



Faculty of Science

2022-2027 Strategic Plan



University
of Victoria
Science

Cover photo: Researchers at work in the Glover Greenhouse. *Credit: UVic Photo Services*

We acknowledge and respect the ləkʷəŋən peoples on whose traditional territory the university stands and the Songhees, Esquimalt and W̱SÁNEĆ peoples whose historical relationships with the land continue to this day.



Conducting research in the Glover Greenhouse. Credit: UVic Photo Services

Introduction

The present strategic plan charts a confident and bold new course for the Faculty of Science that is inspired by the beautiful physical environment of the university and the outstanding intellectual environment offered by the many brilliant minds at UVic. The plan reflects our spirit of ambition and innovation. It is outward facing, drawing from the many connections of our researchers to colleagues around the world. It is also firmly anchored to the Indigenous lands on which the university stands and on which we are privileged to work each day.

The plan's central theme is empowerment of students, staff, and researchers. It is understood that we are all at our best when we have agency over our daily work; when we are not only given the responsibility to be excellent students, researchers, staff, instructors, and colleagues, but are also given respective support and authority. The strong emphasis of the current plan on equity, diversity and inclusion is directly connected to this vision of an empowered and responsible science community.

While many of the trends we surveyed were decades-long, the time horizon of this plan is for the next five years, consistent with most other strategic plans at UVic and elsewhere. The plan complements the existing strategic plans of the six departments in the Faculty of Science, as well as the university-wide plans – Aspiration 2030: UVic's Research and Creative Works Strategy, the 2019 Strategic Enrolment Plan, the 2017-2022 Indigenous Plan, the 2017-2022 International Plan and, of course, the overarching 2018-2023 Strategic Framework.

This plan does not supersede any of these existing plans, and in particular, it does not restrict our research activities to areas that are deemed important in today's opinion. The plan describes our values and our ambitions to the university community and to the international community of scientists. The plan will help the Deans' Office and Department Chairs to support, facilitate, and promote excellence in science research and teaching.

This plan is in service to the Faculty's mission:
To be the destination of choice for curious minds.



**To be the
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The coral reef on Kiritimati, the site of research by marine ecologist Julia Baum. Credit: Kristina Tietjen



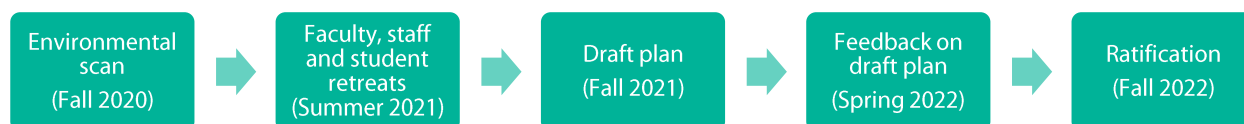
Students conducting field work for an Earth and Oceans Sciences class. Credit: UVic Photo Services

Process

The 2022-2027 Strategic Plan for the Faculty of Science was created during a period of considerable uncertainty – in academia and in our society at large. The first strategic planning discussions between department chairs and the dean’s office were held just a few weeks into the COVID-19 pandemic; the draft was completed during the January/February 2022 “omicron wave” that saw unprecedented mortality numbers from COVID-19. While the planning process was ongoing, the University of Victoria went through numerous cycles of complete or partial online instruction alternating with in-person learning - with and without physical distancing. For many months, most of us – students, instructors, researchers, administrators

and staff - were well outside our comfort zone and had to relearn what it meant to provide outstanding education and conduct world-class research in an uncertain and rapidly changing environment.

While one might think that this must be the worst time to prepare a new Strategic Plan for the Faculty of Science - and the first one in more than a decade - we found all of us became far more open to alternative modes of course delivery, allowed more and different technology into our classrooms, and managed to modify, maintain – even increase! - our research activities through previously unused or underused means.



The planning process involved a large number of stakeholders within the faculty and in the larger community. The process started in Fall of 2020 with an environmental scan. We analysed current and historic enrolment data, entrance GPAs,

staffing levels, gender and age distributions and funding support. We collected data on alumni interactions, fundraising, graduation times, and graduate student support. We examined bibliometric data, finance records and the space

available for learning and research. The scan provided a rich trove of data which was combined into about 100 diagrams, tables and graphs.

The results of the environmental scan were presented in three separate retreats held in the summer of 2021. These retreats addressed initiatives and action items related to undergraduate studies, graduate studies and research activities, respectively. They involved groups of 30-50 stakeholders each, faculty members, students, and staff from the Faculty of Science as well as representatives from the library, the office of the Vice President for Research and Innovation, the Faculty of Graduate Studies, and others. We recognized that student

input may be muted in the presence of many faculty members and an additional retreat was held only with student participants and under the guidance of the Associate Dean Academic. Each of the four retreats resulted in a document which collected all ideas and discussion points. These documents were distilled down into reoccurring themes that were separated into strategic goals and actions.

The resulting draft plan was presented for discussion and feedback to members of the six units at their departmental meetings. After that feedback was incorporated, the plan was distributed for final review. The Strategic Plan was ratified in its present form on November 3rd, 2022.



Dr. Alexander Brolo is developing new ways to use gold nanostructures in medical applications. Credit: UVic Photo Services

Execution

The Strategic Plan consists of 27 *Strategic Initiatives* that pertain to all aspects of the operation of the Faculty of Science. The Initiatives are grouped in categories that reflect the main Activities of the Faculty, i.e. education and research training, research and partnerships, and operations. Each of the Activities is further divided into three clusters that pertain to either: People, Environment or Finance. The resulting 3x3 matrix presents the Initiatives in a form that is deliberately not prioritized, but rather allows

each member of the Faculty to identify with activities within their specialty or portfolio.

The Initiatives are further connected to a much larger number of Actions, each related to one or more Initiatives. These Actions constitute a detailed plan that will be executed on three different timescales, from the near term (1-2 years, indicated by *) to the medium term (4-6 years **) and long term (more than 5 years ***).

Strategic

Education and Research Training

PEOPLE

(Recruitment, Retention, Success)

- (1.1) Become the national and international destination of choice for academically excellent undergraduate and graduate students from diverse backgrounds.
- (1.2) Become a leader in world-class, accessible, relevant, experiential, research-informed undergraduate and graduate education.
- (1.3) Transform science pedagogy to put students first and recognize, respect and foster student diversity in all activities.
- (1.4) Become a destination of choice for Indigenous science students through leadership in Indigenization and decolonization.

ENVIRONMENT

(Quality, standards, outcomes and reputation)

- (1.5) Review and advance teaching infrastructure, delivery modes, pedagogy and programs.
- (1.6) Provide graduating students with specialized and transferable scientific knowledge and critical thinking skills necessary for success in a broad range of careers, nationally and internationally.
- (1.7) Foster life-long relationships with students and alumni through Department- or Faculty-centered events and initiatives.
- (1.8) Strengthen ties to our community of alumni entrepreneurs to support students and recent alumni in their careers.
- (1.9) Support educational collaborations, including national and international partnerships.

FINANCE

(1.10a) Ensure competitive financial support for undergraduate students in need-based bursaries and merit-based scholarships.

(1.10b) Provide competitive, adequate, transparent, predictable financial support for graduate students.

Initiatives

Research and Partnerships

- (2.1) Support research activities of existing and emerging strategic importance in fundamental and applied science, such as climate science, oceans, health and neuroscience, data science, materials, astrophysics, and particle physics.
- (2.2) Establish a research environment that values PDF training and provides internationally competitive support levels for PDF.
- (2.3) Enhance our community-engaged research activities to better connect our Faculty to surrounding communities by applying science to the day-to-day lives of community members.

- (2.4) Promote UVic Science research locally, nationally and globally—adapting to the communication channels of our key audiences.
- (2.5) Communicate research results to broad (expert and non-expert) audiences.
- (2.6) Celebrate and recognize outstanding research accomplishments.
- (2.7) Provide and foster world-class research environment and infrastructure.

- (2.8) Increase level and diversity of funding for research activities.
- (2.9) Increase support for the application and administration of large and complex grants.

Operations

- (3.1) Become the best place to work on campus by promoting positive, creative and respectful learning, teaching, and working environments.
- (3.2) Identify and eliminate systemic barriers to access and career success, particularly those based in bias and discrimination.
- (3.3.) Identify and prioritize hiring goals (e.g. EDI priorities, teaching professors, education research, collaborative and interdisciplinary research areas).

- (3.4) Build and maintain strong connections with private, public, and non-governmental sectors including Indigenous communities on Vancouver Island and beyond.
- (3.5) Implement Faculty-wide and public-facing sustainability policies.
- (3.6) Ensure availability of adequate, functional space for teaching and research.

- (3.7) Review and optimize operations within the Faculty to increase flexibility, predictability, and transparency of financial operations.
- (3.8) Diversify sources of revenue and financial support available to the Faculty of Science.



The Faculty of Science launched UVic's inaugural faculty-level Alumni Advisory Board in 2021. Credit: UVic Photo Services

Closing remarks

A strategic plan and clear vision is a necessary first step to transformative change, but it is not a goal in itself. The Faculty of Science is committed to putting this plan into action and executing the plan in an unbureaucratic and flexible but accountable way. Many of the action items can be readily linked to metrics that are residing either within the departmental or university databases. The Dean's Office will use these metrics to assess the progress on each of the action items on an annual basis and report the results back to the departments.

It is also understood that even the best laid plans cannot anticipate large academic, (geo)political or financial changes. Events like the recent pandemic show how well organizations can adapt to quickly changing circumstances.

We think that the Strategic Plan will serve us well during these rapidly evolving times, since it not only presents a roadmap but also declares our values to members of the Faculty of Science, the University of Victoria, our students and our alumni.



CONNECT WITH US

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