



# BCCUPMS

Institutional Reports 2021

August 25 2021

Reports from Institutional Representatives to the British Columbia Committee on the  
Undergraduate Program in Mathematics and Statistics – August 2021

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## Acsenda School of Management (ASM)

**Representative providing this report:** [Dr. Chehra Aboukinane, Dean, Business Administration Program](#)

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**1. Do you have any announcements of new hires or retirements that you'd like to share?**

[During the past fiscal year ASM recruited a new VPA , Dr. Pedro Cortina](#)

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

[No](#)

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

[No](#)

**4. Are there any concerns or issues related to articulation that you'd like to share?**

[No](#)

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

[ASM curriculum committee is introducing more topics in the BBA curriculum on Indiginuous business issues and relevant implications](#)

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

[ASM received renewal for the articulation with CPHRBC and new pathway for our BBA students toward a CCLP designation through CITT.](#)

**8. Do you have any other news that you'd like to share about your department or institution?**

[None](#)

## Alexander College

**Representative providing this report:** [Krishna Subedi](#)

**Email address of representative providing this report:** [k.subedi@alexandercollege.ca](mailto:k.subedi@alexandercollege.ca)

**9. Do you have any announcements of new hires or retirements that you'd like to share?**

Our long time Dean of Arts and Science Dr. Barbara Moon took the position of Provost of Alexander College. Dr. Steve Reo has been appointed recently for the vacant position of Dean of Arts and Science. But there is no hire or retirement in the Math and Statistics department.

**10. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

Due to the pandemic and travel restriction, many overseas students deferred their admission and as such, the college is experiencing a drop in the enrollment by 12% during the pandemic, but we predict a healthy growth of enrollment for Spring and Fall 2021. With regards to mathematics courses, number of course offerings have been declining this year as expected due to pandemic and changes in students' demographics. As such, the enrollment in math courses dropped by 10% which is inline with college-wide enrollment drop.

**11. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

A number of new courses have been developed and articulated in other departments and subject areas including the following two new courses in Mathematics and Statistics.

- (1) MATH 123 (Mathematics for Everyday Life)- this course is primarily intended for non-science (liberal arts) students.
- (2) STAT 270 (Introduction to Probability and Statistics)- this is a calculus-based introductory statistics course.

The college has taken an initiative to offer some courses asynchronously in various departments during the pandemic. As such, we offered one of the sections of our Math 104 (Diff. Calculus with Applications to Commerce and Social Sciences) asynchronously in Fall 2020, Winter 2021, and Spring 2021. Even though we offered one of the sections of Math 104 asynchronously, to maintain the academic integrity, students are required to write the same major exams (e.g, final exam) as their synchronous counter part and are invigilated using Zoom.

We are also planning to offer Associate of Arts and Associate of Science degrees with a specialization in Mathematics for which we have sent proposals to DQAB, and we are waiting for the approval.

**12. Are there any concerns or issues related to articulation that you'd like to share?**

There isn't any major concern or issue related to articulation but there is a concern related to the academic readiness of our students, particularly those from India. Multiple research and data analysis projects are underway to determine how we can mitigate this complex issue, and some initiatives have already been implemented (e.g. priority registration, math placement test, review of prerequisites etc).

**13. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

We are using the following open access resources for the following course:

Course #	Course Name	OER Textbook	Homework System
MATH 100	Precalculus	Precalculus by Jay Abramson	Canvas
MATH 104	Diff. Calculus with Applications to Commerce and Social Sciences	(i) Applied Calculus by Shana Calaway et.al + (ii) Calculus Vol. 1 by Strang/ Herman	Canvas+ myopenmath.com
MATH 105	Int. Calculus with Applications to Commerce and Social Sciences	(i) Applied Calculus by Shana Calaway et.al + (ii) Calculus Vol. 2 & 3 by Strang/ Herman + (iii) Probability (Kuter). (2019, June 23). <a href="https://stats.libretexts.org/@go/page/3243">https://stats.libretexts.org/@go/page/3243</a>	Canvas+ Myopenmath.com
MATH 255	Ordinary Differential Equations	Elementary Differential Equations by William F. Trench	Canvas+ Myopenmath.com

Overall, we found that the textbooks and homework system are working good for us. For some courses, particularly for MATH 104 and MATH 105, we encountered a challenge to find a single good quality open-source textbook that meets the depth and breadth of our curriculum standard. So, having reviewed a few textbooks thoroughly, we decided to use two textbooks- some chapters/contents from one and other chapters/ content from the other and then supplemented by the materials created by the instructors over the years.

Regarding homework system, use of Canvas and or Canvas+myopenmath seems to be quite effective. We are also using publishers' platform (e.g., person's MylabMath) for some courses.

**(6) Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

The college is taking some initiatives towards Indigenization recently. For example, one of the main agendas for upcoming ProD day for faculties revolves around Indigenization. The guest speaker will give a talk/workshop on the topic: "Indigenous Pedagogy: Curriculum delivery using First People's Principles of Learning as a model". In addition, some faculty members in humanities and social sciences department have also taken some initiatives to include indigenous materials in their curriculum but there is nothing particular to the mathematics department.

**(7) Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

The discussion is going on about this topic in the college management team, but I have nothing to report here at this moment.

**(8) Do you have any other news that you'd like to share about your department or institution?**

- a) The college has acquired a new facility for our Burnaby location (near Metrotown) which is significantly larger than the current one. This new location in Burnaby is almost complete and will be open for the Fall term of 2021.
- b) Alexander College has been running online for a year, starting from March 2020. In cooperation with other universities and colleges in Canada and the Provincial Health Officers and Public Health direction, Alexander College intends to open the Burnaby campuses for face-to-face classes and some campus services in September 2021.
- c) Every effort is made to minimize cheating during exams by implementing various strategies including strict video rules and creating exam questions that cannot be looked up online easily. During the major exams (midterm, final etc.), students are given open-ended questions with just enough time limit. Students are required to solve the problems on paper and then asked to take pictures and submit their solutions within the time limit. During the exam, student's workspace, face, and hands must be visible to the invigilator. To ensure academic integrity, if a student is suspected of any wrong doings/ cheating during exam, he or she is required to write a new test or complete a 10- 15 minutes oral exam with the instructor where the student is asked questions relating to course concepts and how to approach and solve problems.

**Questions:**

- (1) We would like to know how are other institutions planning to run their courses and exams in the Fall? What are the strategies you have taken to minimize cheating in the exam?
- (2) We would also like to hear from other institutions about their experience with asynchronous calculus courses particularly, how they run their major exams and other challenges that we need to be aware of.

## British Columbia Institute of Technology (BCIT)

Representative providing this report: [Sandra Merchant](#)

Email address of representative providing this report: [smerchant3@bcit.ca](mailto:smerchant3@bcit.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

Long time faculty member Erika Crema retired last September and our long time department administrator Judy Dahl retired this spring.

New Faculty member: Maryam Dehghani Estarki joined our department in the last year

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

Loss in international overall and something like 10% lower enrollment over all at BCIT. No significant reduction in classes required though.

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

No new programs or major revisions over the past year.

**4. Are there any concerns or issues related to articulation that you'd like to share?**

None.

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

Webwork has been used by faculty since we have been online. In addition to the basic system we have been using it with R to create more complex statistics problems.

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

None specific to report.

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

No.

**8. Do you have any other news that you'd like to share about your department or institution?**

No.

## Camosun College

**Representative providing this report:** [Patrick Montgomery, Department Chair](#)

**Email address of representative providing this report:** [montgomeryp@camosun.bc.ca](mailto:montgomeryp@camosun.bc.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

[Neither have occurred this past year](#)

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

[We've seen just over a 4% drop in enrollment in mathematics and statistics courses this year, in both domestic and international students.](#)

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

[None of any concern](#)

**4. Are there any concerns or issues related to articulation that you'd like to share?**

[I have seen a few students trying to enter \(and exit\) engineering programs who are having trouble articulating some of Calculus, Linear Algebra, Differential Equations and Statistics courses. The essential issue is course articulation between institutions with separate courses for engineering and non-engineering students, and those with a single set of courses. I don't have an easy solution here, other than asking engineering programs to accept the non-engineering labelled courses in lieu.](#)

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

[Although we have used several OER, nothing jumps out as particularly effective when compared to other textbook resources. For homework systems, MyOpenMath is starting to become more popular, but it still has a way to go to catch up with some publisher's homework systems.](#)

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

[The institutional response to the TRC has been slowed this year, but is now in draft form. All course amendments \(and new courses\) now are required to have a component of indigenization approved by our Educational Council.](#)

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

Local K-12 school outreach, engagement in math contests, and support to the CMS summer camp are planned for the following year, as most activities have been paused this year.

**8. Do you have any other news that you'd like to share about your department or institution?**

Other than to note that the shift to pandemic teaching has been a singularly difficult year, and it has underscored the continuing need for an organization of mathematicians and statisticians to support the community.

## Capilano University (CapU)

**Representative providing this report:** [Paul Ottaway](#)

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**1. Do you have any announcements of new hires or retirements that you'd like to share?**

None this year.

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

No drastic changes. Our international enrollment remains higher than our historical average and the administration is undertaking initiatives to boost domestic enrollment which has been on a slow but steady decline. The mathematics department has shown steady growth compared to many other STEM disciplines which have remained level or in slight decline this year.

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

Capilano has multiple new BSc. Programs coming online in the next year though none of them are in mathematics directly and we will simply provide service courses. A minor in data science will also be coming online next year and could see us offering upper year courses in math, stats and comp sci.

**4. Are there any concerns or issues related to articulation that you'd like to share?**

Nothing directly related to articulation.

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

We continue to move most of our courses over to open access materials and only two of our courses still use print texts. We haven't found any one source to be excellent, but many instructors find that drawing from multiple sources is the best solution for our students.

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

The University One program at Capilano is designed for Indigenous students and mathematics is a core component. We also have dedicated Math Learning Centre hours for the Indigenous Student Centre to support those students. As far as indigenization of our core curriculum very little, if any, changes have been made.

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

Due to the pandemic, our outreach activities have all been cancelled for the past year and there hasn't been enough support to replace them with online alternatives.

**8. Do you have any other news that you'd like to share about your department or institution?**

Nothing else at the moment.

## College of New Caledonia (CNC)

Representative providing this report: [Tracy Wall](#)

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**1. Do you have any announcements of new hires or retirements that you'd like to share?**

[None.](#)

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

[Not significant changes in enrollment although online second year courses have been full.](#)

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

[No](#)

**4. Are there any concerns or issues related to articulation that you'd like to share?**

[No](#)

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

[No](#)

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

[No](#)

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

[No](#)

**8. Do you have any other news that you'd like to share about your department or institution?**

[There are currently several options being discussed for teaching in the Fall, depending on the course.](#)

[These include scheduled in person classes, online scheduled live synchronous, online unscheduled asynchronous, hybrid online \(blended synchronous/asynchronous\), and hybrid classroom/online.](#)

[There is some experimentation currently with simultaneous in-person and online instruction from a classroom.](#)

## Coast Mountain College

**Representative:** Erfan Zahrai – University Credit

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**New hires:** None

**University Credit Courses 2021-22:** Math 101/102 Calculus I and II, Math 115 Pre-Calculus, Math 131 Intro to Statistics, Math 235 Linear Algebra, Math 190 Principles of Mathematics for Elementary Teachers

**Textbooks:**

- Math 131: Triola, Elementary Statistics, 3rd Canadian Ed.
- Math 101/102: OpenStax Calculus
- Math 115: OpenStax Pre-Calculus
- Math 235: Nicholson, Linear Algebra with Applications
- Math 190: : O’Daffer et al. Mathematics for Elementary School Teachers

**Enrollment 2020-21:** Improved enrollment in both precalculus and stat as these two courses are required by our Applied Coastal Ecology program, which had a significant increase in international students.

**Mode of delivery-Fall 2021:** Distributed learning using Wacom tablet, BlueJeans and BrightSpace. We are not sure yet about winter 2022!

**Outreach:** Joining PIMS Educational Associate Affiliation in the works.

## College of the Rockies (COTR)

Representative providing this report: [Andrea Hyde](#)

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**1. Do you have any announcements of new hires or retirements that you'd like to share?**

No

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

Increased second year enrollment – We offered Calc 3 and 4 as well as Differential Equations for the first time in several years. We have the same courses planned, as well as a second year Stat, for the 21/22 academic year.

Otherwise, enrollment has been down little in the International department. I don't currently have numbers – will update if I can.

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

No

**4. Are there any concerns or issues related to articulation that you'd like to share?**

We are considering reordering the material in Calc 3 and 4 to provide better articulation. Currently Calc 3 is vectors and partial derivatives, and Calc 4 is multiple integrals and vector fields. We are curious as to whether anyone here recalls a conversation about the ordering of the material with the previous rep (Jim Bailey) and what order the material is taught in other institutions.

We've generally seen an increased emphasis on the weight of assignments and projects over exams this year. Faculty felt that student learning was more fairly evaluated in assignments and projects instead of tests that could be vulnerable to cheating.

We found that first year calculus students were reasonably well prepared – not particularly different from other years.

Students struggled or dropped out of courses at a slightly higher than normal rate, particularly in the non-science major courses (stats, finite math), but class averages were about normal.

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

We continue to use Lyryx in first year calculus and first year stats with good success.

We implemented *Notes on Diffy Q's* by Lebl for our Differential Equations course with mixed reviews from the students. We also used Edfinity for homework in that course, again with mixed reviews.

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

We continue to work with the Indigenous team and individual Indigenous scholars to improve our programming, however it is still a challenge to Indigenize courses and programs in a meaningful way within a colonial structure.

In some courses, strategies such as flexible deadlines, student directed projects, and self-reflection were used to recognize the different rates at which students master the material and to incorporate more wholistic demonstrations of the learning outcomes.

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

This year the Math and Science department hosted an academic speaker series. Over the year there were four talks given over Zoom with a variety of topics including mathematical modeling presented by Dr. Lisa Canary from Yukon University. There was moderate attendance but we plan to continue it in the future with an eye to attracting a community audience.

**8. Do you have any other news that you'd like to share about your department or institution?**

We offered a university level Pre-calculus course (Math 100) this year for the first time. It ran in the same time block as Calculus 1. The goal was to allow students who were not succeeding in Calc 1 to transfer to Pre-calc but maintain their university course status (as opposed to taking a high-school equivalent at the 090 level). Students could make this transfer much later in the semester than usual and did not incur any extra fees in the transfer. We offered Calc 1 in the winter semester and Calc 2 in the spring (another first for us) so that students could complete their first-year courses in the first year and continue into second year on schedule.

I have release time to create first year stat labs in R. We are looking to add them to our first-year stat course as an alternative to our current Excel labs. We plan to gain transfer credit for biology and geology students in particular, but any other course we can articulate to will be welcome.

## Columbia College

**Representative providing this report:** [Ana Culibrk](#)

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**1. Do you have any announcements of new hires or retirements that you'd like to share?**

[Dr. Sam Ekambaram](#) will retire at the end of August after 25+ years of teaching at CC.

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

[Our enrollment is lower than before the COVID-19 pandemic has started, but much better than anticipated.](#)

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

[No.](#)

**4. Are there any concerns or issues related to articulation that you'd like to share?**

[No.](#)

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

[We have been using WebWoRK for two years now, and gradually switching more and more courses to use this online homework platform. We started to use OpenStax textbooks for Precalculus in September 2020. This semester we will start using CLP-1 Differential Calculus textbook by UBC for our Science Calculus 1 course. Next term we will use it for Calculus 2 and 3 as well.](#)

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

[Indigenous materials are being used more and more in our Secondary program. In the UT program, Social Sciences lead the way in incorporating those materials in the existing course curriculums.](#)

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

[Community Connections Program: This Winter 2021 semester the International Centre for Student Success at Student Services will be piloting a paid externship program for CC students. For this program, we are looking for students to take on project work with local non-profit and community benefit](#)

organizations. Students who are placed with local organizations will be paid a salary of up to \$3500 for their work during a 14-week placement in the Winter 2021 semester.

**8. Do you have any other news that you'd like to share about your department or institution?** [No.](#)

## Coquitlam College

Representative providing this report: [Gera Belchev](#)

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**1. Do you have any announcements of new hires or retirements that you'd like to share?**

No

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

The COVID-19 pandemic caused serious disruptions in international travel and as most of our students are international, we experienced a significant decrease in enrolment and had to cancel several sections. Our department is concerned that a mandated return to in-person delivery will keep affecting negatively our enrolment in the fall as many international students are still hesitant to travel.

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

No

**4. Are there any concerns or issues related to articulation that you'd like to share?**

No

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

Many of my colleagues use MyOpenMath in there courses for homework problems.

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

There is a variety of resources and activities posted on our course management platform.

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

No

**8. Do you have any other news that you'd like to share about your department or institution?**

No

## Douglas College - Math

Representative providing this report: [Natasha Davidson](#)

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**1. Do you have any announcements of new hires or retirements that you'd like to share?**

We had a new hire, Peter Sinclair, beginning Fall 2020. Arezou Valadkhani was regularized by the end of 2020. Larry Tombouljian plans to return from leave in the Fall semester .

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

The enrolment numbers for the math department have been fairly stable – we had a net reduction of one section of Math 1160 in the Fall 2020, but that change has not been made permanent. The enrolment numbers for Summer 2021 are also good. I am unsure of enrolments across the College.

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

The Computer Science department (currently administered within MATH) is continuing to grow in its enrolments and develop new courses including many second year courses.

**4. Are there any concerns or issues related to articulation that you'd like to share?**

There are on-going concerns about how the on-line learning environment has impacted the learning of our students. Concerns around standards, coverage, academic integrity, the impact of isolation on both students and faculty, and whether or not students will be adequately prepared for subsequent courses.

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

We have used the Openstax Intermediate Algebra for the Math 1101 a number of times and it needs little supplementation. In some cases, MyOpenMath has been used for the online homework and quizzing. For Math 1105 we are using Openstax Algebra & Trigonometry – no known concerns for this text. For Math 2210, Applied Linear Algebra Nicholson – Linear Algebra with Applications has been used and K Kuttler's A First Course in Linear Algebra is being used this summer. Octave has been used as a complementary technology to Matlab. Students can access it freely when off-campus.

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

No

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

On hold for now with the current pandemic situation as far as I know.

**8. Do you have any other news that you'd like to share about your department or institution?**

Since March 2020 nearly all instruction at Douglas has been necessarily on-line with faculty who where teaching courses or assigned workloads teaching those courses on-line.

Moving forward – there is an administrative plan to classify some courses as being suitable for on-line and or hybrid instruction. Once a course has gone through that process there will be another process by which faculty will become QTT to teach the courses. The method by which this is done is new – QTT currently is determined by faculty elected by their peers to departmental selection committees with little, if any input, from administration. For courses to be offered on-line or in hybrid format QTT would be determined by committees of administrative appointments. Faculty who complete something called Course Readiness for Distributed Learning will be given priority for online or hybrid teaching assignments. This may seem of little, or even no, consequence, however it represents a massive and unilateral administrative shift around how qualified to teach and access to work is determined.

There has been some push back from the union but potentially it represents reallocation of work without regard for the Collective Agreement and is therefore is a huge concern.

## Douglas College – Stats

Representative providing this report: [Dan Henschell](#)

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**1. Do you have any announcements of new hires or retirements that you'd like to share?**

[No new hires for stats specifically.](#)

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

[No significant changes to enrollments \(per section\). Demand for our stats offerings remained strong this year. Although some sections of Math 1160 \(Intro Stats\) were pre-emptively cancelled \(covid/international\), actual demand resulted in all but one section being reinstated.](#)

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

[No new courses or programming for stats this year.](#)

**4. Are there any concerns or issues related to articulation that you'd like to share?**

[Steady as we go.](#)

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

[We used Triola last year for our intro stats course. We will be looking to use OpenIntro Stats next Fall 2021, along with MyOpenMath, or WebWork.](#)

[We used Hayter for our calc-stats course. R is the computational technology of choice.](#)

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

[Not at this time.](#)

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

[No](#)

**8. Do you have any other news that you'd like to share about your department or institution?**

[Douglas will be creating an instance of WeBWork on its servers over the summer. If anyone has advice regarding the implementation, WW course design to share or resources, I'll be appreciative and indebted for your insights.](#)

## Fraser International College (FIC)

Representative providing this report: [Navid Alaei](#)

Email address of representative providing this report: [nalaei@learning.fraseric.ca](mailto:nalaei@learning.fraseric.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

None to mention. There are currently 5 continuing instructors and 8 sessional instructors.

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

Institutionally, the enrolment has dropped approximately 25% year over year when comparing student numbers for the Spring 2021 with Spring 2020 semesters. Specific enrolment data is noted below:

Table 1: Annual Enrolment Numbers in FIC  
Math\_Stats

Course/Program Name	Enrolment Numbers (Summer 2020 - Spring 2021)	Enrolment Numbers (Summer 2019 - Spring 2020)
MATH100	1090	1484
MATH151	411	586
MATH152	442	505
MATH157	628	774
MATH232	178	191
MACM101	306	422
STAT203	400	588

Table 2: Semester Breakdown of Math\_Stats Courses (Summer 2020 - Spring 2021)

Course/Program Name	Enrolment Numbers (Spring 2021)	Enrolment Numbers (Fall 2020)	Enrolment Numbers (Summer 2020)
MATH100	357	376	357
MATH151	117	136	158
MATH152	111	136	195
MATH157	175	233	220
MATH232	48	63	67

MACM101	96	71	139
STAT203	103	133	164

Course/Program Name	Enrolment Numbers (Spring 2020)	Enrolment Numbers (Fall 2019)	Enrolment Numbers (Summer 2019)
MATH100	442	554	488
MATH151	217	198	171
MATH152	152	172	181
MATH157	251	283	240
MATH232	67	60	64
MACM101	143	135	144
STAT203	180	205	203

- 3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

None to mention.

- 4. Are there any concerns or issues related to articulation that you'd like to share?**

None to mention.

- 5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

None to mention

- 6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

None to mention in 2021.

- 7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

None to mention.

- 8. Do you have any other news that you'd like to share about your department or institution?**

Course offerings will continue online throughout the Summer 2021 semester. A return to campus and in-person classes are being planned for September, as possible. Some online course offerings are expected as not all students will be able to secure their student visas by then.

## Kwantlen Polytechnic University (KPU)

**Representative providing this report:** [Michael Nyenhuis](#)

**Email address of representative providing this report:** [Michael.nyenhuis@kpu.ca](mailto:Michael.nyenhuis@kpu.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

Retirements: Graham Rankin retired last August. Sergei Novocelski will be retiring at the end of December. We gained the former Academic and Career Preparation Math courses and faculty, of whom Terry Berg and Margaret Zmudzka-Bajerski will be retiring (end December and end August). Michel Virgilio has been regularized. Louis Saumier-Demers has started a new parental leave. It is likely that we will be hiring over the next few years.

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

Enrolments in general are up, particularly in our service courses. It seems that going online met a stifled demand. Unfortunately, enrolments are down in our science courses. Did science-bound high school students delay college for a year? Our B.Sc. in Applications of Math now has 38 students.

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

No

**4. Are there any concerns or issues related to articulation that you'd like to share?**

No

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

We have been using an OER text in our Precalculus Algebra and Precalculus courses (Abramson's Algebra and Trigonometry, from OpenStax for both, Precalculus Algebra is supplemented with Abramson's College Algebra also from OpenStax). Terry Berg has developed an OER algebra text which he is currently revising. Collaborative Stats, by Illowski and Dean has a positive review as a supplemental text in non-calculus-based introductory stats, Quantitative Reasoning and the Environment by Langkamp and Hull at [enviromath.com](http://enviromath.com) also has a good review for Environmental Math. Some instructors have developed their own resources, for example, Raquel Cabral has developed a text for our Complex Numbers and Linear Algebra course (which includes the Wave Equation, Schrodinger's Equation and some Fourier Analysis), a course we developed for KPU's Physics for Modern Technology B.Sc.

We have also been using WebWorK, which has been installed on a KPU server. Many of our precalculus students said WebWorK helped them most in learning the course material.

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

No

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

No

**8. Do you have any other news that you'd like to share about your department or institution?**

Academic and Career Preparation Math has joined the math department. The same has happened in the other sciences. The B.Sc. in Applications of Math has undergone its quinquennial review, and we expect a mostly positive report, with many recommendations to implement. Our current dean will retire in November, so we are searching for a new dean.

## Langara College

**Representative providing this report:** [Eugene Belchev \(Math\)](#) & [Michael Lo \(Stats\)](#)

**Email address of representative providing this report:** [ebelchev@langara.ca](mailto:ebelchev@langara.ca) & [mlo@langara.ca](mailto:mlo@langara.ca)

**1. Do you have any announcements of new hires or retirements that you would like to share?**

Math – None

Stats – there were three new hires: Ken Li, Nooshin Lary, and Azadeh Alimadad

Data Analytics – None

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

As most post-secondary institutions, admissions at Langara College were affected by the various travel restrictions due to the pandemic and the move to online delivery. The college experienced fluctuations in the number of both domestic and international students.

Understandably, there was a downturn in registration last summer, but by this fall we expect to have similar numbers to Fall 2019.

Math and Stat had to cancel 2 - 3 classes last summer but managed to reschedule them later in the year. The largest impact was on post degree diplomas. (Langara School of Management, Web Mobile Design and Development). Dana Analytics was also influenced but we managed to bring a cohort in the fall. The main problem was the delay with study permits for the international students.

**3. Are there any new or significantly revised programs or courses at your institution that you would like to let the BCcupms community know about?**

MATH 1175 and MATH 1275 (Calculus I and II for Life Sciences) were successfully launched.

MATH 1162 (Finite Math) was offered after a long hiatus, though classes were under-populated.

KINS 2206 (Intro Stats for Kinesiology) was created for Kinesiology major; R is the main statistical software.

STAT 3225 (Statistical Methods for Biological and Health Sciences) was created for the Bioinformatics program; R is the main statistical software.

**4. Are there any concerns or issues related to articulation that you would like to share?**

None

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you have found to be particularly effective?**

College Algebra, Corrected Edition by Carl Stitz and MyOpenMath homework system (used in MATH 1152 College Algebra)

Linear Algebra with Applications by W. Keith Nicholson and online homework through Lyrx for MATH 1252 (used in MATH 1252 Linear Systems)

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you would like to report?**

Langara College Teaching & Curriculum Development Centre organized a series of workshops focused on indigenizing STEM, which was well attended by members of the department.

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you would like to report?**

Over the past few years, we have been hosting AMC events for students who do not have a high school to host them. The AMC organizers decided to offer an online version of their competitions this season, which we helped facilitate for those students whose schools did not host the AMC. Note that some of these students are also home-schooled. These are highly competitive events, which many students train for. We do not train any of these students and merely provide an opportunity for students to compete. We had student participants as follows: 33 in the AMC 8 on Nov 10, 2020; 36 AMC 10A and 11 AMC 12A on Feb 4, 2021; 28 AMC 10B and 12 AMC 12B on Feb 10, 2021; and 6 AIME students (must score high enough on the AMC 10/12 to qualify).

**8. Do you have any other news that you would like to share about your department or institution?**

We implemented an online version for our Math and Stat diagnostic tests in Brightspace Quizzes and successfully ran them over the last few terms. Also, we were able to successfully run our Math and Stat help centre online - we opted to go with using Zoom on a drop-in basis, which allowed us to collect some data on our tutoring usage.

Fall schedule: Courses with multiple sections and high enrolment of international students will have about 30-40% scheduled online and the rest face-to-face. Surveys have been sent to future students regarding their whereabouts. This information will be used to determine if they have priority to register in the online sections.

## North Island College (NIC)

Representative providing this report: [Jeannie Cameron](#)

Email address of representative providing this report: [Jeannie.cameron@nic.bc.ca](mailto:Jeannie.cameron@nic.bc.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

No

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

There has been a slight increase in domestic enrollment (6%) but a large decrease in international enrollment (35%).

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

The new one-year Computer Information Systems (CIS) certificate was delayed by the pandemic but will be offered starting in Fall 2021. The certificate includes a new course MAT 156 Applied Math and Statistics for Computing. MAT 156 is identical to the course of the same name at Camosun College and it is designed to allow students to transfer into the second year of the diploma program at Camosun.

**4. Are there any concerns or issues related to articulation that you'd like to share?**

No

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

MAT 181/182 Calculus I/II switched to *CLP Calculus* Textbooks from UBC for Fall 2020  
<http://www.math.ubc.ca/~CLP/>

STA 115 Introduction to Statistics (Algebra-based): *OpenIntro Statistics*  
<https://www.openintro.org/book/os/>

MAT 122 Logic and Foundations: *Book of Proof* <https://www.people.vcu.edu/~rhammack/BookOfProof/>

WeBWorK is used with MAT 181/182 Calculus I/II, MAT 102 Calculus for the Life Sciences, MAT 151 Finite Math, STA 115 Introduction to Statistics, MAT 122 Logic and Foundations.

This past year, Mobius (formerly Maple TA) <https://www.digitaled.com/mobius#> was used for asynchronous content delivery in MAT 102 and for both asynchronous content delivery and secure testing in Math 181/182. While not free, the content delivered in Mobius included embedded OER or was linked to OER

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

*NIC 2021 Department of Math Science - Workshop on Indigenizing Math and Science Curriculum, May 17 – 21* Contact [Jeannie.cameron@nic.bc.ca](mailto:Jeannie.cameron@nic.bc.ca) for more information if you are interested in attending.

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

NIC Youth Academy Summer Camps are running to provide fun and meaningful, hands-on learning in focus areas such as STEM: <https://www.nic.bc.ca/programs/summer-camps/>

**8. Do you have any other news that you'd like to share about your department or institution?**

As of April 2021, NIC has a new president: Dr. Lisa Domae. In June, the Math Science department will have a new chair: Alex Blair. All 2020 - 2021 academic year (including spring/summer intercession) NIC math and statistics courses were offered online either synchronously or asynchronously. For the 2021 - 2022 academic year, it appears most math and stats courses will continue to be delivered online with the timetable being posted May 18. The sudden switch to full online teaching and learning has been stressful with an increased workload for faculty. The online transition does provide opportunities for new online teaching and assessment practices with improved access for some students such as those who are remote or who have conflicting work or family responsibilities.

## Northern Lights College (NLC)

Representative providing this report: [Hongbin Cui](#)

Email address of representative providing this report: [hcui@nlc.bc.ca](mailto:hcui@nlc.bc.ca)

1. Do you have any announcements of new hires or retirements that you'd like to share?

No

2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?

No

3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?

No

4. Are there any concerns or issues related to articulation that you'd like to share?

No

5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?

Calculus I and Calculus II: David Guichard, [Calculus -Early Transcendentals](#), BCcampus Open Textbook.

Introductory Linear Algebra: Ken Kuttle and Ilijas Farah, [A First Course in Linear Algebra](#), BCcampus Open Textbook.

Introduction to Statistics: Barbara Illowsky, Susan Dean, [Introductory Statistics](#), BCcampus Open Textbook.

6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?

No

7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?

No

8. Do you have any other news that you'd like to share about your department or institution?

We plan to return to in-person teaching beginning in Fall 2021.

## Okanagan College (OC)

**Representative providing this report:** [Stephen Brown](#)

**Email address of representative providing this report:** [SCBrown@okanagan.bc.ca](mailto:SCBrown@okanagan.bc.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

During the 2020/ 2021 year, we hired 4 full time term faculty and converted 2 to continuing. During the 2021/ 2022 year, we have 2 full time term positions and 1 full time continuing position posted. We anticipate 1 retirement.

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

Due to COVID 19, our enrolments decreased both domestically and internationally (and therefore, overall as well).

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

We finished the PSIPS process on a Post-Baccalaureate program in Health Analytics. This comes with a number of new health-analytics and mathematics/ statistics courses.

**4. Are there any concerns or issues related to articulation that you'd like to share?**

None at this time.

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

We have used a version of Open Intro Stats that we have modified to better reflect the statistics requirements of the CPA in our Business Stat class.

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

None at this time.

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

None this year primarily due to COVID 19.

**8. Do you have any other news that you'd like to share about your department or institution?**

We will deliver roughly half of our Fall 2021 year online with classes that are historically of interest to international students. We will be transitioning to fully face to face in the Winter 2022 term (Bonnie Henry-willing).

## Quest University

**Representative providing this report:** [Asia Matthews](#)

**Email address of representative providing this report:** [asia.matthews@questu.ca](mailto:asia.matthews@questu.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

Glen Van Brummelen and Richard Hoshino have both left the building, so at Quest now we have one full-time faculty (Asia Matthews) in mathematics as well as our Quantitative Reasoning coordinator (Chris Stewart).

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

Yes, much lower enrolment due to CCAA, but we are out of that now and hoping to increase enrolment. New partnership with Primacorp is in its infancy, and so we don't know who it will be when it grows up, but they are in charge of recruitment now (and have a vested interest), so we are hopeful that enrolment will increase.

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

At Quest we work hard to keep Quantitative Reasoning (Number, measurement, graphs, algebra) separate from Mathematics. QR is a requirement for most science courses, but not our foundation mathematics courses. One of the new directions that we expect our institution to go in is developing new academic programs. We are just starting to figure out now what that will look like.

**4. Are there any concerns or issues related to articulation that you'd like to share?**

No

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

Active Calculus

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

No

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

On an individual level, I ran a ProD workshop for local mathematics teachers where we focused on mathematical thinking and asking interesting questions

**8. Do you have any other news that you'd like to share about your department or institution?** No

## Selkirk College

**Representative providing this report:** [Doug Henderson](#)

**Email address of representative providing this report:** [dhenderson@selkirk.ca](mailto:dhenderson@selkirk.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

Our engineering instructor (Elroy Switlishoff), who also taught some upgrading math courses, is retiring. We also hired a short-term instructor for a few courses this past semester (teaching remotely from Waterloo), but there is not the workload for him to stay on next year. We have a new chair for our department (University Arts & Sciences) who began his work last August. College president will be leaving at the end of the upcoming academic year.

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

Domestic enrollments fairly steady college-wide. A dip in international enrollments (particularly in the business programme) due to the pandemic. Planning on a return to normal enrollment levels next year. This past year one math course was not offered, and fewer sections of other courses were offered. This was more to keep workloads for instructors manageable than for lack of demand.

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

No

**4. Are there any concerns or issues related to articulation that you'd like to share?**

No

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

No

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

Hired Dianne Biin as Manager, Indigenous Education and Engagement last summer. No recent efforts with respect to Math education

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

No

**8. Do you have any other news that you'd like to share about your department or institution?** No

## Simon Fraser University (SFU) – Math Report

**Representative providing this report:** [Justin Gray](#)

**Email address of representative providing this report:** [jgray@math.sfu.ca](mailto:jgray@math.sfu.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

We are in the process of concluding searches for two Canada Research Chair faculty, in the areas of Quantum Computing and Infectious Disease.

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

Overall enrollments at SFU for 2019/2020 are virtually the same as the year prior, as measured by annualized activity full-time equivalents ( $(\# \text{ of units}) \times (\# \text{ of undergraduate students enrolled}) / 30$ ). Overall enrollment in math courses is down about 5% from the previous year. The number of students enrolled in a math major/honors program (252) has not changed from the previous year.

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

None

**4. Are there any concerns or issues related to articulation that you'd like to share?**

None

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

We have adopted OpenStax Precalculus for MATH 100 and are using the large problem bank that accompanies this book in the Möbius homework system.

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

Efforts toward indigenization at the course level in my department have been primarily focused on integrating indigenous pedagogical approaches.

The mandate of the SFU Aboriginal Reconciliation Council (ARC), established in 2017, is to develop a proposal and implementation plan for funding the Aboriginal Strategic Initiative (ASI), which will draw upon \$9M in one-time funds to build SFU's capacity to recruit, educate, and support Aboriginal students to be successful in their programs, lives, and careers. Some of these funds are now distributed through faculty inquiry grants for decolonizing and indigenizing curricula.

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

There are numerous ongoing outreach initiatives, though many of these were cancelled this year due to the current pandemic.

[Elementary School Outreach](#)

Math Catcher

[High School Outreach](#)

Academic Summer Camp for Aboriginal Students

Math Ambassadors

SFU Math Camp for High School Students

[Teacher Outreach](#)

SFU Math Camp for Teachers

Changing the Culture Conference

See <http://www.sfu.ca/math/k-12/k-12-outreach-programs.html> for more details.

**8. Do you have any other news that you'd like to share about your department or institution?**

SFU has recently completed a Learning Experiences Transition Survey of our students. A summary can be found here: <http://www.sfu.ca/vpacademic/learnteach/announcements/lets-survey.html>

## Simon Fraser University (SFU) – Stats Report

Representative providing this report: [Harsha Perera](#)

Email address of representative providing this report: [gperera@sfu.ca](mailto:gperera@sfu.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

We had two new hires late last year. Dr. Himchan Jeong and Dr. Haolun Shi joined as Assistant Professors. This year hiring is still in progress. We are expecting two lecturers to join this September.

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

Demand is always continuing to increase with Department of Statistics and Actuarial Science.

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

No

**4. Are there any concerns or issues related to articulation that you'd like to share?**

No

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

WeBWorK has used for some of our Statistics workshop courses: STAT 100 – Chance and Data Analysis, STAT 201 - Statistics for the Life Science, and STAT 203 – Introduction to Statistics for the Social Sciences to give online quizzes during last Summer and Fall..

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

No

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

Unfortunately, most of the outreach events were cancelled/postponed last summer due to the pandemic.

**8. Do you have any other news that you'd like to share about your department or institution?**

No

## Thompson Rivers University (TRU)

**Representative providing this report:** [Suzanne Feldberg and Mateen Shaikh](#)

**Email address of representative providing this report:** [sfeldberg@tru.ca](mailto:sfeldberg@tru.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

[This summer we will be hiring one tenure-track teaching professor to replace some of our retired faculty.](#)

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

[Enrollments were actually up this past year. Next year, who knows?](#)

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

[Ours Masters in Data Science program is up and running as of Winter 2021. The University has new "General Education" requirements, which have necessitated a change in wording of some of our course descriptions and learning outcomes, but not the content of the courses themselves.](#)

**4. Are there any concerns or issues related to articulation that you'd like to share?**

[No.](#)

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

[We're actively exploring WebWork.](#)

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

[No.](#)

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

[Not this year. We're looking forward to doing the BCSSMC in 2022 after a two year break.](#)

**8. Do you have any other news that you'd like to share about your department or institution?**

[No.](#)

## Thompson Rivers University Open Learning (TRU-OL)

Representative providing this report: [Iain Pardoe](#)

Email address of representative providing this report: [ipardoe@tru.ca](mailto:ipardoe@tru.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

None at this time.

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

TRU OL enrolment has continued to see consistent growth. Year to date has been 4.64% growth.

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

- [BIOL 4001 \(Biostatistics\)](#) is currently under major revision.
- [SOSC 2XX1 \(Statistics in the Social Sciences\)](#) is a proposed new course.
- Also, TRU is currently undergoing implementation of Institutional Learning Outcomes. All courses and programs are being reviewed to ensure they meet this requirement and there may be possible changes as a result.

**4. Are there any concerns or issues related to articulation that you'd like to share?**

One concern is that institutions are all facing significant pressures on finances. This is critical work, so we hope to see articulation agreements continue to be in place.

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

TRU has continued to pursue OERs. STEM courses have traditionally been in less supply than other areas in OER. As a result, there has been a desire to generate more materials in this area.

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

TRU has engaged in the "Coyote Project," which is a cross-campus initiative to indigenize curriculum in all subject areas. This work continues.

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

None at this time.

**8. Do you have any other news that you'd like to share about your department or institution?**

TRU, like many institutions, faced an unprecedented year of challenges. There are also challenges in the year ahead for budgets and international student enrolments. TRU has begun work on an Integrated Strategic Plan to address concerns such as these moving forward: <https://www.tru.ca/vpacademic/integrated-strategic-planning.html>.

## Trinity Western University (TWU)

Representative providing this report: [Sam Pimentel](#)

Email address of representative providing this report: [sam.pimentel@twu.ca](mailto:sam.pimentel@twu.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

[No new hires or retirements.](#)

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

[No significant change in enrollment.](#)

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

[No](#)

**4. Are there any concerns or issues related to articulation that you'd like to share?**

[No](#)

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

[We are using WeBWorK for online homework assignments for many of our courses. In pre-calculus we use the open textbook <https://www.stitz-zeager.com/>. In our calculus sequence a variety of resources are suggested, including: <http://www.apexcalculus.com/>, <https://openstax.org/subjects/math>](#)

[https://math.libretexts.org/Bookshelves/Calculus/Map%3A\\_Calculus\\_Early\\_Transcendentals\\_\(Stewart\)](https://math.libretexts.org/Bookshelves/Calculus/Map%3A_Calculus_Early_Transcendentals_(Stewart))

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

[None, specifically aimed at mathematics.](#)

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

[None, specifically aimed at mathematics.](#)

**8. Do you have any other news that you'd like to share about your department or institution?**

[No](#)

## UBC Vancouver (UBC-V) – Math Report

Representative providing this report: [Wayne Nagata](#)

Email address of representative providing this report: [nagata@math.ubc.ca](mailto:nagata@math.ubc.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

No. Currently a hiring freeze for our dept but not next year.

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

I heard enrollment went up

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

No (except for the chaos when everything went online, of course)

**4. Are there any concerns or issues related to articulation that you'd like to share?**

No

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

Webwork, for homework, tests, exams (is Webwork open access?). Effectiveness is debatable. Some experimentation with PrairieLearn. Textbooks/notes for Calc 1-4, DE 1, Mathematical Proof, Linear Algebra for Engineers are all free online (CLP1-4, Diffyqs, Book of Proof). Textbook for Linear Algebra for Science is online but not free. Canvas LMS for all courses. Online grading software (like Speedgrader, Crowdmark, but apparently better) being developed.

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

We have an EDI committee but not a lot of concrete changes implemented yet

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

No

**8. Do you have any other news that you'd like to share about your department or institution?**

No

## UBC Vancouver (UBC-V) – Stats Report

**Representative providing this report:** [Bruce Dunham](#)

**Email address of representative providing this report:** [b.dunham@stat.ubc.ca](mailto:b.dunham@stat.ubc.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

There were five additions to the department this year. In the educational leadership stream, Vincenzo Coia, Melissa Lee, and Rodolfo Lourenzutti joined, and Daniel McDonald and Yonjin Park joined as assistant professors. Prof Park is a joint appointment with Pathology.

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

The anticipated “student melt” due to the pandemic did not materialise, as student numbers across UBC remained quite stable. In fact, the Faculty of Science saw a modest increase in student numbers this year. Not all departments saw growth in numbers, however, with disciplines with lab-based courses seeing a reduction. For STAT and DSCI courses there were increases in numbers of over 10% from the previous year, partly due to room capacities not being a concern. The cap on students entering a specialisation in statistics was raised to 150, moving to 159 for the coming year.

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

The new minor in data science was approved at all levels within UBC, and awaits final ratification from the Ministry of Education. In addition to DSCI 100, and STAT 201 that ran for the first time this year, the new STAT 301 is core for the minor and will be offered for the first time next year.

There were changes to our statistics major and honours specialisations. Both DSCI 100 and STAT 201 are now core for both, and STAT 301 is core for the major. A motivation for these changes is to enable students to have more exposure to statistical concepts earlier in their programs.

**4. Are there any concerns or issues related to articulation that you'd like to share?**

Data science courses: It is expected that other institutions are offering, or planning to offer, courses similar to DSCI 100 (and perhaps also STAT 201). Articulation requests for such courses are most welcome. Although DSCI 100 is R-based by default, a version using Python is being developed in collaboration with Earth, Ocean, and Atmospheric Sciences.

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

The department makes much use of free online resources for its teaching. These include: WeBWork(iR): A free online homework system for mathematics and statistics, incorporating R. See [webwork.maa.org](http://webwork.maa.org) and <https://wiki.ubc.ca/Documentation:WeBWork> for more details.

StatSpace: An online repository for teaching resources in statistical sciences is available at <https://statspace.elearning.ubc.ca>. Some new RShiny applets, with related resources, were developed this year. Colleagues are invited to explore and review existing resources and can also register as an instructor in order to see instructor-only materials and submit their own resources.

Free online textbooks used, notably for DSCI 100 and STAT 201, include:

Modern Dive: Statistical Inference via Data Science (at [moderndive.com](http://moderndive.com)) developed by Chester Ismay and Albert Kim.

OpenIntro Statistics (at [www.openintro.org](http://www.openintro.org))

Introduction to Data Science (at <https://rafalab.github.io>) by Rafael A. Irizarry.

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

There are ongoing efforts via a student diversity initiative in the Faculty of Science (see [skylight.science.ubc.ca/projects/sdi](http://skylight.science.ubc.ca/projects/sdi) for details). The department will be involved in the annual Indigenous Scholars Summer Camp for the first time this summer.

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

Further efforts have been made to support high school teachers working on Statistics 12, including the running of a webinar at the BCAMT annual conference in October, 2020. Aligned to teacher outreach, but also useful to any educator in statistics, is the SSC educators' forum:

Signup Link: [piazza.com/statistical\\_society\\_of\\_canada/other/forum](https://piazza.com/statistical_society_of_canada/other/forum)

Institution: Statistical Society of Canada

Class name: SSC Educators' Forum

Class number: Forum

Please note that all forum members subscribe with a “student” status. The access code is SSCforum. The forum is not intended for student use, so please do not distribute the access code to anyone not involved in teaching statistics.

**8. Do you have any other news that you'd like to share about your department or institution?**

Various department members won external awards this year. Current head of department Paul Gustafson was awarded the 2020 SSC Gold Medal. Associate department member, and emeritus professor in Mathematics, Priscilla (Cindy) Greenwood was appointed to the Order of Canada. Professor Ruben Zamar has been named as a [Fellow in the Institute of Mathematical Sciences](#). Bruce Dunham was awarded the 2021 PIMS Education Prize.

## University Canada West (UCW)

**Representative providing this report:** [Nam Phuong Le](#)

**Email address of representative providing this report:** [nam.le@ucanwest.ca](mailto:nam.le@ucanwest.ca)

### 1. Do you have any announcements of new hires or retirements that you'd like to share?

Because of the current situation with COVID-19, we tried to keep the same team of math and stat faculty

### 2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?

Our enrolment in math and statistics remain approximately the same (average per term) compared to the last academic year

Courses	Summer 2020	Fall 2020	Winter 2021	Spring 2021
MATH 101	65	150	126	139
MATH 105	0	0	4	0
MATH 106	0	0	0	6
MATH 200	8	7	12	19

### 3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?

We have been implementing 2 new non-credit courses that we were developing in the last academic year which are Math 105 Algebra and Trigonometry and 106 Pre-Calculus. These courses help students to be prepared for other university-level math and statistics courses. We also revised our 2 calculus courses Math 110 Calculus I, Math 120 Calculus II

#### **MATH 105 (0)—Algebra and Trigonometry**

This course is designed for students who have not used mathematics for an extended period of time and feel they need a refresher in the concepts, practices, and skills as preparation for Pre-Calculus or Calculus I. It is designed for students who require extra time to develop their problem-solving skills and deeper understanding of fundamental concepts needed for success in advanced mathematic courses Concepts such as the language of algebra, linear equations, graphing and functions, roots and radicals, functions, conics, equations and inequalities are covered This preparation course is fast-paced and supports student success in future mathematic courses

#### **MATH 106 (0)—Pre-Calculus**

Students are prepared for first-year calculus and other mathematics courses. Topics of instruction include linear function, polynomial/rational functions, exponential/logarithmic functions, trigonometric functions, periodic functions, systems of equations and inequalities, analytic geometry. **Pre-requisite(s):**

Math 105 or Pre-Calculus11 or Math Foundations11 or similar course achieving a minimum grade of 65% in the last two years.

### **MATH 110 (3)—Calculus I**

This course applies some mathematical techniques and concepts within practical contexts, as well as quantitative approaches to undergraduate art-science programs It begins with basic observations about functions and graphs and emphasizes power functions and polynomials. The derivative is introduced in three complementary ways: (1) As a rate of change, (2) as the slope, and (3) as a computational quantity. All applications of calculus are developed using simple functions (power and polynomials). The course introduces the chain rule and its applications and transcendental functions (exponentials and trigonometric). Nonlinear differential equations of the first order are explored as well as interpretations of graphs and slopes to motivate linear approximation and Newton’s method for finding zeros of a function. **Prerequisites:** MATH 106 with a minimum grade of 50% / Precalculus12 with a minimum grade of C+ or similar course in the last two years.

### **MATH 120 (3)—Calculus II**

Students are introduced to the concepts of integrals. They build on knowledge gained in Calculus I (which focused on solving for the change in quantity), and are introduced to solving the quantity itself. The concepts and applications of integrals are covered, including approximate integration, integration techniques, sequences and series, power series, Riemann sums, and the Fundamental Theorem of Calculus Students learn how to apply calculus concepts and theories to modern-day business and science situations. This is an in-depth course that develops problem-solving skills **Prerequisite:** MATH 110

#### **4. Are there any concerns or issues related to articulation that you'd like to share?**

There is no issue. Since the 2020-2021 academic year, our Math courses (UCW MATH 106 Pre-Calculus, UCW MATH 110 CALCULUS I, UCW MATH 120 Calculus II) are approved for transfer to various institutions in BC. Detail is on <https://www.bctransferguide.ca/search/course>

#### **5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

Instruction of UCW courses has shifted to a blended online learning model necessitated by the COVID-19 pandemic. Personnel across departments have supported students and faculty make this change from a physical classroom to a virtual one. We look forward to returning to campus when it is deemed safe to do so.

As mentioned above, UCW has been supporting faculty to transition to OER to students by providing faculty a stipend for the work associated with changing the main course texts. We have a committee under our Library department that is spearheading this initiative to incorporate OER in our courses.

We are using open textbooks for many of our math and statistics courses

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

N/A

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

N/A

**8. Do you have any other news that you'd like to share about your department or institution?**

General

During COVID – 19, UCW has been experiencing a slight decrease in student enrollment for some term but in general, the total student enrollment at UCW is still climbing up gradually.

During COVID – 19, UCW transitioned to online delivery quickly with support from the IT and Academic Department in the area of technology. With the establishment of the Centre for Teaching Excellence, faculty are able to set up the discussion group in terms of the best practices in teaching pedagogy. Meanwhile, CTE has been continuously providing professional development training to faculty.

During 2020, UCW has been working hard on the student support program, which includes reformatting new student orientation, implementing the Learning for Success Workshop, and building the micro-credential in the career development & learning success programs, etc.

UCW another campus – Vancouver House has now opened. Due to COVID, we have not had the opportunity to move into our new location. The new campus is located near the Granville Bridge and it is a new feature for UCW.

Budgets/Facilities

UCW has allocated a set amount of budget to faculty who adopt OER textbooks for their course development. Meanwhile, there is a budget allocated to faculty every year for their professional development and scholarly activities.

Vancouver House campus is now open, and we have increased the number of classrooms, dry lab, and computer lab. Areas for student activities have also been increased in Vancouver House.

Students/Enrollment

There has been a slight decrease in student enrolment associated with the conditions created by the COVID 19 pandemic. Though there has been a small decrease, the total population of students enrolled at UCW continues to increase gradually. We have also seen a slight increase in domestic students over the last two years, since 2019.

	2019	2020	2021
Domestic	2.60%	2.74%	3.33%
International	97.40%	97.26%	96.67%

Staffing

Dr. Cyndi Banks has been starting her position as the VPA at UCW since Feb 2020.

Dr. Aigerim Shilibekova has been appointed to the Manager of Online Learning from April 2020 to April 2021 and returns to the F.T. faculty position at UCW.

Seyed-Reza Hosseinifar has been appointed to Director of CTE as of March 2021.

Meghan Barclay has been appointed as the Manager, Learning Success since January 2021.

Amy Hua has been promoted to the Director of Strategic Academic Planning since December 2020.

Christine Chan has been appointed as the Director of Student Affairs since March 2021.

## University of the Fraser Valley (UFV)

**Representative providing this report:** [Ian Affleck](#)

**Email address of representative providing this report:** [ian.affleck@ufv.ca](mailto:ian.affleck@ufv.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

No. We posted a new position in Stats in 2019, and completed the process, but our offer had to be deferred due to the budgetary uncertainty caused by the COVID-19 pandemic. Since then, the position has been cancelled.

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

We saw a mild increase in enrollment in the last year. Border closures had little impact on international registrations, since all Math & Stats at UFV ran entirely online. It remains to be seen if there will be a noticeable impact on international registrations in 2021-2022, as most courses will have some face-to-face meetings – including required face-to-face tests – but there could be some continuing international travel restrictions.

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

UFV has a new Applied Bioinformatics Certificate, which requires some Stats and Computing.

**4. Are there any concerns or issues related to articulation that you'd like to share?**

Nothing significant to report here.

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

We are using WeBWoRK as an online homework assessment platform for our Precalculus (MATH 110), Calculus I (MATH 111) and II (MATH 112 or 118), Discrete Math (MATH 125) courses. Some Statistics instructors are using it in 100-level Stats courses .

Our MATH 118 (Calculus II for Life Sciences) uses an open source textbook developed by Leah Keshet at UBC, and has found it to be an excellent resource for that material.

Some Stats instructors have also been using open textbooks:

- OpenStax (<https://openstax.org/details/books/introductory-statistics>) and
- OpenIntro (<https://www.openintro.org/book/os/>) as a supplementary textbook.

Other than that, our first- and second-year transferable courses typically use commercially available textbooks, some as e-texts. We are always interested in hearing of open access resources that other institutions have found to be effective.

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

In February of 2019 and 2020, UFV hosted its first two annual Fraser Valley Math Education Sq'ép events. ("Sq'ép" is a Stó:lō word pronounced like "skup", and loosely translates as "a meeting" or "a gathering".) Since such gatherings were not allowed this year, the organizers decided to team-up with others at UBC to co-plan a two-part virtual Indigenous Math Symposium, which will run on May 11 and 18, 2021. Theme for this year's symposium is "Mathematical and Indigenous Futures: Generational Journeys.

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

Unfortunately, our elementary school Math Mania events had to be cancelled this year, as well as our annual on-site hosting of BC Math Challengers Fraser Valley Regionals and the BC Secondary Schools Math Contest.

Also, due to the pandemic, *Super Science Club* (a program coordinated by Science World) did not run in the Fraser Valley this past year, and we have also had to cancel our *Science Rocks!* Summer camps for 2021. Assuming we are back in the classroom for the coming academic year, we will run *Super Science Club* again in the coming academic year.

Our "*Science Rocks! In the Community*" events are school visits, planned and delivered by our students. We were able to run some events this past semester (as we usually do, but this year all school visits were done by zoom). We are branching out and developing a new program for the coming year. Beginning this Fall, we are expanding our *Science Rocks!* outreach activities, starting a new "*Science Rocks! Days*" program, consisting of single day-events run during the school year, inviting children from the local communities onto campus for a (Saturday) science day of activities. In the past, our *Science Rocks!* Program was geared toward grades 4-6, but this year we are also expanding our activities to include events for grades 7-8.

**8. Do you have any other news that you'd like to share about your department or institution?**

Most Math & Stats courses at UFV this Fall will have just one face-to-face meeting each week, and will have a face-to-face final exam, but most meetings/lectures will still run via Zoom. This will allow us to arrange for all testing to be done in a classroom, while keeping campus usage and health risks relatively low. About 35% of our courses will run entirely online, while about 5% will run entirely face-to-face.

## University of Northern British Columbia (UNBC)

Representative providing this report: [Erin Beveridge](#)

Email address of representative providing this report: [erin.beveridge@unbc.ca](mailto:erin.beveridge@unbc.ca)

1. Do you have any announcements of new hires or retirements that you'd like to share?

[Jennifer Hyndman has returned as Department Chair](#)

[We are in the process of hiring a replacement for Sam Walters who retired last year.](#)

2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?

[There has been a decrease in international students and a slight decrease in domestic students. A further decrease for next year is expected if we remain online.](#)

3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?

[The engineering program has been expanded and this is affecting the numbers in our math classes.](#)

4. Are there any concerns or issues related to articulation that you'd like to share?

No

5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?

[For Precalculus we have been using OpenStax for several years and mostly quite pleased with it. We do augment some sections for our specific needs.](#)

[This year we also switched from Stewart to OpenStax for our first two Calculus for majors courses.](#)

[For linear algebra we are using <https://lyryx.com/linear-algebra-applications/>](#)

6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?

[We are having on ongoing discussions with the Office of Indigenous Initiatives](#)

7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?

[Activities were postponed due to Covid.](#)

8. Do you have any other news that you'd like to share about your department or institution?

[The two college model has been replaced with a five faculty model. We are now part of the Faculty of Science and Engineering.](#)

## University of Victoria (UVic)

**Representative providing this report:** [Gary MacGillivray](#)

**Email address of representative providing this report:** [gmacgill@uvic.ca](mailto:gmacgill@uvic.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

By the time of the meeting we should be close to filling the Kennedy Chair in Mathematical Biology

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

We held steady

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

The computational requirement for our undergraduate program has been broadened in the sense that Computer Science II and Intro to Data Science can now also be used to satisfy that requirement.

There have been some prerequisite changes. Of note to articulation, Math 151 now has a pre-requisite of university admission (Precalculus 10).

There have been some changes to Stat 252, Stats for Business, to include topics involving simple and multiple linear regression. These came at the request of the Faculty of Business

**4. Are there any concerns or issues related to articulation that you'd like to share?**

We note that some institutions have transfer agreements with Fraser International College listed in the Transfer Guide. UVic does not currently recognize FIC, which creates issues for students transferring from FIC to UVic.

A concern is what to do about courses that are incorrectly assessed, or where flexibility in assessment could be beneficial to students.

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

We have developed open source materials for Math 122, Logic and Foundations. A number of instructors use their own notes as an alternative to making the students buy a textbook. For Math 222, Discrete and Combinatorial Mathematics, we used Geller and Trotter this past term and it went well. For Math 211, Linear Algebra, we used Beezer and found it did not suit our course well.

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

Nothing that can be explained briefly.

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

We have a PIMS Education project to assist the transition from high school math to university math that, so far, has gone well.

**8. Do you have any other news that you'd like to share about your department or institution?**

Nothing that can be explained briefly.

## Vancouver Community College (VCC) – Math

Representative providing this report: [Costa Karavas](#)

Email address of representative providing this report: [ckaravas@vcc.ca](mailto:ckaravas@vcc.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

[No new hires.](#)

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

[Small decrease in enrolment. Not anticipating increase in enrolment if we remain online for the Fall 2021 term.](#)

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

[Offered first time MATH 2700-Probability and Statistics for Science and Engineering as part of our Computing Science and Software Systems Certificate](#)

**4. Are there any concerns or issues related to articulation that you'd like to share?**

[No](#)

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

[MyLab Pearson and OpenStax for Precalculus, Calculus, and Statistics.](#)

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

[Dr. Daum, founding member of the Board of Directors of Reconciliation Canada, worked with VCC in early 2021 to support Indigenization readiness initiatives. Along with Lindsay Heller, met with over 30 groups at VCC to find out things that are working, ideas that people have and barriers that people are facing. The idea is not to try to Indigenize VCC but rather after having many meetings with varied stakeholders, to make recommendations to leadership in support of moving forward with concrete plans and actions.](#)

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

[No.](#)

**8. Do you have any other news that you'd like to share about your department or institution?**

Exploring and applying for grant monies to install the WeBWork homework system.

VCC hosted COVID-19 vaccination clinics by providing space for Vancouver Coastal Health to administer COVID-19 vaccinations.

## Vancouver Island University (VIU)

Representative providing this report: [David Bigelow](#)

Email address of representative providing this report: [david.bigelow@viu.ca](mailto:david.bigelow@viu.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

[Patrick Ng will be retiring at the end December 2021.](#)

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

[They are down a little but not significantly.](#)

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

[No](#)

**4. Are there any concerns or issues related to articulation that you'd like to share?**

[No](#)

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

[We have used a few but I don't think any have become the go to textbook.](#)

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

[No](#)

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

[No](#)

**8. Do you have any other news that you'd like to share about your department or institution?**

[Glen Pugh will be taking over as Math Chair as of June 16, 2021.](#)

# Yorkville University

**Representative providing this report:** Dr. Mandev Singh

**Email address of representative providing this report:** [msingh@yorkvilleu.ca](mailto:msingh@yorkvilleu.ca)

**1. Do you have any announcements of new hires or retirements that you'd like to share?**

None

**2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?**

Like other post secondary institutions, we experienced slight fluctuation in admissions, as a result of the pandemic. However, the transition from on-campus to online teaching was not a major challenge. Like other post-secondary institutions, in line with the public health guidelines, the on-campus classes were primarily offered through synchronous online sessions for three terms in 2020 (starting April onwards) and are still being conducted online using Zoom. Efficient and effective online teaching protocols and processes have been developed during the last academic year. Exams were also conducted online using Zoom and MS Teams.

**3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?**

Yorkville University recently completed a major project to review, update, and redesign all business courses. All courses offered in the BBA programme were reviewed.

**4. Are there any concerns or issues related to articulation that you'd like to share?**

No

**5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?**

When the courses were re-developed after review, the use of open educational resources was encouraged. The textbooks available on BC Campus Open Ed have been adopted for various courses including Maths and Statistics. Also, several open textbooks available on BC Campus (<https://open.bccampus.ca/>) have been formally reviewed by Yorkville University's faculty members.

**6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?**

This has been initiated and we will share the work done next year.

**7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?**

Students from Yorkville University collaborated with the New Westminster Chamber of Commerce for a project to support local businesses. ([https://www.yorkvilleu.ca/volunteerism-club-granted-13k-to-train-students-to-assist-small-businesses-with-digital-marketing-needs/?fbclid=IwAR0qzWZSivgP\\_GYRR78\\_jqfaNq4a\\_3SZ\\_QEGHII15QpEZ9BIDxRkGdp0IY](https://www.yorkvilleu.ca/volunteerism-club-granted-13k-to-train-students-to-assist-small-businesses-with-digital-marketing-needs/?fbclid=IwAR0qzWZSivgP_GYRR78_jqfaNq4a_3SZ_QEGHII15QpEZ9BIDxRkGdp0IY))

**8. Do you have any other news that you'd like to share about your department or institution?**

Weekly workshops for Maths and Statistics – Faculty initiated effort to assist the students. These are conducted every week and are voluntarily managed by faculty members teaching the courses.

Funds to support Scholarly Research and Professional Development - Yorkville University provides Funding for Scholarly Activity (SASF) to support research. Every quarter, applications and ideas are invited, and faculty members apply for financial support for the research projects and professional development. SASF funds were used to finance/ support four faculty members at Yorkville University's BC Campus.

## Appendix I : BCcupms Institutional Report Template 2021

Institution: [xxxxx](#)

Representative providing this report: [xxxxx](#)

Email address of representative providing this report: [xxxxx](#)

Is this the only report which your institution will provide, or will there be another, or others, submitted by a representative for another discipline – Math, Stats, or Math Ed?

[xxxxx](#)

1. Do you have any announcements of new hires or retirements that you'd like to share?

[xxxxx](#)

2. Has your institution or department seen significant enrollment changes this year (domestic, international, or overall), or are significant changes expected in the coming year?

[xxxxx](#)

3. Are there any new or significantly revised programs or courses at your institution that you'd like to let the BCcupms community know about?

[xxxxx](#)

4. Are there any concerns or issues related to articulation that you'd like to share?

[xxxxx](#)

5. Are there any open access resources (texts or homework systems) that your department is using, particularly in first- and second-year transferable courses, that you've found to be particularly effective?

[xxxxx](#)

6. Are there any efforts towards Indigenization that have been made in your department, or at your institution, that you'd like to report?

[xxxxx](#)

7. Are there any outreach initiatives that have been made in your department, or at your institution, that you'd like to report?

[xxxxx](#)

8. Do you have any other news that you'd like to share about your department or institution?

[xxxxx](#)