ya Ting Kuo
Adriana Sofia Zamora-Lopez