YUKON UNIVERSITY, Earth Sciences

The new two-year Earth Sciences diploma program was formally approved in December 2019, replacing a nationally accredited Geological Technology program that ran from 2012-2019. Low enrolments were the main driving force for a change in programming focus and direction. The new program provides the first two years of a B.Sc. in geoscience and aligns well with CFES education requirements. A block transfer was formalized with Vancouver Island University's Department of Earth Science, allowing Yukon University students to transfer directly into the 3rd year of VIU's B.Sc. in geoscience.

Marketing for the new program began in earnest in early 2020 but the arrival of COVID-19 derailed many of these efforts. The university decided in early May to pull back full delivery of low enrolment programs, including Earth Sciences. The program did have a soft launch, offering standard first year courses in 2020-2021. However, instead of instead of offering a full suite of diploma courses in 2021-2022, the program will only offer first-year courses for the second consecutive year. Second-year courses will commence in 2022-2023.

Joel Cubley has stepped into a two-year term position as the chair of the university's School of Science; Mary Samolczyk has moved into his role as the head of the Earth Sciences program.

Yukon College officially became Yukon University in May 2020, with negligible changes in programming within the School of Science.

Joel Cubley

UNIVERSITY OF VICTORIA, School of Earth and Ocean Sciences

COVID-19 Effects

Undergraduate teaching at UVic in 2020/21 is online by default, with essential in-person teaching approved on a case-by-case basis. We are teaching our second-year Mineralogy and third-year Petrology labs in person in first term, and are approved to teach second-year Sedimentology and Structural Geology labs in second term. We were unable to teach our third- and fourth-year Field Schools in the summer of 2020, and teaching these (in some form) is a high priority for summer 2021. Undergraduate registration numbers in 2020/21 are close to normal (up slightly in first-year and service courses). Instructors and students are generally finding that the transition to on-line teaching and evaluation significantly increases workloads, and stress and mental-health issues for students are a concern. On-campus research labs reopened over the summer in a phased approach and field research programs were permitted (both required considerable administrative and logistical efforts).

Undergraduate Program/Course Changes

SEOS underwent an Academic Program Review earlier in 2020, which provided strong support and constructive advice for our programs. We are developing a new program in Climate Science (joint with the Geography Department) which will have 2 streams: Physical Climate Science, and Impacts, Adaptations and Mitigation. We are also revising our Earth Sciences program, which includes adding senior Sedimentology/Stratigraphy and Earth History courses and a second-year Oceans-Climate Systems course, plus introducing computer coding and analysis into a number of courses.

Faculty/Staff Changes

SEOS currently has 18 faculty members, although accounting for cross-appointments and secondments results in ~14 FTE positions. We also have a limited-term faculty appointment, 3 office staff, 3 senior lab instructors, a geochemical lab manger, and a scientific assistant.

Blake Dyer joined our faculty as an Assistant Professor in November, 2019, with research in Earth history, sedimentology and carbonate geochemistry. Andrew Fraass will join us in July, 2021, with research in paleobiology/paleoceanography. We have hired 7 new faculty members in the past 5 years, which represents a significant rejuvenation (but not growth) for the School.

Senior lab instructor David Nelles will retire in January, 2021. David is responsible for, among other things, field schools and field trips, and his outstanding logistical support will be missed. *Stan Dosso*

SIMON FRASER UNIVERSITY, Earth Sciences

Faculty and Staff

We have 19 faculty members: 2 Assistant Professors, 1 Associate Professor, 12 full Professors, 1 Teaching Professor, 2 Senior Lecturers, and 1 Lecturer. We also have 21 adjunct faculty, 3 Associate Members, and 2 Professor Emeriti. Our staff consists of three office staff responsible for all administrative activities, 1 Senior Technician, and a Resource Specialist

New additions

We were successful in our search to replace our geological engineer, Dr. Doug Stead, FRBC Chair in Resources and Geological Engineering. The final paperwork to confirm an offer letter to the new Chair is winding its way through the university administration and should be completed before the end of the year. Projected start date is May 2021. We are also in the very preliminary stage of a CRC search (to be jointly appointed in Earth Sciences and the School of Environmental Science) for a new position in Flood science.

Enrollments

Undergraduate enrollments have dropped again, and we now have 53 majors and 3 minors. In addition, we have 1 Honours and 1 Major joint with Chemistry. Our undergraduates mainly take one of two streams, Geology or Environmental Geoscience, both of which lead to Professional Registration with the Engineers and Geoscientists of British Columbia. We have launched focused efforts in Recruitment and Engagement along with ongoing outreach

with local high schools. We are also undertaking a review of our undergraduate program and courses with a view to streamlining and facilitating student progress; this is also with an eye to rationalising course offerings in advance of a number of upcoming retirements.

Our Graduate program has seen a slight decrease with 45 students representing 22 PhD and 23 MSc.

Covid-19

The pandemic forced a rapid move to online teaching in the Spring semester and continued online lecturing/labs this Fall. Summer field courses were cancelled. We have been fortunate in being allowed able to offer limited Face to Face labs (2 hr labs for 6 weeks) in 6 undergrad courses. Slight loosening of restrictions by the University will enable expanded F2F labs in 6 courses (3 hr labs for 8 weeks) as well as limited 1-day field trips in 3 courses in Spring 2021. We are cautiously optimistic that we will be able to offer our 3 field schools in the Summer 2021 session.

Some faculty and graduate students were able to do fieldwork in the Summer 2020; while no international travel was possible some interprovincial and territory work was allowed.

Notable Awards:

- Professor Shahin Dashtgard: GAC WWW Hutchison Medal
- Professor (emeritus) John Clague: Order of Canada

News:

Two successful CFI-JELFs (to Jessica Pilarczyk and Brendan Dyck) have allowed for acquisition and recent delivery of a scanning electron microscope (SEM) and Itrax XRF core scanner; installation and full operation of both are delayed by COVID-19 restrictions. We are awaiting news on a $7.4M CFI application "*The Canadian Natural Hazards facility and Knowledge Portal*" and should hopefully find out this month. We also submitted an LOI to the New Frontiers in Research Fund Transformation entitled "*Natural Hazards Knowledge Mobilization – Building Resilient Societies*". The ask is for $19.4 million and would support HQP and research over a 6-year period while further building capacity in the Centre for Natural Hazards Research.

Challenges:

- Faculty coming up for retirement. A significant proportion of the faculty will retire in the next 5-10 years. We are concerned about faculty renewal.
-Space
-Low Enrollments

Glyn Williams-Jones

THOMPSON RIVERS UNIVERSITY

We continue to offer a limited geology program through the BSc General Science degree and the two-year Associate of Science. The new BSc Geoscience program continues to move forward in collaboration with other departments in science and arts. The program is designed to meet the knowledge requirements for all three streams of EGBC, and as described by Geoscientists Canada, as well as boost enrolments in cognate disciplines. We can also offer geoscience-related graduate programs through an MSc in environmental science (an interdisciplinary program). We have a new dean who seems supportive of the initiatives and is establishing a new committee. Our faculty currently comprises one full-time and two part-time faculty in geology (part of physical sciences), but students also take courses through physical geography and natural resource science.

To build teaching and research capacity we have received funding through CFI, BCKDF and a private donor to establish the MICA Lab (Micro-imaging and Chemical Analysis). Two critical new pieces of equipment, the ICP-MS and SEM/EDS (with a nice suite of image analysis software) should be installed by the end of this year, early next year. The lab also includes reflected and transmitted light polarizing microscopes, a digital microscope, and prep equipment, and a plan for collaborative management ensuring broad access to the facility and sustainability of the equipment.

Our enrolments have been steady though we were forced to cut a section of intro this fall to save money in other sectors that have lost enrolments. Nevertheless, this fall we have 51 students in Intro and 18 in Environmental and Forensic Geology. My sabbatical was postponed to next year due to Covid, and we are optimistically anticipating a full-time replacement.

Nancy Van Wagoner

UNIVERSITY OF BRITISH COLUMBIA – OKANAGAN CAMPUS

The Department of Earth, Environmental and Geographic Sciences (EEGS) consists of 17 faculty: 6 Professors, 10 Associate Professors and 1 Assistant Professor and 2.7 FTE support staff (three individuals). Two faculty members are cross-appointed with Biology. Two faculty currently are seconded to administrative positions in the Dean's Office and three faculty have reduced time (0.5 FTE) appointments leading to retirement. Dr. Fes de Scally (physical geography) retired in June 2020.

On 1 July 2020, the Irving K. Barber School of Arts and Sciences restructured into two separate Faculties: the Irving K. Barber Faculty of Science and the Irving K. Barber Faculty of Arts and Social Science. The new Dean of Science is Gino DiLabio.

John Greenough was the recipient of the 2020 Career Achievement Award from the Geological Association of Canada Volcanology and Igneous Petrology Division.

The department presently is concluding two Assistant Professor searches (Geographic Information Science and Geochemistry) carried over from the 2019-20 academic year. An additional Assistant Professor position in Earth Observation has been approved for 2020-21. We also expect to recruit a new Associate Professor in Watershed Science during the coming year pending Provost approval.

There is currently a freeze on new staff hires at UBC Okanagan. Our department has two unfilled support positions: a 0.5 FTE administrative support position in the department office and a 0.5 FTE teaching laboratory technician.

The first Charles E. Fipke Foundation Award of $10,000 was made this summer to an incoming student enrolled in the Earth and Environmental Sciences undergraduate degree program. A $1M endowment supporting this award is now complete. Four annual awards of $10,000 will be made in future years to students in the Earth and Environmental Sciences degree program. Selection criteria for the award are academic performance, financial need and a demonstrated interest in geology.

We have been confirmed as the host department for a new Bachelor of Sustainability degree program. The program proposal is in the final stages of review at the BC Ministry of Advanced Education, Skills and Training. The program is expected to open in September 2021.

Our cartography laboratory is undergoing a $200k renovation to convert the space into a dedicated computer suite for our new Minor in Geospatial Information Science degree program. The lab will have 24 workstations and includes conversion of an adjacent room into a GIS helpdesk and print facility that will be operated by the EEGS Department. The computer suite will be available for teaching from 1 January 2021. The GIS workstations can be accessed remotely by students during scheduled lab sessions while COVID-19 restrictions to campus remain in force.

Ed Hornibrook completed a five-year term as department Head in June 2020 and was renewed for a further three-year term.

Edward Hornibrook

MOUNT ROYAL UNIVERSITY, Earth and Environmental Sciences

Enrollment

Our undergraduate enrolment has declined at <200 students, spread over a BSc– Geology (70) and BSc–Environmental Science (120). We also have 8 students in BSc–General Science with concentration in Earth Sciences, and 3 students taking a Minor in Geography. In 2020–21 we will have approximately 1200 students registered in service or general education courses.

Faculty & Staff

The department currently has 16 tenured/tenure-track faculty, 1 emeritus professor, 2 full-time lab instructors and 3 instructional assistants. The department had two instructional assistants leave in 2019-20 (1 resignation; 1 retirement). We replaced 1 position with a new Geoscience Technologist (Candace Toner).

Research

Our research activities cover the following five broad domains: mineral resources; radiogenic isotopes and tectonics; marine geology; groundwater; ichnology & palaeontology. Faculty are funded through NSERC Discovery, NSERC SPG, CFREF, Metal Earth, and other external grants.

Highlights

- Our department has set up a large endowment fund to support direct costs of field work for student trips and research
- New concentration in Environmental Geoscience and new Geoscience Minor beginning in 2021 that meets the educational requirements of Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Challenges

- Find physical space to house contract instructors and research assistants, and store research equipment and rock collections
- New international field schools in the time of COVID-19. Courses are based in Iceland (led by Michelle DeWolfe) and Cyprus (Jeff Pollock)
- Secure replacements for several recent and upcoming faculty retirements
- The budgeting process at MRU has come under intense scrutiny in the past year with declining enrollments and revenue. Funding to the institution may be reduced by up to 10 per cent in the new provincial budget.
- Preparing for the implementation of Alberta's performance-based funding model for universities

Jeff Pollock

UNIVERSITY OF CALGARY, Geoscience

The department offers a BSc degree in Geology and a BSc degree in Geophysics. It also houses a large and vibrant graduate student cohort. The department is well aligned with the institutional Energy Strategy (Energy Innovations for Today and Tomorrow) and plays an important role in the University of Calgary Canada First Research Excellence Fund (CFREF) program entitled "Global Research Initiative in Sustainable Low Carbon Unconventional Resources".

Faculty and Staff

The department has currently 34 full-time faculty members (20% are female) including 3 research chairs, 2 program directors and 7 instructors. Over the past six months there has been a major re-organization of the Faculty of Science, with most staff members redistributed or let go as a consequence of centralization of services. Although we are still well supported, our staff largely do not reside on teams in the department. We have >35 soft-money-funded-research staff members.

Enrollment

Undergraduate enrolment has decreased from an all-time high of more than 800 students between 2012 to 2016 to 270 registered undergraduate students (2019-20). The incoming cohort of 2nd year Geoscience students has stabilized at circa 30-35 students. The number of graduate students has also decreased somewhat to ~150 in thesis-based PhD, thesis-based MSc, and course-based MSc programs.

New Developments

- Our Department Head, Dr. Bernhard Mayer, was tapped to fill in as Interim Dean for 2020-2021 upon the sudden departure of our previous dean;
- We have filled a CRC tier 1 position in Geomicrobiology (Dr. Marc Strous);

- We are working on a new departmental strategic plan (2021-25) with the goal to remain a leading and modern Department of Geoscience that is attractive to undergraduate and graduate students interested in studying Earth Science topics that address societal grand challenges;
- The department recently voted towards integrating the Geology and Geophysics degree programs into a B.Sc. in Geoscience, with a mind towards removing the discipline-based "silos" and encouraging more interdisciplinary study.
- We are exploring the options of revenue generating programs such as professional masters degrees, certificates and diplomas, driven by the reduction in the Campus Alberta Grant (historically provides ~50% of operating budget, across the University).
- Pandemic responses – completed winter 2020 semester online, three large lecture-based classes in the spring ran virtually fraught with academic misconduct, all field schools canceled and no virtual replacement ran, Fall 2020 semester run in a hybrid style with some in-person labs (elevated safety precautions and no incidents to date), return to campus for lab-based researchers staggered and now largely complete.

Challenges

- The major challenge over the next four years will be to deal with successive cuts to the Campus Alberta Grant. Initial cuts were substantial, more have followed, and more are anticipated. This past summer, a major staff reorganization across the Faculty of Science resulted in centralization of services. A number of support staff in our department were moved to new teams, with a number of positions abolished;
- Last year we still graduated 75-100 undergraduates, who faced a challenging job market
- Adjust to a new budget model that is partially based on bums in seats.

Steve Hubbard

UNIVERSITY OF ALBERTA, Earth and Atmospheric Sciences

A challenging year for all of us, but perhaps most challenging for the Albertan PSE institutions where government support for universities has been severely curtailed. The result has been significant ongoing budget cuts. Since February these budget cuts have, in EAS, resulted in termination of the following staff positions:

1 - Financial Admin assistant (contract employee - contract not renewed)
2 - Departmental Graduate Program Administrator
3 - Field & Field School Equipment Manager
4 - Thin Section technician
5 - ICP MS technician
6 - ICP MS technician
7 - Health & Safety Administrator
8 - Lab technician (transferred to soft money support position)
9 - Electrical technician (primarily ICP MS and Electron Microprobe support)
10 & 11 - two technical positions that were open and are now not going to be filled.

I am expecting (possibly this week) instructions regarding the next round of lay-offs (I expect to lose at least two more positions).

In addition, a 'soft' or recommended hiring freeze that was instituted in 2019 is now an official hard hiring freeze. Luckily we were able to squeeze in one last new position - Faculty Lecturer in Urban and Regional Planning - prior to implementation of the hard hiring freeze. Neal LaMontagne had joined our School of Urban and Regional Planning and we are extremely lucky to have him.

We had four Assistant Professor's up for tenure & promotion this year, and all four received unanimous approval from the Faculty of Science committee responsible for tenure review. With these four promotions, we now have 10 Associate Profs and 4 Assistant Profs. We had 4 retirements this past year, leaving us with 31 Full Professors, for a total of 45 faculty members (3 of whom are x-listed in Physics and 1 in Biology).

Enrolment - remains weak. However, the diversity of our department, with Urban Planning and Human Geography programs in addition to our Earth Science and Environmental Earth Science programs, is propping us up. Student demand for the Planning and Geography programs remains high and is rising. Earth Sciences? Not so much.

Challenges

1) Restructuring of the university - UAlberta currently has 19 faculties. Efforts are underway to reduce that number, perhaps down to 3. Science may end up in a 'super faculty' with either Engineering or possibly with Arts. However, Science teaches almost a quarter of the students taught at UAlberta, brings in more than a quarter of the university's research funding, and is responsible for only 8% of its administrative costs. We are the most cost-effective faculty on campus and on this basis we (the Chairs of all the science departments) have requested that the university leave us alone.

2) Field School - will we be able to teach field schools this coming year? If not, we are faced with a significant problem. Professional accreditation and our degree specifications both require the completion of an Earth Science field school. What to do? There is a bigger issue here - field schools are a significant barrier to diversity in the Earth Sciences. In order to address the incredible lack of diversity in the Earth Sciences (we are the least diverse science by a significant margin) we need to remove field schools as a requirement for an Earth Science degree. We also need to convince Geoscience Canada to remove field school participation as a requirement for accreditation.

3) Enrolment - we have two problems. 1 - In Alberta Earth Science is synonymous with Petroleum. Educating parents and potential students about the broader Earth System questions that can be addressed through an Earth Science degree is a tough nut to crack in this province. 2 - There is incredible demand to enter our Faculty of Science, primarily for degrees in either Biology (as an entry point in the UAlberta medical school) or Computing

Science (which has an extremely highly ranked Artificial Intelligence program). This demand has driven up the entry level grade requirement to the point that few students interested in the Earth Sciences have the grades necessary for acceptance into our faculty.

Stephen T. Johnston

LAKEHEAD UNIVERSITY, Department of Geology

In 2019/2020, our enrollment of majors has declined with 52 currently enrolled down, from 74 last year. Thirty-two are enrolled in the HBSc Geology with the others in Environmental Earth Studies, Water Resource Science and the BSc degree. In addition, we currently have 11 MSc students in our program with three more starting in January.

We have six faculty and two active emeritus professors and this year will be hiring four sessionals in order to cover teaching relief provided to offset additional administrative duties. We also have one contract lecturer teaching First Year Geology at our Orillia campus. One of our Faculty has announced that they will be starting a phased retirement at the end of the current academic year. We are currently advertising for a tenure-track appointment in Structural Geology with an anticipated start date of Summer 2021.

Covid-19 has created some interesting challenges but we have managed to teach all our Geology labs face-to-face with online lectures. We also taught our fourth-year field school in the Fall and are planning to teach our second year field school in the Spring. The Faculty is currently out of contract and we are in mediation with the Administration, the main issues are the pension plan and the administration's attempt to add a clause to the collective agreement that would give the President the power to fire or terminate faculty at will.

This will be my last year at the CCCESD as I am finally done my time as Chair! *Pete Hollings*

LAURENTIAN UNIVERSITY, Harquail School of Earth Sciences

Faculty/Staff

Laurentian remains under a hiring freeze that started in Fall 2019 and we do not have approval to replace our geochemistry position (departed in 2017) nor our environmental-focused position (departed summer 2019). The university president has indicated Laurentian is moving to a performance/activity-based funding model. We expect three faculty to retire in the next 1-4 years and we have funding lined up for three mid-career level research chair positions but have not been able to obtain approval to hire due to budget concerns in 5-10 years. We plan to have our Tier I CRC Metallogeny position filled, with a 2021 start date. The faculty of Science, Engineering and Architecture experienced a reduction in administrative assistant positions, and in the reshuffle we were able to fill a vacant ½ administrative assistant position.

Enrollment

For the Fall 2020, our undergraduate enrollment is up slightly (64 FTE) compared to the past Winter term (57 FTE). We were expecting a decrease in new 1st-year BSc students, but we saw an increase of approximately 5 students compared to the previous year. Our MSc enrollment is down slightly, partially due to 6 international students in our 1-Yr Applied MSc in Mineral Exploration that did not arrive for the Fall term, presumably due to COVID-19 related travel problems. Our PhD enrollment is steady, with 31 registered PhD students. We offered six new Harquail BSc scholarships ($5k each) derived from donation funds, and will offer four additional scholarships to new students in either Winter 2021 or Fall 2021. I project a continued decrease in research MSc/PhD enrollment over the next 2 years as most faculty are supervising on average 5 research based graduate students; research based graduate enrollment will not increase until faculty renewal. If we can successfully move our 1-Yr Applied MSc program to coursework-only, we have an opportunity to significantly increase non-research based graduate enrollment.

COVID-19

Laurentian is offering most courses in a remote delivery format in both Fall 2020 and Winter 2021. Our Spring 2020 Field School II course was cancelled, but we were able to deliver our Fall 2020 Field School III in-person in the field. Our Fall 2020 Field School I course was moved to Spring 2021 at the request of Laurentian administration and Health and Safety. If we will be able to teach Field School I and II in Spring 2021, we will have covered all of our students for field geology program requirements. All other courses are being delivered remotely. Our BSc thesis and graduate students all have access to our building for research purposes only. Some of our research labs are housed in the OGS government lab facility in our building, and this has caused a significant issue for many of our research students because that facility was completely shut down from March 12 – October, and currently only a few lab technicians are allowed in the labs to provide analysis. Of significant concern is there does not appear to be any desire from the government side to allow any students/post-docs to access the facility for the foreseeable future.

Doug Tinkham

UNIVERSITY OF WINDSOR, School of the Environment

One retirement over the past year – Alan Trenhaile – after 50 years of university teaching. Alan was fixture in geomorphology in Canada and his contributions to the unit and discipline will be missed.

New faculty hires (including retirement replacements) are on hold due to budgetary constraints. We have been told that future hires need to be directly linked to new program developments with enrolment growth, which is concerning for smaller units such as the SoE. These strategies tend to work better for course-based 'professional' Masters programs (e.g., computer science and engineering), which have historically been targeted at foreign students. In my opinion, this approach will need to be revisited in light of impacts due to COVID, which have caused dramatic enrolment decreases in these programs.

Undergraduate enrolments are stable (~ 35 Environmental Science and 80 Environmental Studies), however, there is concern that COVID deferrals might impact the entire university in the coming year. Early expressions of interest for academic year 2021-22, however, suggest enrolments in our program will be approximately equal to this year.

Graduate enrolments are stable to slightly decreasing, which reflects retirement or ramping down of research programs by older faculty members.

A new GIS certificate is now in place and students entering in Fall 2021 will be able to complete the certificate as part of their BSc or BES degree program. The certificate has been designed to be accessible to many other undergraduate degree programs within the university, which should help enrolment.

We have completed design and a 2+2 degree completion pathway for students in Ontario colleges that have completed Environmental Tech or Forestry Tech programs. Students will be able to obtain a BSc in Applied Environmental Science after completing 20 university-level courses. Intake is expected to commence in Fall 2021, pending final university approval. The program is designed to help college graduates qualify for jobs requiring a minimum of an undergraduate science degree.

We are in the midst of preparing our IQAP Self Study document in preparation for our external program review in Spring 2021. This is the first IQAP to incorporate all of our programs (BSc, BES, MSc and PhD). We will be reaching out to other universities for external reviewers in the near future (wink, wink).

The university invested in an engineering study of Memorial Hall, which determined that the building has at least another 50 years life. Consequently, a new roof was installed and plans to move the SoE to other buildings on campus (appear to) have been cancelled.

SoE faculty and staff, for the most part, have adapted well to the online learning model that was necessitated by the COVID pandemic. We will continue to be nearly exclusively online next term (Winter 2021) with the exception of courses that necessitate in class learning (e.g., courses involving wet chemistry laboratory space). These courses will be adapted to meet COVID social distancing requirements. Student feedback to online learning has been mixed with some appreciating the recorded lectures, which enable easy review of difficult concepts, and others struggling with isolation.

We offered one field-based course since institution of COVID-related restrictions (Great Lakes Geomicrobiology) in order that some students could complete their degree requirements on time. Most of the 'field' work was accomplished through videotaping GAs conducting the activities. Student feedback was generally positive, however, the lack of a true field experience is problematic and we continue to work on options for students to complete our field-based courses.

Joel Gagnon

UNIVERSITY OF WESTERN ONTARIO (Patricia Corcoran)

Current Faculty complement:

• 21 full-time faculty including 2 CRCs, 1 externally funded chair

Current staff/student complement:

- 15 support staff
- 101 graduate students
- Approx. 78 undergraduate students enrolled in years 2, 3 and 4 (does not include 1st year students)
- 6 post-doctoral fellows
- Approximately 2000 students in service courses per year

Programs:

- Undergraduate programs for Professional Registration in Geology, Geophysics and Environmental Geoscience
- Major in Geology; Minors in Geology, Geophysics, Planetary Science and Space Exploration
- Graduate MSc and PhD programs in Geology and Geophysics
- Collaborative graduate programs in Planetary Science and Environment & Sustainability
- Joint JD/MSc in Geology or Geophysics and Law
- Focus on field education with 6 field courses offered each year

Major changes in the past year:

- Beginning work on moving Western Environmental Science modules into our department
- Undergraduate and graduate external reviews complete
- Preparation for GAC-MAC 2021

Major challenges in the future five years:

- Decrease in Limited Duties appointments
- Decrease in international students due to Covid-19
- Four of our current 21 professors will retire
- Continue to face low undergraduate enrollment
- Hosting 2021 GAC/MAC meeting in a virtual format or hybrid model

Patricia Corcoran

UNIVERSITY OF WATERLOO Earth and Environmental Sciences

Faculty/Staff

Over the past year our faculty has increased in size through the largest period of growth since the mid 1970s. We have hired and now fully incorporated new Assistant Professors in Geomicrobiology, Integrated Hydrosystem Modeling and Biogeochemical Modeling. In addition, we have welcomed a Spousal hire in the area of Environmental Geochemistry at the Associate Professor level and a Research Assistant Professor in Critical Zone Hydrology. Of note, the Central Administration has decided not to provide support for Spousal hires in the future and salary support will be completely the responsibility of the Departments involved with the spousal issue. Over the last 4 years, we have moved towards the inclusion of continuing and definite term lecturers. We

have hired a continuing Lecturer in Stratigraphy and Sedimentology and 2 to 3-year definite term lecturers in Geophysics, International Programs and Early Year/On-line education. The Lecturer positions are considered as Faculty and these hires may impact the potential for future regular faculty hires. Four of the seven hires are female, which significantly improves our gender balance. These hires were finalized during a period of a campus-wide hiring freeze that only allowed hires that were "mission critical".

Current Student Enrollment

For the Fall 2020 first-year enrollment, we were expecting lower than usual numbers of applicants and a significant percentage of deferrals. We were surprised with a slightly better than average intake and only one deferral in each of our Earth and Environmental Sciences programs and Geological Engineering. Approximately 70% of the incoming students have applied to the Environmental Science streams (either Geoscience or Water Science), which has been a trend over the last few years. We are anticipating that this has had an impact on the number of students applying for our more classical Geoscience programs. We have introduced a new Water Science program within the Environmental Sciences offerings that is being run in collaboration with Wuhan University of China. Currently a total of approximately 65 Chinese and domestic students are enrolled and it has become more popular than we had expected. A major challenge has been to facilitate the Chinese students to come to Waterloo to start their course program as part of this collaboration as a result of Covid-19. All courses are being delivered on-line. The challenge of attracting students into the Geosciences remains a concern and should be addressed at a national scale. Currently we have about 280 students in all years within the undergraduate EES program and about 120 in GeoEng. Our Graduate program enrolment has dropped somewhat to ~95 MSc and PhD students combined. The major drop was in MSc students. Research activities and funding supporting the Graduate Studies program remain strong and continue to diversify. We have tried to maintain some in-person geological labs and outdoor training activities including the Geology Mapping course. This remains a challenge but so far have been successful endeavours. Finally, as is the case for all programs across Canada, we continue to expand our on-line course offerings, building on the material and effort put into the overall pivoting to a virtual instructing environment.

Other Challenges

We are continuing to enhance outreach to local High Schools in concert with central UW outreach and becoming more directly engaged in the overall recruitment process. New recruitment videos have been developed for Geological Engineering and the classical Geoscience programs. One is now in development for Environmental Sciences. We have been trying to understand how a ranking system such as that used by MacLean's Magazine defines and assesses Environmental Sciences across Canada. This has proven to be very confusing and overall has an impact on student recruitment. We continue to focus on clarifying the distinction between all environmental options on campus and Geosciences. This remains a confusing entry point for new students. We are concerned by the reduction in students applying for the classical geoscience areas (Geophysics, Hydrogeology, Geology) in favour of other Environmental programs. We are interested to discuss the potential to share online offerings with all students across Canada and all interested Geoscience programs to reduce the need to develop redundant, online course material. The challenges to maintain a reasonable level of in-person and experiential learning remain. *David L. Rudolph*

McMASTER UNIVERSITY, School of Earth, Environment & Society

Formerly the School of Geography & Earth Sciences, the School changed its name effective July 1, 2020 to the School of Earth, Environment & Society (SEES), which we feel better reflects who we are and what we do.

SEES has a complement of 25 fully appointed faculty, and an additional 4 faculty members with joint appointments. The 25 include 4 teaching faculty and 21 research professors. 12 of the research (full appointment) professors would be considered either earth or environmental scientists and of these, 10 hold NSERC awards. We have 1 CRC chair (Waddington) and 1 privately endowed chair (Bhattacharya). SEES faculty secured approximately $8 million in funding as of 2020, and we average about 100 publications/year. A significant component of our undergraduate experience includes experiential opportunities, which start in our first-year courses and carry through 4th year. We offer a 2nd year field course to help recruit students to our program, as well as a 3rd year field course. We successfully recruited a structural geologist (Alex Peace) and a remote sensing/GIS specialist (Alemu Gonsoma) during the 2018/19 academic year, with both starting July 1, 2020. We are currently advertising for a Fluvial Geomorphologist, reflecting an endowed Chair position. Unfortunately, Alan Dicken, a long-term member of the School, retired effective August 31, 2020.

We currently have about 90 graduate students, about 70 are full time, and about 50% are PhD versus MSc, with a slight majority of graduate students in earth and/or environmental science. Undergraduate majors are about 229 in the BSc programs, reflecting a modest growth in enrollment numbers over the previous year. Of these, 72 are in our Earth and Environmental Science programs, with the balance in our Environmental Sciences, Biology and Environment Science programs, and Geography and Environmental Sciences programs. We continue to emphasize APGO certification.

Like other schools, the pandemic has had a significant impact on the School and its research. Courses were moved online in March, and all field courses for 2020 were cancelled. Although McMaster has developed and implemented a Return to Research plan, some faculty were not able to gain access to their field sites to conduct research during the 2020 field season. All teaching in the spring, summer and fall of 2020 was virtual. The winter term of 2021 will also be virtual, except for a limited number of 'hands-on' courses that require lab time and received permission to proceed. Recognizing the need to pivot teaching opportunities, several earth science faculty members

have secured funding to create virtual field trips and online learning environments that will enhance the virtual classroom experience.

Bruce Newbold

BROCK UNIVERSITY

Faculty complement consists of 8. Long-time faculty member Greg Finn finished his term as the University's Provost & Vice-President, Academic and is now on academic leave for several years. No replacement was provided, and the department had no retirements. Two cross appointed faculty members in Geography continue to contribute primarily to the graduate program.

Undergraduate enrollments beyond first year have dropped somewhat as several students have decided not to return this year. Enrollments in first year courses are dominated by two online context courses. Brock's current funding model allocates tuition from context courses to the unit offering them, which helps to offset departmental costs, including salaries. Hence the department continued to offer these courses during the summer with enrollments >500. During the fall/winter sessions enrollment in these courses is down somewhat, though still respectable with >900 students each.

During the last year, the department and one of its initiatives (a BA option focused on communication) have undergone a review process after some delays, which in both cases, was carried out via video conferencing. While this is not ideal for either the department or the reviewers, it does allow us to move forward.

The first review was for the Department's proposed new degree in Earth and Planetary Science Communications. The reviewers made some insightful suggestions, and the proposal is currently undergoing revisions. Like many activities under COVID this process is slower than it would during regular working conditions. Nevertheless, it is our hope that the revised proposal will be going forward before the end of the academic year.

The second review was the normal cyclical departmental review that is due every seven years. Reviewers made several recommendations that are currently being considered by the department. Like at several other institutions, environmental geoscience appears viable but traditional geology is struggling.

Other than that, the activities of the department have obviously been centered on our COVID response. Brock shut down in mid-March and all classes were moved abruptly to an online format. During the spring access to the campus and our research labs were severely limited, but access was granted to individual heads of labs with strict COVID protocols since early summer. Extra-regional travel (field work, conference, etc.) remains prohibited, affecting several researchers and grad students. Brock's Faculty of Graduate Studies provided funding for an additional semester for students whose research was adversely impacted by the restrictions (virtually all of our current cohort) and only two new students enrolled in the MSc program this fall, in part because of restrictions on international admissions.

All regularly scheduled classes were moved online for the fall term, although we did get permission to allow students to complete the Quaternary/ Environmental Geoscience Field Camp that was canceled in spring, although with substantial restrictions and accommodations. We are currently planning to offer three courses with in-class labs (mineralogy, optical mineralogy and paleontology) during the winter term, again with substantial restrictions and accommodations.

Francine McCarthy

UNIVERSITY OF TORONTO, Earth Sciences

Our faculty renewal and growth continues: in July 2021 experimental petrologists Dr. Corliss Sio and Dr. Neil Bennett start as Assistant Professors here, and Dr. Andrei Swidinsky joins us (from the Colorado School of Mines) as the Teck Chair in Applied Geophysics. We are in the midst of a search in Near-surface Geophysics and have a vacant position to fill later this year or next year--possibly in structural geology. Overall, the new hires (four others in the last three years, in addition to the current searches) have led to a much younger, more dynamic faculty group--much needed faculty renewal for the department.

Like all institutions, we faced various pandemic-related issues, but things seem to have settled into some normalcy of online learning. The year started with a mix of in-person and online classes, but this got modified to purely online once COVID-19 case numbers in Ontario started to rise. We're still waiting for final enrolment numbers for this year, but a lot of our classes have seen significant increases in numbers in this pandemic year (e.g., doubling/tripling in some 2nd and 4th year classes). Our field camps were cancelled this past summer, in addition to our regular host of international "extra" field excursions/modules. One of our faculty members, Dan Gregory, created and deployed an online field course that we allowed as credit for our introductory field camp at Whitefish Falls (and customized appropriately). Approximately 9 students enrolled in the course and based on their evaluations, they found it to be a positive learning experience--e.g., wandering around virtual outcrops with their various avatars--they missed the camaraderie of learning in-person for field work.

Research operations are essentially back at nominal as in-person lab work started in the summer (with lots of paperwork). A new group of graduate students started in the Fall. Some international students are still stranded in their home countries, but the online courses and research adjustments have allowed them to start without major complication. Graduate students, in particular, are anxious about the impact of the pandemic circumstances on their completion times (MSc and PhD). We have provided various rounds of "emergency funding" to grad students, but we're finding ways to bank funds in anticipation of needing to support a decent number of students with extra time for their graduate programs.

We are undergoing a departmental review this year – not as satisfying since the review visit will be entirely virtual. Nevertheless, we look forward to a few CCCESD members helping with the review.

Russ Pysklywec

QUEEN'S UNIVERSITY Geological Sciences & Geological Engineering

Retirement of Dr. Noel P. James, OC, now Emeritus

Passing of Dr. Edward Farrar Nov 8 2020

New hire – Dr. Hom Nath Gharti – although he's not yet arrived from the US owing to Covid. We are still awaiting permits etc. Hom Nath is a Geophysicist/Geodynamicist and is an expert in high performance computing (he was hired as a "Digital Earth Scientist" and interestingly was interviewed in the early stages of the pandemic and has not actually set foot on Queen's campus).

New alumni donor funded project – Geoselenics project investigating the earth and moon interaction, to fund PDF for 5 years, just launched recently.

Chris Spencer awarded the GSA Donath Medal (Young Scientist Award) in October 2020.

With Hom Nath's hiring we have a total of 8 new faculty members in Geo since 2017/2018, with a 9th cross-appointed between Geo and Geography.

Queen's now has a hiring freeze and no vacated positions will be retained.

As Peir noted last year, space is now at a premium, and we were starting to fund-raise around research lab renovations, although on hold until probably next fall.

Miller Hall turned 90 this fall.

We have provisional approval to hold our 2nd year Field Methods course in late April 2021. We will seek approval for some offerings of field school. An external expert in Emergency preparedness and field safety (also with a Ph.D in Geo) has offered to review our field plans. *Vicki Remenda*

CARLETON UNIVERSITY – Earth Sciences

Enrolment: Our four-year undergraduate enrolment has decreased slightly to 94 students, spread over 10 programs and concentrations. We also have 13 students in B.Sc.H. - Environmental Science with Concentration in Earth Sciences, and 59 students taking Minors in Earth Sciences. In 2020-21 we have over 1650 students registered in service or general interest courses, compared to 2900 in 2019-20, but the good news is that enrolment in our two introductory earth sciences courses are both up by 20%. For 2020-21 we have 35 graduate students, 13 MSc and 22 PhD. Carleton now waives the non-resident tuition for international PhD students.

Faculty and Staff Members: We have nine full-time faculty members, one cross-appointed (one-half time) faculty member in Environmental Sciences, one Instructor in Geophysics, a First-Year Laboratory Coordinator, six administrative and technical staff members, and several contract instructors. The department has hired a full-time, University-funded Laboratory and Contract Specialist for the Isotope Geochemistry and Geochronology Research Centre, Shuangquan Zhang. Claudia Schroder-Adams retired in July 2020, and the department was given permission to advertise for a replacement in Environmental Sedimentology. The new faculty member will hopefully join the department in July 2021. We will have another retirement in June 2021 that we hope will also be given a replacement position.

Space: To resolve the issue of lack of space for storage of sensitive geophysical and field equipment and rock collections, we have a proposal for a "Field Research Facility" in the preparation stage that will include us, Environmental Sciences, and Biology. Facilities Management is planning a new parking garage on campus with space allocated for storage. A fire in the Steacie Building in February 2019, caused by faulty wiring in a 50 year-old fume hood, shut down Tim Patterson and Rich Amos's research lab, along with the brand new XRD lab, and all of these facilities are now up and running again. Most of our teaching, administrative, and research lab space will undergo renovation (lighting, HVAC, repairs) during the summer of 2021 to bring the rooms up to modern standards. The IGGRC clean labs in Steacie will also be shut down for the summer of 2021 for a floor-to-ceiling renovation.

Quality Assurance: We completed learning outcomes (LO) for both undergraduate and graduate programs. Both the Undergraduate and Graduate (Ottawa-Carleton Geoscience Centre) program review volumes are complete, approved by Carleton, and we await External Review Committee "site visits" in January and March 2021.

Ottawa-Carleton Geoscience Centre: The Director of OCGC for 2020-2021 is George Dix at Carleton University. The OCGC Directorship will transfer to uOttawa Earth and Environmental Sciences in July 2021. In 2018-2019, the OCGC helped fund and organize an invited seminar series (joint with the GSC Logan Club), student transportation to the PDAC Annual Meeting, and the annual OCGC Alumni Reception at the Royal York Hotel during the PDAC.

Funding: The Department is involved in two CFI proposals, the first for a new field emission microprobe and for ICP-MS/laser/TIMS instruments ($5M), and a second collaborative proposal with the Great Lakes Institute at U. Windsor ($2.5M). We hope to get positive news on both fronts in the near future.

Highlights:

- Two new endowed funds for student travel (K. Sethu Raman Endowment) and expenses for Honours thesis students (Charlie Roots Scholarship).
- Excellent alumni attendance at the PDAC Alumni Reception.
- Overall, a good transition to online teaching for Fall 2020.
- Near-completion of department Strategic Plan

Challenges:

- Find space to store sensitive equipment and rock collections.
- Convert the Instructor in Geophysics position back to a faculty position, and secure replacements for several upcoming faculty retirements.
- Renovations, renovations, renovations…..
- Field schools during pandemic *Brian Cousens*

UNIVERSITÉ DU QUÉBEC À MONTRÉAL – Sciences de la Terre et de l'atmosphère

Students and programs

Despite the Covid-19 crisis, there has been a small increase of student enrolment in our department in academic year 2020-21 as compared to 2019-20. Details for 2019-20 and 2020-21 are as follow:

Bachelor and certificates: TOTAL – 189 (2020) vs 175 (2019).

- Geology: 84 (79)
- Meteorology: 7 (17) (abandoned program)
- Meteo & Climate: 27 (14) (program created in 2019)
- Major inn Geology: 3 (4)
- Certificate in applied geology: 15 (14)
- Certificate in energetic resources: 42 (43)
- Certificate in atmospheric sciences : 11 (6) (created in 2019)

Graduate students : TOTAL – 88 (2020) vs 90 (2019).

M.Sc. Earth Sciences (research and professional): 43 (41)

M.Sc. Atmospheric Sciences: 15 (14)

Ph.D. Earth & Atmospheric Sciences (joint with UQAC): 30 (33) at UQAM.

12 Post-doctoral fellows.

Faculty and staff

● 23 faculty members, 13 associate professors, 2 emeritus professors, and permanent staff: 1 administrative assistant, 1 secretary, 1 logistic clerk, 2 laboratory technicians, 4 research officers, and 2 IT support technicians.

● Recent hires: 4 professors since 2019 – Joshua Davies (Jan. 2019), high-temperature geochronology; Violaine Ponsin (Sept. 2019), environmental geology/geochemistry; Alejandro Di Luca (Oct. 2020), atmospheric sciences, plus one on-going advertisement for a tenure-track faculty position in Atmospheric Sciences.

● No retirement in 2020. In January 2021, there will be 3 semi-retirements (Gauthier, Lamothe, Hamzaoui).

Research. The department hosts 2 Research groups – Geotop: a multi-disciplinary and multi-institutional group of scientists (14 from our department) supported by FQRNT funding; research activities in geochemistry, isotope geochemistry, geochronology, hydrogeology, environmental geology, mineral deposits and geophysics. – ESCER: a multi-departmental (6 from our department) research group in Atmospheric sciences; research activities in Regional Climate Modelisation and related domains.

Other research activities in Economic Geology, Tectonics, Surficial and Bedrock Geology in collaboration with federal/provincial surveys and Mineral Exploration industry.

Challenges.

(1) Beginning new program in Atmospheric Sciences (Météo et Climat) in 2019. (2) Current revision and evaluation of the UQAC-UQAM joint Ph.D. program (created in 2008). (3) Renewal of tenure-track position in low-temperature geochronology and geophysics in the near future.

Alain Tremblay

McGILL UNIVERSITY, Earth and Planetary Sciences

COVID-19 – The pandemic continues to be incredibly disruptive to both teaching and research. Through the summer all our research laboratories were reopened with university approval and appropriate safety protocols. Both this semester and next semester teaching is remote delivery, with only a very limited subset of courses or teaching labs allowed in person. The university continues a ban on all air travel and effectively fieldwork is limited to Southern Quebec. An online field school was taught in May 2020, and we hope to have a local field school in August 2021. Our primary focus is on ensuring that undergraduate and graduate students can graduate.

Students – We continue to be a graduate student focused department with 24 MSc and 39 PhD students. BSc student numbers remain low. The largest change is in PDFs, of which we have now increased to 11. Like last year, an ongoing challenge is in recruiting undergraduate students to the Department from both CEGEP and first year science.

Faculty – The department currently has 17.5 faculty members (not including emeritus, adjuncts, etc.), of which 5 are untenured. The department now has four CRC Tier II Chairs. Of note is two-time former Chair, Professor Alfonso Mucci, has retired though he continues his very active research program.

Varia – The University continues to develop a plan for the now-empty Royal Victoria Hospital, adjacent to our campus. Assuming all goes to plan, EPS will be moving into this space in seven years. *Jeff McKenzie*

UNIVERSITY OF NEW BRUNSWICK, Earth Sciences

The department offers undergraduate programs in Earth Sciences, Environmental Geochemistry, and Earth Science-Physics, in addition to a program in Geological Engineering (GE) offered jointly with the Dept of Civil Engineering. Undergraduate enrolments have been challenging in the past few years, with the GE program experiencing a larger drop than the others, though intakes improved slightly this year. Overall undergraduate enrolments (Yrs 2 - 4) stand at approximately 40 majors - a little under half of the most recent peak we reached in 2014-15. Graduate enrolments in Earth Sciences (all research-based) have been relatively steady in the range 27 – 33 over the past several years split roughly equally between MSc and PhD.

In efforts to boost enrolments, we have simplified/streamlined the structure of some programs, and worked to better highlight their environmental geoscience content. Recent faculty hirings have brought research expertise and new course offerings supporting that goal. While our main programs remain focussed on equipping students with education required for professional licensure (P.Geo. or P.Eng.), we will also be offering more flexible degree paths for students who may not be attracted to conventional applied geoscience/GE careers. This dovetails with an initiative by the Faculty of Science to begin offering multi-disciplinary programs in Environmental Science, as early as Fall, 2021.

Our current full time faculty complement is 10, down by two from what it was two years ago due to one resignation that we were not granted permission

to replace, and due to the retirement of a Tier 1 CRC whose position had been previously backfilled. That said, the former CRC remains very active in research, and in January, 2020, we were very pleased to welcome a new environmental hydrogeochemist Dr. Allison Enright (PhD, UofT), to the department as an Assistant Professor, replacing another retirement. This marked the fourth female faculty hiring in a row for the department over the past six years, markedly improving the gender balance. Other departmental personnel include three research scientists/PDFs, one administrative assistant, and five technical staff including two assigned full time to our thin section shop and one to the LA-ICP MS lab.

The department has benefited in recent years from generous donations and endowments, especially from mining industry alumni, supporting our field schools, as well as undergraduate labs, student scholarships and bursaries.

Like universities all across the country, the coronavirus pandemic forced UNB to lock down campus and adopt online teaching starting in March, 2020. Three field schools, normally held in April/May were cancelled, and a fourth normally held in Aug/Sept was deferred to next spring. By late spring with the benefit of very low infection rates in the Atlantic Provinces, researchers were permitted to begin regional fieldwork and return to their labs. For the 2020-21 academic year, classes are again on-line, but we are able to offer labs in-person, provided requirements for physical distancing and masks, etc are met. For large first year labs, where this is not feasible, our Instructor Dr. Ann Timmermans assembled kits of rocks, minerals, and compasses, etc. which students have signed out from the library (like books) for the term.

After 11 yrs of yeoman's service, Dr. Cliff Shaw stepped down as Chair on June 30, 2020, and is enjoying more time melting rocks with his graduate students. I hope to match his effectiveness, but not his longevity, in the position. *Karl Butler*

ACADIA UNIVERSITY, Earth and Environmental Science

Geology and Environmental Geoscience enrolments have dropped significantly over the past three years, resulting in very small upper-year classes, but seemed to have recovered with a very large second year group and a healthy first year class. Classes are being held in-person, but most have an online option this year, and large classes are entirely online, which mainly affects first-year options. Environmental Science enrolment remains stable.

At the graduate level we introduced an MSc program in Environmental Science, with three students immediately switching from MSc programs in Geology or Biology into it.

We were awarded a tenure-track position to replace a resignation in sedimentary geology and conducted a successful search with the appointment of Morgan Snyder, a recent U of Alberta graduate. The resignation resulted in the relocation of the XRD equipment in our new CFI-funded lab to Queen's University, but the lab continues to see considerable action with XRF work.

Rob Raeside

DALHOUSIE UNIVERSITY, Earth and Environmental Science

Enrollments

Year	2017-18	2018-19	2019-20	2020-21
Total UG years 2-4	68 (ERTH)	55 (ERTH)	107 (ENVS) 60 (ERTH)	122 (ENVS) 47 (ERTH)
Total grad	12 PhD/10 MSc	11 PhD/13 MSc	11 PhD/15 MSc	16 PhD/14 MSc
Total program enrollment	90	79	193	199

Earth Science undergraduate student enrollments continue to decline (-6) but this is more than offset by an increase (+15) in the Environmental Science program. First year enrollments in feeder courses for both programs are at capacity, despite predictions of enrollment declines as a result of the pandemic. Graduate student enrollments have grown as an expected result of recruitment by the newer faculty.

Faculty and staff

One of the faculty gained as a result of the merger with the Environmental Sciences program held the Elizabeth May Chair in Health and the Environment and has now moved to the Faculty of Health Science. The endowed chair remains with the department, and a search for the replacement is under way. An additional search will commence later this summer in the area of Environmental Geoscience. This will bring the faculty complement to 15 regular faculty and 5 instructors. The technician that helped to support primarily first and second year teaching has retired. It seems likely we will be able to replace this position, but with more focus on supporting the field-based activities for both programs.

Support for Teaching and Research

Negotiations are now complete to start the design and construction of the next generation ocean bottom sensors that serves as the core infrastructure for the CFI-funded ($16m) National Seismic Imaging Facility (M. Nedimovic, PI).

Several faculty have benefitted greatly from the research funds available through the Ocean Frontiers Institute to support ocean-focused research in the eastern Arctic and Northwest Atlantic. As a result of the merger, the department is embarking on significant renovations to teaching and research space (including new expansion into a wing of the building we occupy). Most of the design planning is complete, but construction has been delayed by a hold on major budget expenditures.

Challenges

There are two: First, trying to maintain a sense of community in the virtual world. All classes are on-line, and it is difficult to get permission to conduct on-campus gatherings. Normally our students develop strong bonds through field courses and events with their societies. The former were cancelled this year, and the latter have been severely curtailed. We managed an alumni-student field trip with about 50 people in late Oct, which helped. Second, since we did not run any field courses in the Spring-Summer-Fall 2020 +

Winter 2021, this has produced a big deficit in student progression towards their degrees. We are now developing plans for the Spring-Summer-Fall 2021 to hold six field courses (all within the Atlantic Bubble) plus face-to-face Intro to Petrology which was also canceled in Winter 2022. Fingers crossed!!

James Brenan

CAPE BRETON UNIVERSITY

Our enrolment in courses taught for engineering and public health programs remains very strong because most of the students in those programs were half-way through when the pandemic hit, so they are completing their degrees online this year. New enrolments are down as is the case everywhere. We have two full-time faculty members, and all three term positions from last year were rehired to cope with the very large numbers of students but the university refuses to consider any longer-term hiring, including refusing to hire a planned sabbatical replacement for the coming year. Teaching has all the problems other departments are facing, we have no on-campus classes this term and there likely won't be any until the spring/summer term.

Deanne van Rooyen