

Dec 2, 2021

### **Progress Report on the Program Review Actions for the former Geography and the Environment (GATE)**

The former Department of Geography and the Environment (GATE) underwent a program review in May of 2018. The External Review Committee sent recommendations by June 2018, and GATE responded by January of 2019. At the time of the review, GATE was in the College of Arts and the Dean in charge, Dr. Jacqueline Nolte submitted a report pertaining to the review by June of 2019. As a result of the review and in response to recommendations, GATE reviewed its priorities, strengths and challenges and reconfigured as a School and moved to the Faculty of Science effective April 1, 2019. Initially the School took an interim name of SAGE (School of Agriculture, Geography and the Environment) as it was hoped that the Department of Agriculture that was within the Faculty of Applied Technical Studies would join the School, but this did not materialize, and the unit rebranded as the **School of Land Use and Environmental Change (SLUEC)**.

The following is an update to the Program Review report since, and is providing updates to the two primary recommendations from the External Reviewer panel:

**Recommendation #1: That the members of the Department of Geography and the Environment, led by the Dean of the College of Arts and an External Facilitator, engage in a strategic planning exercise that uses the current Self Study as a solid starting point to address current trends and changing patterns across the Faculty and the University. GATE faculty should use the exercise to examine strengths and challenges within the Department, with the primary objective of invigorating the undergraduate program**

As noted in the preamble above, GATE officially moved to the Faculty of Science on April 1, 2019, as SAGE, following various consultation meetings, and became the School of Land Use and Environmental Change (SLUEC) in October of 2019. Continuous changes are/have been made ever since, and these are expanded further below in the attached report from SLUEC.

**Recommendation #2: That the Dean of the College of Arts immediately initiate a search for an external candidate to assume leadership of the Department of Geography and Environment.**

With a complete change of structure and rather than bringing in an external candidate, an acting Director (Dr. Gregg Schlitt, former head of the Math and Stats Dept) was appointed from April to December of 2019 to assume leadership and work with the interim unit (SAGE) on its path to becoming SLUEC (name officially changed in October of 2019). The inaugural/current School Director, Dr. Jonathan Hughes, was selected by a Divisional Review Committee following a call for applications and was appointed in January of 2020. Managing the unit has been difficult with the outbreak of the pandemic, and working remotely for the first several months has delayed the implementation of changes that begun since the review was made, but the School is moving along with a new Vision "Creating leaders for a resilient future" and Mission that "creates collaborative opportunities for students and community organizations to explore geography of natural and human environments towards a resilient future".

Since it's move and restructuring of the unit, SLUEC has began to grow in terms of student enrolments in courses from a rough average of 1700 each year between the periods of 2015-2019 as GATE, to over 2000 enrolments per year in 2019-20 and 2020-21 as SLUEC (See attached Data Book for 2020-21 produced by Institutional Research, section 1). As well, the number of FTE increased from an average of 200 to about 250 by 2020-21 (Databook section 10). This significant growth has been achieved without an increase in faculty and with a reduction in section offerings that averaged 92 in previous years to 90 and 80 in past two years (See Databook section 5). Concomitant to this growth the number of waitlisted students increased from a rough average of 160 total for each of academic years 2015-16,17,18 to a peak of over 400 wait listed students in 2019-20, and just over 300 in 2020-21 (Databook section 15, sum totals for summer, fall and winter terms). We are managing this situation with more strategic course offerings and hope to decrease the wait listed students once we replace the faculty we lost by attrition.

Despite the growth in course enrolments, we have noted a decrease in our students with declared Majors and Minors from a high of 151 in 2015-16 to 102 in 2020-21 (Databook section 17). Similarly the number of graduates reduced from a high of 56 in 2015-16 to a low of 30 in 2019-20 but we are noticing a slow recovery and 2020-21 had 33 graduates with Majors and Minors from SLUEC (Databook section 20). Finally, the number of domestic and international student growth has been steady with 913 registered as domestic students in 2015-16 to 1067 in 2020-21, and a more significant growth from 68 international students in 2015-16 to 325 in 2020-21 (Databook section 43).

With continuing changes, we plan to increase our percentage of self-declared Indigenous students which has been hovering at an average of 5% cumulatively (Databook section 44) to hopefully the demographic average, especially as we Indigenize the academy and plan on adding programs that would attract more Indigenous students.

All in all, good progress has been made and we hope that new opportunities arise to make this unit grow and thrive.

Respectfully yours,

Lucy Lee, PhD

Professor and Dean

Faculty of Science

## MEMORANDUM

To: Dr. Lucy Lee, Dean of Science

From: Dr. J Hughes, Director, School of Land Use and Environmental Change

CC:

Date: 2 December 2021

Re: Update on Actions from GATE's Program Review

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The Department of Geography and the Environment (GATE), now the School of Land Use and Environmental Change (SLUEC), underwent an external program review in May 2018. In their report, the external reviewers report strengths and weaknesses related to

- Contribution of Programs to the University's Strategic Goals, Vision, Mission, Plan and Values,
- Alignment in Institutional Learning Outcomes,
- Ministry, Professional/Industry and Academic Standards,
- Overall curriculum
- Standards of Educational Practices, and
- Utilization of Resources.

Programs reviewed include:

- BA, major in Geography
- BSc, major in Physical Geography
- BA, major in Honours Geography
- BSc, major in Honours Physical Geography
- BA, minor in Geography
- BSc, minor in Physical Geography
- Certificate in Geographic Information Systems (GIS)
- Certificate in Indigenous Maps, Films, Rights, and Land Claims

In their conclusion, the review committee makes two recommendations related to strategic planning and leadership. GATE responded to the external report and the Dean of Arts at the time, Jacqueline Nolte, replied with a summary report (attached). The overarching responses to the external reviewer recommendations were to form a school (now SLUEC) within the Faculty of Science and to interview internally for SLUEC's first Director. This update is to explain how the new school has evolved with regards to personnel and program development since receiving the Dean's summary report. The update finishes with a brief discussion of SLUEC needs and opportunities to thrive towards future growth.

## **Personnel**

Since the external review, SLUEC has gained two tenure-track faculty and one tenured faculty. SLUEC has lost an equal number. One retired, one moved full time to Teaching and Learning, and the other has taken a two-year leave of absence to direct a different area followed by sabbatical leave. As a result of these personnel shortfalls along with the inaugural Director's reduced teaching load, SLUEC consistently depends on two or three Limited Term Appointments along with Sessional Faculty to deliver its curriculum. SLUEC plans to hire two new faculty this winter to support land use planning and the environmental science of water and climate change. We have tried to attract funding for an Indigenous hire, but so far have not been successful.

Early in 2020, SLUEC reorganized its governance structure to increase efficiency, increase service participation by faculty, and facilitate growth while easing disciplinary tensions within the school. SLUEC governance includes a working group for each program area. Working groups for existing programs include Environmental Studies, Geographic Information Systems (GIS), Human Geography, and Physical Geography. Each working group has a Program Coordinator to organize group meetings and represent the group on SLUEC's curriculum committee, which the SLUEC Director chairs. Other strategic committees within the school—including Adjunct and Associate Membership, Honours and Awards, Research Ethics, and Standing Selection Advisory committees—also include a member from each working group, which helps to ensure equal representation in school governance. Program planning and visioning happen at all levels within the school but filter through school meetings for approval before moving on to the Faculty of Science and College of Arts Curriculum Committees.

In September, faculty crafted the following vision and mission statements for SLUEC:

### ***Vision***

*School of Land Use and Environmental Change: Creating leaders for a resilient future.*

### ***Mission***

*The School of Land Use and Environmental Change creates collaborative opportunities for students and community organizations to explore geography of natural and human environments towards a resilient future.*

These simple statements help to unite SLUEC faculty and create a vision for program development. They also help to frame how SLUEC supports in accordance with faculty expertise UFV's Vision, Mission, Values, and Integrated Strategic Plan.

## **Program development and changes**

In addition to the programs listed above, SLUEC now includes the following:

Bachelor of Environmental Studies

Bachelor of Environmental Studies (Natural Sciences)

Minor in Environmental Studies

The BES programs attract students from within and outside the institution and declared majors have increased substantially since coming online. The BES programs utilize courses from across the university to foster interdisciplinary studies of the environment. New course development includes Living Within Our Watershed

(ENV 200), Leadership in Environmental Professions (ENV 310), Sustainable Fashion (ENV 330), and Environmental Seminar (ENV 410).

The Associate Certificate in Indigenous Maps, Films, Rights, and Land Claims has been revised over two years with thorough consultation. The revised certificate is now titled “Power and Place: Stó:lō Téméxw Responsibility, Reflection and (Re)Storying,” and it will now be housed in Indigenous Studies, but SLUEC remains a primary partner in its delivery.

SLUEC is currently working on a new Bachelors in Regional and Community Planning (BCRP). Senate approved the proposal and the concept paper to support the first phase of the approval process, which will be ready early in 2022. BRCPP is an applied program that, once accredited, will present undergraduates with the opportunity to register as a professional planner. The program can be completed within four semesters of full-time study, typically two years on acceptance. The program is designed for PLAR and block transferability, delivering content collaboratively with First Nations, Municipal, and industry partners.

The GIS working group has proposed three Associate Certificates in GIS that allow students to customize their program of study towards community health, environment and resources, and municipal planning. The Associate Certificates are meant to prepare graduates for entry-level GIS positions, but they can also ladder into the full GIS Certificate or support an industry practicum. Students can complete the credential in one or two semesters, partly by design and partly because recent hires help to teach the GIS curriculum, which allows courses to be offered more frequently.

Adding more to the GIS program, UFV recently signed a contract with Matsqui First Nation to offer a series of GIS micro-courses to Matsqui staff. The delivery model is new for UFV and is portable.

Next steps in SLUEC program development include continuing to update course outlines and tending to articulation agreements while refining programs to ensure consistent and predictable delivery to students. SLUEC is currently collaborating with Advisors to align our curriculum development with professional registration standards that will help our students become job aware and prepared.

### **What SLUEC needs to thrive and grow**

1) Course releases: Faculty need more time for service, research, and scholarship. Program coordination and development are critical and yet incredibly demanding on the faculty with expertise and passion to deliver them. If publications and grants matter, faculty need more time to do the careful and important work. The external reviewers report clearly states the need for more time to support research and advanced teaching.

2) Lab and equipment updates: Faculty need more space with appropriate facilities for teaching, research, and community engagement. Examples include a dedicated GIS computer laboratory and a science teaching laboratory equipped for work with soil, sediment, and water. SLUEC also needs a teaching laboratory suitable for advanced group work.

- 3) Succession planning and new faculty hires: SLUEC needs *at least* two new faculty hires to operate. Continued support and commitment is needed for the urgent hiring of two new faculty in the next year (2022), and additional hires in the 2023-2025 years as we prepare for upcoming retirements in the next 3-6 years.
- 4) Revised weighting arrangements for 4-credit courses: Currently, SLUEC has upper-level, 4-credit courses in that include 60 contact hours per term. These courses receive a section weighting of 1, which is the same as a 3-credit course with 45 contact hours per term. Tensions about workload within SLUEC will be eased if these 4-credit, 60-hour courses are weighted higher.
- 5) Lab support: SLUEC will benefit greatly from a fulltime laboratory technician to help maintain equipment, order supplies, and help with field-trip safety. Such support will improve what faculty can do with students.