

BOARD OF GOVERNORS

Tuesday, March 22, 2022 at 4:00 p.m.

**This is a hybrid meeting, attend in person in MPR1 and MPR2
in the Smartpark Innovation Hub.
OR attend via Zoom webconference**

The material contained in this document is the agenda for the next meeting of the Board of Governors.

OPEN SESSION

Please email regrets to shelley.foster@umanitoba.ca no later than 9:00 a.m. the day of the meeting.

OFFICE OF THE UNIVERSITY SECRETARY



**University
of Manitoba**



Acknowledgement

The University of Manitoba campuses are located on original lands of Anishinaabeg, Cree, Oji-Cree, Dakota, and Dene peoples, and on the homeland of the Métis Nation.

We respect the Treaties that were made on these territories, we acknowledge the harms and mistakes of the past, and we dedicate ourselves to move forward in partnership with Indigenous communities in a spirit of reconciliation and collaboration.

Mission

To create, preserve, communicate and apply knowledge, contributing to the cultural, social and economic well-being of the people of Manitoba, Canada and the world.

Vision

To take our place among leading universities through a commitment to transformative research and scholarship and innovative teaching and learning, uniquely strengthened by Indigenous knowledge and perspectives.

Values

To achieve our vision, we require a commitment to a common set of ideals.

The University of Manitoba values:

Academic Freedom – Accountability - Collegiality - Equity and Inclusion - Excellence

Strategic Priorities

- Support and sustain a post-COVID teaching, learning, research, and work environment. This includes our commitment, as one of Canada's top 15 research universities, to remain a leader in research excellence.
 - Develop and publicize a university-wide anti-racism strategy.
- Enhance and expand opportunities for learning, including research opportunities for students.
 - Deliver on our commitment to Indigenous achievement and engagement.
 - Create a more accessible, equitable, diverse, and inclusive university.

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AGENDA

	<u>Presenter</u>	<u>Page</u>	<u>Est. Time</u>
1. Call to Order	Chair	-	4:00 p.m.
MOTION TO MOVE TO In Camera Session (Board with President)			
2. In camera session (Board with President)	Chair	-	4:00 p.m.

MOTION TO MOVE TO OPEN SESSION

BOARD OF GOVERNORS OPEN SESSION

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AGENDA

	Presenter	Page	Est. Time
1. APPROVAL OF AGENDA (Open Session)	Chair	3	4:20 p.m.
2. <u>Presentation: Mental Health and Wellness</u>	Chair	6	4:20 p.m.
Presented by: Don Stewart, Executive Director, Student Support; David Ness, Director, Student Counselling Centre; and Arlana Vadnais, Employee Wellness Specialist and Campus Mental Health Facilitator			
3. MINUTES (Open Session)			
3.1 Approval of the Minutes of the January 25, 2022 Open Session, as circulated or amended	Chair	14	4:50 p.m.
3.2 Business Arising – None	Chair	15	4:50 p.m.

FOR APPROVAL

4. UNANIMOUS CONSENT AGENDA	Chair	-	4:55 p.m.
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If any member of the Board wants to ask a question, discuss or oppose an item that is marked for the consent agenda, the member can have an item removed from the consent agenda by contacting the Secretary of the Board prior to the meeting or by asking that it be removed before the Chair calls for a mover and seconder for the motion to approve or receive, by unanimous consent, the items listed.

4.1 From Senate for Approval

4.1.1 Report from Senate	President	15	4:55 p.m.
4.1.1(a) Report of the Senate Committee on Awards (dated January 20, 2022)	President	22	(consent)
4.1.1(b) Proposal for a Bachelor of Science (Major) and Bachelor of Science (Honours) in Environmental Geoscience, Clayton H. Riddell Faculty of Environment, Earth, and Resources	President	32	(consent)

4.2 From Senate for information

4.2.1 Annual Report of the University Discipline Committee	President	90	(consent)
4.2.1 Undergraduate Admission Targets, 2022-2023	President	92	(consent)
4.2.1 Provincial Approval – Closure of Diploma in Population Health, Department of Community Health Sciences	President	94	(consent)

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AGENDA

Presenter

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Est. Time

FOR APPROVAL

5. FROM FINANCE, ADMINISTRATION, AND HUMAN RESOURCES

5.1 President's Policy Change Delegation of Approval Authority

K. Lee

94

4:56 p.m

FOR CONSULTATION

6. Increase to Enrolment Target: Bachelor of Social Work

President

105

5:01 p.m.

FOR INFORMATION

7. President's Report

President

116

5:06 p.m.

MOTION TO MOVE TO CLOSED SESSION

Chair

-

5:11 p.m.



**Minutes of the OPEN Session of the
Board of Governors
Held by Web Conference on January 25, 2022 at 4:00 p.m.**

Present: L. Hyde, Chair
J. Leclerc, Secretary

J. Anderson	M. Benarroch	N. Brigg	D. Brothers	A. Drummond
E. Kalo	J. Lieberman	L. Magnus	A. Mahon	T. Matthews
N. Mogan	N. Murdock	K. Osiowy	S. Prentice	A. Raizman
L. Reimer	B. Scott	S. Sekander	J. Taylor	

Regrets: J. DeSouza-Huletey K. Lee

Assessors: M. Shaw S. Woloschuk

Officials: N. Andrew C. Cook M. Emslie S. Foster
D. Hiebert-Murphy D. Jayas V. Koldingnes

Guest: S. Scott

The Chair welcomed Vanessa Koldingnes to her first meeting as Interim Vice-President (External), and Stephanie Scott, Executive Director of the National Centre for Truth and Reconciliation, who would give a presentation on the work of the National Centre for Truth and Reconciliation.

She advised the Board that Ethan Cabel resigned from the Board on January 5, 2021, and thanked him for his contributions to the Board of Governors.

FOR ACTION

1. **APPROVAL OF THE AGENDA**

It was moved by Chancellor Mahon and seconded by Dr. Brothers:
THAT the agenda for the January 25, 2022 meeting be approved as circulated.

CARRIED

2. **MINUTES (Open) Session**

- 2.1 Approval of the Minutes of the November 30, 2021 Open Session as circulated or amended

It was moved by Dr. Anderson and seconded by Mr. Osiowy:

THAT the minutes of the November 30, 2021 Open session be approved as circulated.

CARRIED

- 2.2 Business Arising

There was no business arising from the minutes.

BOARD LEARNING TOPIC

3. Presentation: Catherine Cook, Vice-President (Indigenous)
Stephanie Scott, Executive Director, National Centre for Truth and Reconciliation (NCTR)

NCTR & UM Advancing Reconciliation (Individual and Collective Responsibilities)

The Chair welcomed Dr. Catherine Cook and Ms. Stephanie Scott and said she was pleased that they were able to join the meeting to help us learn and understand more about the work of the National Centre for Truth and Reconciliation. She noted that Dr. Cook, Vice-President (Indigenous) attends meetings of the Board on a regular basis so the Board knows her well.

The Chair introduced Ms. Scott, noting that she is the Executive Director of the NCTR, and previously worked with the Truth and Reconciliation Commission (TRC) as the Manager of Statement Gathering, and as Executive Assistant to the Chair of the TRC. She added that Ms. Scott also continues to oversee her own production business. She added that through her past and current work Ms. Scott has experienced first-hand the strength, courage, and resilience of Residential School Survivors as they overcome many challenges and pass their teachings on to the next generation. The Chair said that Ms. Scott provides outstanding leadership at the local and national levels and we are so pleased to welcome her today.

Ms. Scott thanked the Board of Governors for this opportunity.

Ms. Scott said the National Centre for Truth and Reconciliation has always been grateful for the University of Manitoba's role as host and partner, noting that this is an important relationship that should receive more attention. She added that this relationship is a model for other institutions as they also walk the path of reconciliation. She said the NCTR and the University are on their own path of learning and growth, which continues to evolve. She noted that this evolution is reflected in the very important new NCTR policy adopted by the University last summer. This evolution, she noted, is another reason why ongoing conversations are important.

Ms. Scott highlighted some new developments at the NCTR which illustrate the scope of its current work, including:

- A new Memorandum of Agreement with the federal government that will facilitate the long overdue release of residential school records that were withheld or only partially released to the Truth and Reconciliation Commission.

The voices of Survivors are even more crucial than the records. Since last year when the Tk'emlups te Secwépemc located the little ones buried on the site of the former Kamloops Residential School, there has been an outpouring of Survivors who feel the time is right to now share their truth. These are people who were not ready when the Truth and Reconciliation Commission (TRC) was holding its statement gathering events.

- A very powerful dialogue session was recently held with Two Spirit Survivors and other members of the 2SLGBTQQIA+ community. NCTR made a commitment that it would work with that community to help bring to light and to focus attention on the overlooked experiences of Two Spirit Survivors. Similarly, there is more work to be done in hearing from Survivors with disabilities.
- A new series of statement gathering events is being developed so that more voices can be heard and added to the public record. The intention is to build on the lessons learned from the TRC and implement truly state of the art approaches to respectful, trauma-informed truth gathering.
- The NCTR has been engaging with the federal government to convene a National Advisory Committee to support First Nations, Métis Nation and Inuit communities considering undertaking searches for unmarked grave sites. This is not yet public but will be announced soon. These are all examples of the scope, diversity, and significance of the work we are engaged with to fulfill our mandate.

Ms. Scott said that in the first five years of the NCTR's existence, much was learned about what the mandate really entails. It has grown as an organization, in size, in the scope of its work, and in the impact it is having on the national dialogue. She added that the University's 2021 *National Centre for Truth and Reconciliation Policy* addresses changes that have occurred as the NCTR evolves.

Ms. Scott listed the purposes set out in that policy, as they are the vital principles that will inform the relationship between the University and the NCTR going forward.

1. To support the NCTR in being responsive and accountable to the Indigenous peoples whose rights it promotes and to the Residential School Survivors whose truths it preserves.
2. To ensure that the perspectives of First Nations, Inuit, and Métis peoples, and in particular the voices of Residential School Survivors, are always reflected in the strategies and priorities of the NCTR.

3. To enable the NCTR to fulfill its responsibilities in a manner consistent with the laws, protocols, traditions, and knowledge systems of Indigenous peoples.
4. To create a new template of partnership and collaboration consistent with the UN Declaration's affirmation of the right to self-determination of Indigenous peoples, including the right of Indigenous peoples to govern their own cultural institutions and to make their own decisions about the preservation and transmission of their history, knowledge systems, and historical and cultural property.

Dr. Cook thanked Ms. Scott and thanked the Board of Governors for providing the opportunity to speak to this. She said that drafting the new Policy and the accompanying Procedure was quite a long process, and it was done at the same time the NCTR was also updating its own by-laws. She noted that the original governance documents, including the Administrative Agreement through which the University took on the role as host to the NCTR, did not provide sufficient guidance. She said there it was vague in places, had gaps, and it had fallen out of step with the very positive relationship and governance practices that have evolved since the NCTR was created. She added that it was critical that the policy affirm that the NCTR is an Indigenous-led institution and to clarify what that means in practical terms.

Dr. Cook explained that the NCTR has a unique governance model which works within the policy framework of the University. At the same time, it has its own Governing Circle that sets strategic direction for the Centre. Dr. Cook added that the governance model was intentionally designed so that the majority of the Governing Circle's membership must always be First Nations, Métis and Inuit, and follow a consensus-based decision-making model. She added that in addition to its own members, it receives input from Elders and from a Survivors Circle that ensures that the governance of the NCTR is always informed by the perspectives and experiences of First Nations, Inuit and Métis Residential School Survivors and Inter-generational Survivors.

Dr. Cook said that as the Vice-President (Indigenous), she serves as the University's representative on the Governing Circle, in part to ensure the alignment between the guidance of Indigenous leadership with the NCTR and the policies of the University. She added that being at the forefront of critical issues such as trauma-informed research and Indigenous protocols for respectful custodianship of data and cultural objectives, the NCTR presents a tremendous opportunity for the University to learn from its work and look at how to adapt and change broader University policies and procedures.

Dr. Cook observed that the new NCTR policy sets out some of the principled reasons why Indigenous leadership is so important to the work of the NCTR and expressed her view that same principles apply to a great many other areas of the University's work. She explained that the first principle, as the Policy acknowledges, is that respect for Indigenous leadership is consistent with the University's commitments to upholding the rights set out in the UN Declaration on the Rights of Indigenous Peoples, an essential part of reconciliation. She added

that in this way, institutions such as Universities can contribute to undoing the harm of laws and policies that denied generations of Indigenous peoples any voice in decisions ranging from the governance of Indigenous Nations to the care of children.

Indigenous-led processes recognize that when it comes to the history and cultures of Indigenous peoples, the legacy of colonialism, and how these harms were addressed, Indigenous peoples are the experts. For this reason, the NCTR has, from the outset, created structures that ensure that Survivors, Elders, and community members have a place in the governance process where their expertise can be recognized, and their voices heard.

Applying this approach to the University more widely, Dr. Cook expressed her view that the University community must challenge itself to think about the structures and processes that create space for Indigenous perspectives and expertise to come to the forefront. By way of example, Dr. Cook asked how is the expertise of Elders and Survivors recognized and credentialed? Also, how does the University ensure that they receive fair remuneration for their contributions to research, teaching and learning, and good governance? She noted that too often, our hands are tied by policies and procedures that were created without the benefit of Indigenous perspectives and expertise; creating barriers to innovation.

Dr. Cook shared that her experience with the NCTR has highlighted the benefits of exploring new models for how to structure and staff academic institutions. Dr. Cook highlighted a new initiative in her office to develop an engagement process with the Indigenous community to address the complex and important issue of how we vet claims of Indigenous identity. She noted that the University has kept to the practice of honouring one's self-declaration as Indigenous for many reasons and regardless of whether it is related to applying for an Indigenous-specific position, an Indigenous-specific scholarship or award or an investigator/collaborator on research projects. She explained that Indigenous identity is complex due to centuries of colonialism and racism and acknowledged that the self-declaration process for faculty, staff and students was a step forward in institutions being able to demonstrate inclusion of Indigenous people. However, as we evolve together on the path of reconciliation, institutions must take the further step of vetting claims of Indigenous identity. The University's commitment to Indigenous achievement, Indigenous community relationships and reputation could be at stake if nothing is done to prevent Indigenous identity fraud.

Dr. Cook stated that the UM Indigenous Identity Consultation Working Group is being established to listen to the voices of Indigenous community members and provide guidance and advice on how to address the affirmation and verification of Indigenous identity.

Dr. Cook thanked the Board for its time and for its interest in the work of the National Centre for Truth and Reconciliation.

Dr. Reimer joined the meeting.

In response to a question about the new NCTR building, Ms. Scott said the NCTR is outgrowing its current home in Chancellor's Hall. She noted that there were initially 23 staff members in the building and that has now grown to 34 staff members. She said that the NCTR building will be a home to protect the growing number of survivors' stories.

The Chair thanked Dr. Cook and Ms. Scott and said the Board supports NCTR's initiatives and will help where it can. She noted the importance of this work and on behalf of the Board asked that it receive frequent updates on the work of the NCTR.

FOR INFORMATION

4. UNANIMOUS CONSENT AGENDA

It was moved by Dr. Raizman and seconded by Dr. Reimer:

THAT the Board of Governors approves and/or receives for information the following:

THAT the Board of Governors approves a revision to Section 2.1 of the Distinguished Professor/Distinguished Professor Emeritus/Emerita Policy to ensure that all members of the academic staff are eligible for nomination as Distinguished Professor, effective upon approval.

THAT the Board of Governors approve, as recommended by Senate:

- A. Reports of the Senate Committee on Awards (dated October 19 and December 15, 2021)**
- B. Proposal for a Bachelor of Arts (Single Advanced Major) and Bachelor of Arts (Double Advanced Major) in German, Faculty of Arts**
- C. Proposal for a Bachelor of Arts (Single Honours) in Global Political Economy, Faculty of Arts**
- D. Proposal for a Micro-Diploma in Workplace Health and Safety, Faculty of Arts**

Items forwarded for information:

- E. Extension of Suspension of Admissions, Provincial Approval: Master of Arts in Icelandic, Baccalaureate Program for Registered Nurses, Post-Baccalaureate Diploma in Agrology**
CARRIED

5. NEW BUSINESS

5.1 President's Report

The President's written report was included in the meeting materials. He stated that there have been some discussions around the report's format and said it will become one that focuses on his priorities as approved by the Board every year. He stated that he welcomes comments about what the Board would like to see and ways the report could be different.

President Benarroch said the University once again has a new Minister of Advanced Education,

Jon Reyes, who seems very interested in the University. He added that he has received communication from the Minister's office reiterating the government's priorities for education and advising that the government is considering restructuring the size and composition of the Boards of Governors. He said he would review this with his Executive Team and will bring it to the board. He said he had also received an invitation to a consultation on the government's tuition policy, Bill 33.

Dr. Benarroch said the search for a Vice-President (Research and International) continues with the Executive Search firm collecting applications. He added that the first interviews will be virtual.

FOR DISCUSSION

6. Report from Senate Regarding Changes to Admission Targets

Dr. Benarroch stated that changes are proposed in admission targets for the Price Faculty of Engineering and for the College of Nursing.

Members of the Board commented that there are significant resourcing implications to an increase in admission targets in nursing and engineering because both programs require teaching of electives by other faculties. It was noted that the units receive government funding; however, this does not extend to the faculties that provide teaching for elective courses. Some members commented that conversations like these should take place earlier in the approval process so that the President can consider resources required in various service areas.

President Benarroch noted a ripple effect of the Price gift to the Faculty of Engineering, as changing its admissions target will affect all faculties.

It was also noted that targeted funding for enrolment increases in the College of Nursing will likely create a log jam that will need to be examined as we go forward. There will be a number of students needing courses in the Faculty of Science, where, in the case of first year biology, there are sometimes 100 students on the waiting list.

President Benarroch stated that the government will continue with targeted funding. He said when the budget is presented it should include the support necessary in other units. He added that because courses are already full in many cases, it is necessary to ensure quality and reduce strains on units. He added that the University will need to be careful with this as we go forward.

A Board member commented that that this is a positive step for the University and the province, and noted their trust that Senate performed its responsibilities in assessing these impacts and their confidence in the University to sort out resource implications and the budget model.

MOTION TO MOVE TO CLOSED AND CONFIDENTIAL SESSION

It was moved by Dr. Prentice and seconded by Dr. Murdock:
THAT the meeting move into Closed and Confidential Session.

CARRIED

Chair

University Secretary

Dear Board Members:

I am very excited for our March 22, 2022 Board meeting – our first meeting in-person since January 2020! It will be good for many of us to be together in one room again.

As a Board, we continue our work addressing the priorities we identified in the fall in our ‘year ahead document’. One of the key priorities and strategic learning topics identified by the Board is Mental Health & Wellness for students and staff. Promoting mental health and wellness is a key part of the *Our Shared Future* strategic plan update approved last fall. The Board has consistently emphasized deep concern and commitment to ensuring we are prioritizing the mental health and well-being of our students, faculty and staff. As we think about that statement, it is timely to take a step back and ask what does that really mean?

A recent article in the AGB states: “ Meaningfully investing in programs dedicated to students’ physical safety and mental health demonstrates an institutional commitment to student wellness and decreases the risk of future student wellness crisis. Boards are becoming increasingly engaged on this issue and must continue to support students by learning the scope of their institution’s wellness efforts as well as key areas for growth and risk prevention.” This is equally true for employee wellness.

On the March 22nd Board agenda, we will have a presentation from Don Stewart, Executive Director, Student Support, David Ness, Director, Student Counselling Centre and Arlana Vadnais, Employee Wellness Specialist and Campus Mental Health Facilitator on Mental Health and Wellness: Supports and Challenges at the UM. As we listen to this critically important presentation, please consider the following questions, amongst other questions you may have:

- Does the UM have clear goals and benchmarks for measuring student wellness? How is this shared with the Board?
- How does the UM consult with student and staff representatives?
- How does the University define wellness?
- Are the resources / supports/ programming to support mental health and wellness meeting the need?
- Are we seeing any positive trends and alarming trends as it pertains to mental wellness?

The University of Manitoba is a people-driven organization. There are many excellent plans and initiatives underway to promote and support mental health and wellness. Hearing from some of our UM leaders on this topic and discussing trends with them will help us keep wellness top of mind in our work. I look forward to our time together.

Thank you.
Laurel Hyde



Report from Senate (March 2, 2022)

Items forwarded for approval:

Recommended resolution:

THAT the Board of Governors approve, as recommended by Senate:

- A. Report of the Senate Committee on Awards (dated January 20, 2022)**
- B. Proposal for a Bachelor of Science (Major) and Bachelor of Science (Honours) in Environmental Geoscience, Clayton H. Riddell Faculty of Environment, Earth, and Resources**

Items forwarded for information:

- C. Annual Report of the University Discipline Committee, September 1, 2020 – August 31, 2021
 - D. Undergraduate Admission Targets, 2022 – 2023
 - E. Provincial Approval - Closure of Diploma in Population Health, Department of Community Health Sciences
-

ITEM A – for approval (Attachment 1)

Reports of the Senate Committee on Awards (dated January 20, 2022)

Context and Background:

As provided for in its terms of reference, the Senate Committee on Awards has the responsibility, “[on] behalf of Senate, to approve and inform Senate of all new offers and amended offers of awards that comply with the University of Manitoba’s policy on *Student Awards*.”

At its meeting on January 20, 2022, the Committee approved eight new offers and three amended offers, as set out in the Report.

Resource Requirements:

The awards will be funded from the sources identified in the Report.

Consultation and Routing to the Board of Governors:

These award decisions are consistent with the *Student Awards* policy. They were endorsed by the Senate Committee on Awards, on behalf of Senate, at its meeting on January 20, 2022. The Report was provided to the Senate Executive Committee (February 16, 2022) and to Senate (March 2, 2022), for information.

ITEM B – for approval (Attachment 2)

Proposal for a Bachelor of Science (Major) and Bachelor of Science (Honours) in Environmental Geoscience, Clayton H. Riddell Faculty of Environment, Earth, and Resources

Context and Background:

The Department of Earth Sciences, Clayton H. Riddell Faculty of Environment, Earth, and Resources, is proposing to introduce a Bachelor of Science (Major) and Bachelor of Science (Honours) in Environmental Geoscience. Environmental geoscience is defined in the proposal as the interaction of humans with their fundamentally geologic environment. It involves the application of geological and geophysical principles to understand the interaction between Earth materials, the processes that change these over time, and human activities. A core concept of the discipline is sustainable management, which is to work with natural systems to sustain development.

The four-year degrees will require 120 credit hours of course work, as detailed in the proposal. Students in both the Major and Honours programs will be required to complete GEOL 4260 Applied Geophysics Field Course in Year 4. Students in the Honours degree will also complete a thesis (GEOL 4870 Honours Thesis).

The objectives for the programs are to provide students with skills and integrated knowledge of both geological and environmental systems and to align the Department's program offerings with professional registration streams of the Engineers Geoscientists of Manitoba (EGM), which regulates the practice of engineering and geoscience in Manitoba. The curriculum is designed to meet the geoscience knowledge and experience requirements for the Environmental Geoscience stream of study established by Geoscientists Canada. The national organization, which comprises the EGM and other provincial and territorial geoscience practice regulators, establishes requirements for professional registration of geoscientists.

The programs will also address a need within the Department to redesign and redevelop its program offerings, to respond to both contemporary needs of mining, mineral exploration, and oil and gas industries and demand from students, to address issues related to short- and long-term effects of environmental sustainability. Career options available for graduates include environmental consulting, natural hazard assessment, environmental protection and mitigation in resource industries, research and development, and education.

Projected enrolment for the first intake is ten (10) students. The maximum seat capacity is twenty (20) students. The Faculty anticipates the introduction and implementation of the programs will not result in significant incremental enrolment. Most students who will enrol otherwise would have entered one of the Faculty's Geological Sciences degrees.

Resource Requirements:

No new resources will be required to offer the programs, which will make use of existing courses offered by the Departments of Earth Sciences and Environment and Geography, as well as several departments in the Faculties of Science and Agricultural and Food Sciences.

The total cost of delivering the program will be \$3,550,605, in Year 4. Revenue to support the program will be derived from the following sources (as of Year 4):

- operating grant revenue (\$462,953);
- tuition (\$282,703), program/course fees (\$54,900), and student fees (\$16,500), which would generate the amounts indicated, based on enrolment of 55 students;
- existing resources in the Faculty (\$2,733,549).

Revenues identified above will be allocated to the items listed below (figures are for Year 4):

- salary and benefits for existing academic staff (\$2,643,197), including 2.0 FTE Excluded Academic Administrators, 6.0 FTE Professors, 5.0 FTE Associate or Assistant Professors or Senior Instructors, and 4.0 Lecturers, Instructors, or Sessional Instructors;
- salary and benefits for existing professional and support staff (\$470,385), including 2.0 FTE EMAPS Support Staff, 2.0 FTE AESSES Support Staff, and 1.5 FTE CUPE Teaching Assistants;

- existing indirect salary expenses (\$206,199);
- tax on grant and tuition revenue (\$132,354);
- operating expenses (\$70,200); and
- administrative overhead (\$28,270).

The University of Manitoba Libraries indicated current collections can support the proposed programs.

Connection to the University Planning Framework:

The proposal is consistent with the University's Strategic Research Plan, 2015 – 2020, including the Research Themes, Arctic System Science and Technology and Sustainable Water Management Systems, as well as the Signature Area, Arctic System Science and Climate Change. The proposed programs also reflect the breadth of research and teaching of faculty members in the Department of Earth Sciences.

The Senate Planning and Priorities Committee recommends that a high priority level be assigned to the proposal.

Implications:

The proposed B.Sc.(Maj.) and B.Sc.(Hons.) in Environmental Geoscience would be the only undergraduate program in the discipline offered in the province. Environmental geosciences programs are offered at several other Canadian universities. Establishment of the proposed programs would give Manitoba students the option to remain in the province to complete their studies and to receive education and training in Manitoba related aspects of environmental geoscience.

Consultation and Routing to the Board of Governors:

Endorsed and recommended to Senate by: Faculty Council of the Faculty of Environment, Earth, and Resources (September 27, 2021); Senate Planning and Priorities Committee (October 25, 2021); Senate Committee on Curriculum and Course Changes (October 21, 2021); Senate Committee on Admissions (October 27, 2021); Senate Committee on Instruction and Evaluation (October 14, 2021); Senate Executive Committee (February 16, 2022).

Approved and recommended to the Board of Governors by Senate, March 2, 2022.

ITEM C – for information (Attachment 3)

Annual Report of the University Discipline Committee, September 1, 2020 – August 31, 2021

Context and Background:

Correspondence related to the annual report of the University Discipline Committee for the period September 1, 2020 to August 31, 2021 is attached. The full report, outlining all reported disciplinary cases is available on the University Governance website and is linked at the end of this submission. The Board of Governors has jurisdiction over the discipline of students.

The overall number of incidents in 2020-2021 (1219) decreased over the previous year (1303) and involved 3.9 percent of the student body versus 4.3 percent the previous year.

There were 1147 reported incidents of academic misconduct involving 1017 students and 72 reported incidents of non-academic misconduct involving 61 students. A lower number of incidents of non-academic misconduct relative to 2019-2020 (n = 166) may be due to students not being on-site during the pandemic.

There were 44 incidents pending that are not included in the Report, as outcomes were not yet determined or were not available. Updates on the incidents will be included in the 2021-2022 Annual Report.

Four Disciplinary Authorities observed an increase in the incidents of academic misconduct and suggested it was due to remote delivery/testing methods.

One Disciplinary Authority that noted a decrease in the incidents of academic misconduct attributed this to instructors providing more information and supports to educate students on academic integrity.

A second Disciplinary Authority that noted a decrease in the incidents of academic misconduct suggested there were several reasons for this, including pedagogical changes in evaluation strategies, use of Respondus and Zoom for invigilation, proactive approaches (exam design) to identify when unauthorized sources have been used, and educational efforts on academic integrity. It was also noted that students could be getting more sophisticated in committing academic misconduct.

A third Disciplinary Authority noted a declining trend in students submitting academic work that is not their own, particularly paying individuals or otherwise purchasing academic work, known as contract cheating. They noted several similarities in incidents involving essays including marked differences in the quality of writing when compared to other work in the course and the use of unusual metadata attachments. These incidents were first reported with 40 cases in 2016-2017 but decreased to 5 cases in the current report.

A fourth Disciplinary Authority noted a decrease in the instances of non-academic misconduct primarily related to breaches of student residence rules or regulations that might be explained by the pandemic-related reduction in capacity.

The report is shared broadly in order to provide information to assist disciplinary authorities in making decisions on disciplinary matters.

Consultation and Routing to the Board of Governors:

Senate Executive and Senate received the Annual Report, for information, at their meetings on February 16, and March 2, 2022, respectively.

ITEM D – for information (Attachment 4)

Undergraduate Admission Targets, 2022 – 2023

Context and Background:

The Board policy on *Admission Targets* specifies that it is the President who has authority to approve changes to, or the introduction of, admission targets following consultation and discussion with the dean or director, with Senate and with the Board of Governors, subject to the provisions of the provincial *Programs of Study Regulation*.

One change from the previous year's report is an increase to the admission target for the Bachelor of Nursing degree, from 240 to 280 seats. The increase was previously approved by the President effective for the Fall 2021 intake, as reported to Senate on April 7, 2021. The anticipated change had been noted in the report on Undergraduate Admission Targets, 2021 – 2022, but it had not been formally approved at the point in time that the report on undergraduate admission targets was made to Senate and the Board of Governors.

In a cover memo included with the current report, the Vice-Provost (Students) signals the possibility of two changes to the admission targets for the Fall 2022 based on requests for changes to admission targets that are currently being considered. One is the possibility of a further increase to the admission target for the Bachelor of Nursing degree. The second is a possible one-time increase of five seats for the Doctor of Pharmacy degree.

Consultation and Routing to the Board of Governors:

Senate Executive and Senate received the Annual Report, for information, at their meetings on February 16, and March 2, 2022, respectively.

ITEM E – for information

Provincial Approval - Closure of Diploma in Population Health, Department of Community Health Sciences

Context and Background:

- The closure of the Diploma in Population Health, Department of Community Health Sciences was approved by the Board of Governors at its meeting of June 23, 2020. The University received notification on January 19, 2022, that Manitoba Advanced Education, Skills, and Immigration has approved the University's request to close the program.
- The Diploma was established in 2000 to deliver advanced research training to health professionals, clinicians, and managers in population health sciences, including epidemiology and biostatistics. In 2006, the Department of Community Health Sciences established a Master of Public Health degree that has since replaced demand for the Diploma program. The subsequent request to close the Diploma program follows from a recommendation in an external program review.
- As there are no students enrolled in the program, the Provost and Vice-President (Academic) has authorized the closure of the program effective September 1, 2022.

Consultation and Routing to the Board of Governors:

Senate was informed of the Province's approval of the program closure at its meeting on March 2, 2022.

SUBMISSION PREPARED BY: University Secretary

ATTACHMENTS:

Items for approval:

Attachment 1 –

Report of the Senate Committee on Awards (dated January 20, 2022)

Attachment 2 –

Proposal for a Bachelor of Science (Major) and Bachelor of Science (Honours) in Environmental Geoscience, Clayton H. Riddell Faculty of Environment, Earth, and Resources

Items for information:

Attachment 3 –

Covering correspondence from the Chair of UDC re: Annual Report of the University Discipline Committee, September 1, 2020 – August 31, 2021

Note: the full report is available [here](#).

Attachment 4 –

Undergraduate Admission Targets, 2022 – 2023

REPORT OF THE SENATE COMMITTEE ON AWARDS

Preamble

Terms of reference for the Senate Committee on Awards include the following responsibility:

On behalf of Senate, to approve and inform Senate of all new offers and revised offers of awards that comply with the Student Awards Policy.

Observations

At its meeting of January 20, 2022, the Senate Committee on Awards approved 8 new offers and 3 revised offers as set out in the *Report of the Senate Committee on Awards (January 20, 2022)*.

Recommendations

On behalf of Senate, the Senate Committee on Awards recommends that the Board of Governors approve 8 new offers, 3 revised offers as set out in the *Report of the Senate Committee on Awards (January 20, 2022)*. These award decisions comply with the Student Awards Policy.

Respectfully submitted,

Dr Jared Carlberg

Chair, Senate Committee on Awards

SENATE COMMITTEE ON AWARDS

January 20, 2022

1. NEW OFFERS

AmirHossein Ghassemi Graduate Scholarship

In memory of AmirHossein Ghassemi, family, friends and colleagues have established an endowment fund at the University of Manitoba with an initial gift of \$28,000 in 2020. The purpose of the fund is to reward the academic achievements of graduate students pursuing studies in the Biomedical Engineering (BME) Graduate Program in the Price Faculty of Engineering. Each year, beginning in 2022-2023, the available annual income from the fund will be used to offer one or more scholarships to graduate students who:

- (1) are enrolled full-time in the Faculty of Graduate Studies in the Master's or Doctoral Biomedical Engineering (BME) Graduate Program offered by the Price Faculty of Engineering;
- (2) have achieved a minimum grade point average of 3.5 based on the last 60 credit hours (or equivalent) of study; and
- (3) have demonstrated outstanding interest in, or commitment to, research in Epilepsy.

Preference will be given to students whose research involves an emphasis on the sleep electroencephalogram (EEG).

In order to demonstrate how they meet criterion (3), applicants will be required to submit an application that includes a description (maximum 500 words) of their research.

If there are no graduate students working on Epilepsy research, the award can be offered to students who meet criteria (1) and (2).

The selection committee will have the discretion to determine the number and value of the scholarships each year, based on the available income from the fund, as outlined in the criteria above.

The Vice-Provost (Graduate Education) and the Dean of the Faculty of Graduate Studies (or designate) will ask the Scholarships, Bursaries and Awards Committee of the Price Faculty of Engineering to convene the selection committee, which will include the Director of the Biomedical Engineering program (or designate).

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

Drs. Carla and Newman Stephens Awards for Indigenous Health Professionals

In memory of Dr. Carla Stephens (M.D., PhD/'75) and Dr. Newman Stephens (M.D., FRCP), family, friends, former students and colleagues of Drs. Carla and Newman Stephens established an endowment fund at the University of Manitoba. The purpose of the fund is to support and recognize Indigenous achievement in the health professions and to recognize the special roles of education and health care in advancing equality and justice for Indigenous peoples in Canada. When funds are available, the Manitoba Scholarship and Bursary Initiative may make a contribution to the award. Each year, beginning in 2021-

2022, the available annual income from the fund will be used to offer four awards, two of which will be bursaries based on financial need, and two of which will be merit-based scholarships.

Drs. Carla and Newman Stephens Scholarship for Indigenous Health Professionals

Each year, 25% of the available annual income will be used to offer one scholarship to a student who:

- (1) has self-declared as a First Nations, Métis or Inuit person from Canada;
- (2) is enrolled either:
 - (a) full-time (minimum 80% course load) in any year of an undergraduate degree program offered by any College in the Rady Faculty of Health Sciences; or
 - (b) full-time in the Faculty of Graduate Studies in a Master's or Doctoral program offered by any department in the Rady Faculty of Health Sciences;
- (3) has achieved either:
 - (a) as a current undergraduate student, a minimum degree grade point average of 3.0;
 - (b) as a current undergraduate student in the Undergraduate Medical Education program, good standing; or
 - (c) as a current graduate student, a minimum grade point average of 3.0 based on the last 60 credit hours (or equivalent) of study; and
- (4) has demonstrated strong leadership skills in their community.

Applicants must submit the following:

- (i) a written statement (maximum 500 words) to demonstrate their strong leadership skills in their community, which could include a record of community work, volunteerism, or other related activity in or for an Indigenous organization or community;
- (ii) an abstract of their research project in the area of Indigenous health which the applicant had been or is currently involved with; and
- (iii) one reference letter from a member of their community outlining the applicants' leadership ability in the community (maximum 250 words).

The Vice-Provost (Graduate Education) and Dean of the Faculty of Graduate Studies (or designate) will ask the Dean of the Rady Faculty of Health Sciences (or designate) to name the selection committee for the award, which will include a minimum of one Indigenous support staff or faculty member.

Drs. Carla and Newman Stephens Scholarship for Indigenous Health Professionals (Parents)

Each year, 25% of the available annual income will be used to offer one scholarship to a student who:

- (1) has self-declared as a First Nations, Métis or Inuit person from Canada;
- (2) is a single custodial parent with a dependent child or children;
- (3) is enrolled either:
 - (a) full-time (minimum 80% course load) in any year of an undergraduate degree program offered by any College in the Rady Faculty of Health Sciences; or
 - (b) full-time in the Faculty of Graduate Studies in a Master's or Doctoral program offered by any department in the Rady Faculty of Health Sciences;
- (4) has achieved either:
 - (a) as a current undergraduate student, a minimum degree grade point average of 3.0;

- (b) as a current undergraduate student in the Undergraduate Medical Education program, good standing; or
 - (c) as a current graduate student, a minimum grade point average of 3.0 based on the last 60 credit hours (or equivalent) of study; and
- (5) has demonstrated strong leadership skills in their community.

Applicants must submit the following:

- (i) a written statement (maximum 500 words) demonstrating how they meet criterion (2) and their strong leadership skills in their community, which could include a record of community work, volunteerism, or other related activity in or for an Indigenous organization or community;
- (ii) an abstract of their research project in the area of Indigenous health which the applicant had been or is currently involved with; and
- (iii) one reference letter from a member of their community outlining the applicants' leadership ability in the community (maximum 250 words).

In the event that there are no applicants who meet all of the numbered criteria, the scholarship will be offered to a student who meets criteria (1), (3), (4), and (5).

The Vice-Provost (Graduate Education) and Dean of the Faculty of Graduate Studies (or designate) will ask the Dean of the Rady Faculty of Health Sciences (or designate) to name the selection committee for the award, which will include a minimum of one Indigenous support staff or faculty member.

Drs. Carla and Newman Stephens Bursary for Indigenous Health Professionals

Each year, 25% of the available annual income will be used to offer one bursary to a student who:

- (1) has self-declared as a First Nations, Métis or Inuit person from Canada;
- (2) is enrolled either:
 - (a) full-time (minimum 60% course load) in any year of an undergraduate degree program offered by any College in the Rady Faculty of Health Sciences; or
 - (b) full-time in the Faculty of Graduate Studies in a Master's or Doctoral program offered by any department in the Rady Faculty of Health Sciences;
- (3) has achieved either:
 - (a) as a current undergraduate student, a minimum degree grade point average of 3.0;
 - (b) as a current undergraduate student in the Undergraduate Medical Education program, good standing; or
 - (c) as a current graduate student, a minimum grade point average of 3.0 based on the last 60 credit hours (or equivalent) of study; and
- (4) has demonstrated financial need on the standard University of Manitoba General Bursary application.

The Associate Registrar & Director of Financial Aid and Awards (or designate) will name the selection committee for this award.

Drs. Carla and Newman Stephens Bursary for Indigenous Health Professionals (Parents)

Each year, 25% of the available annual income will be used to offer one bursary to a student who:

- (1) has self-declared as a First Nations, Métis or Inuit person from Canada;
- (2) is a single custodial parent with a dependent child or children;

- (3) is enrolled either:
 - (a) full-time (minimum 60% course load) in any year of an undergraduate degree program offered by any College in the Rady Faculty of Health Sciences; or
 - (b) full-time in the Faculty of Graduate Studies in a Master's or Doctoral program offered by any department in the Rady Faculty of Health Sciences;
- (4) has achieved either:
 - (a) as a current undergraduate student, a minimum degree grade point average of 3.0;
 - (b) as a current undergraduate student in the Undergraduate Medical Education program, good standing; or
 - (c) as a current graduate student, a minimum grade point average of 3.0 based on the last 60 credit hours (or equivalent) of study; and
- (5) has demonstrated financial need on the standard University of Manitoba General Bursary application.

In the event that there are no applicants who meet all of the numbered criteria, the bursary will be offered to a student who meets criteria (1), (3), (4), and (5).

The Associate Registrar & Director of Financial Aid and Awards (or designate) will name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall confirm as closely as possible to the expressed intention of the donor in establishing the award.

Lorraine Taraska, FCPA Bursary

Lorraine Taraska, (B.A./'72, B.Comm.(Hons.)/'78, C.A./'80), has established a fund at the University of Manitoba with an initial gift of \$75,000 in 2021. The purpose of the fund is to support students pursuing studies in Accounting in the Asper School of Business. Each year, beginning in 2023-2024, the available annual income from the fund will be used to offer one bursary to an undergraduate student who:

- (1) is enrolled full-time (minimum 60% course load) in any year of study in the Bachelor of Commerce (Honours) program in the Asper School of Business with a declared major in Accounting;
- (2) has achieved a minimum degree grade point average of 2.5; and
- (3) has demonstrated financial need on the standard University of Manitoba bursary application form.

The Dean of the Asper School of Business (or designate) will name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes

necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

Manitoba Farmers with Disabilities Inc. Scholarship in Biosystems Engineering

Manitoba Farmers with Disabilities Inc. established an endowment fund at University of Manitoba in 2020. The purpose of this fund is to reward the academic achievements of undergraduate students pursuing studies in the Biosystems Engineering program in the Price Faculty of Engineering at the University of Manitoba. Each year, beginning in 2022-2023, the available annual income from the fund will be used to offer one scholarship to an undergraduate student who:

- (1) is enrolled full-time (minimum 80% course load) in the third or fourth year of study in the Biosystems Engineering program in the Price Faculty of Engineering;
- (2) has achieved a minimum degree grade point average of 3.0;
- (3) has a history of volunteerism; and
- (4) has registered with Student Accessibility Services as a student with a permanent disability.

Applicants will be required to submit a statement (maximum 250 words) to demonstrate how they meet criteria (3) and (4).

In the event that there are no eligible candidates who meet all of the above criteria, the award can be offered to a student who meets criteria (1) through (3).

The selection committee for this award will be the Scholarships, Bursaries and Awards Committee of the Price Faculty of Engineering and will include an Accessibility Coordinator from the Student Accessibility Services office.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

Professor H. Cohen Graduate Scholarship

In honour of Dr. Harley Cohen, his former student, Sung Suh (M.Sc.[M.E.]'69), established an endowment fund at the University of Manitoba with an initial gift of \$25,000 in 2021. The purpose of the fund is to reward the academic achievements of graduate students in the Master's program in either Mechanical Engineering or Civil Engineering in the Price Faculty of Engineering. Each year, beginning in 2023-2024, the available annual income from the fund will be used to offer one scholarship to a graduate student who:

- (1) is enrolled full-time in the Faculty of Graduate Studies in the Master's Program in Mechanical or Civil Engineering offered by the Price Faculty of Engineering;
- (2) has achieved a minimum grade point average of 3.5 based on the last 60 credit hours (or equivalent) of study; and
- (3) has demonstrated an interest in, or commitment to, research in Applied Mechanics, including Structural Mechanics or Fluid Mechanics.

In order to demonstrate how they meet criterion (3), applicants are required to submit a written description (maximum 500 words) of their research.

The Vice-Provost (Graduate Education) and Dean of the Faculty of Graduate Studies (or designate) will ask the Dean of the Price Faculty of Engineering (or designate) to name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

Sharon Dainard Memorial Award

In memory of Sharon Dainard, Jennifer Rattray and Stacy Dainard, along with family and friends, have established an endowment fund at the University of Manitoba with an initial commitment of \$25,000 in 2021. When funds are available, the Manitoba Scholarship and Bursary Initiative may make a contribution to the award. The purpose of the fund is to support students with First Nation status who identify as female who are pursuing studies in the Faculty of Graduate Studies at the University of Manitoba. The donor will make an additional gift of \$1,000 so the award can be offered in 2022-2023. Each year, beginning in 2023-2024, the available annual income from the fund will be used to offer one award to a graduate student who:

- (1) has First Nation status;
- (2) identifies as female;
- (3) is enrolled part-time or full-time in the Faculty of Graduate Studies in any Master's or Doctoral program offered at the University of Manitoba;
- (4) has achieved a minimum degree grade point average of 3.0 based on the last 60 credit hours (or equivalent) of study; and
- (5) has demonstrated financial need on the standard University of Manitoba bursary application form.

Preference will be given to a candidate from Roseau Anishinabe First Nation.

The Associate Registrar & Director of Financial Aid and Awards (or designate) will name the selection committee for this award, and may include the Head of the Department of Native Studies (or designate).

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

The Teranet Bursary for Indigenous Students

Teranet Inc. established an annually funded bursary for a four-year term with an initial gift of \$10,000 in 2021. The purpose of the bursary is to provide financial support to Indigenous students at the University of Manitoba. Teranet Inc. would like to advance the process of truth and reconciliation with, and for, Indigenous peoples across Canada through the funding of educational opportunities for Indigenous students. Each year, beginning in 2022-2023 and ending in 2025-2026, one bursary valued at \$2,500 will be awarded to an undergraduate student who:

- (1) has self-declared as a First Nations, Métis or Inuit person from Canada;

- (2) is enrolled full-time (minimum 60% course load) in any year of study in any faculty, college, or school with a Direct Entry option;
- (3) has either:
 - (a) as an entering student, met the minimum admission requirements for University 1 or any faculty, college, or school with a Direct Entry option; or
 - (b) as a continuing student, achieved a minimum degree grade point average of 2.0; and
- (4) has demonstrated financial need on the standard University of Manitoba bursary application form.

The Associate Registrar & Director of Financial Aid and Awards (or designate) will name the selection committee for this award.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

**Walter T. Burdz Scholarship
in the Engineering, Safety, and Stewardship of Transportation Infrastructure**

Mr. Walter T. Burdz, B.Sc.(C.E.)/'87, MBA/'96, established an endowment fund with an initial gift of \$25,000 to the University of Manitoba in 2020. The purpose of the fund is to acknowledge and reward the academic achievements of undergraduate and post-graduate students with specific interests in Transportation Engineering.

Beginning in 2022-2023, in academic years ending in an odd number (e.g. the 2022-2023 academic year), the available annual income from the fund will be used to offer one scholarship to an undergraduate student who:

- (1) is enrolled full-time (minimum 80% course load) in their final year of study in the Department of Civil Engineering at the University of Manitoba;
- (2) has achieved a minimum degree grade point average of 3.0; and
- (3) has completed courses within any of the following Transportation Engineering sub-discipline areas: Transportation Systems/Planning, Transportation Infrastructure Geometric Design, Traffic Management/Operations, Pavement Design, or Road Safety (including Pedestrian/Cyclist Safety, Railway Crossing Safety, and Trucking Safety).

In academic years ending in an even number (e.g. the 2023-2024 academic year), the available annual income from the fund will be used to offer one scholarship to a graduate student who:

- (1) is enrolled full-time in the Faculty of Graduate Studies at the University of Manitoba in the second year of any Masters program delivered by the Department of Civil Engineering in the Faculty of Engineering;
- (2) has achieved a minimum grade point average of 3.5 based on the last 60 credit hours (or equivalent) of study; and
- (3) has completed courses within, or has undertaken research relevant to, any of the following Engineering sub-discipline areas: Transportation Systems/Planning, Transportation Infrastructure Geometric Design, Traffic Management/Operations, Pavement Design, Road Safety (including Pedestrian/Cyclist Safety, Railway Crossing Safety, and Trucking Safety), and Roadway and Right-of-Way Stewardship.

Undergraduate and graduate applicants will be required to submit a written statement (maximum 500 words) to demonstrate how they meet criterion (3).

In years in which the scholarship is offered to an undergraduate student, the selection committee will be the Scholarships, Bursaries and Awards Committee of the Faculty of Engineering and will include the Head of Civil Engineering (or designate), and Mr. Walter T. Burdz.

In years in which the scholarship is offered to a graduate student, the Vice-Provost (Graduate Education) and Dean of the Faculty of Graduate Studies (or designate) will ask the Dean of the Faculty of Engineering (or designate) to name the selection committee for the award, which will include the Head of Civil Engineering (or designate), and Mr. Walter T. Burdz.

This agreement may be amended by the mutual consent of the donor (or designate) and the University of Manitoba. All such amendments shall be in writing. In the absence of the donor (or designate), and providing all reasonable efforts have been made to consult, the Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

2. AMENDMENTS

The Asper Foundation Entrance Bursary

The following amendments were made to the terms of reference for The Asper Foundation Entrance Bursary:

- The preamble was revised to:

The Asper Foundation established an endowment fund with a commitment of \$5,000,000 to the University of Manitoba in 2019. The purpose of the fund is to financially support undergraduate students pursuing studies at the University of Manitoba. Each year, beginning in 2022-2023, the available annual income from the fund will be used to offer a maximum of five bursaries in August, valued at \$1,000 each to undergraduate students who:

- The numbered criteria were revised to:

- (1) are registered with Student Accessibility Services as a student with a permanent physical disability;*
- (2) are enrolled full-time (minimum 60% course load) in their first year of study in University 1 or any faculty, college or school at the University of Manitoba with a direct entry option;*
- (3) have achieved a high school average of at least 70% calculated on those courses considered for admission to the University of Manitoba; and*
- (4) have demonstrated high financial need on a Financial Aid and Awards approved bursary application form.*

The remaining available annual income from the fund will be used to offer bursaries in August, which will be valued at \$1,000 each, to undergraduate students who:

- (1) are enrolled full-time (minimum 60% course load) in their first year of study in University 1 or any faculty, college or school at the University of Manitoba with a direct entry option;*
- (2) have achieved a high school average of at least 70% calculated on those courses considered for admission to the University of Manitoba; and*

(3) *have demonstrated high financial need on a Financial Aid and Awards approved bursary application form.*

- The following paragraph was revised to:

The selection committee will have the discretion to determine the number of awards offered each year as outlined above, based on the available annual income from the fund. Priority will be given first to any renewals, and then to any new awards after all renewals have been offered. When the available annual income permits, a maximum of 200 students may receive bursaries in one academic year.

- The selection committee paragraph was revised to:

The selection committee will be named by the Associate Registrar & Director of Financial Aid and Awards (or designate) and will include an Accessibility Coordinator from the Student Accessibility Services office.

Wawanesa Mutual Insurance Company Bursary

The following amendments were made to the terms of reference for Wawanesa Mutual Insurance Company Bursary:

- The preamble was revised to:

The Wawanesa Mutual Insurance Company provides \$15,000 annually to offer bursaries for students at the University of Manitoba. The donor has agreed to renew their financial commitment to provide bursaries for a three-year term. Each year, beginning in 2019-2020, a total of six bursaries, valued at \$2,500 each, will be offered. Two bursaries will be offered in each of the following areas of study: actuarial mathematics, nursing, and computer science.

- The numbered criteria were revised to:

Each year, two bursaries will be offered to undergraduate students who:

- (1) *are enrolled full-time in the third or fourth year of study in either:*
 - (a) *the Asper School of Business, in a Bachelor of Commerce (Honours) program, with a declared major in Actuarial Mathematics, or*
 - (b) *in the Faculty of Science, in a Bachelor of Science (Honours) in Actuarial Mathematics (single or joint Honours program);*
- (2) *have achieved a minimum degree grade point average of 2.5; and*
- (3) *have demonstrated financial need on the standard University of Manitoba general bursary application form.*

Each year, two bursaries will be offered to undergraduate students who:

- (1) *are enrolled full-time in the third year of study in the Faculty of Nursing;*
- (2) *have achieved a minimum degree grade point average of 2.5; and*
- (3) *have demonstrated financial need on the standard University of Manitoba general bursary application form.*

Each year, two bursaries will be offered to undergraduate students who:

- (1) *are enrolled full-time in the third year of study in the Faculty of Science in the Computer Science (Honours) program;*
- (2) *have achieved a minimum degree grade point average of 2.5; and*
- (3) *have demonstrated financial need on the standard University of Manitoba general bursary application form.*

- The selection committee paragraph was revised to:
The selection committee will be named by the Associate Registrar & Director of Financial Aid and Awards (or designate).
- The standard Board of Governors statement was added.

Wawanesa Insurance IBEP Bursary

The following amendments were made to the terms of reference for Wawanesa Mutual Insurance Company Bursary:

- The preamble was revised to:
Wawanesa Insurance provides \$2,500 annually to offer bursaries for students in the Indigenous Business Education Partners program at the University of Manitoba. The donor has agreed to renew their financial commitment to provide bursaries for a three-year term. Each year, beginning in 2019-2020, one or more bursaries totaling up to \$2,500 will be offered to undergraduate students who:
- The numbered criteria were revised to:
 - (1) are members of the Indigenous Business Education Partners (IBEP) program;*
 - (2) are enrolled full-time (minimum 60% course load) in the Asper School of Business at the University of Manitoba;*
 - (3) have as achieved either:*
 - (a) for entering students, the minimum Direct Entry admission requirements for the Asper School of Business, or*
 - (b) for continuing students, a minimum degree grade point average of 2.0; and*
 - (4) have demonstrated financial need on the IBEP bursary application form, approved by the Financial Aid and Awards office at the University of Manitoba.*
- The selection committee paragraph was revised to:
The selection committee will be named by the Director of the Indigenous Business Education Partners program (or designate) and may include the Associate Registrar & Director of Financial Aid and Awards (or designate).
- The standard Board of Governors statement was added.

geoApplication

NEW PROGRAM OF STUDY

Under The Advanced Education Administration Act

Universities and colleges requesting approval for a **new** program of study from Education and Training must apply using this application form. This form reflects the requirements set out in the Programs of Study Regulation (MR 134/2015) under The Advanced Education Administration Act.

UM INTERNAL REQUIREMENTS:

1. Following unit approval* please submit the complete proposal electronically (.pdf single file) to both the Office of the Provost & Vice-President (Academic) and, for:
 - Undergraduate Programs:** Office of the University Secretary (for Senate submission deadlines visit <http://umanitoba.ca/admin/governance/meetings/index.html>. Please also submit a **hard copy** version to the Office of the Secretary to their office as well.
 - Graduate Programs:** Faculty of Graduate Studies (for timelines visit http://umanitoba.ca/faculties/graduate_studies/admin/program_approval_timeline.html).
 - ALL Programs:** as preparation for submission to MET, please submit a .docx file of the proposal, an .xlsx file of the Financial Support Form and a .pdf file of all other supporting documents (letters of support, external reviews, etc.). Please date stamp these files for ease of tracking should any changes result from the Senate approval process and submit directly to the Provost's Office.
2. Along with the information requested in the proposal template, please **append** details on the following:
 - a) **MEDT /SPPC Financial Support Form** [available through the Office of the Provost & Vice-President (Academic)] This form requires the signature of the Financial Planning Office. Please contact Giselle Martel, Executive Director, Financial Planning and Budgeting, for direction on completion of the form. Approval of the financial support form does not signify approval of any funding requests, either internally or from the province. Confirmation of resource availability and allocation of any new funds will be determined by the Provost at time of implementation.
 - b) **Admission and/or transfer criteria** for the proposed program.
 - c) **Course details** for required coursework, including title, course number, credit hours and calendar description. Highlight any proposed new courses and attach:
 - Undergraduate Programs:* for SCCCC Program and Course Change forms, as applicable, visit <http://umanitoba.ca/admin/governance/forms/index.html>
 - Graduate Programs:* for course change forms visit http://umanitoba.ca/faculties/graduate_studies/admin/course_changes.html
 - d) Any **new academic regulations** for the program that are not currently addressed in existing faculty/college/school requirements.
 - e) **Letters of support** from internal units that may be impacted by the proposed new program and any external letters of support as outlined below.
 - f) **Library statement** of support.
 - g) Where applicable, a **transition plan** for current students entering the new program.
3. Please direct questions to Cassandra Davidson, Academic Programs Specialist, at Cassandra.Davidson@umanitoba.ca in the Office of the Provost and Vice-President (Academic).



**University
of Manitoba**

*Note: the complete proposal, including all appendices, and associated program and course forms, should be submitted to departmental (as appropriate) and faculty/college/school approving bodies for review and approval, prior to submission to the Office of the University Secretary.

Revised December 2019.

SECTION A – PROPOSAL DETAILS

Institution: **UNIVERSITY OF MANITOBA**

Applicable faculties/department with responsibility for the program:

Clayton H. Riddell Faculty of Environment, Earth, and Resources

If program is a joint program, list all participating institutions and the roles of each in delivering the proposed program:

Not a joint program

Program name: Environmental Geoscience

Credential awarded: Bachelor of Science (Honours) in Environmental Geoscience
Bachelor of Science (Major) in Environmental Geoscience

Office Use Only

Funding request: None

One-time funding: _____

On-going funding: _____

Proposed start date: Fall 2022

List any critical issues that may impact the start date of the program: None

UM INTERNAL REQUIREMENT: Name of Person(s) responsible for the Program internally (please include contact information):

B-1 Provide a general description of the program and its objectives: *(Include intended purpose, curriculum design, and highlight distinctive attributes)*

The proposed B.Sc. Earth Science Major and Honours in Environmental Geoscience is a 4-year, 120 credit hour program, in the Department of Earth Sciences, Clayton H. Riddell Faculty of Environment, Earth, and Resources (“the Faculty”). The objective of this program is to provide students with skills and integrated knowledge of both geological and environmental systems. A significant motivation for this proposal is to align our professional program offerings with the Engineers Geoscientists Manitoba (EGM) professional registration streams. This program will be interdisciplinary and will be composed of courses from the departments of Earth Sciences, Environment and Geography, Chemistry, Physics, Mathematics, Statistics and Soil Science. When the program is implemented, it will provide a platform for new course introductions in this field in the future.

Why should the University of Manitoba have an Environmental Geoscience program?

Environmental geoscience can be defined as the interaction of humans with their – fundamentally geologic – environment, and applies geological and geophysical principles to understand the interaction between Earth materials (rock, sediments and fluids), the processes that change those materials over time, and human activities. Environmental geoscience is linked directly with engineering geology, environmental engineering, and environmental science. At the heart of environmental geoscience is the concept of sustainable management – working with natural systems to sustain development.

Environmental geoscience has grown in importance as a discipline over the past 40 years, as considerations of economic geology have moved away from the simple resource extraction of the previous two centuries. For example, there has been an increased necessity to fully understand the complexity of Earth composition and structures to resolve contaminant movement and other human interactions with the Earth. Today, environmental geoscience is a broad area of geological endeavour and a major industry in its own right.

By way of example: World energy consumption was ~400 quadrillion BTU in 2003 when the Faculty of Environment Earth and Resources was created, and reached ~600 quadrillion BTU by 2018, with much of the increase attributable to “less-developed” non-OECD countries. During the same period, world carbon emissions rose by 2% (by 2018) to a new record, and demand for oil globally rose by 1.6% (more than twice the average annual rate). Meanwhile, Arctic sea ice formed later in the fall and melted earlier in the spring. International accords such as the Paris Agreement (UN Framework Convention on Climate Change) have seen increasing threats due to a widespread, international rise in nationalism and protectionism. Now in 2021, as we contemplate our “build back better future”, in response to COVID-19, it is important to understand that infrastructure, including steel and concrete, ultimately comes from rocks and minerals at a huge CO₂ price. The shiny new electric vehicles we all hope to be driving will put huge demands on copper, nickel, cobalt and lithium production with a concomitant environmental price. How much of these environmental costs is Canada prepared to externalize? Canada’s workforce needs the technical geoscience knowledge to manage challenges such as these.

The introduction of the Environmental Geoscience program reflects the breadth of research and teaching among the faculty of the Department of Earth Sciences as well as providing more opportunities for developing synergies between the diverse groups within the Faculty. Overall, the introduction of the program demonstrates the University of Manitoba’s ability and strong engagement of the Faculty to tackle the relevant and essential questions about the planet Earth.

This will be the first undergraduate Environmental Geoscience program in Manitoba.

B-2 Length of Program: *(Define the length of the proposed program using measures appropriate to the schedule and delivery format. This will include total course credits and weeks/months, and, where relevant, hours and semesters of instruction)*

The Environmental Geoscience program will be a 4-year B.Sc. (Major and Honours) degree of 120 credit hours.

B-3 Intended outcomes of the program:

B-3.1 Describe how this program serves and advances the academic, cultural, social and economic needs and interests of students and the province:

Geosciences is at a crossroads. In light of the current political climate and the environmental concerns of the public, the introduction of the Environmental Geoscience program aims to significantly improve the public's perception of the geosciences, by showing its relevance to societal and environmental issues and an economically viable, innovative career.

The Faculty and the Department of Earth Sciences have the expertise and facilities to train the next generation of geoscientists that will tackle these complex systems. Mineral development has been identified as a key opportunity for the long-term economic prosperity of Manitoba and equitable outcomes for Manitobans through the Look North strategy and Manitoba's Economic Growth Action Plan. Introduction of an Environmental Geoscience program is a step forward to better prepare our graduates in all phases of mineral development, and to ensure our economic prosperity is not considered mutually exclusive with environmental protection. In addition, the Department of Manitoba Agriculture and Resource development considers groundwater to be a "vital resource". Statistics Canada calculates that 30.2% of the Manitoba population and 50% of Manitoba's municipalities are reliant on groundwater. Graduates of an Environmental Geoscience program will be positioned to address ongoing and future interests of hydrogeologic usage and quality.

B-3.2 Describe the existing and anticipated post-secondary learning needs of students in Manitoba that this program addresses and responds to:

A pressing need remains to deliver equitable outcomes between the resource use that underpins society and environmental impacts. Students, in general, graduate often with strong feelings about the environment but with limited quantitative knowledge of the constraints that underpin our reality. The program is designed to give students a practical and quantitative-based program that realistically deals with these issues. Having graduated from this program, their toolkit will have embedded knowledge and skills that will make them eminently employable.

B-4 Mode of Delivery

B-4.1 Provide the total program length through **one** of the following measures:

120 Total credit hours

Total contact hours

Total courses

B-4.2 What proportion of the total program length (as indicated above) can be completed through the two following modes of delivery? *(Note that one or both selections can be offered up to the total program length.)*

120 credit hours can be concurrently completed In-person

15+ credit hours can be concurrently completed Online

There will be no limit on the number of credit hours that can be completed online. Students will be able to complete as many online course offerings (including required and elective courses) as are available.

B-5 Provide an overview of the suggested progression of courses on a year-by-year basis for the program from start to maturity. *(Course level detail is not necessary, however, please include credit hours/contract hours, proportion of upper level courses, clinical placements or practicums, or subject area requirements where applicable)*

The Clayton H. Riddell Faculty of Environment, Earth, and Resources is proposing to offer a B.Sc. (Major and Honours degree) in Environmental Geoscience. Consistent with other B.Sc. (Major and Honours) Degrees, the degree requires 120 credit hours, or 4 years of study when a student completes a full course (30 credit hours) load each year.

Students will be able to apply to the Environmental Geoscience path upon completion of a minimum of 24 credit hours via advanced entry, or apply directly to the program from high-school via direct entry, each route including specific required courses. These courses can be completed as a Faculty of CHREER student, or as a student in another unit at the University of Manitoba, such as University 1. The university level courses a student would take to gain entry to the program include introductory courses in Geology, Environmental Science, Chemistry, Physics, Mathematics and Statistics. In addition, 6 credit hours of the elective credit to satisfy the Faculty of Arts requirement should be completed in Year 1. As these are common courses offered at many post-secondary institutions, students may have the opportunity to complete these requirements elsewhere, transfer to the U of M, and declare the major after their first year.

Year 2 builds on the foundational introductory courses taken in Year 1, and the content primarily draws on second-year courses in the Department of Earth Sciences.

In Year 3, students build on the knowledge they gained in Year 2, taking more advanced courses that require many of the Year 2 courses as pre-requisites.

Environmental Geoscience students will continue in Year 4 with more advanced courses that require many of the Year 2 courses as pre-requisites. In their final year, students in the Honours program will complete a capstone thesis project in Environmental Geoscience where they will apply the knowledge and skills acquired in earlier courses to a substantial scientific problem.

In addition to the specific required courses in Years 2, 3 and 4, students will complete 15 credit hours (5 courses) from a list of options (Group C) in Earth Sciences and Environment and Geography,

Most of the required courses in Year 1 of the proposed Environmental Geoscience program overlap with courses in Year 1 of the existing Geology and Geophysics (Honours and Major) programs. This synergy allows students, when starting their studies, flexibility in choosing their program of interest without falling behind the proposed timeline.

UM INTERNAL REQUIREMENT: please complete the chart below to provide an overview of suggested progression through the program (indicate pre-requisites and related credit hours). Outline options for specializations within this program [minor(s) and/or concentration(s)].

The program chart is constructed from existing courses offered by Earth Sciences, Environment and Geography, Soil Science and the Faculty of Science. It is proposed to offer both an Honours and Major option, just as with our existing Geology and Geophysics programs.

Environmental Geoscience (Major)¹

Plan of Study Grid

Year 1		Hours
GEOL 1340	The Dynamic Earth (C+)	3
GEOL 1400	Time-Trekker's Travelog: Our Evolving Earth	3
ENVR 1000	Environmental Science – Concepts (C+)	3
MATH 1500	Introduction to Calculus ² (C)	3
CHEM 1100	Atomic and Molecular Structure and Energetics (C)	3
CHEM 1120	Introduction to Chemical Techniques ³	3
PHYS 1020	General Physics 1 ⁴	3
STAT 1000	Basic Statistical Analysis 1 ⁵	3
Select 6 credit hours from the Faculty of Arts, including a required “W” course		6
	Hours	30
Year 2		
GEOL 2390	Environmental Geology	3
GEOL 2440	Structural Geology	3
GEOL 2500	Introduction to Mineralogy	3
GEOL 2520	Igneous and Metamorphic Petrology	3
GEOL 2530	Introductory Sedimentary Petrology and Stratigraphy	3
GEOL 2800	Optics and Spectroscopy of Minerals	3
GEOL 2770	Principles of Inorganic Geochemistry	3
GEOL 2060	Introductory Geophysics	3
6 credit hours of electives		6
	Hours	30
Year 3		
GEOL 3130	Communication Methods in the Geological Sciences	3
GEOL 3420	Engineering Geology	3
GEOL 3450	Hydrogeology	3
GEOL 3490	Glacial Geology and Geomorphology	3
GEOL 3910	Introduction to Field Mapping ⁶	3
SOIL 3600	Soils and Landscapes in Our Environment	3
GEOG 3730	Geographic Information Systems	3
9 credit hours of electives		9
	Hours	30
Year 4		
GEOL 3810	Applied Geophysics	3
GEOL 4260	Applied Geophysics Field Course ⁶	3
Select 15 credit hours of Earth Science Environmental Geoscience Electives		15
9 credit hours of electives		9
	Hours	30
	Total Hours	120

Environmental Geoscience (Honours)¹

Plan of Study Grid

Year 1		Hours
GEOL 1340	The Dynamic Earth (B)	3
GEOL 1400	Time-Trekker's Travelog: Our Evolving Earth	3

ENVR 1000	Environmental Science – Concepts (B)	3
MATH 1500	Introduction to Calculus ² (C)	3
CHEM 1100	Atomic and Molecular Structure and Energetics (C)	3
CHEM 1120	Introduction to Chemical Techniques ³	3
PHYS 1020	General Physics 1 ⁴	3
STAT 1000	Basic Statistical Analysis 1 ⁵	3
Select 6 credit hours from the Faculty of Arts, including a required “W” course		6
	Hours	30
Year 2		
GEOL 2390	Environmental Geology	3
GEOL 2440	Structural Geology	3
GEOL 2500	Introduction to Mineralogy	3
GEOL 2520	Igneous and Metamorphic Petrology	3
GEOL 2530	Introductory Sedimentary Petrology and Stratigraphy	3
GEOL 2800	Optics and Spectroscopy of Minerals	3
GEOL 2770	Principles of Inorganic Geochemistry	3
GEOL 2060	Introductory Geophysics	3
6 credit hours of electives		6
	Hours	30
Year 3		
GEOL 3130	Communication Methods in the Geological Sciences	3
GEOL 3420	Engineering Geology	3
GEOL 3450	Hydrogeology	3
GEOL 3490	Glacial Geology and Geomorphology	3
GEOL 3910	Introduction to Field Mapping ⁶	3
SOIL 3600	Soils and Landscapes in Our Environment	3
GEOG 3730	Geographic Information Systems	3
9 credit hours of electives		9
	Hours	30
Year 4		
GEOL 3810	Applied Geophysics	3
GEOL 4260	Applied Geophysics Field Course ⁶	3
GEOL 4870	Honours Thesis	6
Select 9 credit hours of Earth Science Environmental Geoscience Electives		9
9 credit hours of electives		9
	Hours	30
	Total Hours	120

Footnotes

- ¹ The courses required in this program will satisfy the University Mathematics requirement.
- ² MATH 1230, MATH 1510 or MATH 1520 may be used in lieu of MATH 1500; or MATH 1690 may be used in place of MATH 1500 (or equivalent) and MATH 1700.
- ³ CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.
- ⁴ PHYS 1050 may be used in lieu of PHYS 1020.
- ⁵ STAT 1150 may be used in lieu of STAT 1000.
- ⁶ Students will register for GEOL 3910 and GEOL 4260 in Summer term. NOTE: Students should be aware that they are expected to contribute to transportation and accommodation costs. See the department office at the beginning of each year for information.

Important: The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program. (Letters in brackets indicate the minimum prerequisite standing in a specific course required for entry to the program).

GEOL 1400 is highly recommended to be taken in Year 1, but will not be considered when assessing entrance requirements to the program. If this requirement is not fulfilled in Year 1, it must be completed by the end of Year 2.

Notes:

- To fulfil prerequisite requirements, a grade of 'C' must be achieved in any course stipulated as prerequisite to a further course in Earth Sciences, unless a higher prerequisite is stipulated in a course description.
- All courses are not offered every year. The course schedule for the current academic term is available from the Class Schedule in Aurora.
- Students registering in certain courses may be required to pay a portion of the costs associated with field trips. For details, contact the Department general office.
- Equivalent courses offered through Université de Saint Boniface may be used in lieu of the specified courses identified in the degree program chart.

Earth Sciences Environmental Geoscience Electives

Course List

Course	Title	Hours
GEOL 3900	Sedimentology	3
GEOL 4270	Advanced Studies in Earth Sciences	3
GEOL 4280	Instrumental Techniques in Geology	3
GEOL 4370	Global Change	3
GEOL 4810	Geophysical Data Analysis	3
ENVR 2180	Introductory Toxicology	3
ENVR 2550	Environmental Chemistry	3
ENVR 3160	Environmental Responsibilities and the Law	3
ENVR 3250	Environmental Assessment	3
ENVR 4180	Ecotoxicological Risk Characterization	3
ENVR 4550	Aquatic Chemistry	3
GEOG 2310	Introduction to Process Hydrology (PS)	3
GEOG 2930	Introduction to Oceanography	3
GEOG 3200	Introduction to Remote Sensing (TS)	3

B-6 Will the program be available for part-time study?

Yes

B-7 Indicate if this program will have a cooperative education, work placement, internship or practicum component and provide any relevant details:

No formal program is planned at this time. Geology and geophysics students typically find summer work opportunities in their field, and environmental geoscience students are expected to have similar experiences.

B-8 Intake Information

B-8.1 Projected enrolment for the first intake: 10

B-8.2 Maximum seat capacity (*Defined as first-year enrolment capacity*): 20

B-8.3 Anticipated date of maturity:

Year 3 in the program

UM INTERNAL REQUIREMENT: please indicate the projected enrolment and graduates for the first 5 years of the program.

	Year 1	Year 2	Year 3	Year 4	Year 5
Enrolments	10	25	45	55	60
Graduates	0	0	0	10	15

C-1 Describe how this new program aligns with the strategic plans of your institution:

Within the core strategic research areas at the University of Manitoba, fundamental research on **Sustainable Systems for Resilient Communities** has been identified as cross-cutting research theme: Research in this area is crucial to the future of Manitoba and Canada in the context of changing climate and increasing resource scarcity. University researchers examine questions of sustainability with three main foci: economic, social or equity-based, and environmental - each with unique perspectives, along with key overlaps that allow for interdisciplinary investigations. The proposed Environmental Geoscience program aligns well with these foci. In addition, the Environmental Geoscience program aligns well with two of the eight core research themes identified at the University of Manitoba:

Arctic System Science and Technology. Researchers bring a holistic perspective to research which increasingly emphasizes the interconnectivity of the natural environment, resource development, people, and policy in the Canadian and circumpolar Arctic, as well as teleconnections to temperate regions on the Earth. Increasing political and economic interest in the Arctic, including the rapid expansion of development and resource extraction, demands such an integrated research vision that takes into account both the human and natural environments.

Sustainable Water Management Systems. Management of water quantity and quality at the regional-, watershed-, and farm-scales is contributing to the long-term sustainability of our land, rivers, and lakes. Sustainable water management practices draw on research addressing the interface of land and water, river ice engineering, turbulence, fluid movement and dynamics, building design as well as the hydrologic, biological and atmospheric sciences.

Moreover, **Arctic System Science and Climate Change** is one of the three signature areas (established areas of excellence).

C-2 Outline the internal approval process (i.e. committees, governing bodies) for approving this new program of study within your institution and indicate any dates of decision. *(Governing Council, Board of Governors, Board of Regents, Senate, other)*

UM INTERNAL REQUIREMENTS: Please note date(s) of Faculty/College/School Approval. Approval dates through the governing bodies will be inserted by the Provost’s Office prior to submission to government.

UM Undergraduate Programs:

<u>Decision-Making Body</u>	<u>Date of Approval</u>
Faculty/College/School	_____
SCCCC	_____
SPPC	_____
SCADM <i>(if applicable)</i>	_____
SCIE <i>(if applicable)</i>	_____
Senate Executive	_____
Senate	_____
Board of Governors	_____

UM Graduate Programs:

<u>Decision-Making Body</u>	<u>Date of Approval</u>
APC <i>(preliminary review)</i>	_____
External Review	_____
APC	_____
FGS Executive	_____
FGS Faculty Council	_____
SPPC	_____
Senate Executive	_____
Senate	_____
Board of Governors	_____

C-3 Responsibility to consult

C-3.1 If this program subject to mandatory review or approval by organizations external to the institution (such as regulatory bodies, Apprenticeship Manitoba, etc.), please describe any consultation processes and provide copies of reports or letter from these organizations providing support:

Not applicable

C-3.2 What agencies, groups, or institutions have been consulted regarding the development of this program? *Note: this includes any consultation with internal UM units, academic or otherwise.*

Geoscientists Canada, the national organization of the regulators that govern geoscience practice in Canada's provinces and territories, establishes the geoscience knowledge and experience requirements for the professional registration of geoscientists in Canada. The proposed UM program of study was developed to meet the Environmental Geoscience stream of geoscience study specified by Geoscientists Canada.

In addition, we have consulted with industry, engineering firms and government institutions during the development of this program. We have consulted with the Department of Environment and Geography at UM, which houses the Environmental Science and Environmental Studies programs, as well as other units in our Faculty. Consultations were favourable: universally supportive of the program initiative and helpful in refining the program chart.

C-3.3 How have students and faculty been informed of the intent to establish this program?

Initial consultation was with student representatives, both graduate and undergraduate, and faculty of the Department of Earth Sciences. These initial consultations were followed up by meetings on a one-to-one basis and in groups between the Department Head and students. In addition, individual meetings over a year with Faculty members provided the background knowledge.

In addition to these personalised meetings, the undergraduate curriculum committee (consisting of six faculty members, the graduate and undergraduate student representatives, the Department administrative assistant, and the Faculty student affairs coordinator) met on several occasions over a year to introduce, discuss and refine the program. Voting in October 2020 Department Council and January 2021 Faculty Council was overwhelmingly in favour of the introduction the Environmental Geoscience program.

C-4 List any similar programs offered in Manitoba: *(Provide such information as institution, programs, and credentials offered in addition to any impacts on these programs, explain rationale for duplication.)*

Note: this includes any programs currently offered at UM.

There are no similar undergraduate programs offered in Manitoba.

C-4.1 Describe any specific laddering, articulation and/or credit transfer options for students that are anticipated in this program in Manitoba.

Students in college and universities in the province would be considered for credit transfers as they currently are for any other program in the Faculty. Individual courses are assessed by departments for transferability.

C-5 List any similar programs offered in Canada: *(Provide such information as institution, programs, and credentials offered in addition to any impacts on these programs, explain rationale for duplication.)*

University of Saskatchewan offers a 4-year undergraduate degree in Environmental Geoscience
University of Regina offers a 4-year undergraduate degree in Environmental Earth Sciences
University of Alberta offers a 4-year undergraduate degree in Environmental Earth Sciences
Laurentian University offers a 4-year undergraduate degree in Environmental Geosciences

University of Toronto offers a 4-year undergraduate degree in Environmental Geosciences
University of Ottawa offers a 4-year undergraduate degree in Environmental Geosciences
McMaster University offers a 4-year undergraduate degree in Earth and Environmental Sciences
Acadia University offers a 4-year undergraduate degree in Environmental Geosciences
Brock University offers a 4-year undergraduate degree in Environmental Geosciences
University of New Brunswick offers a 4-year undergraduate degree in Environmental Geosciences
Dalhousie University offers a 4-year undergraduate degree in Environmental Geosciences
Trent University offers a 4-year undergraduate degree in Environmental Geosciences

Environmental geoscience as a separate instructional stream of geoscience has evolved rapidly over the past 20 years. The increasing number of universities adding an Environmental Geoscience degree program attests to the timeliness and rationale of this proposal for UM. We do not anticipate any impacts on the programs offered in other provinces. The Environmental Geoscience program proposed at University of Manitoba would provide Manitoban students with a program in their home province, provide education and training in Manitoba related aspects, and likewise would be closer to home for students from northwestern Ontario and Nunavut.

C-5.1 Describe any specific laddering, articulation and/or credit transfer options for students that are anticipated in this program in Canada.

Students in Canadian universities or colleges would be considered for credit transfers as they currently are for any other program in the Clayton H. Riddell Faculty of Environment, Earth, and Resources. Individual courses are assessed by departments for transferability.

C-6 Describe the current and projected labour market demands in Manitoba for graduates of this Program:

(Provide such information as probable employment destinations or further educational opportunities available to graduates of this new program of study. Attach any formal reports such as those from Associations, Statistics Canada, Sector Councils, Industry or Regulators.)

Graduates from an Environmental Geoscience program can undertake a career in environmental consulting, environmental protection and mitigation directly in the resource industries in Canada and abroad, in research and development, in education, and in natural hazard assessment. Environmental geoscientists are employed by environmental consulting companies serving the resource sector, by resource companies directly, and by urban planning and environmental government entities. A number of UM Geology and Geophysics graduates have pursued these careers successfully, forming a notable contingent among Manitoba's environmental consultants; a dedicated Environmental Geoscience program will allow students to tailor their geoscience degree toward this career path already at the undergraduate level.

The Government of Canada groups environmental geoscientists with other science streams in its evaluations of labour market conditions: its rating for Manitoba's job prospects over the next three years for geoscientists is "good" (3/3 on their ratings schedule). The federal Canadian Occupational Projection System Occupational Projection Summaries note that the number of geoscientists is expected to increase over the period 2019-2028. They expect that the increase will come mostly in the mining industry, as commodity prices are expected to increase with demands for resource use, as demands for metals used in "smart" green technologies increase, and as Canada continues to be a top destination for mineral exploration and mining.

C-7 If copies of any internal or peer evaluations with respect to this new program of study are being provided with this proposal, please indicated how any issues identified by these evaluations have been addressed and attach any relevant documents as available:

SECTION D – REQUIRED RESOURCES AND FINANCIAL IMPLICATIONS

D-1 If one-time or pilot funding are being requested to support this new program of study, please identify the amount of funding being requested:

We are not asking for any funding for this program. Please see budget spreadsheet for details.

D-2 If ongoing funding being requested to support this new program of study, please identify the amount of funding being requested:

We are not asking for any funding for this program. Please see budget spreadsheet for details.

D-3 If new funding is not being requested, how will the program be funded?

The Clayton H. Riddell Faculty of Environment, Earth, and Resources will use existing resources as well as tuition from students in Environmental Geoscience, to deliver and manage this program.

D-4 List any external sources of funding that will be used to support the implementation or delivery of this new program of study: (Provide such information as agreements for funding from industry or external grants and indicate the anticipated length of time for each agreement.)

Not applicable

D-5 What are the resource implications to the institution (budget, IT, library, laboratory, computer, space, practicum liability insurance, student services, etc) in delivering this new program of study?

The Environmental Geoscience program relies on the same infrastructure needs as our existing programs in Geology and Geophysics.

D-6 Please describe new and existing staffing resources needed to provide this new program of study.

Include reallocation of existing faculty, hiring of new faculty, administrative and support services and any other considerations.

No new staffing resources are needed to administer this program. The Department consists of 15 faculty members, 5 of which have been hired in the last 4 years and have a very strong environmental geoscience research portfolio.

Salary and benefits for existing academic staff (\$2,643,197), including 2.0 FTE Excluded Academic Administrators, 6.0 FTE Professors, 5.0 FTE Associate or Assistant Professors or Senior Instructors, and 4.0 Lecturers, Instructors, or Sessional Instructors;

Salary and benefits for existing professional and support staff (\$470,385), including 2.0 FTE EMAPS Support Staff, 2.0 FTE AESES Support Staff, and 1.5 FTE CUPE Teaching Assistants;

Existing indirect salary expenses (\$206,199);

D-7 Provide a program implementation plan for the new program of study by academic year (start to maturity) that includes any elements to be phased in (e.g., new faculty hires, distribution of existing faculty and support staff) from launch to maturity:

Year 1 N/A

Year 2

Year 3

Year 4

D-8 Please describe the effect of this new program on existing capital infrastructure and equipment:

This new program will not impose on existing capital infrastructure and equipment. The Clayton H. Riddell Faculty of Environment, Earth, and Resources has all the necessary resources.

D-9 If capital funding is being requested to support additional specialized program materials such as infrastructure or equipment required to provide this new program of study, please provide a detailed description of the use of this capital:

Not applicable

SECTION E– TUITION

E-1 What are the proposed tuition fees?

The tuition fees will be based on existing Clayton H. Riddell Faculty of Environment, Earth, and Resources fees and therefore will be very similar to fees for existing programs. We have used a rate of \$153.42 (<https://umanitoba.ca/registrar/tuition-fees/undergraduate>) per credit hour based upon the 2020-21 fee schedule. This was the fee that was in effect when the proposal was prepared. Fees may change subject to Board of Governors and provincial approvals.

E-2 Please provide a rationale for the tuition fee proposed. *(For example, are these tuition fees comparable to tuition for existing programs within the academic unit or to tuition for similar programs offered at other institutions?)*

The tuition fees are comparable to existing programs within the Clayton H. Riddell Faculty of Environment, Earth, and Resources.

E-3 Please describe any additional fees that would apply to a student in this program?

UM INTERNAL REQUIREMENTS: Please note any new course-fees proposed in support of this program. Please provide a rationale for any new fees. Are these fees comparable to fees for existing programs within the academic unit or for similar programs offered at other institutions?

In addition to tuition fees the following additional fees will apply:

Lab fees per student per year are about \$325 and,

Field courses: 2 field courses at about \$1000 each.

E-4 Please describe any specific supports to encourage affordability and accessibility to the program:

The supports available are the same as those for existing programs in the Clayton H. Riddell Faculty of Environment, Earth, and Resources. The Department of Earth Sciences has an abundance of awards and scholarships that can assist students with financial needs. In addition, eligible students can apply for general bursary and scholarship funds available through the University of Manitoba.

SECTION F – SIGNATURES

(A second signature section is provided for joint programs only)

SUBMITTED BY:

President:

Name:

Signature:

Date:

Vice-President/Academic:

Name:

Signature:

Date:

For use by joint programs only:

President:

Name:

Signature:

Date:

Vice-President/Academic:

Name:

Signature:

Date:

SUBMIT COMPLETED FORM

PROVOST'S OFFICE ONLY Once completed and signed, please submit this application form to Post-Secondary Education and Labour Market Outcomes at PSE-LMO@gov.mb.ca with the following attachments *(double-click to engage check box)*:

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Cover letter |
| <input type="checkbox"/> | Program of Study Financial Form |
| <input type="checkbox"/> | Any supporting documentation <i>(reviews, letters of support, etc.)</i> |

If you have any questions or require further information, please contact:

Post-Secondary Education and Labour Market Outcomes
Manitoba Education and Training
400-800 Portage Avenue Winnipeg MB R3C 0C4
(204) 945-1833
PSE-LMO@gov.mb.ca



Post-Secondary Education and Labour Market Outcomes
Program Proposal Financial Form

Form Instructions:

1. When proposing a new program *Current Fiscal Year* (the first column) should be left blank, with the first year of the program starting in year 1.
2. When proposing a new program expansion *Current Fiscal* should be entered in the first column.
3. If a program reaches maturity prior to *Fiscal Year 4*, remaining fiscal year columns must still be completed so that *Ongoing Program Funding* can be calculated.
4. Fill in line items for revenue, expenditure, and capital as these pertain to the program. Examples are correspondently listed to the right of the table.
5. Ensure that line items account for overhead. For example, include the amount of tuition that the program will receive after administrative overhead.
6. Only fill out areas shaded in green, using cash accounting. The increment, on-going and total will self-populate accordingly.

Overview

Institution:

Program Name:

Contact Information:

Date:

	Current Fiscal Year	Fiscal Year 1	Increment	Fiscal Year 2	Increment	Fiscal Year 3	Increment	Fiscal Year 4	Increment	Ongoing Program Funding
	(Enter 0's if new program)	Budget Yr. 1	(change from current year)	Budget Yr. 2	(change from year 1 to year 2)	Budget Yr. 3	(change from year 2 to year 3)	Budget Yr. 4	(change from year 3 to year 4)	
REVENUE INFORMATION										
Contribution from Institution		\$ 69,125	\$ 69,125	\$ 172,656	\$ 103,531	\$ 310,404	\$ 137,748	\$ 379,153	\$ 68,749	\$ 379,153
Tuition		\$ 46,026	\$ 46,026	\$ 119,380	\$ 73,354	\$ 222,942	\$ 103,562	\$ 282,703	\$ 59,761	\$ 282,703
Student Fees		\$ 3,250	\$ 3,250	\$ 20,075	\$ 16,825	\$ 41,300	\$ 21,225	\$ 54,900	\$ 13,600	\$ 54,900
Other		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contribution from Unit (Existing Resources)		\$ 2,977,692	\$ 2,977,692	\$ 3,081,911	\$ 104,219	\$ 3,189,778	\$ 107,867	\$ 3,301,420	\$ 111,642	\$ 3,301,420
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
Total Revenue (A)	\$ -	\$ 3,096,093	\$ 3,096,093	\$ 3,394,022	\$ 297,929	\$ 3,764,424	\$ 370,402	\$ 4,018,176	\$ 253,752	\$ 4,018,176

	Current Fiscal Year	Fiscal Year 1	Increment	Fiscal Year 2	Increment	Fiscal Year 3	Increment	Fiscal Year 4	Increment	Ongoing Program Funding
	(Enter 0's if new program)	Budget Yr. 1	(change from current year to year 1)	Budget Yr. 2	(change from year 1 to year 2)	Budget Yr. 3	(change from year 2 to year 3)	Budget Yr. 4	(change from year 3 to year 4)	
EXPENDITURE INFORMATION										

MEDT Form

New Academic Salaries - Direct		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Existing Academic Salaries - Direct		\$ 2,069,417	\$ 2,069,417	\$ 2,555,730	\$ 486,313	\$ 3,156,327	\$ 600,597	\$ 3,898,063	\$ 741,736	\$ 3,898,063	
New Professional/Support Salaries - Direct		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Existing Professional/Support Salaries - Direct		\$ 295,538	\$ 295,538	\$ 364,989	\$ 69,451	\$ 450,761	\$ 85,772	\$ 556,689	\$ 105,928	\$ 556,689	
Operating Expenses		\$ 28,500	\$ 28,500	\$ -	\$ (28,500)	\$ -	\$ -	\$ -	\$ -	\$ -	
Student Support		\$ 47,071	\$ 47,071	\$ 58,132	\$ 11,061	\$ 71,793	\$ 13,661	\$ 88,664	\$ 16,871	\$ 88,664	
Indirect Salary Expenses		\$ 154,691	\$ 154,691				\$ -		\$ -	\$ -	
Administrative Overhead		\$ 25,042	\$ 25,042	\$ 63,774	\$ 38,732	\$ 116,963	\$ 53,189	\$ 145,750	\$ 28,787	\$ 145,750	
			\$ -		\$ -		\$ -		\$ -	\$ -	
			\$ -		\$ -		\$ -		\$ -	\$ -	
Total Expenditures (B)	\$ -	\$ 2,620,259	\$ 2,620,259	\$ 3,042,625	\$ 577,057	\$ 3,795,844	\$ 753,218	\$ 4,689,166	\$ 893,322	\$ 4,689,166	

	Current Fiscal Year	Fiscal Year 1	Increment	Fiscal Year 2	Increment	Fiscal Year 3	Increment	Fiscal Year 4	Increment	Ongoing Program Funding
	(Enter 0's if new program)	Budget Yr. 1	(change from current year to year 1)	Budget Yr. 2	(change from year 1 to year 2)	Budget Yr. 3	(change from year 2 to year 3)	Budget Yr. 4	(change from year 3 to year 4)	
CAPITAL INFORMATON										
Major Equipment		\$ 6,500	\$ 6,500	\$ -	\$ (6,500)	\$ -	\$ -	\$ -	\$ -	\$ -
Vehicles		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Renovations		\$ 7,100	\$ 7,100	\$ -	\$ (7,100)	\$ -	\$ -	\$ -	\$ -	\$ -
Furniture		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
			\$ -		\$ -		\$ -		\$ -	\$ -
Total Capital (C)	\$ -	\$ 13,600	\$ 13,600	\$ -	\$ (13,600)	\$ -	\$ -	\$ -	\$ -	\$ -

Revenue less Expenditures and Capital (A-(B+C))	\$ -	\$ 462,234	\$ 462,234	\$ 351,397	\$ (265,528)	\$ (31,420)	\$ (382,816)	\$ (670,990)	\$ (639,570)	\$ (670,990)
Funding Request		\$ -		\$ -		\$ -		\$ -		

Tuition Generated		49,276		139,455		264,242		337,603		
Tuition allocated		52,276		146,955		277,742		354,103		
Difference in tuition		(3,000)		(7,500)		(13,500)		(16,500)		
From SPPC Form:										
Program Revenue		121,401		319,611		588,146		733,256		
Existing Resources		2,977,692		3,081,911		3,189,778		3,301,420		
Total Revenue (A) from SPPC Form		3,099,093		3,401,522		3,777,924		4,034,676		
Total Revenue MEDT Form	\$	3,096,093	\$	3,394,022	\$	3,764,424	\$	4,018,176		
Difference (S/b = difference in tuition)		3,000		7,500		13,500		16,500		

MEDT Form

Total Costs from SPPC		3,031,234		3,145,685		3,306,741		3,447,170		
Total Cost from MEDT		2,633,859		3,042,625		3,795,844		4,689,166		
Difference (S/b zero)		397,375		103,060		(489,103)		(1,241,996)		
Revenue less Expenditures and Capital (A-(B+C))		\$ 462,234		\$ 351,397		\$ (31,420)		\$ (670,990)		
		\$ -		\$ -		\$ -		\$ -		

**SENATE PLANNING AND PRIORITY COMMITTEE (SPPC)
New Program Approval - Financial Form**

FACULTY / SCHOOL Clayton H. Riddell Faculty of Environment, Earth, and Resources
PROGRAM Environmental Geoscience

1. STAFFING REQUIREMENTS (FTE)	Year 1	Year 2	Year 3	Year 4	Year 5
New Academic Positions (FTE) (Appendix A)	-	-	-	-	-
New Professional and Support Positions (FTE) (Appendix A)	-	-	-	-	-
New Indirect Staff (FTE) (Appendix A)	-	-	-	-	-
Subtotal Staffing Requirements (FTE)	-	-	-	-	-

2. PROGRAM COSTS

Direct Program Costs

New Academic Salaries (incl bpl) (Appendix A)	\$ -	\$ -	\$ -	\$ -	\$ -
Existing Academic Salaries (incl bpl) (Appendix A)	2,384,012	2,467,453	2,553,814	2,643,197	2,735,709
New Professional/Support Salaries (incl bpl) (Appendix A)	-	-	-	-	-
Existing Professional/Support Salaries (incl bpl) (Appendix A)	424,260	439,109	454,478	470,385	486,848
Operating Expenses (Appendix B)	70,200	70,000	70,200	70,200	70,200
Student (Graduate/Undergraduate) Support (Appendix C)	-	-	-	-	-
Major Equipment (Appendix D)	-	-	-	-	-
Vehicles (Appendix D)	-	-	-	-	-
Renovations (Appendix D)	-	-	-	-	-
Furniture (Appendix D)	-	-	-	-	-
Other Capital (Appendix D)	-	-	-	-	-
Subtotal Direct Program Costs	\$ 2,878,472	\$ 2,976,562	\$ 3,078,492	\$ 3,183,782	\$ 3,292,757

Indirect Program Costs

New Indirect Salary Expenses (incl bpl) (Appendix A)	\$ -	\$ -	\$ -	\$ -	\$ -
Existing Indirect Salary Expenses (incl bpl) (Appendix A)	185,980	192,489	199,226	206,199	213,416
Tax on Grant and Tuition Revenue	23,153	58,613	106,848	132,354	137,961
Administrative Overhead	4,603	11,938	22,294	28,270	27,237
Subtotal Indirect Program Costs	\$ 213,735	\$ 263,040	\$ 328,368	\$ 366,823	\$ 378,614

Total Program Costs (Direct & Indirect)	\$ 3,092,208	\$ 3,239,602	\$ 3,406,860	\$ 3,550,605	\$ 3,671,371
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3. ENROLMENT	Year 1	Year 2	Year 3	Year 4	Year 5
Expected Enrolment (headcount)	10	25	45	55	60
Expected Enrolment (credit hours)	300	750	1,350	1,650	1,800

4. PROGRAM REVENUE ALLOCATED TO FACULTY/SCHOOL					
Operating Grant Revenue (see note)	\$ 84,413	\$ 210,833	\$ 379,019	\$ 462,953	\$ 504,880
Tuition Revenue (Appendix E)					
• Credit Hour Based					
Undergraduate	46,026	119,380	222,942	282,703	272,366
Graduate	-	-	-	-	-
• Program Based	-	-	-	-	-
• Program/Course Specific Fees	3,250	20,075	41,300	54,900	60,900
• Other Compulsory Student Fees	3,000	7,500	13,500	16,500	17,813
Other revenue	-	-	-	-	-
Total Program Revenue	\$ 136,689	\$ 357,788	\$ 656,761	\$ 817,056	\$ 855,959

5. EXISTING RESOURCES					
From Operations:					
Academic Salaries (Appendix A)	\$ 2,384,012	\$ 2,467,453	\$ 2,553,814	\$ 2,643,197	\$ 2,735,709
Professional and Support Salaries (Appendix A)	424,260	439,109	454,478	470,385	486,848
Indirect Salaries (Appendix A)	185,980	192,489	199,226	206,199	213,416
Current/prior years surplus (carryover)	15,055	(38,701)	(215,804)	(291,075)	(298,653)
From Other Sources:	(53,788)	(178,536)	(241,615)	(295,157)	(321,908)
Subtotal Existing Resources	\$ 2,955,519	\$ 2,881,814	\$ 2,750,099	\$ 2,733,549	\$ 2,815,412

6. Program shortfall (surplus) (Program Costs -Program Revenue - Existing Resources)	\$ (0)	\$ (0)	\$ 0	\$ 0	\$ (0)
Internal Funds Requested through Strategic Allocation					
Funds Requested of the Provincial Government					
Balance (should be zero)	\$ (0)	\$ (0)	\$ 0	\$ 0	\$ (0)

Guy Beaudry

Digitally signed by Guy Beaudry
Date: 2021.05.18 17:45:47 -05'00'

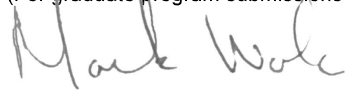
Submitted by Faculty/School Budget Officer (signature)

Date

Reviewed by Graduate Studies Business Manager

Date

(For graduate program submissions only)



Mark Walc

Digitally signed by Mark Walc
Date: 2021.05.18 16:09:57
-05'00'

Reviewed by University Budget Officer (signature)

Date

App A - Salaries

											Average Salary Increase	3.5%
											Average Benefits and Pay Levy	20%
Appendix A - Salary Expenses												
SENATE PLANNING AND PRIORITY COMMITTEE												
NEW PROGRAM APPROVAL PROCESS												
NEW	Year 1		Year 2		Year 3		Year 4		Year 5			
Academic	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary		
Excluded Academic Admin	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -		
Professor	-	-	-	-	-	-	-	-	-	-		
Assoc/Asst Professor or Senior Instructor	-	-	-	-	-	-	-	-	-	-		
Lecturer/Instructor/Sessionals	-	-	-	-	-	-	-	-	-	-		
Librarians	-	-	-	-	-	-	-	-	-	-		
Teaching Assistants	-	-	-	-	-	-	-	-	-	-		
Subtotal New Academic Salaries	-	-	-	-	-	-	-	-	-	-		
Benefits and Pay Levy	-	-	-	-	-	-	-	-	-	-		
Total New Academic Salaries (including BPL)	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -		
Professional and Support Staff												
EMAPS	-	-	-	\$ -	-	\$ -	-	\$ -	-	\$ -		
AESES	-	-	-	-	-	-	-	-	-	-		
CUPE TA's	-	-	-	-	-	-	-	-	-	-		
Subtotal New Professional and Support Staff	-	-	-	-	-	-	-	-	-	-		
Benefits and Pay Levy	-	-	-	-	-	-	-	-	-	-		
Total New Professional and Support Staff (incl. BPL)	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -		
Indirect Staff (Within your faculty/school)												
EMAPS	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -		
AESES	-	\$ -	-	-	-	-	-	-	-	-		
CUPE TA's	-	-	-	-	-	-	-	-	-	-		
Subtotal New Indirect Staff	-	-	-	-	-	-	-	-	-	-		
Benefits and Pay Levy	-	-	-	-	-	-	-	-	-	-		
Total New Indirect Staff (including BPL)	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -		
Total New Staff		\$ -		\$ -		\$ -		\$ -		\$ -		
EXISTING (Within your faculty/school)	Year 1		Year 2		Year 3		Year 4		Year 5			
Academic	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary	FTE	Total Salary		
Excluded Academic Admin	2.00	\$ 349,402	2.00	\$ 361,631	2.00	\$ 374,288	2.00	\$ 387,388	2.00	\$ 400,947		
Professor	6.00	879,913	6.00	910,710	6.00	942,585	6.00	975,575	6.00	1,009,720		
Assoc/Asst Professor or Senior Instructor	5.00	461,229	5.00	477,372	5.00	494,080	5.00	511,373	5.00	529,271		
Lecturer/Instructor/Sessionals	4.00	296,133	4.00	306,498	4.00	317,225	4.00	328,328	4.00	339,819		
Librarians	-	-	-	-	-	-	-	-	-	-		
Teaching Assistants	-	-	-	-	-	-	-	-	-	-		
Subtotal Existing Academic Salaries	17.00	1,986,677	17.00	2,056,210	17.00	2,128,178	17.00	2,202,664	17.00	2,279,757		
Benefits and Pay Levy		397,335		411,242		425,636		440,533		455,951		
Total Existing Academic Salaries (including BPL)	17.00	\$ 2,384,012	17.00	\$ 2,467,453	17.00	\$ 2,553,813	17.00	\$ 2,643,197	17.00	\$ 2,735,709		
Professional and Support Staff												
EMAPS	2.00	\$ 156,357	2.00	\$ 161,829	2.00	\$ 167,494	2.00	\$ 173,356	2.00	\$ 179,423		
AESES	2.00	138,888	2.00	143,749	2.00	148,780	2.00	153,988	2.00	159,377		
CUPE TA's	1.00	44,505	1.00	46,063	1.00	47,675	1.00	49,343	1.00	51,071		
Subtotal Existing Professional and Support Staff	5.00	339,750	5.00	351,641	5.00	363,949	5.00	376,687	5.00	389,871		
Benefits and Pay Levy		67,950		70,328		72,790		75,337		77,974		
Total Existing Professional and Support Staff (incl. BPL)	5.00	\$ 407,700	5.00	\$ 421,970	5.00	\$ 436,738	5.00	\$ 452,024	5.00	\$ 467,845		
Indirect Staff												
EMAPS	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -		
AESES	3.00	154,983	3.00	160,407	3.00	166,022	3.00	171,832	3.00	177,847		
CUPE TA's	-	-	-	-	-	-	-	-	-	-		
Subtotal Existing Indirect Staff	3.00	154,983	3.00	160,407	3.00	166,022	3.00	171,832	3.00	177,847		
Benefits and Pay Levy		30,997		32,081		33,204		34,366		35,569		
Total Existing Indirect Staff (including BPL)	3.00	\$ 185,980	3.00	\$ 192,489	3.00	\$ 199,226	3.00	\$ 206,199	3.00	\$ 213,416		

App A - Salaries

Total Existing Staff	\$ 2,977,692	\$ 3,081,911	\$ 3,189,778	\$ 3,301,420	\$ 3,416,970
GRAND TOTAL	\$ 2,977,692	\$ 3,081,911	\$ 3,189,778	\$ 3,301,420	\$ 3,416,970
Total New from MEDT	-	-	-	-	-
Total Existing MEDT	2,364,955	2,920,719	3,607,088	4,454,752	
Total Indirect from MEDT	154,691	-	-	-	
Total	2,519,646	2,920,719	3,607,088	4,454,752	
Difference	(458,046)	(161,192)	417,310	1,153,332	
Total New from SPPC	-	-	-	-	-
Total Existing SPPC	2,791,712	2,889,422	2,990,552	3,095,221	3,203,554
Total Indirect from SPPC	185,980	192,489	199,226	206,199	213,416
Total	2,977,692	3,081,911	3,189,778	3,301,420	3,416,970
Difference	-	-	-	-	-

App B - Operating Exp.

Appendix B - Operating Expenses						
SENATE PLANNING AND PRIORITY COMMITTEE						
NEW PROGRAM APPROVAL PROCESS						
	<u>Direct Expenses</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
700BGT	Travel - Budget (includes visiting speakers, orientation, research day)	\$ -	\$ -	\$ -	\$ -	\$ -
701BGT	Hospitality - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
704BGT	Printing and Duplicating - Budget	\$ 3,000	\$ -	\$ -	\$ -	\$ -
706BGT	Consumable Materials/Supplies Budget (includes computers)	\$ 7,000	\$ -	\$ -	\$ -	\$ -
708BGT	Telecommunications - Budget	\$ 10,500	\$ -	\$ -	\$ -	\$ -
710BGT	Other Expenses (Nonconsumable) Budget	\$ -	\$ -	\$ -	\$ -	\$ -
713BGT	Insurance - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
716BGT	Externally Contracted Serv - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
718BGT	Professional Fees - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
740BGT	Repairs and Maintenance - Budget	\$ 8,000	\$ -	\$ -	\$ -	\$ -
	Subtotal Direct Operating	\$ 28,500	\$ -	\$ -	\$ -	\$ -

Appendix C - Student Support					
SENATE PLANNING AND PRIORITY COMMITTEE					
NEW PROGRAM APPROVAL PROCESS					
<u>Graduate / Undergraduate Support Expense</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
7700 Scholarships	\$ -	\$ -	\$ -	\$ -	\$ -
7710 Bursaries	\$ -	\$ -	\$ -	\$ -	\$ -
7720 Awards					
Subtotal Operating	\$ -	\$ -	\$ -	\$ -	\$ -

App D - Capital

Appendix D - Capital Costs															
SENATE PLANNING AND PRIORITY COMMITTEE															
NEW PROGRAM APPROVAL PROCESS															
	Year 1			Year 2			Year 3			Year 4			Year 5		
Capital Item	QTY	Unit Cost	Total	QTY	Unit Cost	Total	QTY	Unit Cost	Total	QTY	Unit Cost	Total	QTY	Unit Cost	Total
Major Equipment	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -
Vehicles	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -
Renovations	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -
Furniture	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -
Other (<i>list</i>)			-			-			-			-			-
...															
Subtotal Operating			\$ -			\$ -			\$ -			\$ -			\$ -

**SENATE PLANNING AND PRIORITY COMMITTEE
NEW PROGRAM APPROVAL PROCESS**

1. EXPECTED ENROLMENT	Year 1	Year 2	Year 3	Year 4	Year 5
Headcount					
Undergraduate	10	25	45	55	60
Graduate					
Graduate (continuing only)					
Credit Hours					
Undergraduate	300	750	1,350	1,650	1,800
Graduate					

2. TUITION REVENUE GENERATED BY THE PROGRAM					
• Credit Hour Based - (enter credit hour rate in yr 1)	\$ 153	\$ 159	\$ 165	\$ 171	\$ 178
Undergraduate	46,026	119,380	222,942	282,703	319,968
Graduate	-	-	-	-	-
• Program Based - (enter annual program fee in yr 1)	\$ -	\$ -	\$ -	\$ -	\$ -
Undergraduate	-	-	-	-	-
Graduate	-	-	-	-	-
Total Tuition Fees	\$ 46,026	\$ 119,380	\$ 222,942	\$ 282,703	\$ 319,968
• Continuing Fee - (enter annual continuing fee in yr 2)		\$ -	\$ -	\$ -	\$ -
Graduate	-	-	-	-	-
• Program/Course Specific Fees					
Lab Fees - (enter amount in applicable years)	3,250	6,075	8,300	8,900	8,900
Field Trip Fees - (enter amount in applicable years)	-	14,000	33,000	46,000	52,000
(Fee description/rate)					
..... (add as required)...					
..... (add as required)...					
Total Program/Course Specific Fees	\$ 3,250	\$ 20,075	\$ 41,300	\$ 54,900	\$ 60,900

TOTAL TUITION AND FEES GENERATED BY THE PROGRAM	\$ 49,276	\$ 139,455	\$ 264,242	\$ 337,603	\$ 380,868
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3. TUITION REVENUE ALLOCATED TO THE FACULTY					
• Credit Hour Based - Undergraduate (enter amount)	46,026	119,380	222,942	282,703	319,968
• Credit Hour Based - Graduate	-	-	-	-	-
• Program Based	-	-	-	-	-
• Program/Course Specific Fees	3,250	20,075	41,300	54,900	60,900
• Other Compulsory Student Fees (enter amount)	3,000	7,500	13,500	16,500	18,000
TOTAL TUITION REVENUE ALLOCATED TO THE FACULTY	\$ 52,276	\$ 146,955	\$ 277,742	\$ 354,103	\$ 398,868

Operating Worksheet

Acct	Expense	Year 1	Year 2	Year 3	Year 4	Year 5
700BGT	Travel and Conferences	\$ -	\$ -	\$ -	\$ -	\$ -
7001	Travel Academic					
7002	Travel Administration					
7003	Relocation					
7004	Staff Recruitment					
7005	Field Trips					
7006	Team Travel					
7007	Local Travel					
7009	Student Recruitment					
7010	Student Travel					
7130	Airfare					
7131	Accommodation					
7132	Meals (Per Diem-No receipts)					
7133	Meals (with receipts)					
7134	Mileage (Km's)					
7135	Parking					
7136	Car Rental					
7137	Conference Registration					
7138	Taxis					
7139	Misc Travel/Incidentals					
7676	Hospitality					
704BGT	Printing and Duplicating - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
7040	Printing					
7041	Copying					
706BGT	Consumable Materials/Supplies Budgt	\$ -	\$ -	\$ -	\$ -	\$ -
7060	Office Supplies					
7061	Lab Supplies					
7062	Audio Visual Supplies					
7063	Agricultural Supplies					
7064	Safety Supplies					
7065	Sports and Athletic Supplies					
7066	Books and Subscriptions					
7067	Other Supplies					
7068	Computing Supplies					
7069	Maintenance and Cleaning Supplies					
7070	Dental Supplies					
7071	Equipment Foreign Operations					
7072	Supplies Foreign Operations					
708BGT	Telecommunications - Budget	\$ -	\$ -	\$ -	\$ -	\$ -
7080	IST Telecommunications					
7082	Physical Plant Postage					
7085	Departmental Communications					
710BGT	Other Expenses (Nonconsumable) Budgt	\$ -	\$ -	\$ -	\$ -	\$ -
7100	Affiliated Personnel Costs					
7101	Professional Development					
7102	Professional Memberships					
7103	Conferences/Events Hosted by U of M					
7104	Other Services					
7106	Bad Debts					
7107	Advertising and Promotion					
7108	Licenses and Permits					
7109	Software Maintenance					
7110	Staff Benefits					

Operating Worksheet

7111	Other Non-Consumable Expenses						
7114	Internal Financing Expense						
7116	Internal Services Expense						
718BGT	Professional and External Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7160	Externally Contracted Services						
7180	Professional Fees						
7185	Investment Management Expenses						
740BGT	Repairs and Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7400	Equipment Repairs & Maintenance						
7401	Building Repairs & Maintenance						
7402	Equipment Rental						
7403	Grounds Maintenance						

Admissions and/or transfer criteria (appendix 2. b – UM internal requirements)

Entrance to Honours

To enter the Honours program in Environmental Geoscience, a student must have completed at least 24 credit hours with the minimum Degree Grade Point Average as stipulated in the Entrance and Continuation Requirements Table. In addition, the student must attain the minimum grade requirements specified for individual Year 1 courses according to the degree requirements for Environmental Geoscience. Students who are ineligible to enter Honours with their admission to the Riddell Faculty may establish eligibility the following year on the basis of their second year of academic performance.

Entrance to the Major

To enter a Major program in Environmental Geoscience, a student must have completed at least 24 credit hours with a minimum Degree Grade Point Average of 2.50 as stipulated in Entrance and Continuation Requirements Table. In addition, the student must attain the minimum grade requirements specified for individual Year 1 courses according to the program table for the Major in Environmental Geoscience.

Earth Sciences Advanced Entry Entrance and Continuation Requirements

Degree Program	Minimum Degree GPA Entrance	Minimum Degree GPA Continuation
Major (Environmental Geoscience)	2.50¹	2.50¹
Honours (Environmental Geoscience)	3.00¹	3.00¹
General (Earth Sciences)	2.00¹	2.00¹

¹ In addition to the minimum degree grade point average noted in this chart, specific courses (with minimum grades) are required for entry and these are noted in the program chart for each program.

Course details (appendix 2. C – UM internal requirements)

GEOL 1340 The Dynamic Earth 3 cr

(Lab required) An introduction to dynamics of the Earth's interior and surface that created the environment in which life evolved and that continue to change the world in which people now live. Not to be held with the former GEOL 1440 or the former GEOL 2250. Required for students intending to proceed in further courses in the Geological Sciences

Mutually Exclusive: GEOL 1440, GEOL 2250

Attributes: Recommended Intro Courses

GEOL 1400 Time-Trekker's Travelog: Our Evolving Earth 3 cr

Take a trip across billions of years, as we explore awesome times in the evolution of our planet and its life -- from dust to us! Not to be held with GEOL 1350.

Equiv To: GEOL 1350

Attributes: Recommended Intro Courses

GEOL 2060 Introductory Geophysics 3 cr

(Lab required) An introduction to geophysical exploration, Earth physics, seismology, electrical methods, and potential fields. Emphasis will be on quantitative modeling and will include geophysical measurements and handling of data.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: [[GEOL 1340](#) (or the former GEOL 1440 (C))], and [[MATH 1300](#) or [MATH 1301](#) or [MATH 1310](#) or [MATH 1500](#) or [MATH 1501](#) or [MATH 1510](#) or [MATH 1520](#) or the former MATH 1530 (C)], and [[PHYS 1020](#) or [PHYS 1021](#) or [PHYS 1050](#) or [PHYS 1051](#) (C)].

GEOL 2390 Environmental Geology 3 cr

Examination of geological processes and material as they interact with human activities, environmental planning, and management.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [Minimum 3 credit hours of university-level geology] or [[GEOG 1290](#) or [GEOG 1291](#)], or [the former GEOG 1200 or GEOG 1201].

GEOL 2440 Structural Geology 1 3 cr

(Lab Required) Elementary mechanical principles of rock deformation, brittle and continuous deformation, geometry of faults, folds, joints, cleavage, lineations. Descriptive geometric and stereonet solution to structural geology problems, cross sections, structural contour maps.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [GEOL 1340](#) (C+), and [[MATH 1300](#), or [MATH 1210](#), or [MATH 1500](#), or [MATH 1510](#), or [MATH 1520](#)].

GEOL 2500 Introduction to Mineralogy 3 cr

(Lab Required) An introduction to the chemistry, physics and classification of minerals. Brief, systematic description of about 200 of the most important minerals. Laboratory: hand specimen identification. Not to be held with the former GEOL 2540.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: [GEOL 1340](#) (C+) and [one of Chemistry 40S (50%), CKSL 0100 (P) or the former [CHEM 0900](#) (Pass)]. ([CHEM 1100](#) or [CHEM 1101](#)) and (one of [CHEM 1120](#), [CHEM 1121](#), or [CHEM 1126](#)) are highly recommended.

Mutually Exclusive: GEOL 2540

GEOL 2520 Igneous and Metamorphic Petrology 3 cr

(Lab Required) The classification, occurrence and origin of igneous and metamorphic rocks. The study and identification of rocks using hand specimens and thin sections.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: [[GEOL 2500](#) and [GEOL 2800](#)] or [the former GEOL 2540].

GEOL 2530 Introductory Sedimentary Petrology and Stratigraphy 3 cr

(Lab Required) An introduction to sedimentary deposits and principles of stratigraphic analysis. Occurrence, classification and origin of sedimentary deposits. Facies concept, stratigraphic classification and correlation.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: [[GEOL 2500](#) and [GEOL 2800](#)] or [the former GEOL 2540].

GEOL 2770 Principles of Inorganic Geochemistry 3 cr

(Lab Required) The cosmic abundance of the elements, nucleosynthesis, geological differentiation of the elements; chemical petrology of igneous, metamorphic and sedimentary rocks. An introduction to aqueous and low-temperature geochemistry.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [[GEOL 2500](#) or the former GEOL 2540] and [one of [MATH 1300](#), [MATH 1301](#), [MATH 1210](#), [MATH 1211](#), [MATH 1230](#), [MATH 1500](#), [MATH 1501](#), [MATH 1510](#), or [MATH 1520](#)]. Pre or Corequisite: [([CHEM 1100](#) or [CHEM 1101](#)) and (one of [CHEM 1120](#), [CHEM 1121](#) or [CHEM 1126](#))] or the former CHEM 1300 or the former CHEM 1301.

GEOL 2800 Optics and Spectroscopy of Minerals 3 cr

(Lab Required) Use of the petrographic microscope; microscopic recognition of common rock-forming minerals; introduction to spectroscopic techniques in geosciences (including optical, vibrational and luminescence techniques).

PR/CR: A minimum grade of C is required unless otherwise indicated.

Pre- or Corequisite: [GEOL 2500](#) or the former GEOL 2540.

GEOL 3110 Petrogenesis of Igneous Rocks 3 cr

(Lab Required) Crystallization processes in magma and resultant textures; physical, chemical, and kinetic processes of magmatic systems.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: [GEOL 2520](#) and [GEOL 2770](#).

GEOL 3130 Communication Methods in the Geological Sciences 3 cr

(Lab Required) Practice in oral and written description of geologic subjects; tools of library and database research; manuscript organization; abstract writing; preparation of tables, figures, and audio-visual material. This course is for students in the Honours and Major Geological Sciences programs only.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: [GEOL 2440](#) and [GEOL 2520](#) and [GEOL 2530](#).

Attributes: Written English Requirement

GEOL 3420 Engineering Geology 3 cr

Engineering properties of rocks and soils, laboratory testing and site investigations in engineering geology. Engineering geology of tunnels, bridges, dams, reservoirs, shorelines, sanitary landfills, landslides, seismic risk areas, etc.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: [GEOL 2440](#) and [GEOL 2520](#) and [GEOL 2530](#).

GEOL 3450 Hydrogeology 3 cr

(Lab required) The hydrologic cycle and basic hydrologic processes; properties of aquifers and principles of groundwater flow; well hydraulics and groundwater resource evaluation; regional groundwater flow and subsurface geology; and basic chemical hydrogeology. May not be held with [CIVL 4250](#).

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: [[MATH 1230](#) or [MATH 1500](#) or [MATH 1501](#) or [MATH 1510](#) or [MATH 1520](#)] and [[PHYS 1020](#) or [PHYS 1021](#) or [PHYS 1050](#) or [PHYS 1051](#)] and [([CHEM 1100](#) or [CHEM 1101](#)) and (one of [CHEM 1120](#), [CHEM 1121](#), or [CHEM 1126](#))] or [the former CHEM 1300 or the former CHEM 1301] and [[GEOL 2060](#) or [GEOG 2310](#) or (one of [STAT 1000](#), or [STAT 1001](#), or [STAT 1150](#))] and [[GEOL 2530](#)].

Mutually Exclusive: [CIVL 4250](#)

GEOL 3490 Glacial Geology and Geomorphology 3 cr

(Lab required) Principles of landform development with emphasis on glacial deposition. Aerial photo and map interpretation in lab. Not to be held with the former GEOG 3580.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [GEOL 2530](#).

Mutually Exclusive: GEOG 3580

GEOL 3810 Applied Geophysics 3 cr

(Lab required) The application of geophysical methods in exploration and in environmental and engineering projects.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [[GEOL 2060](#)] and [[GEOL 2500](#) or the former GEOL 2540].

GEOL 3910 Introduction to Field Mapping 3 cr

Course introducing field mapping techniques including field navigation and basic geologic interpretations. Students are responsible for costs of room and board during the field course. Offered in the Summer Term.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: [GEOL 2440](#) and [GEOL 2520](#) and [GEOL 2530](#) and permission of department.

GEOL 4260 Applied Geophysics Field Course 3 cr

Field instruction in the planning and execution of geophysical surveys and the use of geophysical equipment; analysis, interpretation and reporting of acquired geophysical data. Taught with the first half of [GEOL 4740](#) in the summer term. Students are responsible for costs of room and board during the field course. Not to be held with [GEOL 4740](#).

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: [GEOL 3810](#), [GEOL 2440](#), [GEOL 2520](#), [GEOL 2530](#), and permission of department.

Mutually Exclusive: [GEOL 4740](#)

GEOL 4870 Honours Thesis 6 cr

A thesis based on a geoscience research project conducted by a fourth-year student in Geology or Geophysics. Selection of a project and supervisor to be arranged prior to registration, submitted in writing to and approved by the department head. This course is for Honours students only and is to be taken in the student's final year before graduation. Not to be held with [GEOL 4920](#).

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [GEOL 3130](#) and permission of department head.

Mutually Exclusive: [GEOL 4920](#)

ENVR 1000 Environmental Science 1 - Concepts 3 cr

This course will introduce students to the conceptual framework of the environment by examining its physical, biological, and social components. General topics to be considered will include ecological principles and the responses of natural and managed systems to disturbance; population growth; biodiversity and conservation; and environmental sustainability. Not to be held with [BIOL 1340](#).

Mutually Exclusive: [BIOL 1340](#)

Attributes: Recommended Intro Courses

MATH 1500 Introduction to Calculus 3 cr

(Lab Required) Differentiation and integration of elementary functions, with applications to maxima and minima, rates of change, area, and volume. May not be held with [MATH 1230](#), [MATH 1501](#), [MATH 1510](#), [MATH 1520](#), the former MATH 1680, or [MATH 1690](#).

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: a minimum grade of 60% in Pre-calculus Mathematics 40S or the former Mathematics 40S (300), or MSKL 0100 offered by Extended Education.

Equiv To: [MATH 1501](#), [MATH 1510](#), [MATH 1520](#), MATH 1530

Mutually Exclusive: [FA 1020](#), [MATH 1010](#), [MATH 1018](#), [MATH 1020](#), [MATH 1191](#), [MATH 1230](#), MATH 1680, [MATH 1690](#)

Attributes: Mathematics Requirement, Science, Recommended Intro Courses

CHEM 1100 Introductory Chemistry 1: Atomic and Molecular Structure and Energetics 3 cr

This course provides a basic understanding of the fundamentals of chemistry. By the end of this course, students will understand the periodic table, energy in chemistry, atomic and molecular structures, and the concept of chemical reactivity. May not be held with the former CHEM 1300 or CHEM 1301.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: [one of Chemistry 40S (50%), CSKL 0100 (P), or the former [CHEM 0900](#) (P)] and [one of Applied Mathematics 40S (50%), Pre-calculus Mathematics 40S (50%), the former Mathematics 40S (300) (50%), or MSKL 0100].

Mutually Exclusive: [CHEM 1018](#), CHEM 1300, CHEM 1301

Attributes: Science, Recommended Intro Courses

CHEM 1120 Introduction to Chemical Techniques 3 cr

This course builds understanding in chemistry through active learning in the lab. By performing lab experiments, students will gain skills in making observations, safe handling of chemicals, handling laboratory equipment, quantitative analysis, data processing, and scientific communication. These skills are fundamental for student success in chemistry. In addition, students will be given a broader appreciation of chemistry in the world by introducing them to chemical sustainability, chemical responsibility and chemical applications. May not be held with [CHEM 1122](#), [CHEM 1126](#), the former CHEM 1310 or CHEM 1311.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: [70% in Chemistry 40S and (one of 70% in Pre-Calculus Mathematics 40S, 70% in Applied Mathematics 40S, or a "B" or better in MSKL 0100)] or [one of [CHEM 1100](#), the former CHEM 1300, CHEM 1301, CSKL 0100 (P), or the former [CHEM 0900](#) (P)].

Mutually Exclusive: [CHEM 1122](#), [CHEM 1126](#), CHEM 1310, CHEM 1311

Attributes: Science, Recommended Intro Courses

PHYS 1020 General Physics 1 3 cr

(Lab Required) It's a crazy world; come and find out why objects fall, slide, bounce, stick, go in circles or stay straight, float or sink, glide or crash. Why don't satellites fall to the ground? What exactly does weightlessness mean anyway? Find answers to these and other questions as you get to know Newton's and other basic laws of nature and see what makes the world go round. This course, together with the sequel [PHYS 1030](#), is recommended for students seeking either a single, comprehensive course in Physics or entry into health science programs. It may also be used for entry into the Honours Physics program ("B+" or better) or the Major Physics program ("B" or better). May not be held with [PHYS 1021](#), [PHYS 1050](#), [PHYS 1051](#), the former PHYS 1410, or the former PHYS 1420.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: (one of Physics 40S, [PHYS 0900](#) (P), PSKL 0100 (P) offered by Extended Education, or equivalent) and (one of Pre-calculus Mathematics 40S, Applied Mathematics 40S (with 70%

or better), MSKL 0100 offered by Extended Education, or equivalent). It is strongly recommended that students attain a minimum of 70% as the average of their marks in Physics 40S and Pre-calculus Mathematics 40S.

Equiv To: [PHYS 1021](#)

Mutually Exclusive: [PHYS 1018](#), [PHYS 1050](#), [PHYS 1051](#), PHYS 1410, PHYS 1420

Attributes: Mathematics Requirement, Science, Recommended Intro Courses

STAT 1000 Basic Statistical Analysis 1 3 cr

(Lab required) This course is not recommended for students in certain programs (see the description of [STAT 1150](#)). An introduction to the basic principles of statistics and procedures used for data analysis. Topics to be covered include: gathering data, displaying and summarizing data, examining relationships between variables, sampling distributions, estimation and significance tests, inference for means. May not be held with [STAT 1001](#), [STAT 1150](#), [STAT 2220](#).

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: Any grade 12 or 40S Mathematics, or equivalent.

Equiv To: [STAT 1001](#)

Mutually Exclusive: [STAT 1150](#), [STAT 2220](#)

Attributes: Mathematics Requirement, Science, Recommended Intro Courses

SOIL 3600 Soils and Landscapes in Our Environment 3 cr

Discover why soil is an essential resource. Explore the roles of soils and landscapes within natural and agricultural ecosystems by learning the fundamental biological, chemical and physical properties and processes; soil and landscape classification and evaluation.

GEOG 3730 Geographic Information Systems (TS) 3 cr

(Lab Required) Weekly two-hour lab. The course introduces students to the evolving science, technology and applications of Geographic Information Systems (GIS). Related geospatial technologies such as Global Navigation Satellite Systems and Remote Sensing, as well as the field of Geomatics will be introduced. Not to be held with GEOG 2250.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: a grade of C or better in a minimum of three credit hours from Geography, Geology or Environment courses numbered at the 1000 and/or 2000 level, or permission of instructor or department head.

Equiv To: GEOG 2250

Earth Sciences Environmental Geoscience Electives - GROUP C

GEOL 3900 Sedimentology 3 cr

(Lab Required) The study of depositional environments of sedimentary rocks. Facies analysis and modeling of sedimentary deposits.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [GEOL 2530](#).

GEOL 4270 Advanced Studies in Earth Sciences 3 cr

Advanced study in a selected subject in Earth sciences. As the course content will vary from year to year, students may take this course more than once for credit.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: Permission of department head.

GEOL 4280 Instrumental Techniques in Geology 3 cr

(Lab required) Lecture and laboratory course introducing modern instrumental techniques for the characterization of materials. Includes coverage of diffraction, spectroscopy, mass spectrometry, electron and scanning probe techniques. Emphasis is placed on basic principles, instrument operation, data analysis and sample preparation.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: [GEOL 2520](#) and [GEOL 2530](#) and [GEOL 2770](#) and permission of department.

GEOL 4370 Global Change 3 cr

Examination of the major processes controlling global change through time. The causes, magnitude, and periodicity of changes in the geological record resulting from the variability and interaction of continents, oceans, atmospheres, climate, Earth-sun relationships, and ice sheets, with an emphasis on paleoclimate.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [GEOL 3900](#). Pre- or corequisite: [GEOL 3490](#).

GEOL 4810 Geophysical Data Analysis 3 cr

The theory and application of spectral methods in geophysics. The use of Fourier Transforms, convolution, power spectra, coherence, transfer functions, covariance, correlation and filtering.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [MATH 2132](#) or [PHYS 2490](#) or [PHYS 2496](#) or permission of department.

ENVR 2180 Introductory Toxicology 3 cr

A survey of general principles underlying the effects of toxic substances on biological systems, including consideration of the history, scope and applications of toxicology, the mechanisms of toxic action, and some major types of toxicants. Not to be held with [ENVR 2190](#) or [BIOL 2380](#) or [BIOL 2382](#) or [AGRI 2180](#) or [AGRI 2190](#).

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: [[BIOL 1030](#) or [BIOL 1031](#) or (C)], and [(CHEM 1310 or CHEM 1311 (C), or CHEM 1320 (C)].

Equip To: [AGRI 2180](#), [BIOL 2380](#), [BIOL 2381](#), BOTN 2180

Mutually Exclusive: [AGRI 2190](#), [BIOL 2382](#), [BOTN 2190](#), [ENVR 2190](#), [ZOO 2190](#)

ENVR 2550 Environmental Chemistry 3 cr

(Lab Required) An introduction to the chemistry of the environment. Emphasis will be on the composition of the natural environment and the processes of natural and human-introduced chemical species that take place within it. The course will provide students with the chemical basis for understanding the environment and environmental problems. Not to be held with CHEM 2550.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: CHEM 1310 or CHEM 1311 (C).

Equip To: CHEM 2550

ENVR 3160 Environmental Responsibilities and the Law 3 cr

Environmental responsibilities and their legal framework in terms of policies, legislation, standards and guidelines and the tools to manage responsibility are examined through lectures, case study review and discussion. Environmental liability and due diligence are reviewed in relation to responsibilities of organizations and individuals. Strategies to manage environmental liabilities, including environmental and risk assessment, are also discussed. Not to be held with (ENVR 3150 or ENVR 2650).

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ENVR 2000](#) (C) or permission of department head.

Equip To: ENVR 2650, ENVR 3150

ENVR 3250 Environmental Assessment 3 cr

This course engages with the theory, principles and practices of environmental assessment as a planning and decision-making process to identify and mitigate adverse effects of development projects. Environmental assessment is defined in the context of federal and provincial legislation, and applicable standards and guidelines. Assignments involve practical experiences, case study review and basic report preparation.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: [[ABIZ 3550](#) or [ENVR 3160](#) or the former ENVR 3150] and [[BIOL 2300](#) or [BIOL 2301](#) or [AGEC 2370](#)] or [[BIOL 2390](#)] or permission of department head or instructor.

ENVR 4180 Ecotoxicological Risk Characterization 3 cr

An advanced course that will give students working knowledge of current techniques for defining and mitigating the environmental risks associated with chemical and other contaminants. The course will cover the topics of problem definition, effects characterization, exposure characterization, risk assessment, causality, weight of evidence and risk communication and management.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: One of [ENVR 2180](#), [BIOL 2380](#), [BIOL 2381](#) or [AGRI 2180](#) or permission of instructor or department head.

ENVR 4550 Aquatic Chemistry 3 cr

An examination of biogeochemical processes affecting the distribution, speciation and bioavailability of chemical substances in the aquatic environment. The theoretical basis for the chemical behaviour of natural water systems is discussed, as well as the description of the processes involved in wastewater treatment. Not to be held with CHEM 4550.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: [ENVR 3550](#) (C), or CHEM 3590 (C), or permission of department head.

Equip To: CHEM 4550

GEOG 2310 Introduction to Process Hydrology (PS) 3 cr

This course introduces students to the near-surface components of the hydrological cycle, including the processes of precipitation, evaporation, water-biosphere interactions, infiltration, overland and stream flow.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: (one of [GEOG 1290](#), [GEOG 1291](#), GEOG 1200 or GEOG 1201) and (one of [PHYS 1020](#), [PHYS 1021](#), [PHYS 1050](#), [PHYS 1051](#), Math 1230, [MATH 1500](#), [MATH 1500](#), [MATH 1510](#), [MATH 1520](#) or MATH 1530) or permission of department head or instructor.

GEOG 2930 Introduction to Oceanography 3 cr

This course provides an introduction to the physical, chemical, biological and geological processes in the world oceans and their interactions with the overall Earth system. This course is interdisciplinary, applying geological, chemical and biological processes to the study of the world's oceans.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisite: A minimum grade of "C" in [GEOG 1290](#) (or [GEOG 1291](#)) or GEOG 1200 (or GEOG 1201) or [ENVR 1000](#) or [GEOL 1340](#).

GEOG 3200 Introduction to Remote Sensing (TS) 3 cr

(Lab Required) The course is an introduction to the principles of optical, active and passive microwave remote sensing. A review of satellite and sensors and their geographic applications will be presented, along with digital image analysis techniques. Laboratory assignments will provide hands-on experience in dealing with remote sensing data.

PR/CR: A minimum grade of C is required unless otherwise indicated.

Prerequisites: (one of GEOG 1200, GEOG 1201, [GEOG 1290](#) or [GEOG 1291](#)) and (one of [PHYS 1020](#), [PHYS 1021](#), [PHYS 1050](#), [PHYS 1051](#), [MATH 1230](#), [MATH 1300](#), [MATH 1301](#), [MATH 1310](#), [MATH 1500](#), [MATH 1501](#), [MATH 1510](#) or [MATH 1520](#)) or permission of department head.

Earth Sciences

Head: Alfredo Camacho

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Telephone: (204) 474-9371

Fax: (204) 474-7623

Website: <https://umanitoba.ca/environment-earth-resources/earth-sciences> **Academic Staff:** Please refer to the Clayton H. Riddell Faculty of Environment, Earth, and Resources website at: <https://umanitoba.ca/environment-earth-resources/faculty-staff>

Program Information

The [Geological Earth](#) Sciences deal with the history of the Earth and its life, especially that which is recorded in rocks. Different component parts of the Earth system, the *lithosphere, biosphere, atmosphere and hydrosphere*, operate at different length and time scales. During interactions between the spheres there is feedback between the component parts as energy and mass are exchanged, transferred and redistributed. In a geological context, the feedback can occur on a global scale, or on very small scales such as that which we see in minerals. More recently humans have become a major force in this Earth system because we have intervened in many of these exchanges.

Considering the Earth's past, [earth geo](#)scientists typically work with long time scales (in the order of millions to billions of years). We also use Hutton's original philosophy of *uniformitarianism*, stated as the *present is the key to the past*, to solve geological problems. However, as we see changes at the Earth's surface (our environment) occurring on very short time scales we need to learn [how](#) to extract the [anthropogenic](#) signal ~~of human activity from the Earth's pre-human past~~. Once we understand and quantify the nature and extent of the Earth's natural evolution as well as our more recent environmental impact, [geological-earth](#) scientist [tistsees](#) can help predict future changes to the Earth.

[Geology and Geophysics are the Earth Sciences that](#) provides the quantitative data on the physical and chemical behaviour and characteristics of Earth materials - rocks, minerals, fluids and gases. These data are needed to model the behaviour of minerals in natural as well as many industrial systems. The theoretical and instrumental expertise needed to tackle many resource extraction, mineral processing and environmental problems is resident in [geological](#) science departments. From a broad Earth, environmental and resource perspective our collective future will depend on sustainable use of our Earth's resources and care of the environment.

The three-year General program (comprising ~~of~~ 90 credit hours) in [Geological Earth](#) Sciences is designed to give students a basic understanding of the discipline in combination with a concentration of courses in a second subject area. The General Program is ~~not~~ intended for those students who ~~do not~~ seek a career in the geosciences. Rather, it is a useful consideration for students planning to enter the Bachelor of Education program (see the Faculty of Education in this calendar) or other programs that require an undergraduate degree for admission. Students intending to pursue a career in the [Earth geoes](#)Sciences or graduate study should hold an Honours or Major degree (comprising at least 120 credit hours) in [Geology-or-Geophysics-or Environmental Geoscience](#).

Professional Registration

The professional practice of geoscience in Canada is governed by provincial/territorial law and is regulated by professional geoscience associations. In Manitoba, Engineers Geoscientists Manitoba (EGM) regulates professional practice. The requirements for professional registration are acceptable academic preparation and a subsequent period of acceptable geoscience experience. Students considering professional registration should take the B.Sc. [Geological Sciences](#) Honours or Major degree and make appropriate course selections, particularly in the basic sciences. Graduates who do not meet the academic requirements may be required by the professional association to take additional courses or examinations. Current registration information for EGM is available in the department or from the association's web site: www.enggeomb.ca

[Geological Earth](#) Sciences Prerequisite Information

To fulfil prerequisite requirements, a grade of 'C' must be achieved in any course stipulated as a prerequisite to a further course in [Geological Earth](#) Sciences unless otherwise stated. Please note that some GEOL courses require a minimum grade of 'C+' in the prerequisite course.

Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Geological Earth Sciences, B.Sc. General	3	90	no
Geological Earth Sciences Minor		18	no
Environmental Geoscience, B.Sc. Honours	<u>4</u>	<u>120</u>	<u>no</u>
Environmental Geoscience, B.Sc. Major	<u>4</u>	<u>120</u>	<u>no</u>
Geology, B.Sc. G.Se. Honours	4	120	no
Geology, B.Sc. G.Se. Major	4	120	no
Geophysics, B.Sc. G.Se. Honours	4	120	no
Geophysics, B.Sc. G.Se. Major	4	120	no

Environmental Geoscience, B.Sc.~~G.Sc.~~ Honours

Degree Regulations ~~in for~~ B.Sc. ~~in Geological Sciences~~ (Honours) ~~in~~ Geology, ~~or~~ Geophysics ~~or~~ Environmental Geoscience

The Honours programs are the most heavily concentrated programs offered and lead most directly to graduate studies. A student is required to achieve higher grade standards than in the Major degree program. The Honours degree may be pursued on a part-time basis, although it must be recognized that students will require additional terms to complete degree requirements. Students must complete the degree program within 8 years of gaining initial admission to the Honours program. Failure to complete the Honours degree within the 8-year time limit may require a student to transfer into the Major program.

Students admitted to the Honours program will normally have completed six credit hours of courses from the Faculty of Arts. Students who do not meet this requirement within their first 30 credit hours must do so within the Honours program.

A student will normally begin the Honours program in second year and must meet the entrance requirements set out below. Students in full-time study can expect to complete the prescribed courses in four years. Honours programs lead to either the B.Sc. ~~Geological Sciences~~ (Hons.) ~~in~~ Geology ~~or~~ the B.Sc. ~~Geological Sciences~~ (Hons.) ~~in~~ Geophysics ~~or~~ the B.Sc. (Hons.) in Environmental Geoscience.

To be eligible for any award granted exclusively on the basis of academic performance, a student must normally be enrolled in a full-time program as defined by the department.

Students must complete the University Written English and Mathematics requirement as described in the, General Academic Regulations, of this Calendar.

Entrance to Honours

To enter the Honours program in ~~Geology~~ Geophysics ~~or~~ Environmental Geoscience, a student must have completed at least 24 credit hours with the minimum Degree Grade Point Average as stipulated in the Entrance and Continuation Requirements Table. In addition, the student must attain the minimum grade requirements specified for individual Year 1 courses according to the degree requirements for Honours ~~Geology~~ Geophysics ~~or~~ Honours Environmental Geoscience. Students who are ineligible to enter Honours with their admission to the Riddell Faculty may establish eligibility the following year on the basis of their second year of academic performance.

Continuation in Honours

A student's academic performance is assessed first with his/her application for admission to the Riddell Faculty and then following each term in which the student is registered. To be in **good standing** and permitted to continue in the degree program, a student must maintain the performance requirement as stipulated in the Entrance and Continuation Requirements Table. Students who do not meet the minimum performance requirements will be placed on academic warning, probation or academic suspension as outlined in the Faculty Regulations; Academic Warning, Probation, Academic Suspension and Special Students (Academic Standing) in this Chapter. Students who do not maintain this minimum average to remain in the program will be required to withdraw from the Honours program and, if eligible, will be placed in the Major program. Students will have the notation 'Required to Withdraw from the Honours Program' recorded on their transcript.

Failed courses: Students cannot exceed 18 credit hours of failed courses (F's) as calculated on courses applicable to the degree program (DGPA).

Repeating GEOL 4870: The course may be repeated only once after a grade of F.

Program Approval

A Riddell Faculty student advisor in the Faculty Dean's Office must approve a student's ~~Major Honours~~ program each term. Students must also obtain departmental approval for all revisions to their programs. The Advanced/ Major/Honours Program Approval forms are available on the Riddell Faculty web page (<https://umanitoba.ca/environment-earth-resources/>).

Residence Requirement for Honours Students

A student must successfully complete a minimum of 60 credit hours at the University of Manitoba. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources. Residence requirements apply both to first and second-degree students.

Graduation from Honours

In order to graduate from the Honours Geology ~~and~~, Geophysics or Environmental Geoscience programs, students must complete all degree program and faculty requirements as stipulated in Faculty Regulations and in the additional regulations for Geological Earth Sciences. Students must also achieve the minimum performance requirements as outlined in the Graduation Requirements Table. This is defined for the Honours Geology program as a minimum Degree Grade Point Average of 3.00 on 120 credit hours which constitute the degree, ~~and~~ for Honours Geophysics as a minimum Degree Grade Point Average of 2.80 on the 120 credit hours which constitute the degree and Honours Environmental Geoscience as a minimum Degree Grade Point Average of 3.00 on 120 credit hours which constitute the degree.

Recognition of Academic Merit

First Class Honours

To graduate with **First Class Honours**, a student must achieve a Degree Grade Point Average of 3.50. The term 'First Class Honours' will appear both on the parchment and on the student's transcript.

Honours Program Notes

Double Honours Programs

Double Honours programs may be available. The program must be arranged in consultation with the departments concerned.

Honours Requirements and Options

Students who do not obtain the entrance requirements for the Honours program in their first year but who are interested in obtaining an Honours degree should consult with the department before registering for their second year.

Honours Geology Options

For students who wish to increase the focus of their knowledge, recommended electives are listed below:

Environmental Geoscience:

Course	Title	Hours
<u>BIOL 2300</u>	Principles of Ecology	3
or <u>AGEC 2370</u>	Principles of Ecology	
<u>CIVL 4250</u>	Groundwater Hydrology	4
<u>SOIL 4060</u>	Physical Properties of Soils	3
<u>SOIL 4130</u>	Soil Chemistry and Mineralogy	3
<u>SOIL 4500</u>	Remediation of Contaminated Land	3
<u>GEOL 4370</u>	Global Change	3
<u>GEOG 3390</u>	Introduction to Climate Change and Its Causes (PS)	3
<u>ENVR 2180</u>	Introductory Toxicology	3
or <u>BIOL 2380/AGRI 2180</u>	Introductory Toxicology	

Course	Title	Hours
<u>ENVR 3110</u>	Environmental Conservation and Restoration	3
<u>ENVR 3250</u>	Environmental Assessment	3

Or others approved by the department

(Students are responsible for completion of prerequisites for these courses.)

Honours Geophysics Option

Students who wish to enter the Honours Geophysics Option and have not taken 6 credit hours of introductory Geological-Earth Sciences (eg., GEOL 1340 and one of GEOL 1400, GEOL 1410, or GEOL 1420) may arrange with the department to make up this credit. Students must contact the department during the spring preceding entrance to the Honours program. All course choices in the Honours program should be made after consultation with the coordinator of the Geophysics program.

Geological-Earth Sciences Advanced Entry Entrance and Continuation Requirements

Degree Program	Minimum Degree GPA Entrance	Minimum Degree GPA Continuation
Major (Geology, <u>Environmental Geoscience</u>)	2.50 ¹	2.50 ¹
Major (Geophysics)	2.50 ¹	2.50 ¹
Honours (Geology, <u>Environmental Geoscience</u>)	3.00 ¹	3.00 ¹
Honours (Geophysics)	2.80 ¹	2.80 ¹
General (<u>Geological-Earth</u> Sciences)	2.00 ¹	2.00 ¹

¹ In addition to the minimum degree grade point average noted in this chart, specific courses (with minimum grades) are required for entry and these are noted in the program chart for each program.

Geological-Earth Sciences Graduation Requirements

Degree Program	Minimum Degree Grade Point Average
Major (Geology, <u>Environmental Geoscience</u>) (120)	2.50
Major (Geophysics) (120)	2.50
Honours (Geology, <u>Environmental Geoscience</u>) (120)	3.00
Honours (Geophysics) (120)	2.80
General (<u>Geological-Earth</u> Sciences) (90)	2.00

Degree Requirements¹

Plan of Study Grid

Year 1		Hours
CHEM 1100	Atomic and Molecular Structure and Energetics (C)	3
CHEM 1120	Introduction to Chemical Techniques ³²	3
ENVR 1000	Environmental Science 1 – Concepts (B)	3
GEOL 1340	The Dynamic Earth (B)	3
GEOL 1400	Time-Trekker's Travelog: Our Evolving Earth	3
MATH 1500	Introduction to Calculus (C) ²³	3
PHYS 1020	General Physics 1 ⁴	3
STAT 1000	Basic Statistical Analysis 1 ⁵	3
Select 6 credit hours from the Faculty of Arts, including a required "W" course		6
Hours		30
Year 2		
GEOL 2390	Environmental Geology	3
GEOL 2440	Structural Geology 1	3
GEOL 2500	Introduction to Mineralogy	3
GEOL 2520	Igneous and Metamorphic Petrology	3
GEOL 2530	Introductory Sedimentary Petrology and Stratigraphy	3
GEOL 2800	Optics and Spectroscopy of Minerals	3
GEOL 2770	Principles of Inorganic Geochemistry	3
GEOL 2060	Introductory Geophysics	3
6 credit hours of electives		6
Hours		30
Year 3		
GEOG 3730	Geographic Information Systems	3
GEOL 3130	Communication Methods in the Geological Sciences	3
GEOL 3420	Engineering Geology	3
GEOL 3450	Hydrogeology	3
GEOL 3490	Glacial Geology and Geomorphology	3
GEOL 3910	Introduction to Field Mapping ⁶	3
SOIL 3600	Soils and Landscapes in Our Environment	3
9 credit hours of electives		9
Hours		30
Year 4		
GEOL 3810	Applied Geophysics	3
GEOL 4260	Applied Geophysics Field Course ⁶	3
GEOL 4870	Honours Thesis	6
Select 9 credit hours of Earth Science Environmental Geoscience Electives		9
9 credit hours of electives		9
Hours		30
Total Hours		120

Footnotes

- ¹ The courses required in this program will satisfy the University Mathematics requirement.
- ² ~~CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120. MATH 1230, MATH 1510 or MATH 1520 may be used in lieu of MATH 1500; or MATH 1690 may be used in place of MATH 1500 (or equivalent) and MATH 1700.~~
- ³ ~~CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120. MATH 1230, MATH 1510 or MATH 1520 may be used in lieu of MATH 1500; or MATH 1690 may be used in place of MATH 1500 (or equivalent) and MATH 1700.~~
- ⁴ PHYS 1050 may be used in lieu of PHYS 1020.
- ⁵ STAT 1150 may be used in lieu of STAT 1000.
- ⁶ Students will register for GEOL 3910 and GEOL 4260 in Summer term. NOTE: Students should be aware that they are expected to contribute to transportation and accommodation costs. See the department office at the beginning of each year for information.

Important: The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program. (Letters in brackets indicate the minimum prerequisite standing in a specific course required for entry to the program).

GEOL 1400 is highly recommended to be taken in Year 1, but will not be considered when assessing entrance requirements to the program. If this requirement is not fulfilled in Year 1, it must be completed by the end of Year 2.

Notes:

- To fulfil prerequisite requirements, a grade of 'C' must be achieved in any course stipulated as prerequisite to a further course in Geological Earth Sciences, unless a higher prerequisite is stipulated in a course description.
- All courses are not offered every year. The course schedule for the current academic term is available from the Class Schedule in Aurora.
- Students registering in certain courses may be required to pay a portion of the costs associated with field trips. For details, contact the Department general office.
- Equivalent courses offered through Université de Saint Boniface may be used in lieu of the specified courses identified in the degree program chart.

Earth Sciences Environmental Geoscience Electives

Course	Title	Hours
ENVR 2180	Introductory Toxicology	3

Course	Title	Hours
ENVR 2550	Environmental Chemistry	3
ENVR 3160	Environmental Responsibilities and the Law	3
ENVR 3250	Environmental Assessment	3
ENVR 4180	Ecotoxicological Risk Characterization	3
ENVR 4550	Aquatic Chemistry	3
GEOG 2310	Introduction to Process Hydrology (PS)	3
GEOG 2930	Introduction to Oceanography	3
GEOG 3200	Introduction to Remote Sensing (TS)	3
GEOL 3900	Sedimentology	3
GEOL 4270	Advanced Studies in Earth Sciences	3
GEOL 4280	Instrumental Techniques in Geology	3
GEOL 4370	Global Change	3
GEOL 4810	Geophysical Data Analysis	3

Environmental Geoscience, B.Sc.~~G.Sc.~~ Major

Degree Regulations ~~in for~~ B.Sc. ~~in Geological Sciences~~ (Major) ~~in~~ Geology ~~or~~, Geophysics or Environmental Geoscience.

To qualify for the degree, a student must complete a minimum of 120 credit hours with passing grades ('D' or better) in each course and with a minimum degree grade point average of 2.50 as indicated in the Graduation Requirements Table. Students must complete all Faculty requirements as well as the University Written English and Mathematics requirement in the General Academic Regulations, in this *Calendar*.

Students admitted to the Major program will normally have completed six credit hours of courses from the Faculty of Arts. Students who do not meet this requirement within their first 30 credit hours must do so within the Major program.

Minor in Another Department

Students in the B.Sc. ~~Geological Sciences~~ have the opportunity to complete a Minor in a subject field that is different than that of the declared major, and which normally consists of 18 credit hours from a department offering this option at the University of Manitoba. Students in the B.Sc. ~~Geological Sciences~~ are not permitted to complete a Minor in ~~Geological Earth~~ Sciences. The Minor requirements are found in the Faculty Regulations. Contact the department and/or a Riddell Faculty student advisor in the Faculty Dean's Office for further information about eligible Minors.

Entrance to the Major

To enter a Major program in Geology ~~or~~, Geophysics or Environmental Geoscience, a student must have completed at least 24 credit hours with a minimum Degree Grade Point Average of 2.50 as stipulated in Entrance and Continuation Requirements Table. In addition, the student must attain the minimum grade requirements specified for individual Year 1 courses according to the program tables for the Major in Geology ~~or~~ the Major in Geophysics or the Major in Environmental Geoscience.

Continuation in the Major

A student's academic performance is assessed first with his/her application for admission to the Riddell Faculty and then following each term in which the student is registered. To be in **good standing** and permitted to continue in the degree program, a student must maintain a minimum degree Grade Point Average of 2.50 as stipulated in the Entrance and Continuation Requirements Table. Students who do not meet the minimum performance requirement will be required to withdraw from the Major program and will be placed in the General program provided their Degree Grade Point Average is 2.00 or above. Students will have the notation 'Required to Withdraw from the Major Program', recorded on their transcript.

If below 2.00, students will be placed on academic warning, probation or academic suspension as outlined in the Faculty Regulations.

Failed courses: Students cannot exceed 18 credit hours of failed courses (F's) as calculated on courses applicable to the degree program (DGPA).

Repeating GEOL 4920: The course may be repeated only once after a grade of F.

Program Approval

A Riddell Faculty student advisor (riddell.faculty@umanitoba.ca) in the Faculty Dean's Office must approve a student's Major program each term. Students must also obtain departmental approval for all revisions to their programs. The Advanced/Major/Honours Program Approval.

Graduation in the Major

In order to graduate from the Geology ~~or~~, Geophysics ~~or~~ Environmental Geoscience Major program, students must complete all degree program and faculty requirements as stipulated in the Faculty Regulations and in the additional regulations for Geological Earth Sciences. Students must also achieve the minimum performance requirements as outlined in the Graduation Requirements Table. This is defined as a minimum Degree Grade Point Average of 2.50 on 120 credit hours which constitute the degree.

Residence Requirement for Major Students

A student must successfully complete a minimum of 60 credit hours at the University of Manitoba. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources. Residence requirements apply both to first and second-degree students.

Recognition of Academic Merit

Degree with Distinction

To obtain a degree with distinction a student must achieve a minimum 3.50 Degree Grade Point Average on all courses constituting the Major degree. The term 'Degree with Distinction' will appear both on the parchment and on the student's transcript.

Geological Earth Sciences Advanced Entry Entrance and Continuation Requirements

Degree Program	Minimum Degree Grade Point Average
Major (Geology, <u>Environmental Geoscience</u>) (120)	2.50
Major (Geophysics) (120)	2.50
Honours (Geology, <u>Environmental Geoscience</u>) (120)	3.00
Honours (Geophysics) (120)	2.80
General (<u>Geological Earth</u> Sciences) (90)	2.00

¹ In addition to the minimum degree grade point average noted in this chart, specific courses (with minimum grades) are required for entry and these are noted in the program chart for each program.

Geological Earth Sciences Graduation Requirements

Degree Program	Minimum Degree Grade Point Average
Major (Geology, <u>Environmental Geoscience</u>) (120)	2.50
Major (Geophysics) (120)	2.50
Honours (Geology, <u>Environmental Geoscience</u>) (120)	3.00
Honours (Geophysics) (120)	2.80
General (<u>Geological Earth</u> Sciences) (90)	2.00

Degree Requirements¹

Plan of Study Grid

Year 1		Hours
CHEM 1100	Atomic and Molecular Structure and Energetics (C)	3
CHEM 1120	Introduction to Chemical Techniques ³²	3

ENVR 1000	Environmental Science 1 – Concepts (C+)	3
GEOL 1340	The Dynamic Earth (C+)	3
GEOL 1400	Time-Trekker's Travelog: Our Evolving Earth	3
MATH 1500	Introduction to Calculus (C) ^{2,3}	3
PHYS 1020	General Physics 1 ⁴	3
STAT 1000	Basic Statistical Analysis 1 ⁵	3
Select 6 credit hours from the Faculty of Arts, including a required “W” course		6
Hours		30
Year 2		
GEOL 2390	Environmental Geology	3
GEOL 2440	Structural Geology 1	3
GEOL 2500	Introduction to Mineralogy	3
GEOL 2520	Igneous and Metamorphic Petrology	3
GEOL 2530	Introductory Sedimentary Petrology and Stratigraphy	3
GEOL 2800	Optics and Spectroscopy of Minerals	3
GEOL 2770	Principles of Inorganic Geochemistry	3
GEOL 2060	Introductory Geophysics	3
6 credit hours of electives		6
Hours		30
Year 3		
GEOG 3730	Geographic Information Systems	3
GEOL 3130	Communication Methods in the Geological Sciences	3
GEOL 3420	Engineering Geology	3
GEOL 3450	Hydrogeology	3
GEOL 3490	Glacial Geology and Geomorphology	3
GEOL 3910	Introduction to Field Mapping ⁶	3
SOIL 3600	Soils and Landscapes in Our Environment	3
9 credit hours of electives		9
Hours		30
Year 4		
GEOL 3810	Applied Geophysics	3
GEOL 4260	Applied Geophysics Field Course ⁶	3
Select 15 credit hours of Earth Science Environmental Geoscience Electives		15
9 credit hours of electives		9
Hours		30
Total Hours		120

Footnotes

¹ The courses required in this program will satisfy the University Mathematics requirement.

² ~~CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120. MATH 1230, MATH 1510 or MATH 1520 may be used in lieu of MATH 1500; or MATH 1690 may be used in place of MATH 1500 (or equivalent) and MATH 1700.~~

³ ~~CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120.~~ MATH 1230, MATH 1510 or MATH 1520 may be used in lieu of MATH 1500; or MATH 1690 may be used in place of MATH 1500 (or equivalent) and MATH 1700.

⁴ PHYS 1050 may be used in lieu of PHYS 1020.

⁵ STAT 1150 may be used in lieu of STAT 1000.

⁶ Students will register for GEOL 3910 and GEOL 4260 in Summer term. NOTE: Students should be aware that they are expected to contribute to transportation and accommodation costs. See the department office at the beginning of each year for information.

Important: The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program. (Letters in brackets indicate the minimum prerequisite standing in a specific course required for entry to the program).

GEOL 1400 is highly recommended to be taken in Year 1, but will not be considered when assessing entrance requirements to the program. If this requirement is not fulfilled in Year 1, it must be completed by the end of Year 2.

Notes:

- To fulfil prerequisite requirements, a grade of 'C' must be achieved in any course stipulated as prerequisite to a further course in Geological-Earth Sciences, unless a higher prerequisite is stipulated in a course description.
- All courses are not offered every year. The course schedule for the current academic term is available from the Class Schedule in Aurora.
- Students registering in certain courses may be required to pay a portion of the costs associated with field trips. For details, contact the Department general office.
- Equivalent courses offered through Université de Saint Boniface may be used in lieu of the specified courses identified in the degree program chart.

Earth Sciences Environmental Geoscience Electives

Course	Title	Hours
ENVR 2180	Introductory Toxicology	3
ENVR 2550	Environmental Chemistry	3
ENVR 3160	Environmental Responsibilities and the Law	3
ENVR 3250	Environmental Assessment	3
ENVR 4180	Ecotoxicological Risk Characterization	3
ENVR 4550	Aquatic Chemistry	3
GEOG 2310	Introduction to Process Hydrology (PS)	3
GEOG 2930	Introduction to Oceanography	3

Course	Title	Hours
GEOG 3200	Introduction to Remote Sensing (TS)	3
GEOL 3900	Sedimentology	3
GEOL 4270	Advanced Studies in Earth Sciences	3
GEOL 4280	Instrumental Techniques in Geology	3
GEOL 4370	Global Change	3
GEOL 4810	Geophysical Data Analysis	3



May 10, 2021

Via Email to – Alfredo Camacho – Alfredo.Camacho@umanitoba.ca

Alfredo Camacho
Department of Geological Sciences
University of Manitoba
125 Dysart Road
Winnipeg, Manitoba R3T 2N2

Re: Endorsement for the University of Manitoba – Department of Earth Sciences

Dear Alfredo Camacho:

The purpose of this letter is to fully endorse the Department of Geological Science changing its name to the Department of Earth Sciences and to support the University of Manitoba's introduction of the Environmental Geoscience Program. I graduated from the University of Manitoba in 1999 and have over 20 years of experience in the mineral resources industry.

I support these changes in response to the current political climate and the environmental concerns of the public. Earth Sciences are highly relevant to societal and environmental issues. The introduction of the Environmental Geoscience Program will serve to improve the public's perception of the geosciences by promoting it as a highly economically viable and innovative career path. Geologists are not only involved in finding high-grade resources, but their expertise is critical in almost every aspect of adding value to the resources and assets, including engineering, environmental management, and community relations.

I fully recommend the University's Department name change to the Department of Earth Sciences and support the program proposal for the Environmental Geoscience Program. Please do not hesitate to contact me with any questions.

Yours truly,

A handwritten signature in black ink that reads "Shastri Ramnath".

Shastri Ramnath, B.Sc. (Hons), M.Sc., MBA (Exec), P.Geo
President, & CEO **Exiro Minerals Corp.**; Non-Executive Chair, **Orix Geoscience Inc.**
Shastri.Ramnath@orixgeo.com, Cell: 647-382-5137

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416.477.1971

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705.885.9977

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UM | Faculty of Agricultural
and Food Sciences

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Alfredo Camacho
Head, Department of Geological Sciences,
University of Manitoba,
125 Dysart Rd,
Winnipeg, Manitoba, R3T 2N2
CANADA

May 10, 2021

Dear Dr Camacho

I am writing in support of the proposal by the Clayton H. Riddell Faculty of Environment, Earth, and Resources at the University of Manitoba to introduce a program in Environmental Geoscience.

An understanding of the basic processes in earth sciences is critical to a number of issues in agriculture, such as the development and maintenance of soil health, processes of agricultural remediation of post-industrial land, and the impact of climate change on agricultural productivity (positive and negative in the case of western Canada) and its potential to spread pests and infestation.

There will be a number of benefits of such a program to students in the Faculty of Agricultural & Food Sciences. Students in our degree programs will have access to courses delivered in the program, and their interactions with students taking the Environmental Geoscience will be a component of peer-to-peer learning to help challenge nascent ideas and help our students formulate new solutions for agricultural challenges. Secondly, students in the Environmental Geoscience program will be able to take Soil Science courses, thus potentially eliciting interest from Environmental Geoscience students to pursue graduate studies in the Faculty of Agricultural & Food Sciences. As a result, a segment of entrants to skilled work in Manitoba's agricultural industry will have a good interdisciplinary mix of agriculture and environment.

Studies in both agriculture and the environment have much in common, and Manitoba's future skilled workforce will benefit from the type of interdisciplinary knowledge generated by the Environmental Geoscience program. I hope that it can be supported.

Yours sincerely,

Martin Scanlon, C&G, Ph.D.
Dean
Faculty of Agricultural and Food Sciences



**ENGINEERS
GEOSCIENTISTS
MANITOBA**

March 16, 2021

Dear Dr. Frederiksen:

Engineers Geoscientists Manitoba enthusiastically endorses the creation of a new Environmental Geoscience program created within the Department of Geology at University of Manitoba. We are also happy to hear that the program is designed to be compliant with the Geoscience Canada knowledge standard – a standard which has been adopted as the academic requirement for geoscientists wishing to register not only with our Association but with other provincial associations as well.

There is no question that Environmental Geoscience is an important field in Manitoba and unfortunately, in the past, environmental geoscientists have been required to go outside Manitoba in order to obtain the requisite academic requirements to practice their discipline.

Having a university program which allows them to take advantage of the education here will allow more of these individuals to stay in the province and to provide the services that are needed by our province – particularly in the area of environmental remediation, nutrient removal in Lake Winnipeg, and removal of pollutants from mine tailings.

The Association wishes you all the best in a successful launch of a new course offering.

Please contact me if you require any additional information from Engineers Geoscientists Manitoba.

Sincerely,



Sharon Sankar, P.Eng., P.E.
Director of Admissions, Engineers Geoscientists Manitoba



April 22, 2021
File: 111499000

Attention: Dr. Alfredo Camacho, Head
Department of Geological Sciences
University of Manitoba
Winnipeg, MB R3T 2N2

Dear Dr. Camacho,

Reference: Department of Geological Sciences Environmental Geoscience Program

This letter serves to express support for the new Environmental Geoscience program proposed by the Department of Geological Sciences at the University of Manitoba. Over my 23-year career as a consultant, I have noted a growing emphasis by our clients (both private and public sector) on project teams consisting of personnel with professional designations – i.e., Requests for Proposals making mandatory P.Eng./P.Geo. professionals to be involved in, and take responsibility for, project designs and deliverables. As a Professional Geoscientist registered with Engineers Geoscientists Manitoba (EGM) and the Operations Leader for Stantec Consulting Ltd.'s Environmental Services Group (Manitoba, Saskatchewan, and Northwestern Ontario), our recruiting in Manitoba is increasingly focusing on new hires that are members-in-training with EGM and/or have the potential for registration to allow us to build succession as we bid/win/undertake a wide variety of engineering and environmental projects. Additionally, as a supervisor to members-in-training at Stantec and having sat on the EGM Registration Committee as a P.Geo. reviewing and approving applications and work experience reports from other members-in-training, I have seen first-hand some struggles (specifically for those in consulting) to demonstrate education and work experience that aligns to EGM registration. On this basis, I see tremendous value in the proposed alignment of the undergraduate program and professional registration. A B.Sc. degree that provides students with a strong geologic background and an environmental focus is well suited to the consulting industry and an Environmental Services career.

Having reviewed the proposed Environmental Geoscience program, I find it well aligned with the requirements for professional registration with EGM, as well as preparing geoscience graduates for projects that they will undertake (at least in a consulting career). The EGM offers three streams for registration (Geology, Geophysics and Environmental Geology) and, currently, the Department of Geological Sciences offers undergraduate programs in Geology and Geophysics. This new program will enable students to register under the Environmental Geology stream, which is honestly much more valuable to the consulting industry as it really fits with our multidisciplinary project portfolio. Graduates of this program will have the skills required to conduct environmental assessment, site monitoring and remediation, and groundwater evaluation, which are essential to the environmental consulting industry. I recall in my first year of consulting (while still working on my M.Sc. at the University of Manitoba in the Department of Geological Sciences under Dr. Norman Halden) desperately wishing that I had had some exposure/education relating to groundwater and soils in my undergraduate years. The required courses on Engineering Geology (GEOL 2390), Hydrogeology (GEOL 3450), Geographic Information Systems (GEOG 3730), and Soils and

Reference: Department of Geological Sciences Environmental Geoscience Program

Landscapes in our Environment (SOIL 3600) - as just a few of the courses being offered in the proposed program – would have been invaluable to my early consulting years.

Our major Environmental Services projects in Manitoba currently relate to either environmental assessment prior to and during resource development and infrastructure improvements, and these types of projects (as well as a wide variety of other industry activities) continue to grow significantly in response to enhanced environmental regulation. By implementing this program, the Department of Geological Sciences is recognizing this growing area for future employment of its graduates and that is absolutely something that this graduate of the Department of Geological Sciences and employer of your graduates can get behind.

Regards,

Stantec Consulting Ltd.



Karen Mathers M.Sc., P.Geo. FGC, PMP
Senior Principal, Environmental Services
Phone: 204-924-5735
Cell: 204-799-6159
karen.mathers@stantec.com

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Office of the University Secretary
312 Administration Building
Winnipeg, Manitoba
Canada R3T 2N2
Phone: 204-474-9593
Fax: 204-474-7511

December 1, 2021

Dr. Michael Benarroch
President and Vice-Chancellor
University of Manitoba
Room 202, Administration Building

Dear Dr. Benarroch:

In accordance with the Student Discipline By-Law, I hereby submit the Annual Report of the University Discipline Committee (UDC) for September 1, 2020 to August 31, 2021. It summarizes the offenses and dispositions reported to the UDC by all disciplinary authorities at the University of Manitoba.

Disciplinary incidents are detailed in the attached tables for the two major categories of "Academic Misconduct" and "Non-Academic Misconduct", and for those pending from last year. Similar disciplinary matters are grouped for easier review. The trends in disciplinary incidents from 2016 to 2021 are shown in the attached figures.

Notable observations related to student discipline at the University in 2020-2021 are as follows:

- 1) Overall, there were 1219 incidents of misconduct reported to the UDC, lower than the 1303 cases reported in 2019-2020. The rate of offenses was 3.9 per 100 students in the current report compared to 4.3 per 100 students last year.
- 2) There were 1147 incidents of Academic Misconduct involving 1017 students, most often related to cheating (45%, 516/1147) and plagiarism (41%, 470/1147).
- 3) There were 72 incidents of Non-Academic Misconduct involving 61 students including 7 cases of threats of harm or actual harm, 6 cases of inappropriate or disruptive behaviour, and 59 cases of abuse of University policies, procedures, or regulations. There were significantly fewer incidents of Non-Academic Misconduct in the current report compared to 166 reported in 2019-2020, possibly due to students not being on-site during the pandemic.
- 4) There were 44 incidents still pending, where outcomes were not yet determined or not available. These incidents will be updated in the 2021-2022 Annual Report.

Disciplinary Authorities provided the following information on significant changes or other issues of University wide interest observed during the current reporting period.

- Four Disciplinary Authorities observed an increase in the incidents of Academic

Misconduct and suggested that it was due to remote delivery/testing methods.

- One Disciplinary Authority noted a decrease in the incidents of Academic Misconduct. They suggested that it was related to instructors providing more information and supports to educate students on academic integrity.
- One Disciplinary Authority noted a decrease in the incidents of Academic Misconduct. They suggested several reasons, such as pedagogical changes in evaluation strategies, use of Respondus and Zoom for invigilation, proactive approaches (exam design) to identify when unauthorized sources have been used, and educational efforts on academic integrity. It was also noted that students could be getting more sophisticated in committing academic misconduct.
- One Disciplinary Authority noted a declining trend in students submitting academic work that is not their own, particularly paying individuals or otherwise purchasing academic work, known as contract cheating. They noted several similarities in incidents involving essays including marked differences in the quality of writing when compared to other work in the course and the use of unusual metadata attachments. These incidents were first reported with 40 cases in 2016-2017 but decreased to 5 cases in the current report.
- One Disciplinary Authority noted a decrease in the instances of Non-Academic Misconduct, primarily related to Breaches of Student Residence violations, likely due to the pandemic-related reduction in capacity.

Incidents of Student Discipline Reported to the UDC

Year	# of Incidents Reported	# of Students at the University of Manitoba	Rate per 100 Students
2016-2017	681	29,987	2.3
2017-2018	741	29,498	2.5
2018-2019	891	29,620	3.0
2019-2020	1,303	30,290	4.3
2020-2021	1,219	31,020	3.9
Average	967	30,083	3.2

Please share this information, as you see fit, with those who have an interest or role in Student Disciplinary matters at the University of Manitoba. It has also been the practice to circulate the Annual Report of the UDC with members of Senate and the Board of Governors for their information. Should you continue this practice, I am prepared to attend the Senate meeting and speak to the Report, if called upon to do so.

In conclusion, I would like to thank those who do the difficult work related to student misconduct and discipline that is essential to maintaining the academic integrity and reputation of the University of Manitoba.

Yours sincerely,

Dr. Sheryl Zelenitsky, Chair
University Discipline Committee




**University
of Manitoba**

Office of Provost and Vice-President (Academic)

208 Administration Building
Winnipeg, Manitoba
Canada R3T 2N2
Telephone (204) 480-1408
Fax (204) 275-1160

MEMORANDUM

TO: Jeff Leclerc, University Secretary

FROM: Laurie Schnarr, Vice-Provost (Students) 

DATE: January 19, 2022

Re: Undergraduate 2022 2023 Admission Targets

Attached please find the proposed undergraduate admission targets effective for the fall of 2022.

I would like to highlight two changes that have been made to the admission targets from last year:

1. The proposal to increase the target for the Bachelor of Nursing degree program from 240 to 280 was approved for the 2021 intake. When the targets were presented to Senate in 2021 this increase was identified but at the time it hadn't been formally approved. A new proposal to further increase the number of seats available in Nursing is being considered.
2. The target for the Pharm D program remains at 55 seats; however, a one-time proposal to increase the number of seats to 60 for the 2022 intake is currently being considered.

Please forward this document to the members of Senate and the Board of Governors for their information.

cc: Dr. Diane Hiebert-Murphy, Provost & Vice-President (Academic)
Jeff Adams, University Registrar and Executive Director, Enrolment Services
Shannon Coyston, Associate University Secretary (Senate)

Attachment

Summary of Undergraduate Admission Targets

January 11-2022

Program	Effective for fall 2021 intake	Effective for fall 2022 intake
Faculty of Agricultural & Food Sciences		
Agricultural & Food Science (Degree)*	165	165
Human Nutritional Sciences (Degree)	90	90
Agriculture (Diploma)*	85	85
Internationally Educated Agrologists	15	15
Faculty of Architecture		
Environmental Design	100	100
Faculty of Arts*		
Arts (Degree)	open	open
Arts (Degree) - Integrated Studies	open	open
Asper School of Business*		
Management (Degree)	584	584
Faculty of Education		
Education After Degree (Early)	70	70
Education After Degree (Middle)	70	70
Education After Degree (Senior)	140	140
Faculty of Engineering		
Engineering*	364	364
Engineering - Internationally Educated Engineers	25	25
CHR Environment, Earth & Resources*		
Environment, Earth & Resources (Degree)	135	135
School of Art		
School of Art: Diploma*	15	15
School of Art: Degree*	100	100
School of Art: Art History	15	15
Faculty of Health Sciences		
Health Studies (Degree)	40	40
Health Sciences (Degree)	40	40
College of Dentistry		
Dentistry (Degree)	29	29
Dentistry - International Dentist Degree	6	6
School of Dental Hygiene		
Dental Hygiene*	26	26
Dental Hygiene - Degree Completion	3	3
College of Rehabilitation Sciences		
Respiratory Therapy (Degree)	16	16
College of Medicine		
Medicine	110	110
Family Social Sciences	80	80
College of Nursing		
Nursing (Degree)	280	280 - See note 1
College of Pharmacy		
Pharmacy (Degree)	55	55 - See note 2
Faculty of Kinesiology & Rec Management		
B Kin (AT)	24	24
B Kin*	100	100
B P E*	35	35
B RM & CD*	40	40
Faculty of Law		
Law (Degree)	106	106
Marcel Desautels Faculty of Music		
Music*	60	60
Music - Jazz Studies*	15	15
Faculty of Science*		
Science (Degree)	Target under consideration - See note 3	Target under consideration - See note 3
Faculty of Social Work		
Social Work (on campus)	75	75
Social Work - Distance Delivery	100	100
Social Work - Inner City	60	60
Social Work - Northern External	10	10
Social Work - Northern Program	35	35

Programs with an asterisk have a direct entry option

Notes:

1. A proposal to further increase the number of seats available in Nursing is being considered.
2. The Pharmacy target is 55 seats; however, a request for a one time increase to 60 seats for the fall of 2022 is being considered.
3. Science does have a cap of between 1200 & 1500; however, this is an older figure and discussions are required prior to finalizing the target.



AGENDA ITEM:

Revision to the President Policy to reflect the delegation of authority from the Board of Governors to the President and to the Provost to approve appointments and the award of promotion and tenure for certain academic and administrative staff.

RECOMMENDED RESOLUTION:

THAT the Board of Governors:

- 1. Approve the Approval Authority Matrix for Academic and Administrative Staff Appointments as outlined in Appendix 1;**
- 2. Approve the revision of the President Policy to delegate authority to the President to act on behalf of the Board to approve the appointment and the award of promotion and tenure of certain academic and administrative staff, effective July 1, 2022; and**
- 3. Authorize the University Secretary to make consequential amendments to other University Governing Documents to consistently reflect this delegation.**

CONTEXT AND BACKGROUND:

At present, the Board of Governors approves all academic and senior administrative staff appointments, tenure, promotion and the suspension without pay and dismissal of academic staff members. All other staffing matters are approved by management in accordance with collective agreements, university policies and procedures.

Through its discussions, the Board has identified its desire to streamline the matters which come to the Board and ensure that Board time is optimized in considering key strategic issues facing the University. Staff appointments and positive tenure and promotion decisions are currently approved by the Board in a pro forma manner at the conclusion of detailed processes outlined in either policy or the faculty association collective agreement, adding little value to the process. The requirement of Board approval can cause administrative delay in the timing of these positive decisions.

The delegation of authority for the appointment of academic and administrative staff would be more efficient and better reflect best practices at other large universities and organizations, in which staffing matters are approved at the management level, in accordance with policy and procedure, using a 'one-over-one' principle for approval authority. Under the proposed delegations, the Board will continue to approve the appointments of senior administrators who report to the President, while the approval of other administrative appointments will be delegated to the President or Provost.

With respect to academic staff in UMFA, the newly negotiated UMFA collective agreement provides that for UMFA appointments, the Board may delegate its approval authority to the President for offers of appointment (Clause 18.C.1 and 18.C.4), for appointments with tenure (19.C.3.5), for probationary appointments (19.C.4.1), for term appointments (19.C.5.1), and for contingent appointments (19.C.6.1). The UMFA collective agreement further acknowledges that the Board may delegate its approval authority to the President for positive recommendations of tenure (19.D.4) and promotion (20.A.3 and 20.B.3). Other Academic Staff and clinical faculty (GFTs) in the Rady Faculty of Health Sciences would be approved similarly.

RESOURCE REQUIREMENTS:

No financial, human resources, or capital resources are required for this proposal. This proposal will require corresponding updates to the following policies and procedures:

- Academic Appointments Policy;
- Appointment of Heads of Departments Policy;
- Deans of Faculties and Directors of Schools of the University Appointment and Review Procedure;
- Executive Group and Academic Admin Appointments - Academic Staff Policy;
- Executive Group Appointments – Support Staff Policy;
- Hiring Non-Canadians Policy;
- Promotion of Senior Academic Administrators outside Faculty Bargaining Unit Policy and Procedure;
- Research/Study Leave Research Grants
- Term of Appointment and Tenure Policy;
- University Librarian Appointment and Review Policy;
- The Provost and the Vice-Presidents of the University of Manitoba Bylaw;

CONNECTION TO THE UNIVERSITY PLANNING FRAMEWORK:

This delegation will result in a better link between planning and resource allocation in the support of the University's academic mission and priorities.

IMPLICATIONS:

The Board's delegation of authority to the President and Provost on these matters for both academic and administrative staff would streamline processes and leave staffing matters at the appropriate management level.

ALTERNATIVES:

Status quo

CONSULTATION:

The following have been consulted:

Director of Staff Relations
Director of HR Governance and Legal Counsel
University Secretary

ROUTING TO THE BOARD OF GOVERNORS:

<u>Reviewed</u>	<u>Recommended</u>	<u>By</u>	<u>Title</u>	<u>Date</u>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>M. Anon</u>	<u>Vice-President (Administration)</u>	<u>February 28, 2022</u>
<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____

SUBMISSION PREPARED BY: Maria Sabourin, Director, HR Governance and Legal Counsel

ATTACHMENTS:

Appendix 1 - Approval Authority Matrix for Academic and Administrative Staff Appointments Revised President Policy

Approval Authority Matrix for Academic and Administrative Staff Appointments

Executive and Senior Administrative Approvals

Approvals under this category are delegated as follows, and include the appointment, suspension or dismissal of these employees, including the granting of tenure or promotion on appointment/reappointment and administrative leaves.

<u>Appointment Type</u>	<u>Approval Authority</u>	<u>Recommended by</u>
President	Board of Governors	n/a
Vice-Presidents	Board of Governors	President
University Secretary	Board of Governors	President
All other Executive Group ¹	President*	Vice-President
Senior Administrative Academic Staff ²	President*	Vice-President

*these appointments shall be reported to members of the Board for information.

Academic Administrative Staff Approvals

Approvals under this category are delegated as follows, and include the appointment, suspension or removal of these employees from their administrative roles, administrative leaves and research/study leaves.

<u>Appointment Type</u>	<u>Approval Authority</u>	<u>Recommended by</u>
Administrative Academic Staff Group ³	Provost	Dean/Director
Department Heads, Associate Heads and Assistant Heads	Provost	Dean/Director
Director, Audit Services	Audit and Risk Management Committee	Vice-President (Administration)

Academic Staff Approvals

Approvals under this category for academic staff are delegated as follows. This category includes academic staff in the University of Manitoba Faculty Association, Geographic Full Time Staff, and Other Academics.

<u>Appointment Type</u>	<u>Approval Authority</u>	<u>Recommended by</u>
Appointment with tenure	President	Provost and Vice-President (Academic))
Probationary appointments	President	Provost and Vice-President (Academic)
Term appointments	President	Provost and Vice-President (Academic)

¹ Executive Group – as defined in the *Employee Organizations and Employee Groups Procedure*. Includes President, Vice-Presidents, Associate Vice-Presidents, Vice-Provost, Comptroller, Executive Directors, and other positions designated by the Management Resources and Compensation Committee.

² Senior Administrative Academic Staff Group – as defined in the *Employee Organizations and Employee Groups Procedure*. Includes, Deans of Faculties, Directors of Schools, Heads of Colleges and University Librarian.

³ Administrative Academic Staff Group – as defined in the *Employee Organizations and Employee Groups Procedure*. Includes Associate and Assistant Deans and Directors of Faculties and Schools and Directors of Schools within a Faculty.

Contingent appointments	President	Provost and Vice-President (Academic)
Continuing appointments	President	Provost and Vice-President (Academic)
Granting of Tenure	President	Provost and Vice-President (Academic)
Promotion	President	Provost and Vice-President (Academic)
Denial of Promotion or Tenure	Board of Governors	President
Suspension without pay	Board of Governors	President
Dismissal	Board of Governors	President
Research/Study Leaves	Provost	Dean/Director

Approval Authority Matrix for Academic and Administrative Staff Appointments

Executive and Senior Administrative Approvals

Approvals under this category are delegated as follows, and include the appointment, suspension or dismissal of these employees, including the granting of tenure or promotion on appointment/reappointment and administrative leaves.

Appointment Type	Approval Authority	Recommended by
President	Board of Governors	n/a
Vice-Presidents	Board of Governors	President
University Secretary	Board of Governors	President
All other Executive Group ¹	President*	Vice-President
Senior Administrative Academic Staff ²	President*	Vice-President

*these appointments shall be reported to members of the Board for information.

Academic Administrative Staff Approvals

Approvals under this category are delegated as follows, and include the appointment, suspension or removal of these employees from their administrative roles, administrative leaves and research/study leaves.

Appointment Type	Approval Authority	Recommended by
Administrative Academic Staff Group ³	Provost	Dean/Director
Department Heads, Associate Heads and Assistant Heads	Provost	Dean/Director
Director, Audit Services	Audit and Risk Management Committee	Vice-President (Administration)

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Contingent appointments	President	Provost and Vice-President (Academic)
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Promotion	President	Provost and Vice-President (Academic)
Denial of Promotion or Tenure	Board of Governors	President
Suspension without pay	Board of Governors	President
Dismissal	Board of Governors	President
Research/Study Leaves	Provost	Dean/Director

**UNIVERSITY OF MANITOBA
POLICY**

Policy:	President
Effective Date:	April 14, 1987
Revised Date:	July 1, 2022
Review Date:	July 1, 2032
Approving Body:	Board of Governors
Authority:	<i>The University of Manitoba Act Section 16(1)(b)</i>
Responsible Executive Officer:	University Secretary
Contact:	University Secretary
Application:	All Staff

**Part I
Reason for Policy**

- 1.1 To identify the authorities vested in the President of the University of Manitoba, along with a statement of duties and reporting lines.

**Part II
Policy Content**

- 2.1 There shall be a President of the University who is:
- (a) The chief executive officer; and
 - (b) The Vice-Chancellor.
- 2.2 The President shall:
- (a) exercise general supervision over and direction of the operation of the University including its academic work, staff, students and business affairs;
 - (b) have access to all records of the University;
 - (c) recommend to the Board the appointment, promotion, tenure, discipline, or dismissal of the Vice-Presidents and the University Secretary;

- (d) act on behalf of the Board to approve the appointment, promotion, tenure, change of service, and retirement of staff in accordance with Schedule "A";
- (e) recommend to the Board ~~the appointment~~ the denial of promotion, the denial of tenure, the suspension without pay, change of service, discipline, retirement and dismissal of staff identified in Schedule "A";
- (f) be a member ex officio of every committee of the Board;
- (g) be a member ex officio of the council of every faculty, school and department of the University, of every committee of the Senate, and of each faculty and school;
- (h) have the right to call and preside at any meeting of the council of every faculty, school and department;
- (i) deal appropriately with every complaint pertaining to the University lodged with the President;
- (j) prepare an annual budget for the University and submit the budget to the Board;
- (k) recommend to the Board or to the Senate, or to both, any undertaking the President considers advantageous to the University;
- (l) report in writing to the Board at the end of each academic year on the status and needs of the University; and
- (m) have such other powers, duties and functions as may be assigned by the Board.

Part III Accountability

- 3.1 The Office of Legal Counsel is responsible for advising the University Secretary that a formal review of this Policy is required.
- 3.2 The University Secretary is responsible for the implementation, administration and review of this Procedure.
- 3.3 All Staff are responsible for complying with this Policy.

Part IV Review

- 4.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Procedure is July 1, 2032.

- 4.2 In the interim, this Procedure may be revised or repealed if:
- (a) the Board of Governors or Approving Body deems it necessary or desirable to do so;
 - (b) the Policy is no longer legislatively or statutorily compliant; and/or
 - (c) the Policy is now in conflict with another Governing Document.

Part V
Effect on Previous Statements

- 5.1 This Procedure supersedes all of the following:
- (a) all previous Board of Governors/Senate Governing Documents on the subject matter contained herein; and
 - (b) all previous Administration Governing Documents on the subject matter contained herein.

Part VI
Cross References

- 6.1 This Procedure should be cross referenced to the following relevant Governing Documents, legislation and/or forms:
- (a) The University of Manitoba Act.
 - (b) Schedule "A": Approval Authority for Academic and Administrative Staff Appointments.

Schedule “A”
Approval Authority for Academic and Administrative Staff Appointments

The President may:

- Act on behalf of the Board to approve the appointment, promotion, tenure, change of service, and retirement of the following groups in accordance with section 2.2(d) of the President Policy; and
- Recommend to the Board the denial of promotion, the denial of tenure, the suspension without pay, and dismissal of the following groups in accordance with section 2.2(e) of the President Policy;

as follows:

Executive and Senior Administrative Appointments

<u>Appointment Type</u>	<u>Approval Authority</u>	<u>Recommended by</u>
Executive Group ¹ , excluding the President, Vice-Presidents, and University Secretary	President*	Vice-President
Senior Administrative Academic Staff ²	President*	Vice-President

*these appointments shall be reported to members of the Board for information.

Academic Staff³ Appointments

<u>Appointment Type</u>	<u>Approval Authority</u>	<u>Recommended by</u>
Appointment with tenure	President	Provost and Vice-President (Academic)
Probationary appointments	President	Provost and Vice-President (Academic)
Term appointments	President	Provost and Vice-President (Academic)
Contingent appointments	President	Provost and Vice-President (Academic)
Continuing appointments	President	Provost and Vice-President (Academic)

¹ Executive Group – as defined in the *Employee Organizations and Employee Groups Procedure*. Includes President, Vice-Presidents, Associate Vice-Presidents, Vice-Provost, Comptroller, Executive Directors, and other positions designated by the Management Resources and Compensation Committee.

² Senior Administrative Academic Staff Group – as defined in the *Employee Organizations and Employee Groups Procedure*. Includes, Deans of Faculties, Directors of Schools, Heads of Colleges and University Librarian.

³ For the purpose of this Policy, “Academic Staff” includes the following groups as defined in the *Employee Organizations and Employee Groups Procedure*: “Geographical Full-Time Academic Staff”, which includes medical doctors and clinical psychologists at the rank of Professor, Associate Professor, Assistant Professor, Lecturer; and certain members of the University of Manitoba Faculty Association according to the nature of the appointment.



Report from Senate RE: Temporary Reallocation of Admission Targets, Bachelor of Social Work

Items for discussion / advice:

Request for temporary reallocation of admission targets, Bachelor of Social Work, Faculty of Social Work

Item A – for discussion / advice (Attachment 1)

Context and Background:

The Board policy on *Admission Targets* specifies that it is the President who has authority to approve changes to, or the introduction of, admission targets following consultation and discussion with the dean or director, with Senate and with the Board of Governors, subject to the provisions of the provincial *Programs of Study Regulation*.

The President has received a request from the Faculty of Social Work, for a one-time increase of up to forty-eight (48) seats in the Bachelor Social Work, Distance Delivery program site, for the 2022 – 2023 academic year.

Admission targets for the Bachelor of Social Work are distributed across five program delivery sites for a total of 280 seats. Historically, an average of fifty-one seats have been unfilled across the sites for any given year. The Faculty is requesting a reallocation of up to forty-eight (48) existing unfilled seats, including twenty-three (23) from the Inner City program site and twenty-five (25) from the Northern program site, to accommodate the admission of a cohort of southern child and family service workers in rural and Indigenous communities. Any seats unused by the cohort would be transferred back to the original program site, and if not filled at the original site, be reallocated back to distance to address any unmet demand.

Courses that students in the cohort would require to complete the B.S.W. will be offered using a blended model, with some classes to be delivered remotely. Most students will complete practicum courses at the agency at which they are employed.

Resource Requirements:

The B.S.W. program will be offered to the cohort on a cost recovery basis. No new resources will be required. Courses will be taught by existing faculty members and Sessional Instructors will be hired. An administrative fee will be charged to cover costs associated with Teaching Assistants, academic advising, and technical support. Financial and community/agency commitment to the cohort will be established through a legal agreement with the University.

Connection to the University Planning Framework:

The proposal supports the University's priority for Indigenous achievement and engagement, as defined in the planning document, *Our Shared Future: Building on our Strategic Plan*.

Implications:

The temporary reallocation of admission targets will allow the Faculty to address the needs of individuals living in rural and Northern Manitoba seeking to enrol in a B.S.W. degree program for whom, for various reasons, it is not feasible to leave their home communities to pursue postsecondary education.

Consultation and Routing to the Board of Governors:

The President consulted with Senate regarding the requested change at its meeting on March 2, 2022. Senate did not raise any concerns with the request.

SUBMISSION PREPARED BY: University Secretary


ATTACHMENTS:**Items for consultation:**

Attachment 1 –

Request for Temporary Reallocation of Admission Targets, Bachelor of Social Work, Faculty of Social Work

DATE: February 3, 2022

TO: Jeff Leclerc, University Secretary

FROM: Michael Benarroch, Ph.D.
President and Vice-Chancellor 

RE: Temporary Reallocation of Admission Targets, Bachelor of Social Work Program

I attach a recommendation from Dr. Mark Torchia, Vice-Provost (Students) for a one-time reallocation of admission targets in the Bachelor of Social Work program for the 2022-23 admissions cycle.

Under the Admission Targets Policy and Procedure, the President may approve changes to admission targets following consultation with the Dean/Director, Senate, and the Board of Governors.

Accordingly, please place this item on the agenda for the February 16th, 2022 Senate Executive meeting and the March 2nd, 2022 Senate Meeting.


Cc: Diane Hiebert-Murphy, Provost and Vice-President (Academic)
Laurie Schnarr, Vice-Provost (Students)
Michael Yellow Bird, Dean, Faculty of Social Work
Jeff Adams, Registrar and Executive Director, Enrolment Services
Randy Roller, Executive Director, OIA
Cassandra Davidson, Academic Program Specialist



Office of Provost and Vice-President (Academic)

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**University
of Manitoba**

Date: February 3, 2022
To: Dr. Michael Benarroch, President and Vice-Chancellor
From: Dr. Mark Torchia, Vice-Provost (Teaching and Learning) 
Re: Request for Temporary Reallocation of Admission Targets, Bachelor of Social Work Program

Under the Admission Targets Policy and at the request of Dr. Michael Yellow Bird, Dean, Faculty of Social Work, please find attached a proposal for a one-time increase to the admission target of the Bachelor of Social Work, Distance Delivery program site by up to forty-eight seats.

Admission targets for the Bachelor of Social Work are distributed across five program delivery sites for a total of 280 seats. Historically, an average of fifty-one seats remain unfilled across the sites for any given year. The Faculty is requesting a reallocation of up to forty-eight existing unfilled seats (twenty-three from the Inner City program site and twenty-five from the Northern program site) to accommodate a cohort of southern child and family service workers in rural and Indigenous communities for the 2022-23 year. Any seats unused by the cohort would be transferred back to the original program site, and if not filled at the original site, be reallocated back to distance to address any unmet demand. The request results in no net increase of seats and no new resources are required of the institution.

Consistent with the Admission Targets Policy and Procedure, the President may approve changes to Admission Targets following consultation with the Dean/Director, Senate, and the Board of Governors.

Please provide your advice concerning this matter to the Office of University Secretary by Monday, February 7th, 2022 so that, if supported, the request may receive timely consideration by Senate and the Board of Governors.

Cc: Diane Hiebert-Murphy, Provost and Vice-President (Academic)
Laurie Schnarr, Vice-Provost (Students)
Michael Yellow Bird, Dean, Faculty of Social Work
Jeff Leclerc, University Secretary
Jeff Adams, Registrar and Executive Director, Enrolment Services
Randy Roller, Executive Director, OIA
Cassandra Davidson, Academic Program Specialist



January 26, 2022

Dr. Todd Mondor, Deputy Provost
Academic Planning and Programs
Office of the Deputy Provost

Dr. Mark Tochia, Vice-Provost
Teaching and Learning
Office of the Vice-Provost

Cassandra Davidson, Academic Programs Specialist
Academic Planning and Programs
Office of the Deputy Provost

RE: Proposal for temporary increase, social work admit undergraduate targets

Dear Colleagues,

I'm writing you to begin a conversation about the possibility of reallocating unfilled seats in the Faculty of Social Work to accommodate a distance delivery cohort in the Southern Manitoba region. While Indigenous and community engagement is an important priority of the strategic plans of the University of Manitoba and the Faculty of Social Work, a cohort also makes sense in that it will enable us to work towards filling our unused undergraduate seats. The Admission Targets for 2021 were not met. Out of the possible 105 seats filled 57 seats were filled leaving 48 seats that remained unfilled between the two sites. Historically this has been the case with an average of 51 spots per year remaining unfilled. See attached tables (pp. 5 – 7).

At this time, we would like to request that up to 48 seats be transferred to the distance delivery program to allow for a cohort of Child Welfare applicants from various Indigenous agencies to fill the unused seats. This request is for the admission year of 2022-2023 year ONLY. The Faculty of Social Work is currently working on changing our seat allocation for future admissions. If this request is granted, we would also request that any remaining seats that are unfilled by the cohort be transferred back to any program site that could use the seats for this admission period only.

We are requesting to use:

- 23 seats from Inner City social work program and
- 25 seats from Northern social work program

These 48 seats will be transferred to the distance delivery program in order to offer the cohort.

We would also like to ensure that any remaining seats that are unfilled by the cohort be transferred back to any program site that could use the seats for this admission period only. The historical data to provide rationale for the transfer of seats are as follows.

Admission Targets for Faculty of Social Work

*Admission Target-280

- Thompson 45,
- Inner City 60,
- Distance 100,
- Fort Garry 75

Fall 2021 Unused seats were:

Inner City program: 37 seats out of 60 were filled
Northern program: 20 seats out of 45 were filled.

Out of the possible 105 seats filled 57 seats were filled leaving 48 seats that remained unfilled between the two sites. Historically this has been the case with an average of 51 spots per year remaining unfilled. See chart below.

The South Child and Family services agencies have made a request for us to provide a distance delivery cohort. Combined these agencies have approximately 40 students who meet the admission criteria and would enroll in the cohort. The request is for one intake year. This cohort would be admitted into the undergraduate program and begin their undergraduate social work degree in September 2022 or Jan 2023.

The Faculty of Social work is currently reviewing the admission requirements and changes will be made to admissions for the Sept 2023 admissions term. Many of the students have the required number of credit hours and are ready to be admitted. We would like this group of students to be admitted under the 30-credit hour, 1750 hours of social services experience. If we wait until the new criteria is implemented many of the students will not be eligible.

Our proposal is to offer a Bachelor of Social Work (BSW) degree to South Child and Family service workers in rural and Indigenous communities who have requested the Faculty of Social Work to offer a degree using a blended model for delivery. This degree would provide Southeast workers who are currently residing and working in Indigenous Agencies opportunities to ensure they are receiving education required to work in the field. There is a high demand for social workers in rural Manitoba, especially in Child Welfare. In Manitoba we have the highest number of children in care and agencies are demanding that workers have a Bachelor of Social work degree that prepares them for the challenges that they are encountering.

This Cohort would serve communities in areas in the southern portion of Manitoba. Including:

- Treaty 1
- Treaty 2
- Treaty 3
- Treaty 4
- Treaty 5

(See: <https://www.sac-isc.gc.ca/eng/1100100020576/1616073943706>)

Given the high number of children in care in the child welfare system and the recent addition of Bill C-92, which is an Act respecting First Nations, Inuit and Metis children youth and families, providing professional social work education would be appropriate and valuable. The legislation was co-developed with Indigenous, provincial, and territorial partners with the goal of keeping Indigenous children and youth connected to their families, communities, and culture and “affirms the rights of First Nations, Inuit, and Metis peoples to exercise jurisdiction over child and family services, establishes national principles such as the best interests of the child, cultural continuity and substantive equality.” (Please see the below links):

<https://www.sac-isc.gc.ca/eng/1541187352297/1541187392851>

<https://www.canada.ca/en/indigenous-services-canada/news/2019/06/an-act-respecting-first-nations-inuit-and-metis-children-youth-and-families-receives-royal-assent.html>

Additionally, the challenges of the Meth crisis in Manitoba as well as the high number of suicides amongst young people (especially in Indigenous) communities, are also driving the need for more training for the present workforce in the Southern region.

The Bachelor of Social Work degree will be taught using a blended model. The resource implications to the University will be minimal and manageable. IT and library services will be required. Space for the classroom will be provided by the agencies that request a cohort. We will be using CISCO WebEx to teach the online blended component of the program. The Faculty of Social Work has an Educational Tech support person who will ensure that all students are trained and supported while using technology.

The Faculty of Social work would use a similar model that has been successful in the current Cohort we are supporting. The model charges a small cost recovery admin fee which pays for TA's, Academic advisor support, technical support etc. Agencies would also enter a legally binding agreement that ensures financial and community/agency commitment to the cohort. These legal agreements would be similar in nature to the ones used currently with the Northern cohort that is running.

Our faculty would teach some of the BSW curriculum and sessional instructors would be hired as well. The practicum will be completed at the student's agency and most of the

students would be employed by the agency and therefore liability insurance would not be an issue.

The Faculty of Social Work plans to review targets for future years and are currently working with SCADM and Senate to ensure enrolment targets are formally outlined and include cohort students from Manitoba. This would address a high need to address the demographic needs of students living in rural and Northern Manitoba. The students cannot leave their community to obtain their degree since most of them have families and are currently employed full time. A cohort would enable the Southern social service workers to enroll and graduate from our Bachelor of Social Work program.

Please let me know if you have any questions, I am available to meet to discuss this proposal at your earliest convenience.

Sincerely,

A handwritten signature in black ink that reads "Michael Yellow Bird". The signature is written in a cursive, flowing style.

Michael Yellow Bird, MSW, PhD
Dean and Professor
Faculty of Social Work
522 Tier Building
University of Manitoba

**Admission Targets for Faculty of Social Work
2015-2020**

Year	Target	Registered	Difference
2019-2020	280	241	-39
2018-2019	280	208	-72
2017-2018	280	240	-40
2016-2017	280	222	-58
2015-2016	280	231	-49

*Admission Target-280; Thompson 45, Inner City 60, Distance 100, Fort Garry 75

The Faculty of Social Work did not meet the admission target of 280 students in the past five years by 258 spots (**average of 51 spots per year**).

Breakdown by program

Thompson Program					
Year	Target	Applicants	Admitted	Registered	Difference
2019-2020					
External	10	6	4	3	-7
Northern	35	28	22	22	-13
TOTAL	45	34	26	25	-20
2018-2019					
External	10	14	4	2	-8
Northern	35	21	21	15	-20
TOTAL	45	35	25	17	-28
2017-2018					
External	10	9	6	6	-4
Northern	35	31	31	28	-7
TOTAL	45	40	37	34	-11
2016-2017					
External	10	11	6	5	-5
Northern	35	27	27	17	-18
TOTAL	45	38	33	22	-23
2015-2016					
External	10	3	3	1	-9
Northern	35	23	23	19	-16
TOTAL	45	26	26	20	-25

The Thompson Program did not meet the admission target of 225 students in the past five years by 107 spots (**average of 21 spots per year**).

Inner City					
Year	Target	Applicants	Admitted	Registered	Difference
2019-2020	60	107	40	40	-20
2018-2019	60	33	33	33	-27

2017-2018	60	38	38	36	-24
2016-2017	60	50	50	44	-16
2015-2016	60	57	57	49	-11

The Inner City Program did not meet the admission target of 300 students in the past five years by 98 spots (**average of 19 spots per year**).

Distance Delivery					
Year	Target	Applicants	Admitted	Registered	Difference
2019-2020	100	284	117	101	
2018-2019	100	261	106	87	-13
2017-2018	100	304	122	100	
2016-2017	100	288	125	88	-12
2015-2016	100	255	133	86	-14

The Distance Delivery Program did not meet the admission target of 500 students in the past five years by 38 spots (**average of 7 spots per year**).

Fort Garry					
Year	Target	Applicants	Admitted	Registered	Difference
2019-2020	75	210	98	75	
2018-2019	75	194	77	71	-4
2017-2018	75	258	77	70	-5
2016-2017	75	239	92	68	-7
2015-2016	75	226	95	76	

Fort Garry Campus did not meet the admission target of 375 students in the past five years by 15 spots (**average of 3 spots per year**).

**Proposed Admission Targets for Faculty of Social Work
2022-2023**

Thompson/Northern				
	Previous Target	Move to cohort	Difference	New Target
External	10	-5	5	5
Northern	35	-20	20	15
TOTAL	45	25	25	20

Inner City			
Previous Target	Move to cohort	Difference	New Target
60	-23	37	37

Distance			
Previous Target	Cohort	Difference	New Target
100	+48	+48	148

Fort Garry	
Previous Target	New Target
75	75

PRESIDENT'S REPORT TO THE BOARD OF GOVERNORS
March 22, 2022

REPORT OF THE VICE-PRESIDENT (ACADEMIC) AND PROVOST

Awards

- Michael Eskin, (Food and Human Nutritional Sciences), received the Order of Manitoba for his world-recognized research into canola oil and his excellence in food science writing.
- Evelyn Forget, (Community Health Sciences), has been appointed an officer of the Order of Canada. Forget is an internationally recognized health economist who studies antipoverty interventions and the feasibility of a basic income for Canadians.
- Nancy Kang, (Women's & Gender Studies), was awarded Honorable Mention for the Study of American Women Writers (SSAWW) Best Book Award for 2021.
- Donna Martin, (Nursing), received a Canadian Institutes of Health Research (CIHR) grant amounting to \$2,067,415 for her work on *Ki thagi daba wanawug unji uduki wangk: Implementing an Elder-Youth Mentorship Model program to promote health and well-being in Lake St. Martin First Nation*.
- Rusty Souleymanov, (Social Work), was awarded \$394,000 from the Canadian Institutes for Health Research for his work on Addressing the Wider Health Impacts of COVID-19: Indigenous Health Research called "*Gigii-bapiimin: Exploring Resilience and The Impacts of COVID-19 on the Health and Wellbeing of Indigenous People Living with HIV/AIDS in Manitoba and Saskatchewan*".

He also received \$417,000 from the Canadian Institutes for Health Research for his work on HIV/AIDS and STBBI Community-Based Research, "*HIV/STBBI Testing and The Health of African and Caribbean Migrant Communities in Manitoba*".

- Leisha Strachan, (Kinesiology and Recreation Management), was named to the list of 100 Accomplished Black Canadian Women for 2022-2024. She was also awarded the R. Tait McKenzie Award from Physical and Health Education Canada for 2022.
- Christine van Winkle, (Kinesiology and Recreation Management), won an award for Outstanding Reviewer in the 2021 Emerald Literati Awards, selected by the editorial team of *International Journal of Event and Festival Management*.
- Thirteen faculty members, students or trainees in the Rady Faculty of Health Sciences received 2021 awards through The *Winnipeg Foundation's Martha Donovan Leadership Fund*. The \$250,000 fund was established in 2019 to provide leadership development opportunities for women in the Rady Faculty of Health Sciences. The 2021 recipients were:
 - Aviva Goldberg, Pediatrics, Max Rady College of Medicine
 - Nicole Harder, College of Nursing
 - Alexa Hryniuk, Human Anatomy & Cell Science, Max Rady College of Medicine
 - Erin Knight, Psychiatry, Max Rady College of Medicine

- Jennifer Protudjer, Pediatrics, Max Rady College of Medicine
 - Kathy Yerex, School of Dental Hygiene, Dr. Gerald Niznick College of Dentistry
 - Olabisi Ayeni, College of Nursing
 - Allison Balasko, Medical Microbiology & Infectious Diseases, Max Rady College of Medicine
 - Sikta Chattopadhyaya, Physiology, Max Rady College of Medicine
 - Anna Chudyk, College of Nursing
 - Jasmine Frost, Medical Microbiology & Infectious Diseases, Max Rady College of Medicine
 - Qian Liu, Biochemistry & Medical Genetics, Max Rady College of Medicine
 - Karen Livingston, College of Nursing
- The Associates of the Asper School of Business selected five recipients of the *2021 Associates Achievement Awards*. The annual awards, valued at \$5,000 each, recognize faculty members who have achieved outstanding performance in research, teaching and engagement. 2021 Associates Achievement Award Recipients:
 - Teaching: Sean MacDonald, Business Administration
 - Teaching and Research: Mingzhi Liu, Accounting and Finance
 - Research: Sandeep Arora, Marketing
 - Engagement: Ying Zhang, Accounting and Finance
 - Engagement: Raj Manchanda, Marketing
- The drawing of Azouz Manachou, (student, Master of Architecture), was shortlisted in World Architecture Festival Drawing Prize competition in the Hybrid-Student category.
- Michaela Peyson and Smile Singh, (students, Master of Landscape Architecture), were awarded the Andre Schwabenbauer Scholarship and Smile Singh the SALA Academic Awards from the regional Landscape Architecture Canada Foundation respectively.
- In January 2022, Umut Oguzoglu, (Economics), received The Economic Society of Australia's *Economic Record* Best Paper Prize for 2020 for the paper titled *Impacts from delaying access to retirement benefits on welfare receipt and expenditure: Evidence from a natural experiment*.
- Naomi Ratte, (student, Master of Landscape Architecture), co-founder of the Indigenous Design and Planning Students Association, was announced as the inaugural recipient of the Landscape Architecture Canada Foundation Peter Jacobs Indigenous Scholarship.
- Taylen Trinh, (student, Masters in Agricultural Economics), won first prize in the Student Policy Brief Competition (hosted by Agriculture and Agri-Food Canada), part of the 12th Annual Canadian Agri-Food Policy Conference held January 18-19, by the Canadian Agricultural Economics Society.
- Anica Warkentine, (student, Desautels Faculty of Music), recently won the Manitoba Registered Music Teachers' Association scholarship competition (Advanced Piano).
- Asper MBA students utilized their Strategic Leadership and Sustainability course insights to finish at the top of the podium at the *TD Insurance Future of Sustainable Insurance Claims Competition* on February 1, 2022. The international competition challenged participants to find solutions to improve automobile or home claims practices by reducing waste or preventing future claims.

- The Desautels Concert Hall has received the Architect’s Newspaper ‘AN Best of Design 2021’ award. The Jury praised the design in the Unbuilt-Education category.

Initiatives

- The Rady Faculty of Health Sciences and all its colleges have endorsed PaRx, a program that encourages health-care professionals to write “nature prescriptions” for patients to improve their mental and physical health.
- The College of Nursing has a new monthly speaker series that addresses racism in nursing practice and education. The series, *Let’s Talk About Racism in Nursing*, was launched in October 2021 with a presentation by Debra Beach Ducharme, Indigenous health director at Ongomiizwin – Health Services. Six more virtual speaker presentations are scheduled from February to June 2022.
- Eduardo Aquino, (Architecture), and Peter Hargraves, Architect, joined forces to facilitate the Architecture students’ participation and general coordination of the Warming Huts project on the Thunderbird House site. Mimi Locher, Dean of Architecture, joined the team offering her thoughtful expertise in Japanese culture and design.
- In fall 2022, the Stu Clark Graduate School is offering a range of graduate fellowships for Canadian Indigenous Students. This is part of the Asper School of Business’ commitment to advance reconciliation through business education.
- The Stu Clark Graduate School at the Asper School of Business is launching three new co-op programs for professional graduate students, building on the success of Asper’s award-winning Bachelor of Commerce Co-op Program. Starting this summer, the first cohort of Master of Business Administration (MBA) students will start their placements, followed by Master of Finance students in fall 2022 and Master of Supply Chain Management and Logistics students in summer 2023.
- The James W. Burns Leadership Institute’s marquee initiative, the President’s Student Leadership Program (PSLP), is welcoming applications for its 2022 cohort. The program provides an exceptional opportunity for Manitoba students to work with peers from across subjects, post-secondary institutions, and interests, and to connect one-on-one with exemplary leaders.
- The Asper School of Business is supporting the James W. Burns Executive Education Centre’s Leadership Intensive Program this year by inviting staff and students to participate. Thirty individuals including UM staff, Asper students and Indigenous and other community members are participating in the five-day program running from January to March. This program introduces leadership concepts for personal development and career advancement.

Events

- The Three Minute Thesis (3MT) competition heats are occurring in March 2022. The 3MT is an annual competition for graduate students in a thesis-based program and is part of an overall strategy to highlight our graduate students, promote UM research, and connect with community.

- The James W. Burns Leadership Institute and Indigenous Business Education Partners (IBEP) at the Asper School of Business will welcome Asper alumnus Whelan Sutherland [BComm(Hons)/06], CEO, and Tim Daniels, Chief Development Officer for the Treaty One Development Corporation to discuss their roles in the development of the Kapyong Barracks into one of Canada's largest urban reserves. The significance of the land, named Naawi-Oodena "centre of the heart and community," will be discussed at the Institute's series, *Leadership in Our Times: The Critical Issues Series*. Students, faculty, staff and the community were invited to the virtual event held on March 8.
- The Stu Clark Centre for Entrepreneurship welcomes Michele Romanow, of *Dragon's Den*, for a virtual fireside chat as part of the Stu Clark New Venture Championships Graduate Edition. Romanow, a tech titan and a serial entrepreneur, started six companies before her 35th birthday and is the co-founder and president of Clearco. She shared her entrepreneurial journey and advice for aspiring entrepreneurs at a fireside chat held on March 12, 2022.
- The Associates of the Asper School of Business at the University of Manitoba have announced that Indra Nooyi, one of the world's most admired and influential business leaders, will be the recipient of the 2022 International Distinguished Entrepreneur Award (IDEA). Nooyi was the former Chairman and CEO of PepsiCo and is the first woman of colour and first immigrant to lead a Fortune 50 company. Indra Nooyi will be presented the IDEA award at the 2022 IDEA dinner on May 3, 2022 at the RBC Convention Centre.
- From January 14-16, 2022, the I.H. Asper School of Business hosted a virtual iteration of the 17th annual JDC West competition. Over the course of three days, more than 650 students from British Columbia, Alberta, Saskatchewan and Manitoba displayed their skills in the academic, athletic, debate and social aspects of the competition. This year's theme, "The Human Advantage," spoke to the need to understand, anticipate and manage the individual and social consequences of economic, technical, political, social and environmental change in an ethical and environmentally sensitive manner.
- On February 3, 2022, The Winnipeg Art Gallery and the Decolonizing Lens presented a virtual screening of 4 films from Turtle Island, Aotearoa, and Australia to accompany the *Naadohbii: To Draw Water* Symposium.
- A "Mask and Learn" lunchtime talk with Prof. Brandon Trask in the Faculty of Law took place last fall on the topic of protecting one's mental health as a lawyer. The in-person event featured tips for law students to carry into practice to guard their mental health and help reduce the overall stigma of mental health issues in workplace.
- Rebecca Bromwich, EDI manager at Gowling joined the Faculty of Law via Zoom on November 23 to give a Mental Health First Aid presentation. This was an overview for students, staff, and faculty of the basics of mental health, how to notice mental health issues in others, what to do/not do to provide assistance to someone who experiencing a mental health crisis.

New programs

- Health science undergraduate students from historically under-represented groups will be funded for work placements in Africa under a new program. The program, a partnership between UM and

Western University, aims to enhance equity, diversity, inclusion, decolonization, and Indigeneity (EDI-D-I) knowledge and skills in health care. It has received \$1.96 million from the federal Global Skills Opportunity program.

- It was announced in December 2021 that the College of Nursing will receive new, long-term provincial funding to create 120 new seats in its nursing program to address the province's nursing shortage. The initial investment of \$4.3 million includes money for staffing, equipment, capital and transition costs. The expansion proposal is provisional, based on approval through UM's internal quality assurance processes and governing bodies. The proposal anticipates expanding the number of seats by adding a third intake of students each calendar year.
- The Desautels Faculty of Music is now inviting applications for a new Master of Arts program in Music Research.

Leadership appointments

- Nicole Harder, (Nursing), was appointed as Associate Dean (Undergraduate Programs) in the College of Nursing.
- Horace Luong, (Chemistry), has been appointed Associate Dean (Student Experience) in the Faculty of Science effective March 1, 2022.
- Krystyna Koczanski, (Chemistry), assumed the role of Associate Dean (Administration) in the Faculty of Science effective March 1, 2022.
- Ayush Kumar, (Microbiology), has been appointed Equity, Diversity, and Inclusion Lead for the Faculty of Sciences in January 2022.
- Sean McKenna, (Chemistry), has been re-appointed as Associate Dean (Undergraduate) in the Faculty of Science to June 30, 2026.
- Lanette Siragusa, was appointed vice-dean, education of the Rady Faculty of Health Sciences and associate director of Ongomiizwin – Health Services, one of three branches of the Indigenous Institute of Health and Healing in the Rady Faculty.

New resources for faculty and students

- The Faculty of Graduate Studies is launching a *Graduate Education Mentoring* (GEM) program with the aim of supporting professional development for faculty members and graduate program staff. The professional development workshops will be offered in two broad areas: Graduate Administration and Graduate Mentoring. Participants who complete four workshops will receive a letter of participation from FGS for their attendance in workshops as part of the GEM program.
- A group of UM students has produced a podcast called *Through My Eyes: Nursing Perspectives* as a resource for nurses and nursing students. The podcast's creators are participants in the President's Student Leadership Program (PSLP), a non-credit program of the James W. Burns Leadership Institute at UM's Asper School of Business. The podcast can be streamed on SoundCloud.

- In January 2021, the UM received news that Dean Emeritus, Dr. Douglas Ruth had passed away suddenly. His legacy was honored by several waves of contributions to the *Douglas & Beverly Ruth Centenary Award* promoted both by the Price Faculty of Engineering and by the Friends of Engineering. The fund was established by Doug and Beverly Ruth in 2007 at the centenary of the Price Faculty of Engineering. At the time of Dr. Ruth's passing in 2021, the fund value was \$28,397. In the 13 months since his passing, the fund has received \$154,125 and the fund value currently stands at approximately \$182,523. Together with an anticipated MBSI match, the generosity of the community will support very significant awards to deserving students, honoring Dr. Ruth's legacy of humble leadership.

REPORT OF THE VICE-PRESIDENT (RESEARCH AND INTERNATIONAL)

- In alignment with the university's plan to a phased return to normal activities, a recommendation was made to the President's Executive Team that effective immediately, only research in northern communities, where COVID cases are still considered high as well as research that involve unvaccinated participants (i.e., children under the age of 12), will be vetted by the COVID-19 Research Recovery Team.
- On January 12, 2022, Honourable François-Philippe Champagne, Minister of Innovation, Science and Industry, announced the awarding of three new Canada Research Chairs (CRCs) to UM faculty members:
 - Dr. Rotimi Aluko, Food and Human Nutritional Sciences, Faculty of Agricultural and Food Sciences, Tier 1 in Bioactive Peptides.
 - Dr. John Ataguba, currently the Director of the Health Economics Unit, University of Cape Town, coming to the Rady Faculty of Health Sciences, Tier 2 in Health Economics.
 - Dr. Samar Safi-Harb, Physics and Astronomy, Faculty of Science, Tier 1 in Extreme Astrophysics
- On February 1, 2022, the National Centre for Truth and Reconciliation (NCTR) and the Social Sciences and Humanities Research Council (SSHRC) announced their partnership on a national research program to advance understanding of reconciliation. The new partnership responds to the Truth and Reconciliation Commission (TRC) of Canada's Call to Action 65, and supports calls to actions 71 to 76. The collaboration will foster research on reconciliation and residential schools, done by and with Indigenous communities.
- Approximately 90 UM undergraduate students had the opportunity to practice their presentation skills at the annual 2021 Undergraduate Research Poster Competition. The format provides a unique opportunity for students to present their research in an event that focuses on the discoveries these students are making. Judges assess each project based on official judging criteria determining winners for cash prizes in five different categories: applied sciences, creative works, health sciences, natural sciences, and social sciences and humanities. The competition is sponsored by the office of the vice-president (research and international).
- On February 3, 2022, six Rady Faculty of Health Sciences professors with joint appointments in other units have been named to the Highly Cited Researchers 2021 list. Drs. Adam, Schweizer, Lagacé-Wiens, Nicolle, Zelenitsky and Zhanel, leaders in the field of anti-microbial resistance, are seeking solutions that will advance patient care in the battle against infectious disease.

- Dr. Heather Adam, Assistant Professor, Medical Microbiology/Infections Diseases, focuses her research on documenting the common bacteria causing infections in primarily hospitalized patients, assessing the frequency these bacteria are resistant to commonly prescribed antimicrobial treatments and evaluating how the bacteria become resistant.
 - Dr. Philippe Legacé-Wiens, Assistant Professor, Medical Microbiology/Infectious Disease, works to better understand the resistance to antibiotics in bacteria and evaluate new antibiotics against resistant bacteria to confirm that they might work to treat patients with similar infections in the future.
 - Dr. Lindsay Nicolle, Professor Emeritus, Internal Medicine, Max Rady College of Medicine, is no longer active in research, but throughout her career, a major topic she addressed was clinical studies relevant to urinary tract infection.
 - Dr. Frank Schweizer, Professor, Medical Microbiology/Infectious Diseases and Chemistry, focuses his research on therapeutic approaches to overcome bacterial resistance. He studies the development of helper molecules, which, when combined with antibiotics, rescue antibiotics from resistance.
 - Sheryl Zelenitsky, Professor, College of Pharmacy, studies how best to use antibiotics while limiting the risk of harmful effects and antibiotic resistance. She focuses on vulnerable patients, such as people who are undergoing surgery, on dialysis or critically ill.
 - Dr. George Zhanel, Professor, Medical Microbiology/Infectious Diseases is also the director of CARA. He works with researchers and clinicians from across the country to study which patients get infected with resistant infections. How organisms develop resistance and how best to treat these patients with existing and new antibiotics.
- Sixty-Seven (67) projects led by Thirty-Nine (39) PIs received a total of \$14,366,686 in grant funding from a variety of sponsors. Those projects receiving more than \$25,000 are:

PI	Sponsor	Title	Awarded Amount
Tracie Afifi (Community Health Sciences)	Canadian Institutes of Health Research (CIHR)	The Impact of Adverse Childhood Experiences (ACEs) and Peer Victimization on Substance Use, Mental Disorders, and Physical Health Conditions among Adolescents and Young Adults in Manitoba: Identifying Protective Factors to Improve Health and Inform Effective Interventions.	\$75,000
Armstrong, Heather (Internal Medicine)	Manitoba Medical Service Foundation	Defining the role of the intestinal microbiome in the regulation of dietary fibre-associated inflammation in Inflammatory Bowel Disease patients	\$33,000

Ballard, Myrle (Chemistry)	Canadian Institutes of Health Research (CIHR)	Ki thagi daba wanawug unji uduki wangk: Expanding an Elder-Youth mentorship program to promote health and well-being in Lake St. Martin First Nation	\$2,067,415
Curnow, Joe (Educational Administration, Foundations and Psychology)	National Academy of Education	Learning from, with, and toward abolitionist imaginaries	\$88,956
da Silva, Robin (Physiology & Pathophysiology)	Manitoba Medical Service Foundation	The role of adenosine receptors in fibrosis	\$32,000
Decker, Kathleen (Community Health Sciences)	Canadian Institutes of Health Research (CIHR)	Evaluating the impact of the COVID-19 pandemic on cancer control in Manitoba	\$439,392
Goegan, Lauren (Educational Administration, Foundations and Psychology)	Social Sciences and Humanities Research Council of Canada (SSHRC)	The Next Chapter: Exploring the Perceptions and Experiences of Students with Learning Disabilities and the Transition to Postsecondary Education	\$40,411
Jelic, Tomislav (Emergency Medicine)	Manitoba Medical Service Foundation	Accelerated Remote Consultation Tele-POCUS in Cardiopulmonary Assessment (ARC-TICA)	\$35,000

Kazem Moussavi, Zahra (Electrical and Computer Engineering)	Mitacs Inc.	Investigating the Effect of Transcranial Alternating Current Stimulation with and without Simultaneous Cognitive Training on the Executive Brain Functions in Dementia Population	\$400,000
Klassen, Terry (Pediatrics and Child Health)	Canadian Institutes of Health Research (CIHR)	Knowledge to action in pediatric emergency care during the COVID-19 pandemic	\$433,790
Kredentser, Maia (Clinical Health Psychology)	Manitoba Medical Service Foundation	One-year cognitive and mental health outcomes in hospitalized COVID-19 survivors and their caregivers	\$33,000
Kuss, Christian (Chemistry)	Mitacs Inc.	Understanding the fate of tin in cyanide free, yellow bronze plating baths	\$60,000
Kuzyk, Zou Zou (Centre for Earth Observation Science)	Laval University	Ecosystem shift in Hudson Bay and James Bay: Causes, consequences, and prospects for the future	\$90,000
Labouta, Hagar (Pharmacy)	SickKids Foundation	Safe and effective targeted therapy for breast tumor during early pregnancy	\$300,000
Landrum, Lisa (Architecture)	Social Sciences and Humanities Research Council of Canada (SSHRC)	Canadian Architecture Forums on Education: CAFE Capital	\$25,000
Larson, Paul (Supply Chain Management)	Danone Institute International	Feed hungry people during a pandemic: The not-for-profit food supply chain	\$37,809
Liu, Shuangbo (Internal Medicine)	Manitoba Medical Service Foundation	Dial Don't Drive – a Manitoba acute coronary syndrome network public awareness campaign to reduce patient delays in seeking medical attention for heart attacks	\$30,000

Lorway, Robert (Community Health Sciences)	Canadian Institutes of Health Research (CIHR)	Confronting Homophobia in Anal Health: Community-based Program Science and HPV among MSM in Nairobi, Kenya	\$100,000
MacKay, Dylan (Food and Human Nutritional Sciences)	Canadian Institutes of Health Research (CIHR)	Reducing Dietary Acid with fruit and vegetables versus oral alkali in people with Chronic Kidney Disease (ReDACKD) feasibility trial	\$320,534
MacKay, Dylan (Food and Human Nutritional Sciences)	Mitacs Inc.	Resistant Starch Prebiotic Effects in Chronic Kidney Disease (ReSPECKD) study	\$60,000
McGeough, Emma (Animal Science)	Natural Sciences and Engineering Research Council of Canada (NSERC)	Corn intercropping strategies for extended winter grazing of beef cattle	\$713,250
McKenna, Sean (Chemistry)	Natural Sciences and Engineering Research Council of Canada (NSERC)	Wawatay - Fostering Indigenous Student Success in Science	\$522,000
McKinnon, Lyle (Medical Microbiology and Infectious Diseases)	Canadian Institutes of Health Research (CIHR)	Regulatory T cells and the control of female genital inflammation: relevance for HIV prevention	\$837,675
Prenha, Gerd (Microbiology)	Canadian Institutes of Health Research (CIHR)	Characterization of membrane protein effector secretion by the type VI secretion system	\$596,700

Rueda, Zulma (Medical Microbiology and Infectious Diseases)	Manitoba Medical Service Foundation	Syndemics of Concern: Gender, Crystal Meth, HIV and STBBI in Manitoba	\$30,000
Rush, Barret (Internal Medicine)	Manitoba Medical Service Foundation	Rural access and outcomes for critical care in Manitoba	\$30,000
Rush, Barret (Internal Medicine)	University Medical Group	Disparities in Critical Care	\$25,000
Sharif, Tanveer (Pathology)	Canadian Institutes of Health Research (CIHR)	Taking down the 'undruggable' oncogene: therapeutic implications for novel mechanism-based targeting of MYC	\$956,250
Shen, Garry (Internal Medicine)	Canadian Institutes of Health Research (CIHR)	To enhance prenatal education program interrupted by COVID-19 in remote and rural First Nations communities by expanding remote education through two-eyed seeing framework to improve maternal child health	\$1,155,150
Shen, Garry (Internal Medicine)	Canadian Institutes of Health Research (CIHR)	Moms in Motion: Diabetes prevention in pregnancy program in First Nations communities	\$35,000
Sorensen, John (Chemistry)	Mitacs Inc.	Characterization of carotenogenic heterotrophs for production of high-value antioxidants	\$165,000
Souleymanov, Rusty (Social Work)	Canadian Institutes of Health Research (CIHR)	HIV/STBBI testing and the health of African and Caribbean migrant communities in Manitoba	\$417,000
Souleymanov, Rusty (Social Work)	Canadian Institutes of Health Research (CIHR)	Gigii-bapiimin: Exploring resilience and the impacts of COVID-19 on the health and wellbeing of Indigenous people living with HIV/AIDS in Manitoba & Saskatchewan	\$394,928

Stavropoulou, Chrysi (Dental Diagnostic and Surgical Sciences)	Manitoba Medical Service Foundation	Elucidating the role of oral microbes and their metabolites in peri-implant health	\$30,000
Tangri, Navdeep (Internal Medicine)	Manitoba Medical Service Foundation	Real-world efficacy and safety of dual antiplatelet therapy with ticagrelor as compared to clopidogrel	\$30,000
Villar, Rodrigo (Kinesiology and Recreation Management)	Manitoba Medical Service Foundation	The role of frailty and sex in the autonomic, cardiovascular, and respiratory regulation during postural transitions and acute and chronic exercise: A cross-sectional and randomized control trial	\$30,000
Wicklow, Brandy (Pediatrics and Child Health)	Canadian Institutes of Health Research (CIHR)	The developmental origins of pediatric type 2 diabetes and early renal dysfunction	\$1,526,553
Wicklow, Brandy (Pediatrics and Child Health)	Canadian Diabetes Association	The developmental origins of pediatric type 2 diabetes and early renal dysfunction	\$470,000
Wieden, Hans-Joachim (Microbiology)	University of Lethbridge	RNA Bioengineering and Innovation Network	\$31,666
Wilkins, John (Internal Medicine)	University of Manitoba (Millipore Corporation)	Research approaches to molecular characterization of cell migration and cellular composition	\$67,000
Woodgate, Roberta (Nursing)	Canadian Institutes of Health Research (CIHR)	Advancing Patient-Centered Care in Young People Living with Chronic Pain	\$600,524
Woodgate, Roberta (Nursing)	Canadian Institutes of Health Research (CIHR)	Addressing the indirect and wider health impacts of COVID-19 on families of children living with disabilities	\$425,954

Yamamoto, Jennifer (Internal Medicine)	Canadian Institutes of Health Research (CIHR)	Examining executive function and behavioural difficulties in children of mothers with type 1 diabetes (CONCEPT Kids)	\$609,835
Yamamoto, Jennifer (Internal Medicine)	Canadian Institutes of Health Research (CIHR)	Wider impact of the COVID-19 pandemic on gestational diabetes screening, diagnosis, and outcomes	\$358,800
Yuan, Qiuyan (Civil Engineering)	Mitacs Inc.	Investigating the application of composting for phosphorous recovery from alum precipitated sludge	\$30,000
Yurkowski, David (Biological Sciences)	Mitacs Inc.	Spatial variation in the foraging and nutritional ecology of Arctic char (<i>Salvelinus alpinus</i>) in the Kivalliq region	\$60,000

REPORT OF THE VICE-PRESIDENT (INDIGENOUS)

Initiatives

- The Indigenous Identity Engagement Working Group held its first online working group meeting on February 4 2022 with 45 participants in attendance. The Terms of Reference were confirmed at the March 4th meeting and community engagement sessions will begin in April.
- UM has announced a \$16.1M gift from Mastercard. As part of the Mastercard EleV Program, the funds will support innovative programming designed to systematically change post-secondary education for Indigenous students in Manitoba. The UM Today story had 3,107 views in the first week, making it the most-read story on UM Today. The average reading time was 7 minutes 55 seconds, which is significant (normal benchmark for a good reading time is anything over 3 minutes). The social media reach was more than 32,000 people, with high engagement (analytics will be collected after ads finish running). Media hits included the Winnipeg Free Press, Yahoo, and APTN.
- A series of Indigenous Community Engagement Dialogue Sessions will take place starting March 9. Information shared at these sessions will inform the OVPI's Indigenous Community Engagement Action Plan.
- Co-Chairs of Respectful Repatriation Ceremony (Cary Miller, Lara Rosenoff-Gauvin, and Pahan Pte San Win), held the first meeting with the working group comprised of representatives from the university, Indigenous governance organizations, and Indigenous community organizations whose work will produce a comprehensive repatriation policy for tangible and intangible Indigenous materials including ancestral remains that the university acquired historically in the absence of informed consent. TOR are expected to be finalized and approved at the March meeting.

Portfolio structure and Staffing

- Denise Tardiff started as the Blueprint Manager, Indigenous Engagement & Communications on February 14.
- Tamara Cardinal started as the Indigenous Learning Hubs Manager for the EleV partnership, Indigenous Engagement & Communications on February 22.
- Three Indigenous Student Centre Work-study positions extended until Aug 31/22
- Two Indigenous Student Recruitment Officers hired, AVP Indigenous Students, Community & Culture
- The National Centre for Truth and Reconciliation (NCTR) continues to grow to meet the national mandate. Project Infrastructure requires IT support, record keeping and community engagement. As well, the Research Unit is currently being implemented.

Events

- Dr. Réal Carrière and Heather Souter presented at the January and February Indigenous Scholars Speaker Series with 65 and 37 audience members respectively.
- The Manitoba Collaborative Indigenous Education Blueprint partnered with the Manitoba Industry-Academia Partnership and hosted an Indigenous Student Roundtable on March 17.
- Dr. Amy Farrell presented “Understanding the World Beyond a Worldview” as part of the Indigenous Scholars Speaker Series on March 17.

Awards

- Thirty, \$2,500 awards in the amount of \$75,000.00 were disbursed from the Helen Betty Osborne Memorial Fund to Indigenous students. The scholarships honour the memory of Helen Betty Osborne to recognize Indigenous students who are making a difference in eliminating the barriers of racism, sexism, violence, and indifference in society. The fund is one of hundreds of scholarship funds managed by The Winnipeg Foundation. 176 applications were received and reviewed by a selection committee that included representatives from the Indigenous Chamber of Commerce (ICC) and the National Centre for Truth and Reconciliation (NCTR). The awards were available to Indigenous persons who reside in and are enrolled in post-secondary studies in Manitoba.

Upcoming Events

- Graduation Powwow – May 7, 2022
- Lori Blondeau will present “High Tech Storytelling” on April 7.

National Centre for Truth and Reconciliation

- NCTR is working with the Government of Canada (CIRNAC) for sustainable funding for the next 5 years. As well, we are meeting and working together for a new NCTR building.

- On January 20, 2022, Canada and the NCTR signed a Memorandum of Agreement. Canada will share Residential School documents with NCTR.
- The Mint would like to work with the NCTR and its Survivors Circle to create a medal in 2022 that supports residential school Survivors and their communities. 100% of net cash proceeds would be donated to support residential school Survivors thru the NCTR and the Na-mi-quai-ni-mak Fund.

National Monument Steering Committee Call for Survivors

- In response to Truth and Reconciliation Commission Call to Action #81 the Department of Canadian Heritage is undertaking a project, guided by Survivors, to create the residential schools National Monument. The monument will honour Survivors and all the children who were lost to their families and communities and will be in a highly visible site in the City of Ottawa.
- A call for Survivors was issued on February 28, 2022 and the deadline to apply is March 28, 2022. This Survivor-led committee will provide guidance and oversight on the monument project through its 5-year process.

Community Dialogue on Missing Children and Unmarked Burials

- The NCTR, in partnership with AMP, has taken the lead in developing, planning, and delivering a virtual learning event on Missing Children and Unmarked Burials. This event will go live on March 30, 2022, and end on March 31, 2022.
- The objective of the project is to:
 - Provide interactive dialogues with Indigenous communities that will increase knowledge and understanding on searching and identifying Missing Children and Unmarked Burials so families and communities may learn of what became of the children who perished or went missing while attending residential schools
 - Contribute to informed public dialogue on residential schools and the losses of children in attendance
 - Contribute to inter-community supports and learning, as well as the development of resource and information tools for communities

The event will feature remarks from the Truth and Reconciliation Commissioners Chief Wilton Littlechild, The Honourable Murray Sinclair, and Dr. Marie Wilson.

Na-mi-quai-ni-mak

- Na-mi-quai-ni-mak (I remember them) Community Support Fund is a number of small grants made available through the NCTR to support community-based healing and remembrance projects that have demonstrated inclusion of residential school Survivors as central to the planning and execution of the commemoration or gathering. The Regional Advisory Circle has approved 40 Na-mi-quai-ni-mak applications that will support Survivor-led commemorations and gatherings.

Education Unit

- The education unit engaged over 500 persons in 24 events with 6 in January and 18 in February. In addition to presentations with communities and organizations like Tofield, AB; Calmar, AB; Food and Beverage MB; All Nations Child and Family Services; UnionWare; Festival du Voyageur; and UofM Faculties of Engineering, Education, Medicine and St. John's college alumni.
- There was a virtual Decolonizing Lens event on February 3rd to support the Winnipeg Art Gallery's Naadobii water symposium. 77 guests attended from Canada, the USA, Australia and New Zealand with special guests Victoria Anderson-Gardner, Keelan Walker, Kath Akuhata-Brown, and Jason De Santolo (filmmakers from Canada, New Zealand, and Australia).
- *Imagine a Canada* program deadline of February 11, 2022 saw 138 submissions to the program with 87 in K-G5 and 43 from G6-12. There were 10 projects selected from K-G5 and 15 projects selected from G6-12 for honouring and participation in a leadership event in March and a national ceremony set for June 2022.

Research Unit

- The first call for proposals to the Small Research Grants Fund that support research being done that relates to the current focus areas of the NCTR's research. There are seven grants available, each valued up to a maximum of \$7000.00. The deadline to apply was February 28, 2022, with decisions expected in March.
- Brenda Gunn, Academic and Research Director, NCTR, was a part of the first report from the Canadian Reconciliation Barometer, which measures progress toward Reconciliation. The report released in February highlights the gaps in understanding between Indigenous and non-Indigenous peoples in Canada and compares progress across sectors of society. The report was developed by a team of Indigenous and non-Indigenous researchers who polled 3,225 Indigenous and non-Indigenous people on 13 indicators of Reconciliation, with several statements for each indicator.
- A Virtual International Academic Forum on Indigenous Peoples and the Right to Self-Determination, in support of the UN Expert Mechanism on the Rights of Indigenous Peoples was co-hosted by Celeste McKay and Brenda Gunn. The Forum featured current and former members of the UN Expert Mechanism on the Rights of Indigenous Peoples, and the UN Permanent Forum on Indigenous Issues as well as current and former UN Special Rapporteurs on the Rights of Indigenous Peoples.

Archives

- Finalized Memorandum of Agreement (MOA) with the Six Nations of the Grand River to investigate Unmarked Gravesites.
- Data repositories, "Our Relations," for Indigenous communities who have committed to using the repository and are set up for use now include: Sto'lo First Nation; Penelakut First Nation; Six Nations of the Grand River; the Tk'emlúps te Secwépemc; Keeseekoose First Nation; and Sechelt First Nation.

- First transfer of records to the NFB for preservation formatting and received a test sample of records.
- Received first transfer of Narratives from CIRNA. These have been posted on the NCTR web site.
- MOA with the Royal BC Museum to digitize and transfer all records of St. Ann's, and other OMI Lacombe records as well as the records of the Deschatelêts Archives.
- Presentation to the Dalhousie Faculty of Information on the topic of residential school records, February 16th, 2022.
- Finalized agreement and sign off with Services Ontario and the Ontario Attorney General to share vital stats records. Next step, official ceremony, and transfer of records. Negotiated ceremony for March 21th with IST, NCTR Spiritual Guides, Ontario Chiefs, and Ontario Attorney General.
- Presented at an international conference hosted by the Canadian Embassy in Paris January 28, 2022.

Missing Children (Phase 2)

- Installed additional applications in order to assist in the research. The scoping phase continues where relevant records are identified to be used in the manual review phase. The scoping phase is 90% complete and targeting Mar 2022 completion. In the manual record review phase, we will be conducting in-depth manual review of the relevant records identified from the scoping phase.

REPORT OF THE VICE-PRESIDENT (ADMINISTRATION)

Financial Services

- University Residences are currently operating at approximately 50% occupancy with about 600 students in three of our residence buildings. Residence Life programming and specific support, such as a dedicated residence response email, has continued to encourage safety as well as community building. All Public Health orders are being followed, and the steering committee and health and safety committee have reviewed and endorsed protocols in place.

Human Resources

- THRIVE at UM monthly sessions, which are designed to help faculty and staff thrive individually, professionally and organizationally continue to be offered. These learning and wellness sessions share resources, tools and supports for how to work effectively and stay healthy, and to flourish as a community. In January, the offering was, "*Finding Flow: Motivation in Self and Teams*", which explored how disruption has impacted our familiarity and comfortableness, and provided intentional ways to nurture motivation in self and others. The February offering, "*That didn't feel right... 5 ways to support co-workers, and yourself, when personal boundaries are crossed*" explored how a sense of personal space, personal safety and body autonomy is essential for employees to thrive in a workplace, and included trauma-informed approaches to supporting co-workers, and ourselves, during times when our personal boundaries are challenged.

- Learning and Organizational Development (LOD) created new offerings for the winter term for employees on topics that were identified as important for engagement and learning. The following sessions were launched in January 2022, and will be available until the end of March:
 - *“Perspective is Everything”*: in this session, the transition back to campus and in-person work was explored through the lens of how to prepare for, and adapt to, what is becoming the ‘new normal’.
 - *“Building Our New (Ab)Normal Together: Six Tips for Transition”*: this session also focused on the transition to in-person work. A short video by Psychologist Dr. Meagan O’Reilly shared research and stories to help people identify six steps that can be taken to prepare for in-person working and learning.
 - *“Five Steps to Better Email Communication”*: ways to create strong daily emails were covered in this session, along with Dr. Guy Katz’s Ted Talk on practical ways to raise our awareness of digital body language to create better relationships in our work.
- LOD entered into a new partnership with IST Engagement Services in January 2022 to support new presentations on a wide variety of Microsoft 365 topics, and on Zoom security. These sessions are offered by the IT Learning Coordinator on topics ranging from Teams, Sharing Files, MS Bookings, Breakout Rooms, Meeting Settings, and more.

Information Services and Technology (IST)

- A zero-day vulnerability, where an exploit occurs on the same day as the vulnerability being discovered without a patch to correct it, occurred with university-wide impact. Within eleven days, all scanning and mitigations were completed. While waiting for vendors to supply patches during that time period, our UM firewall provided protection within the first 24 hours.

Office of Legal Counsel

- After a pandemic-related hiatus, the Legal Office, in partnership with Student Advocacy, the Office of the University Secretary, and the Centre for the Advancement of Teaching and Learning, has resumed offering training to academic administrators on how to conduct fair investigations for both academic and non-academic misconduct, as well as how to conduct fair appeal processes.

REPORT OF THE VICE-PRESIDENT (EXTERNAL)

Fundraising Highlights

- To date, we have raised \$61 million in philanthropic funds exceeding the target of \$41.8 million for the 2021/22 year. This represents the highest cumulative result since 2017 during the Front and Centre Campaign.

Activities/Events

- The UM Alumni Book Club members will begin reading Michelle Good’s *“Five Little Indians”* beginning mid-March. Nearly 1,000 UM alumni and friends have joined the book club.
- Alumni Relations hosted a St. Patrick’s Day Trivia Night on March 17.

- The online election period for the 2022 Alumni Representative Board of Governors election will be held from mid-April to mid-May.
- The dates for this year's Homecoming have been confirmed for September 21 – 24 and will include the 2022 Distinguished Alumni Awards Celebration of Excellence Gala.

Other Significant Activities:

- The Distinguished Alumni 2021 Celebration of Excellence Awards were celebrated in February via video and print. The Nominations for the 2022 Distinguished Alumni Awards are open until March 28.
- The legacy RedDot website content management system was officially retired at the end of January. This marked the successful completion of the Next Generation Website Experience (NGWE) project that started in 2018.
- The UM Intranet project continues to be on track to conclude in June 2022 with 13 UM Intranet departmental sites launching in the first quarter of 2022.
- From December 23, 2021, through February 23, 2022, External Relations worked with 70 reporters on stories relating to UM. During this time, there were 9,530 news stories in media mentioning UM. Of note, Professor Gordon Giesbrecht was featured as an expert during extreme weather events, and he shared his insights on surviving physiological extremes with outlets including the New York Times. The release of the first Canadian Reconciliation Barometer report, which measures progress toward reconciliation and led by Professor Katherine Starzyk, ran in 215 stories across the country.