UNIVERSITY OF NORTHERN BRITISH COLUMBIA

SENATE MEETING
OPEN SESSION
AGENDA

June 25, 2025
3:30 – 5:00 PM
Senate Chambers

Acknowledgement of Territory

For thousands of years, Indigenous Peoples have walked gently on the diverse traditional territories where the University of Northern British Columbia community is grateful to live, work, learn, and play. We are committed to building and nurturing relationships with Indigenous peoples, we acknowledge their traditional lands.

1.0 **S-202506.01**
Approval of the Agenda †
Page 1 That the agenda for June 25, 2025, Open Session of Senate be approved as presented.

† **NOTE:** *The Senate Agenda for the open session consists of two parts, a consent agenda, and a regular agenda. The consent agenda contains items that are deemed to be routine or noncontroversial and are approved by the Steering Committee of Senate for placement on that agenda. Any Senator wishing to discuss any item on the consent agenda may ask the Chair of Senate that the item be removed from the consent agenda and placed on the regular agenda. Items removed from the consent agenda will be placed on the regular agenda and dealt with in the order in which they appear on the full agenda. Senators wishing to ask a question regarding an item on the consent agenda, without necessarily removing that item from the consent agenda, are strongly encouraged to direct questions to the Secretary of Senate in advance of the meeting.*

2.0 **Presentation:** No presentation

3.0 **Approval of the Minutes**

S-202506.02
Page 10 **Approval of the Minutes**
That the Minutes for May 28, 2025, Open Session of Senate be approved as presented.

S-202506.03
Page 38 **Approval of the Minutes**
That the Minutes of the May 7, 2025 Open Session be approved as presented.

S-202506.04
Page 96 **Approval of the Minutes**
That the Minutes of the February 26, 2025 Open Session be revised as presented. (formatting of calendar changes corrected)

4.0 **Business Arising**

5.0 **President's Report** *(10 minutes)* **Payne**

6.0 **Report of the Interim Provost** *(5 minutes)*- page 116 **Owen**

2024-2025 year in Review- Council of Deans - *Page 117*

7.0 Report of the Registrar *(5 minutes)* **Read**

8.0 Report on Regional Activities *(5 minutes)* **Owen**

9.0 Question Period *(10 minutes)*

9.1 Questions in advance

9.2 Questions from the floor

10.0 Committee Reports

10.1 Senate Committee on Student Appeals **Klassen-Ross**

10.2 Senate Committee on Academic Affairs **Owen**

"For Approval" Items:

Consent

S-202506.05

Change(s) to Course Prerequisites – ECON 310-3, Intermediate Microeconomic Theory

That on the recommendation of the Senate Committee on Academic Affairs, the change(s) to the course prerequisites for ECON 310-3, Intermediate Microeconomic Theory, on page 224 of the 2024/2025 undergraduate calendar, be approved as proposed.

Page 118 **Effective Date:** September 2025

Consent

S-202506.06

Change(s) to Course Prerequisites – ECON 312-3, Introduction to Econometrics

That on the recommendation of the Senate Committee on Academic Affairs, the change(s) to the course prerequisites for ECON 312-3, Introduction to Econometrics, on page 224 of the 2024/2025 undergraduate calendar, be approved as proposed.

Page 120 **Effective Date:** September 2025

S-202506.07

Consent

Change(s) to Course Prerequisites – ECON 320-3, Introduction to Mathematical Economics

That on the recommendation of the Senate Committee on Academic Affairs, the change(s) to the course prerequisites for ECON 320-3, Introduction to Mathematical Economics, on page 224 of the 2024/2025 undergraduate calendar, be approved as proposed.

Page 122 **Effective Date:** September 2025

S-202506.08

Consent

Change(s) to Course Prerequisites – ECON 425-3, Trade and Environment

That on the recommendation of the Senate Committee on Academic Affairs, the change(s) to the course prerequisites for ECON 425-3, Trade and Environment, on page 225 of the 2024/2025 undergraduate calendar, be approved as proposed.

Page 124 **Effective Date:** September 2025

S-202506.09

Consent

Change(s) to Course Title and Prerequisites – ECON 305-3, Environmental Economics and Environmental Policy

That on the recommendation of the Senate Committee on Academic Affairs, the change(s) to the course title and course prerequisites for ECON 305-3, Environmental Economics and Environmental Policy, on page 223 of the 2024/2025 undergraduate calendar, be approved as proposed.

Page 126 **Effective Date:** September 2025

S-202506.10

Regular **Rescinding of Course Deletion** – COMM 751 – Project Management (*for Senate Regular Agenda)*
That on the recommendation of the Senate Committee on Academic Affairs, the motion S-202303.57 which deleted COMM 751 – Project Management from the calendar be rescinded.
Page 128 **Effective Date:** June 2025

Page 129 **Executive Summary for Environmental Science**

S-202506.11
Consent **Course Deletion** – NREM 410-3 Watershed Management
That on the recommendation of the Senate Committee on Academic Affairs, the deletion of NREM 410-3 Watershed Management be approved as proposed.
Page 130 **Effective Date:** September 2026

S-202506.12
Consent **Course Deletion** – NREM 608-3 Watershed Management
That on the recommendation of the Senate Committee on Academic Affairs, the deletion of NREM 608-3 Watershed Management be approved as proposed.
Page 132 **Effective Date:** September 2026

S-202506.13
Regular **New Course Approval** – ENSC 400-3 *Environmental Instrumental Analysis*
That on the recommendation of the Senate Committee on Academic Affairs, the new course ENSC 400-3 *Environmental Instrumental Analysis*, be approved as proposed.
Page 133 **Effective Date:** September 2026

S-202506.14
Regular **New Course Approval** – ENSC 600-3 *Environmental Instrumental Analysis*
That on the recommendation of the Senate Committee on Academic Affairs, the new course ENSC 600-3 *Environmental Instrumental Analysis*, be approved as proposed.
Page 141 **Effective Date:** September 2026

S-202506.15
Regular **New Course Approval –** ENSC 402-3 *Watershed Science and Management*
That on the recommendation of the Senate Committee on Academic Affairs, the new course ENSC 402-3 *Watershed Science and Management*, be approved as proposed.
Page 149 **Effective Date:** January 2026

S-202506.16
Regular **New Course Approval** – ENSC 602-3 *Watershed Science and Management*
That on the recommendation of the Senate Committee on Academic Affairs, the new course ENSC 602-3 *Watershed Science and Management*, be approved as proposed.
Page 158 **Effective Date:** January 2026

S-202506.17
Regular **Change(s) to Program Requirements** – ENSC 402-3 *Watershed Science and Management*
That on the recommendation of the Senate Committee on Academic Affairs, the new course, ENSC 402-3 *Watershed Science and Management* replace NREM 410-3 *Watershed Management* in the 2024-2025 PDF undergraduate calendar in the following places:
• BSc Integrated in the lists of Eligible courses (two places) on p. 51
• BASc Environmental Engineering (UNBC/UBC Joint Program) list of Technical Electives on p. 109 - be approved as proposed.
Page 167 **Effective Date:** September 2025

S-202506.18
Regular **Change(s) to Program Requirements** – ENSC 402-3 *Watershed Science and Management*
That on the recommendation of the Senate Committee on Academic Affairs, the new course, ENSC 402-3 *Watershed Science and Management* replace NREM 410-3 *Watershed Management* in the 2024-2025 PDF undergraduate calendar in the following places:
• Minor in Environmental Science list of Environmental Pollution and Management choices

on p. 118
• Forest Ecology and Management Minor in Natural Resources Planning and Operations “pick four of” list on p. 136
• BSc Major in Wildlife and Fisheries “pick one of” list on p. 192 - be approved as proposed.

Page 171 **Effective Date:** September 2025

S-202506.19

Regular **Change(s) to Program Requirements** – BSc Environmental Science
That on the recommendation of the Senate Committee on Academic Affairs, the addition of two new courses (ENSC 400-3 *Environmental Instrumental Analysis* and ENSC 402-2 *Watershed Science and Management*) to the “two of” list in the Upper-Division Requirements of the BSc Major in Environmental Science on page 116 of the 2024/2025 PDF undergraduate calendar, be approved as proposed.

Page 175 **Effective Date:** September 2025

S-202506.20

Regular **Change(s) to Program Requirements** – Minor in Aquatic Science
That on the recommendation of the Senate Committee on Academic Affairs, the new course (ENSC 402-2 *Watershed Science and Management*) be added to the Elective Courses in the Minor in Aquatic Science, on page 117 of the 2024/2025 PDF undergraduate calendar, be approved as proposed.

Page 178 **Effective Date:** September 2025

S-202506.21

Regular **Change(s) to Program Requirements** – Minor in Soils and the Environment
That on the recommendation of the Senate Committee on Academic Affairs, the course (GEOG 315-3 *Earth’s Critical Zone*) be added to the Elective Courses in the Minor in Soils and the Environment, on page 118 of the 2024/2025 PDF undergraduate calendar, be approved as proposed.

Page 180 **Effective Date:** September 2025

S-202506.22

Regular **New Program Proposal** – Minor in Watershed Science and Management
That on the recommendation of the Senate Committee on Academic Affairs, the new Minor in Watershed Science and Management be approved as proposed.

Page 182 **Effective Date:** September 2025 – Pending DQAB review

Page 191 **Executive Summary for Bachelor of Planning**

S-202506.23

Regular **Change(s) to Program Requirements** – COMM 302-3 Entrepreneurship
That on the recommendation of the Senate Committee on Academic Affairs, the change from COMM 302-Entrepreneurship to COMM 204-3, on page 162 of the 2024/2025 undergraduate calendar, be approved as proposed.

Page 192 **Effective Date:** September 2025

S-202506.24

Regular **Change(s) to Program Requirements** – COMM 302-3 Entrepreneurship
That on the recommendation of the Senate Committee on Academic Affairs, the change from COMM 302-Entrepreneurship to COMM 204-3, on page 139-142 of the 2024/2025 undergraduate calendar, be approved as proposed

Page 196 **Effective Date:** September 2025

S-202506.25

Regular **New Subject Code** – PLAN (Planning)
That on the recommendation of the Senate Committee on Academic Affairs, the new subject code PLAN (Planning) be approved as proposed, and replace all instances of ENPL across the calendar, including Academic Breadth, Course Prefixes list, Course listings for Planning (239- 241), and the Programs that list these courses, as proposed.

Page 207 **Effective Date:** September 2026

S-202506.26

Regular

Change(s) to Calendar Entry – Bachelor of Environmental Planning
That on the recommendation of the Senate Committee on Academic Affairs, the change(s) to the Bachelor of Environmental Planning program description, on pages 110 to 114 of the 2024/2025 undergraduate calendar, be approved as proposed.

Page 210

Effective Date: September 2025 – Pending DQAB review

S-202506.27

Consent

Change(s) to Course Title and Description – ENPL 104-3 Introduction to Planning
That on the recommendation of the Senate Committee on Academic Affairs, the changes to the course title and description of ENPL 104-3 Introduction to Planning on page 239 of the 2024/2025 undergraduate calendar be approved as proposed.

Page 228

Effective Date: September 2025

S-202506.28

Consent

Change(s) to Course Title, Description and Prerequisites – ENPL 105-3 Principles and Practices of Planning
That on the recommendation of the Senate Committee on Academic Affairs, the changes to the course title, description and prerequisites of ENPL 105-3 Principles and Practices of Planning on page 239 of the 2024/2025 undergraduate calendar, be approved as proposed.

Page 230

Effective Date: September 2025

S-202506.29

Consent

Change(s) to Course Title, Description and Prerequisite – ENPL 206-3 Planning Analysis and Technique
That on the recommendation of the Senate Committee on Academic Affairs, the changes to the course title, description and prerequisite to ENPL 206-3 Planning Analysis and Technique on page 239 of the 2024/2025 undergraduate calendar, be approved as proposed.

Page 232

Effective Date: September 2025

S-202506.30

Consent

Change(s) to Course Title and Description – ENPL 301-3 Sustainable Communities: Structure and Sociology That on the recommendation of the Senate Committee on Academic Affairs, the changes to the course title and description of ENPL 301-3 Sustainable Communities: Structure and Sociology on page 239 of the 2024/2025 undergraduate calendar, be approved as proposed.

Page 234

Effective Date: September 2025

S-202506.31

Consent

Change(s) to Course Title, Number and Prerequisite – ENPL 410-3 Land Use Planning
That on the recommendation of the Senate Committee on Academic Affairs, the changes to the course name, number and prerequisite to ENPL 410-3 Land Use Planning on page 240 of the 2024/2025 undergraduate calendar, be approved as proposed.

Page 236

Effective Date: September 2025

S-202506.32

Consent

Change(s) to Course Title, Description and Prerequisite – ENPL 411-3 Planning Theory, Process and Implementation
That on the recommendation of the Senate Committee on Academic Affairs, the changes to the course title and description and prerequisite to ENPL 411-3 Planning Theory, Process and Implementation on page 240 of the 2024/2025 undergraduate calendar, be approved as proposed.

Page 238

Effective Date: September 2025

S-202506.33

Consent

Change(s) to Course Title and Description – ENPL 605-3 Land Use Planning
That on the recommendation of the Senate Committee on Academic Affairs, the changes to the course title and description of ENPL 605-3 Land Use Planning on page 127 of the 2024/2025 graduate calendar, be approved as proposed.

Page 240

Effective Date: September 2025

S-202506.34

Consent

Change(s) to Course Title and Description – ENPL 606-3 Planning Theory, Process and Implementation

That on the recommendation of the Senate Committee on Academic Affairs, the changes to the course title and description of ENPL 606-3 Planning Theory, Process and Implementation on page 127 (of the printed) of the 2024/2025 graduate calendar, be approved as proposed.

Page 242

Effective Date: September 2025

S-202506.35

Consent

Change(s) to Course Preclusion – NURS 202-3 Pathophysiological Concepts

That on the recommendation of the Senate Committee on Academic Affairs, the change to the preclusion in the course description for NURS 202-3 Pathophysiological Concepts, on page 279 of the 2024/2025 PDF undergraduate calendar, be approved as proposed.

Page 244

Effective Date: September 2025

S-202506.36

Consent

Change(s) to Course Preclusion – NURS 205-3 Introduction to First Nations Health

That on the recommendation of the Senate Committee on Academic Affairs, the change to the preclusion in the course description for NURS 205-3 Introduction to First Nations Health, on page 279 of the 2024/2025 PDF undergraduate calendar, be approved as proposed.

Page 245

Effective Date: September 2025

S-202506.37

Consent

Change(s) to Course Preclusion – NURS 206-3 Basic Nutrition

That on the recommendation of the Senate Committee on Academic Affairs, the change to the preclusion in the course description for NURS 206-3 Basic Nutrition on page 279 of the 2024/2025 PDF undergraduate calendar, be approved as proposed.

Page 248

Effective Date: September 2025

S-202506.38

Consent

Change(s) to Course Preclusion – NURS 308-3 Ethics and Law in Nursing

That on the recommendation of the Senate Committee on Academic Affairs, the change to the preclusion in the course description for NURS 308-3 Ethics and Law in Nursing, on page 280 of the 2024/2025 PDF undergraduate calendar, be approved as proposed.

Page 250

Effective Date: September 2025

S- 202506.39

Regular

New Course Approval – NURS 460-3 Health, Justice and the Environment

That on the recommendation of the Senate Committee on Academic Affairs and the Senate Committee on Indigenous Initiatives, the new course NURS 460-3 Health, Justice, and the Environment be approved as proposed.

Page 252

Effective Date: September 2025

Regular

S- 202506.40

New Course Approval – NURS 660-3 Health, Justice, and the Environment

That on the recommendation of the Senate Committee on Academic Affairs and the Senate Committee on Indigenous Initiatives, the new course NURS 660-3 Health, Justice, and the Environment be approved as proposed.

Page 260

Effective Date: September 2025

S-202506.41

Regular

New Program Approval – Master of Engineering

That on the recommendation of the Senate Committee on Academic Affairs, the new Master of Engineering be approved as proposed.

Page 269

Effective Date: September 2026

Page 290

Draft DQAB Stage 1 proposal for reference.

S-202506.42

Regular

Change(s) to Program Requirements – BASc Engineering

That on the recommendation of the Senate Committee on Academic Affairs, the changes to the program requirements for all BASc Engineering programs on pages 105 - 109 of the 2024/2025 undergraduate academic calendar, be approved as proposed

Page 303

Effective Date: September 2025

S-202506.43

Regular

New Course Approval – NREM 201-3, Land Policy in British Columbia

That on the recommendation of the Senate Committee on Academic Affairs and the Senate Committee on Indigenous Initiatives, the new course NREM 201-3 Land Policy in British Columbia be approved as proposed.

Page 310

Effective Date: January 2026

S-202506.44

Regular

New Course Approval – ENPL 201-3, Land Policy in British Columbia

That on the recommendation of the Senate Committee on Academic Affairs and the Senate Committee on Indigenous Initiatives, the new course ENPL 201-3 Land Policy in British Columbia be approved as proposed.

Page 316

Effective Date: January 2026

S-202506.45

Regular

New Course Approval – ORTM 415-3 Conservation, Culture, and Society

That on the recommendation of the Senate Committee on Academic Affairs and the Senate Committee on Indigenous Initiatives, the new course ORTM 415-3 Conservation, Culture, and Society be approved as proposed

Page 322

Effective Date: September 2025

S-202506.46

Regular

New Course Approval – ORTM 615-3 Conservation, Culture, and Society

That on the recommendation of the Senate Committee on Academic Affairs and the Senate Committee on Indigenous Initiatives, the new course ORTM 615-3 Conservation, Culture, and Society be approved as proposed.

Page 328

Effective Date: September 2025

S-202506.47

Regular

New Course Approval – ANTH 231-3, Anthropology and Africa

That on the recommendation of the Senate Committee on Academic Affairs and the Senate Committee on Indigenous Initiatives, the new course ANTH 231-3, Anthropology and Africa, be approved as proposed.

Page 333

Effective Date: September 2025

S-202506.48

Regular

New Course Approval – ANTH 431-3 Special Topics: Conflict and Integration

That on the recommendation of the Senate Committee on Academic Affairs and the Senate Committee on Indigenous Initiatives, the new course ANTH 431-3 Special Topics: Conflict and Integration, be approved as proposed.

Page 338

Effective Date: September 2025

S-202506.49

Consent

Change(s) to Course Title and Description – ANTH 206-3, Ethnography in Northern British Columbia

That on the recommendation of the Senate Committee on Academic Affairs and the Senate Committee on Indigenous Initiatives, the change(s) to the course title and description for ANTH 206-3, Ethnography in Northern British Columbia on page 197 PDF calendar accessible on the UNBC web page of the 2024/2025 undergraduate calendar, be approved as proposed.

Page 343

Effective Date: September 2025

S-202506.50

Consent

Change(s) to Course Title and Description – ANTH 418-3, Archaeology and First Nations

That on the recommendation of the Senate Committee on Academic Affairs and the Senate Committee on Indigenous Initiatives, the change(s) to the title and course description for ANTH 418-3, Archaeology and First Nations on page 200 PDF calendar accessible on the UNBC web page of the 2024/2025 undergraduate calendar, be approved as proposed.

Page 345 **Effective Date:** September 2025

S-202506.51

Consent **Change(s) to Description –** ANTH 203-3, Archaeology of the Americas

That on the recommendation of the Senate Committee on Academic Affairs and the Senate Committee on Indigenous Initiatives, the change(s) to the course description for ANTH 203-3, Archaeology of the Americas on page 197 PDF calendar accessible on the UNBC web page of the 2024/2025 undergraduate calendar, be approved as proposed.

Page 347 **Effective Date:** September 2025

"For Information" Items:

Page 349 **10.2.1 Degree program reviews** **McNeill**

List of programs initiating review in 2025/26, and status of reviews underway in previous years.

10.3 Steering Committee of Senate **Payne**

10.4 Senate Committee on Nominations **Gehloff**

"For Approval" Items:

S-202505.52

Recommendations of Senate Committee Members

That on the recommendation of the Senate Committee on Nominations the following candidates, who have met all eligibility requirements to serve on Senate committees as indicated, be appointed as proposed.

Effective date: Upon approval of Senate

SENATE COMMITTEE POSITION TO BE FILLED (except as otherwise noted, all terms begin immediately) **CANDIDATE**

10.4.1 Senate Committee Vacancies

Vacancies sorted by committee: Senate Committee Vacancies as of May 28, 2025

COMMITTEE	POSITION		TERM EXPIRY DATE
Senate Committee on Academic Affairs	Faculty Dean		N/A
	Faculty Member		03/31/2027
	Graduate Student		08/31/2025
	Regional Representative		03/31/2026

Vacancies sorted by committee: Senate Committee for September 2025

COMMITTEE	POSITION	TERM EXPIRY DATE
Senate Committee on Nominations	Student Senator	08/31/2026
	Vice Chair of Senate	09/23/2027
Senate Committee on Admissions and Degrees	Graduate Student	08/31/2026
	Undergraduate Student	08/31/2026

Steering Committee of Senate	Student Senator	08/31/2026
Senate Committee on Academic Affairs	Graduate Student	08/31/2026
	Undergraduate Student	08/31/2026
	Undergraduate Student	08/31/2026
Senate Committee on Scholarships and Bursaries	Graduate Student	08/31/2026
	Undergraduate Student	08/31/2026
Senate Committee on University Budgets	Graduate Student	08/31/2026
Senate Committee on Student Appeals	Graduate Student Senator	08/31/2026

Note: The symbol "†" denotes that an appointment by Senate is pending

10.5 Senate Committee on Curriculum and Calendar **Read**

10.6 Senate Committee on Admission and Degrees **Read**

10.7 Senate Committee on Indigenous Initiatives **Payne**

10.8 Senate Committee on Honorary Degrees and Special Forms of Recognition **Payne**

10.9 Senate Committee on Scholarships and Bursaries **Wood-Adams**

10.10 Senate Committee on University Budget **Gehloff**

11.0 Approval of Motions on the Consent Agenda **Payne**

S-202506.53
Approval of Motions on the Consent Agenda
That the motions on the consent agenda, except for those removed for placement on the regular agenda, be approved as presented.
Effective Date: Upon the approval of Senate

12.0 Information

13.0 Other Business

14.0 S-202506.54 *(10 minutes)*
Move to the Closed Session
That the meeting move to Closed Session

15.0 S-202506.55
That the Senate meeting be adjourned.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Dr. Bill Owen, Interim Vice-President Academic and Provost
Report to Senate
June 16, 2025

Since the last Senate meeting, we celebrated the convocation of 788 graduates across all four UNBC campuses. Sincere thanks to the staff, faculty, and students who volunteered at each ceremony—your support was instrumental in ensuring these important events ran smoothly.

At each regional celebration, I had the privilege of recognizing one or two graduating students who demonstrated exceptional leadership or who embodied UNBC's deep commitment to our northern regions.

We are especially proud that all of the UNBC Nursing graduates from the Fort St. John campus are already contributing to healthcare in the Northeast: one is working in Dawson Creek, one in Chetwynd, and the remaining graduates have begun their careers in Fort St. John.

The search for the next Dean of the Faculty of Indigenous Studies, Social Sciences and Humanities (FISSSH) is progressing as planned. The search committee has completed long-list interviews and is currently evaluating the short-listed candidates.

The search for the next Dean of the Faculty of Science and Engineering officially launched with its first meeting on June 24.

As a reminder, candidate confidentiality is critical during senior searches. We have seen strong candidates withdraw from processes at other institutions due to informal inquiries made without the candidate's knowledge. It is essential that we respect candidates' privacy and refrain from contacting individuals at their home institutions.

I would like to express my appreciation to the members of the Faculty Association and University bargaining teams for their collegial and constructive dialogue. Bargaining will resume in September or October.

The two Provost Committees—on pedagogical practices and on student enrolment and retention—have submitted their reports and recommendations, as outlined in their respective terms of reference (available on the UNBC Provost website). I am currently reviewing these recommendations to help shape next year's focus areas for both committees.

We continue to closely monitor student enrolments for Fall and are adjusting our strategies as needed to support student success and institutional sustainability.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

2024-2025 Year in Review

Council of Deans

The Deans and University Librarian (UL) have been busy this past fiscal year championing student and faculty initiatives that support student academic success, student research and faculty development.

Strategic Cross-Faculty Initiatives

A competition for one-time strategic initiative funding was held in the Spring of 2024. The call focused on projects that addressed UNBC's strategic goals and priorities. Specific attention was made toward projects that involved and/or impacted more than one program and/or Faculty, engaged students and faculty, and those that raised awareness of teaching activities and outcomes.

26 applications
7 funded

Fulfilling Student Learning Journeys

Through a number of initiatives, the COD has focused on UNBC's Foundational Goal of fulfilling student learning journeys. The initiatives focused on first-year experience and knowledge mobilization of student research.

58 applications
66% funded

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First Year Experience

To support undergraduate student experience and retention, the Council has funded a First Year Experience Coordinator within Student Success and the First Year Experience Program pilot. The pilot involves evaluating the implementation of Saint Mary's University (SMU) "Spark" First-Year Experience (FYE) program at UNBC.

Each of the programs has the potential to impact a student's learning journey through engagement, academic support, and increase student retention.

Knowledge Mobilization

Initiated the Student Knowledge Dissemination and Mobilization Fund. This opportunity supported students in co-creation, dissemination and mobilization of their research.

Foundational Skills Coordinator

First Year Experience Coordinator

Indigenization in Action Speaker Series

Indigenization in Action: Tools for the Classroom is an eight part speaker series featuring Indigenous academics from a variety of academic disciplines talking about their work to Indigenize the academy. In particular, the organizers have striven to invite guest speakers that currently research and work in science, technology, engineering and math (STEM). The series was available to faculty, students, staff and the general public.

Environmental scan

The COD partnered with the Community Development Institute to better understand the needs and knowledge gaps of communities across Northern BC. Our environmental scan will be ready in 2025 and will help optimize UNBC's service to the North.

The Council of Deans/UL is more than our outcomes. As collective we:

- Collaborate to ensure our planning aligns with UNBC's Strategic and Academic Plans
- Offer guidance and feedback to one another
- Identify opportunities for collaboration and partnership
- Support and elevate faculty and student excellence by reviewing cross-faculty award applications

FBE Dr. Ronald Camp III

FE Dr. Nicola Koper

FHHS Dr. Margot Parkes (INT)

FISSSH Dr. Kriston Rennie

FSE Dr. Deborah Roberts

Library Dr. Trina Fyfe

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.05**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change(s) to the course prerequisites for ECON 310-3, Intermediate Microeconomic Theory, on page 224 of the 2024/2025 undergraduate calendar, be approved as proposed.

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:** To ensure students have a strong foundational understanding of materials from prerequisite courses.

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

   ECON 310-3 Intermediate Microeconomic Theory

   This course examines the main principles and techniques of economic analysis in their application to modern theories of price, production, distribution and theory of the firm.

   Prerequisite(s): ECON 100-3, ECON 101-3, MATH 152-3 or MATH 100-3, or permission of the instructor

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   ECON 310-3 Intermediate Microeconomic Theory

   This course examines the main principles and techniques of economic analysis in their application to modern theories of price, production, distribution, and theory of the firm.

   Prerequisite(s): ECON 100-3 (minimum grade C-), ECON 101-3, and one of MATH 100-3 (minimum grade C-) or MATH 152-3 (minimum grade C-) ~~MATH 152-3 or MATH 100-3, or permission of the instructor~~

6. **Authorization:**

   Program / Academic / Administrative Unit: School of Economics

   SCCC Reviewed: May 13, 2025

   Faculty(ies): FBE

   Faculty Council Motion Number(s): FBEFC 20250522-04

   Faculty Council Approval Date(s): May 22, 2025

   Senate Committee on Indigenous Initiatives Motion Number: N/A

   Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: 0 pages

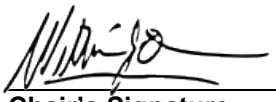
INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF202506.03

Moved by: Bill Owen **Seconded by:** Heather Empey

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 

Date **Chair's Signature**

For recommendation to ✓, or information of _____ Senate.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.06**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change(s) to the course prerequisites for ECON 312-3, Introduction to Econometrics, on page 224 of the 2024/2025 undergraduate calendar, be approved as proposed.

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:** To ensure students have a strong foundational understanding of materials from prerequisite courses.

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

   ECON 312-3 Introduction to Econometrics

   In this course, simple linear regression, maximum likelihood estimators, and multiple regression are used in applied economic analysis. Students are introduced to various software programs.

   Prerequisite(s): ECON 100-3, ECON 101-3, ECON 205-3, MATH 100-3 or MATH 152-3, MATH 150-3 or MATH 220, or permission of the instructor

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   ECON 312-3 Introduction to Econometrics

   In this course, simple linear regression, maximum likelihood estimators, and multiple regression are used in applied economic analysis. Students are introduced to various software programs.

   Prerequisite(s): ECON 100-3 (minimum grade C-), ECON 101-3 (minimum grade C-), ECON 205-3 (minimum grade C-), one of MATH 100-3 (minimum grade C-) or MATH 152-3 (minimum grade C-), and one of MATH 150-3 (minimum grade C-) or MATH 220-3 (minimum grade C-) ~~or permission of the instructor~~

6. **Authorization:**

   Program / Academic / Administrative Unit: School of Economics

   SCCC Reviewed: May 13, 2025

   Faculty(ies): FBE

   Faculty Council Motion Number(s): FBEFC 20250522-05

   Faculty Council Approval Date(s): May 22, 2025

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF

Moved by: Bill Owen **Seconded by:** Heather Empey

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.07**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change(s) to the course prerequisites for ECON 320-3, Introduction to Mathematical Economics, on page 224 of the 2024/2025 undergraduate calendar, be approved as proposed.

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:** ECON 320 contains a lot of math components and students will require a strong grasp of math to be successful.

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

   ECON 320-3 Introduction to Mathematical Economics

   In this course, the mathematical interpretation of fundamental economic concepts such as demand, supply and competitive equilibrium are examined. Calculus is used in the analysis of production and distribution theory.

   Prerequisite(s): ECON 205-3, ECON 310-3, MATH 100-3 or MATH 152-3, MATH 150-3 or MATH 220-3, or permission of the instructor

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   ECON 320-3 Introduction to Mathematical Economics

   In this course, the mathematical interpretation of fundamental economic concepts such as demand, supply, and competitive equilibrium ~~are~~ is examined. Calculus is used in the analysis of production and distribution theory.

   Prerequisite(s): ~~ECON 205-3, ECON 310-3,~~ one of MATH 100-3 (minimum grade C-) or MATH 152-3 (minimum grade C-), and one of MATH 150-3 (minimum grade C-) or MATH 220-3 (minimum grade C-) ~~or permission of the instructor~~

6. **Authorization:**

   Program / Academic / Administrative Unit: School of Economics

   SCCC Reviewed: May 13, 2025

   Faculty(ies): FBE

   Faculty Council Motion Number(s): FBEFC 20250522-06

   Faculty Council Approval Date(s): May 22, 2025

   Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.05

Moved by: Bill Owen **Seconded by:** Heather Empey

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.08**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change(s) to the course prerequisites for ECON 425-3, Trade and Environment, on page 225 of the 2024/2025 undergraduate calendar, be approved as proposed.

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:** To ensure students have a strong foundational understanding of materials from prerequisite courses.

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

   ECON 425-3 Trade and the Environment

   This course considers the relationship between different international trade regimes and environmental issues.

   Prerequisite(s): ECON 100-3 and ECON 101-3, or permission of the instructor

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   ECON 425-3 Trade and the Environment

   This course considers the relationship between different international trade regimes and environmental issues.

   Prerequisite(s): ECON 100-3 (minimum grade C-) and ECON 101-3 (minimum grade C-) ~~or permission of the instructor~~

6. **Authorization:**

   Program / Academic / Administrative Unit: School of Economics

   SCCC Reviewed: May 13, 2025

   Faculty(ies): FBE

   Faculty Council Motion Number(s): FBEFC 20250522-07

   Faculty Council Approval Date(s): May 22, 2025

   Senate Committee on Indigenous Initiatives Motion Number: N/A

   Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.06

Moved by: Bill Owen **Seconded by:** Heather Empey

Committee Decision: CARRIED

Approved by SCAAF: June 12, _____ _____
Date **Chair's Signature**

For recommendation to ✓, or information of _____ Senate.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.09**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change(s) to the course title and course prerequisites for ECON 305-3, Environmental Economics and Environmental Policy, on page 223 of the 2024/2025 undergraduate calendar, be approved as proposed.

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:** To improve student experience and success through a better understanding of math.

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

   ECON 305-3 Environmental Economics and Environmental Policy

   This course is an introduction to environmental economics emphasizing the relationship between economic activities and environmental quality. It introduces students to frameworks for measuring environmental costs and benefits and evaluating the efficiency and equity of environmental policies. Local and global environmental issues, including ozone depletion and climate change, are analyzed.

   Prerequisite(s): ECON 100-3 or permission of the instructor

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   ECON 305-3 Environmental Economics and ~~Environmental~~ Policy

   This course is an introduction to environmental economics emphasizing the relationship between economic activities and environmental quality. ~~It~~ The course introduces students to frameworks for measuring environmental costs and benefits and evaluating the efficiency and equity of environmental policies. Local and global environmental issues, including ozone depletion and climate change, are analyzed.

   Prerequisite(s): ECON 100-3, and one of MATH 100-3 or MATH 152-3 ~~or permission of the instructor~~

6. **Authorization:**

   Program / Academic / Administrative Unit: School of Economics

   SCCC Reviewed: May 13, 2025

   Faculty(ies): FBE

   Faculty Council Motion Number(s): FBEFC 20250522-03

   Faculty Council Approval Date(s): May 22, 2025

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: 0 pages

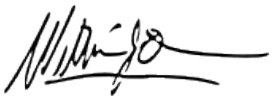
INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.07

Moved by: Bill Owen **Seconded by:** Heather Empey

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 **Date**  **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.10

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED MOTION

Motion: That motion S-202303.57 which deleted COMM 751 – Project Management from the calendar be rescinded.

Effective Date: June 2025

Rationale: This is to ensure that the calendar is consistent since COMM 751 was added back as a required course for the MBA program but a motion to officially rescind the deletion of the course in the calendar was not made.

Motion proposed by: Kafui Monu

Academic Program: Master of Business Administration

Implications for Other Programs / Faculties? None

Faculty: Faculty of Business and Economics

Faculty Council / Committee Motion Number: FBEFC 20250522-08

Faculty Council / Committee Approval Date: May 22, 2025

Attachment Pages (if applicable): # pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF202506.08

Moved by: Bill Owen **Seconded by:** Ronald Camp II

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 Ronald Camp II
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

Explanation of Environmental Science Curriculum changes
2025-03-18

The following package contains motions from the Environmental Science program, Department of Geography, Earth and Environmental Sciences. The motions create two new courses (one of which replaces NREM 410 which is being deleted), and a new minor in Watershed Science and Management, as well as making changes to the calendar to integrate these changes and incorporate new courses from other programs. All of these changes can be handled within the teaching loads of existing faculty. The motions are to:

1. Create new courses, ENSC 400/600-3 *Environmental Instrumental Analysis* to be taught by Dr. Hossein Kazemian, NALS Director and faculty member who has recently joined the Environmental Science program. This course will be a regular part of his teaching load each Fall semester.
2. Create new courses, ENSC 402/602-3 *Watershed Science and Management* which replaces NREM 410/608-3 *Watershed Management* that are being deleted. ENSC 402/602 will be taught by Drs. Siraj ul Islam and Phil Owens as part of their regular teaching load each Winter semester. This course is a capstone in the new proposed minor in *Watershed Science and Management*.
3. Delete:
    a. NREM 410-3
    b. NREM 608-3
4. Since ENSC 402 is a replacement for NREM 410 with similar content, we propose to replace NREM 410-3 with ENSC 402-3 wherever it appears in the undergraduate calendar. Note that these changes have been approved by Ecosystem Science and Management, as well as the Faculty of Science and Engineering.
    a. BSc Integrated in the list of Eligible courses (two places) on p. 51 and BASc Environmental Engineering (UNBC/UBC Joint Program) list of Technical Electives on p. 109
    b. Minor in Environmental Science list of Environmental Pollution and Management choices on p. 118; Forest Ecology and Management Minor in Natural Resources Planning and Operations “pick four of” list on p. 136; and BSc Major in Wildlife and Fisheries “pick one of” list on p. 192
5. In the BSc Major in Environmental Science add ENSC 400-3 and ENSC 402-3 to the upper division pick “Two of the following:” list and add the new course ORTM 415-3 *Conservation, Culture and Society* as an “or” with NREM 306-3 *Society, Policy and Administration* on p. 116
6. In the Minor in Aquatic Science add ENSC 402-3 to the elective courses list in the on p. 117
7. In the Minor in Soils and the Environment add GEOG 315-3 *Earth’s Critical Zone* to the elective courses list on p. 118
8. Create a new *Minor in Watershed Science and Management*. This new minor results from the work of an ad-hoc committee made up of faculty from GEES, ESM, SPS in the Faculty of Environment and from Engineering in the Faculty of Science and Engineering. The new minor builds upon the considerable research and teaching expertise in this area at UNBC across departments and faculties and is designed to be accessible to students from any major, since it has pathways with all prerequisites contained in the minor.

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UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.11

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED MOTION

Motion: That deletion of NREM 410-3 Watershed Management be approved as proposed.

1. Effective Date: September 2026

2. Rationale for the proposed revision: Despite being a subject code overseen by the Dept of Ecosystem Science and Management (ESM), NREM 410-3 Watershed Management has been historically taught by faculty outside our Dept. The subject matter of this course has facets of hydrological movement of water through the environment, as well as implications this has for water resource management. The current compliment of faculty whose expertise match the course content reside within the Dept of Geography, Earth and Environmental Science (GEES), specifically the Environmental Science group. GEES has proposed a new course (ENSC 402) for Sept 2025 to replace NREM 410, which we support and propose to delete NREM 410 from the calendar. We have proposed an Effective Date of Sept 2026 to allow the courses to overlap and be cross-listed for one year, in order to allow students working on older calendars the period to transition.

Our proposal would remove NREM 410 from all degrees currently listing this course, with the proposal to adopt ENSC 402 in its place.

3. Motion proposed by: Ken Otter

4. Academic Program: Dept of Ecosystem Science & Management

5. Implications for Other Programs / Faculties? Yes

NREM 410-3 Watershed Management currently appears as a required course in only one degree program:

- BSc (Integrated) Coast Mountain College Degree Completion Program (page 51 of 2024/2025 Undergraduate Calendar)

It is a listed elective course in the following degrees:

- BSc (Integrated), Eligible courses for the Environmental and Earth Sciences Area of Specialization (page 51)
- B Eng. Environmental Engineering Degree Program Requirements (UNBC/UBC Joint Program) (page 109)
- BSc Environmental Sciences (Minor in Environmental Science) – list of courses in Environmental Pollution and Management (page 118)
- BSc Forest Ecology & Management, Minor in Natural Resources Planning and Operations (page 136)
- BSc Wildlife & Fisheries (page 192)

All these effected programs have been consulted about the intent to remove NREM 410 from the calendar and replace it with ENSC 402. The only degree program for which it is a required, rather than optional course is the BSc (Integrated) degree completion program from Coast Mountain College, for which entry has been suspended over the past two years due to low uptake.

6. Authorization:

SCCC Reviewed: April 15, 2025

Faculty: Faculty of Environment

Faculty Council / Committee Motion Number: **FEFC 2025:05:08:07**

Faculty Council / Committee Approval Date: **May 8, 2025**

Attachment Pages (if applicable): 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

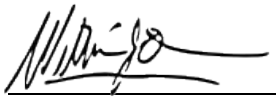
Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.09

Moved by: Kriston Rennie **Seconded by:** Rehana Ramzan

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 **Date**



Chair's Signature

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.12

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED MOTION

Motion: That deletion of NREM 608-3 Watershed Management be approved as proposed.

1. **Effective Date:** September 2026

2. **Rationale for the proposed revision:** ESM is proposing to delete the cross-listed undergraduate course, NREM 410, to this course. The Environmental Science program within the Dept of Geography, Earth and Environmental Sciences is proposing the creation of ENSC 402/602 to replace this course.

3. **Motion proposed by**: Ken Otter

4. **Academic Program:** Dept of Ecosystem Science & Management

5. **Implications for Other Programs / Faculties?** Yes

This course would be available to students within the Natural Resources and Graduate Studies program for credit. As it will be replaced by the ENSC 602 option, there will be no loss of content to students.

6. **Authorization**:

SCCC Reviewed: April 15, 2025

Faculty: Faculty of Environment

Faculty Council / Committee Motion Number: **FEFC 2025:05:08:08**

Faculty Council / Committee Approval Date: **May 8, 2025**

Attachment Pages (if applicable): 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.10

Moved by: Kriston Rennie **Seconded by:** Rehana Ramzan

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 (**Date**) (**Chair's Signature**)

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.13

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW COURSE APPROVAL MOTION FORM

Motion: That the new course ENSC 400-3 *Environmental Instrumental Analysis*, be approved as follows:

A. Description of the Course

1. **Proposed semester of first offering:** September 2026
2. **Academic Program:** Environmental Science
3. **Course Subject, Number*, and Credit hours (e.g. CHEM 210-3):** ENSC 400-3
4. **Course Title:** Environmental Instrumental Analysis
5. **Goal(s) of Course:**
   - **Theoretical Foundations:** Students will demonstrate a comprehensive understanding of fundamental principles underlying modern analytical instrumentation, including principles of spectroscopy, chromatography, mass spectrometry, and microscopy.
   - **Practical Proficiency:** Students will prepare diverse environmental samples and operate analytical instruments following proper QA/QC protocols, safety guidelines, and standard operating procedures.
   - **Data Analysis & Interpretation:** Students will apply appropriate statistical and chemometric methods to evaluate data quality (precision, accuracy, detection limits, uncertainty) and interpret complex datasets with clarity.
   - **Professional Communication:** Students will present experimental results in technical reports and oral presentations suitable for industrial, governmental, or academic stakeholders, and critically evaluate literature and emerging techniques.
   - **Interdisciplinary Applications:** Students will recognize and articulate how advanced analytical methods inform environmental decision-making, from assessing contaminant distributions and speciation to guiding remediation strategies and influencing policy.
6. **Calendar Course Description:**

   This course explores advanced instrumental techniques for analyzing environmental samples, focusing on spectroscopy, chromatography, and material characterization. Students develop practical skills in sample preparation, Quality Assurance/Quality Control, and data interpretation through lectures and labs. Lab work includes real-world applications using state-of-the-art analytical equipment.

7. **Credit Hours:** 3 credit hours (Normally, UNBC courses are 3 credit hours and may not be repeated for additional credit. If this course falls outside the norm, please complete sections “a)” and “b)” below).

   a) **Can the course be repeated for credit if the subject matter differs substantially?** No

b) Is variable credit available for this course? No

8. Contact Hours (per week):

Lecture	3	Seminar	0
Laboratory	2	Other (please specify)	0

NOTE: This somewhat non-standard time allocation (3 lecture hours and only 2 lab hours) has been chosen as the best option pedagogically, given the nature of the course.

9. Prerequisites (taken prior): CHEM 210-3

10. Prerequisites with concurrency (taken prior or simultaneously): None

11. Co-requisites (must be taken simultaneously): None

12. Preclusions: ENSC 600-3

13. Course Equivalencies: none

14. Grade Mode: NORMAL (i.e., alpha grade)

15. Course to be offered:

each semester	
each year	X
alternating years	

16. Proposed text / readings:

Primary Textbooks:

Fundamentals of Analytical Chemistry (9th Edition) by D.A. Skoog, D.M. West, F.J. Holler, and S.R. Crouch.
Principles of Instrumental Analysis (6th Edition) by D.A. Skoog, F.J. Holler, and S.R. Crouch.

Supplementary Resources:

Scientific journal articles and review papers from *Analytical Chemistry*, *Environmental Science & Technology*, and *Talanta*.
Instrument manufacturer manuals and application notes (e.g., Agilent, PerkinElmer, Thermo Fisher Scientific).
Regulatory guidance documents (e.g., US EPA Method Protocols, Environment Canada Guidelines).

B. Significance Within Academic Program

This course fulfills an important role within the Environmental Science Major by developing the chemical analytical methods for quantification of environmental constituents, including pollution and contamination. The course has an ENSC 600-3 counterpart which will serve the needs of graduate students working in the environmental field across the sciences and engineering. The course will be taught using analytical equipment in NALS (Northern Analytical Laboratory Services).

1. Anticipated enrolment 10 undergraduates plus 5 graduates in ENSC 600-3

2. If there is a proposed enrolment limit, state the limit and explain: 15

The limit is needed due to the availability of space and equipment in the NALS.

3. **Required for:** Major: None Minor: None Other: _____

   A forthcoming motion will include this course in the Environmental Science BSc degree

4. **Elective in:** Major: Environmental Science Minor: None Other: _____

5. **Course required by another major/minor:** none

6. **Course required or recommended by an accrediting agency:** No

7. **Toward what degrees will the course be accepted for credit?** any undergraduate degree

8. **What other courses are being proposed within the Program this year?** ENSC 402-3 ENSC 602-3

9. **What courses are being deleted from the Program this year?** ENSC 435-3 ENSC 635-3

C. Relation to Other Program Areas

1. **Identify courses in other UNBC Programs that overlap with this course; describe the overlap and comment on its significance:**

Potential Overlap with CHEM 210 (Analytical Chemistry I) & CHEM 310 (Analytical Chemistry II)
These undergraduate courses introduce students to fundamental analytical chemistry concepts (instrumentation basics, spectroscopic and chromatographic methods, core lab skills). ENSC 400 expands on these foundations but **targets advanced environmental applications**, including specialized sample preparation, rigorous QA/QC protocols for environmental matrices, and interdisciplinary approaches (e.g., policy implications, remediation strategies). While some instrumentation methods (e.g., UV-Vis, ICP) appear in both CHEM 210/310 and ENSC 400, the **context and depth of application** in ENSC 400 are distinct, focusing on real-world environmental monitoring and data interpretation.

Potential Overlap with CHEM 410 (Topics in Analytical Chemistry) & CHEM 610 (Topics in Analytical Chemistry)
CHEM 410/610 courses address advanced or specialized topics in analytical chemistry, which may at times include instrumentation or environmental examples. However, CHEM 410/610 are often **rotating "Topics" courses** whose content can vary significantly from year to year; consequently, potential overlap depends on the specific topic offered. ENSC 400 is **fixed in its environmental instrumentation focus**, integrating methods for assessing contaminants in water, soil, air particulates, and emphasizing environmental QA/QC, regulatory considerations, and real-world decision-making. Any perceived overlap is **nominal**, as CHEM 410/610 generally do not require an explicit environmental focus, nor do they always include the same instrumentation or field-based applications.

Significance of Overlap

- **Context and Learning Outcomes**: ENSC 400 emphasizes the environmental dimension of analytical methods—e.g., regulatory guidelines, speciation of contaminants, real-world sampling strategies—rather than broad or rotating topics in analytical chemistry.
- **Complementary, Not Redundant**: Students who have taken CHEM 210/310 will find ENSC 400/600 builds **upon** their knowledge by applying analytical tools to more complex environmental matrices and advanced QA/QC scenarios. Meanwhile, CHEM 410/610 may delve into niche analytical topics that do not necessarily align with or duplicate ENSC 400.

2. **Is a preclusion required?** Yes _____ No X

3. **If there is an overlap, and no preclusion is required, please explain why not:**

Although ENSC 400 shares certain analytical techniques with CHEM 210/310 and potentially intersects with some "topics" in CHEM 410/610, **the environmental focus, advanced QA/QC, and real-world applications** make it sufficiently distinct. Students benefit from learning how instrumentation is used specifically in environmental investigations—an area not comprehensively covered in the Chemistry analytical sequence.

4. **Has this overlap been discussed with the Program concerned?** Yes X No _____

ENSC 400 provides an environmental application focus that **complements** rather than duplicates existing analytical chemistry courses. This proposal was discussed with the Chemistry and Biochemistry department, and it was decided to have CHEM 210-3 *Analytical Chemistry I* as a prerequisite that ENSC 400-3 could build upon.

5. **In offering this course, will UNBC require facilities or staff at other institutions?**

Yes _____ No X

If yes, please describe requirements:

6. **Is this course replacing an existing course that is included in one or more transfer agreements with external institutions?**

Yes _____ No X

If "yes," please contact the Articulation Officer in the Office of the Registrar.

D. Resources required

1. **Please describe ADDITIONAL resources required over the next five years to offer this course.**

i. **Faculty Staffing:**

No additional faculty staffing: the course will be taught by Dr. Hossein Kazemian, a newly appointed tenure-track faculty member in Environmental Science as his regular teaching load. Dr. Kazemian is Director of NALS (Northern Analytical Laboratory Services) – the course is based on use of NALS equipment.

ii. **Space (classroom, laboratory, storage, etc.):**
No additional space: lectures require a normal classroom. Labs will use both an existing chemistry lab (used for CHEM labs) and the NALS facilities.

iii: Library Holdings: See attached form

iii. **Computer (time, hardware, software):**
No additional computing resources. Course will use equipment already available in NALS.

E. Additional Attached Materials

Course Content and Schedule

Week 1-2: Introduction, Data Analysis & Quality Assurance
Lecture Topics:

- Evolution of analytical methods: Classical to modern instrumentation (Skoog et al., Fundamentals Ch.1-2).
- Experimental design, calibration methods, internal standards, matrix effects.

- Statistical concepts: Precision, accuracy, LOD, LOQ, signal-to-noise ratio, QC charts.
- Overview of instrumentation and facilities at NALS.

Lab:

- Laboratory orientation, safety training, and tour of NALS.
- Introduction to data quality assessment using a simple UV-Vis absorbance experiment.

Week 3: Sample Preparation Techniques

Lecture Topics:

- Importance of sample preparation for environmental matrices (Skoog et al., Fundamentals Ch.27).
- Filtration, centrifugation, liquid-liquid extraction, solid-phase extraction, acid digestion for metals.
- Minimizing contamination and ensuring representativeness of samples.

Lab:

- Preparation of water and soil samples for ICP metals analysis.
- Acid digestion and filtration protocols.

Week 4-6: Atomic and Molecular Spectroscopy

Lecture Topics:

- Atomic Absorption Spectroscopy (AAS), Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES), and ICP-Mass Spectrometry (ICP-MS) principles and their applications in environmental science (Skoog et al., Instrumental Analysis Ch.9-11).
- Molecular spectroscopy: UV-Vis, FTIR, (Ch.13-15).
- Quantitative vs. qualitative spectroscopic methods, standard addition methods, speciation analysis.

Lab:

- Heavy metal quantification in water samples via ICP-MS.
- Identification of organic pollutants using UV-Vis spectroscopy.

Week 7-9: Chromatographic and Hyphenated Techniques

Lecture Topics:

- Gas Chromatography (GC) and High-Performance Liquid Chromatography (HPLC) fundamentals (Skoog et al., Instrumental Analysis Ch.22-24).
- Ion Chromatography for nutrient and anion analysis.
- Hyphenated techniques: GC-MS, LC-MS/MS, addressing complex mixtures, environmental metabolomics.
- Data interpretation: retention times, peak integration, calibration curves.

Lab:

- Analysis of volatile organic compounds (VOCs) in air/water samples using GC-MS.
- Determination of nitrate, phosphate, and sulfate in water using Ion Chromatography.

Week 10-11: Surface, Structural, and Morphological Characterization

Lecture Topics:

- X-ray Diffraction (XRD) for crystalline phases (Skoog et al., Instrumental Analysis Ch.12).
- X-ray Fluorescence (XRF) for elemental composition.
- Scanning Electron Microscopy (SEM) and Energy Dispersive X-ray Spectroscopy (EDS) for morphology and elemental mapping.
- BET surface area analysis for adsorbents and porous materials.

Lab:

- Sediment/Mineral phase identification using XRD.
- Surface area and pore size characterization of adsorbents by BET analysis.

Week 12: Thermal and Electrochemical Techniques

Lecture Topics:

- Thermal Gravimetric Analysis (TGA), Differential Scanning Calorimetry (DSC) for stability and degradation.
- Electrochemical methods: Potentiometry, voltammetry, ion-selective electrodes.
- Environmental sensors and real-time monitoring applications.

Lab:

- Degradation studies on polymeric materials by TGA.
- Determining redox potential and pH in environmental samples using electrochemical probes.

Week 13: Final Project Presentations & Review
Lecture & Lab:

- Undergraduate student presentations of final projects.
- Graduate student presentations highlighting literature review, advanced data analysis, and critical evaluation.
- Peer review of final reports.
- Course wrap-up and synthesis of learning outcomes.

Course Assessments
Undergraduate (ENSC 400):

- Quizzes (3 total): 15%
- Lab Performance, Notebooks & Reports: 40%
- Midterm Exam (Week 7): 20%
- Final Project (Group-based) & Presentation: 25%

F. Other Considerations

1. **First Nations Content*:** Yes _____ No ___X___
   **** Whether a new course has First Nations content is to be determined by the relevant Faculty Council(s).***

   ****If "yes,"** refer the motion to the Senate Committee on Indigenous Initiatives **prior to** SCAAF.

2. **Other Information:** none

4. **Attachment Pages (in addition to required "Library Holdings" Form):** ___0___

G. Authorization

SCCC Reviewed: April 15, 2025

Faculty(ies): Faculty of Environment

Faculty Council Motion Number(s): FEFC 2025:05:08:03

Faculty Council Approval Date(s): May 8, 2025

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

INFORMATION TO BE COMPLETED BY RECORDING SECRETARY AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.11

Moved by: Kriston Rennie **Seconded by:** Rehana Ramzan

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

Library Holdings Form
(to be submitted with SCAAF New Course Approval Motion Form)

PROPOSED NEW COURSE: ENSC 400-3/600-3 Environmental Instrumental Analysis

Library Holdings (to be completed by the appropriate Librarian):

a) Are current library holdings adequate? Yes X No _____

b) If no to a), what monographs / periodicals / E-resources will be needed, and at what estimated cost?

c) If no to a), what is the proposed funding source?

University Librarian (or designate) signature

January 9, 2025
Date

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.14

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW COURSE APPROVAL MOTION FORM

Motion: That the new course ENSC 600-3 *Environmental Instrumental Analysis*, be approved as follows:

A. Description of the Course

1. **Proposed semester of first offering:** September 2026
2. **Academic Program:** Environmental Science
3. **Course Subject, Number*, and Credit hours (e.g. CHEM 210-3):** ENSC 600-3
4. **Course Title:** Environmental Instrumental Analysis
5. **Goal(s) of Course:**
   - **Theoretical Foundations:** Students will demonstrate a comprehensive understanding of fundamental principles underlying modern analytical instrumentation, including principles of spectroscopy, chromatography, mass spectrometry, and microscopy.
   - **Practical Proficiency:** Students will prepare diverse environmental samples and operate analytical instruments following proper QA/QC protocols, safety guidelines, and standard operating procedures.
   - **Data Analysis & Interpretation:** Students will apply appropriate statistical and chemometric methods to evaluate data quality (precision, accuracy, detection limits, uncertainty) and interpret complex datasets with clarity.
   - **Professional Communication:** Students will present experimental results in technical reports and oral presentations suitable for industrial, governmental, or academic stakeholders, and critically evaluate literature and emerging techniques.
   - **Interdisciplinary Applications:** Students will recognize and articulate how advanced analytical methods inform environmental decision-making, from assessing contaminant distributions and speciation to guiding remediation strategies and influencing policy.
6. **Calendar Course Description:**

   This graduate-level course explores advanced instrumental techniques for analyzing environmental samples, focusing on spectroscopy, chromatography, and material characterization. Students develop practical skills in sample preparation, Quality Assurance/Quality Control, and data interpretation through lectures and labs. Lab work includes real-world applications using state-of-the-art analytical equipment.

7. **Credit Hours:** 3 credit hours (Normally, UNBC courses are 3 credit hours and may not be repeated for additional credit. If this course falls outside the norm, please complete sections “a)” and “b)” below).

a) **Can the course be repeated for credit if the subject matter differs substantially?** No
b) **Is variable credit available for this course?** No

8. **Contact Hours (per week):**

Lecture	3	Seminar	0
Laboratory	2	Other (please specify)	0

NOTE: This somewhat non-standard time allocation (3 lecture hours and only 2 lab hours) has been chosen as the best option pedagogically, given the nature of the course.

9. **Prerequisites (taken prior):** None

10. **Prerequisites with concurrency (taken prior or simultaneously):** None

11. **Co-requisites (must be taken simultaneously):** None

12. **Preclusions:** ENSC 400-3

13. **Course Equivalencies:** None

14. **Grade Mode:** NORMAL (i.e., alpha grade)

15. **Course to be offered:**

each semester	
each year	X
alternating years	

16. **Proposed text / readings:**

Primary Textbooks:

Fundamentals of Analytical Chemistry (9th Edition) by D.A. Skoog, D.M. West, F.J. Holler, and S.R. Crouch.
Principles of Instrumental Analysis (6th Edition) by D.A. Skoog, F.J. Holler, and S.R. Crouch.

Supplementary Resources:

Scientific journal articles and review papers from *Analytical Chemistry*, *Environmental Science & Technology*, and *Talanta*.
Instrument manufacturer manuals and application notes (e.g., Agilent, PerkinElmer, Thermo Fisher Scientific).
Regulatory guidance documents (e.g., US EPA Method Protocols, Environment Canada Guidelines).

B. Significance Within Academic Program

This course fulfills an important role for graduate students, especially those in the NRES program, but may also be of interest to graduate students studying Environmental Engineering and Chemistry. The course has an ENSC 400-3 counterpart which will serve the needs of undergraduate students. The course will be taught using analytical equipment in NALS (Northern Analytical Laboratory Services).

1. **Anticipated enrolment** 10 undergraduates in ENSC 400-3 plus 5 graduates in ENSC 600-3

2. **If there is a proposed enrolment limit, state the limit and explain:** 15

The limit is needed due to the availability of space and equipment in the NALS.

3. **Required for:** Major: None Minor: None Other:

A forthcoming motion will include this course in the Environmental Science BSc degree

4. **Elective in:** Major: None Minor: None Other:

5. **Course required by another major/minor:** None

6. **Course required or recommended by an accrediting agency:** No

7. **Toward what degrees will the course be accepted for credit?** any undergraduate degree

8. **What other courses are being proposed within the Program this year?**
ENSC 402-3 and ENSC 602-3

9. **What courses are being deleted from the Program this year?** ENSC 435-3 and ENSC 635-3

C. Relation to Other Program Areas

1. **Identify courses in other UNBC Programs that overlap with this course; describe the overlap and comment on its significance:**

This section describes overlap with the undergraduate version of this course (ENSC 400-3); the discussion is not as relevant for ENSC 600-3.

Potential Overlap with CHEM 210 (Analytical Chemistry I) & CHEM 310 (Analytical Chemistry II)
These undergraduate courses introduce students to fundamental analytical chemistry concepts (instrumentation basics, spectroscopic and chromatographic methods, core lab skills). ENSC 400 expands on these foundations but **targets advanced environmental applications**, including specialized sample preparation, rigorous QA/QC protocols for environmental matrices, and interdisciplinary approaches (e.g., policy implications, remediation strategies). While some instrumentation methods (e.g., UV-Vis, ICP) appear in both CHEM 210/310 and ENSC 400, the **context and depth of application** in ENSC 400 are distinct, focusing on real-world environmental monitoring and data interpretation.

Potential Overlap with CHEM 410 (Topics in Analytical Chemistry) & CHEM 610 (Topics in Analytical Chemistry)
CHEM 410/610 courses address advanced or specialized topics in analytical chemistry, which may at times include instrumentation or environmental examples. However, CHEM 410/610 are often **rotating "Topics" courses** whose content can vary significantly from year to year; consequently, potential overlap depends on the specific topic offered. ENSC 400 is **fixed in its environmental instrumentation focus**, integrating methods for assessing contaminants in water, soil, air particulates, and emphasizing environmental QA/QC, regulatory considerations, and real-world decision-making. Any perceived overlap is **nominal**, as CHEM 410/610 generally do not require an explicit environmental focus, nor do they always include the same instrumentation or field-based applications.

Significance of Overlap

- **Context and Learning Outcomes**: ENSC 400 emphasizes the environmental dimension of analytical methods—e.g., regulatory guidelines, speciation of contaminants, real-world sampling strategies—rather than broad or rotating topics in analytical chemistry.
- **Complementary, Not Redundant**: Students who have taken CHEM 210/310 will find ENSC 400/600 **builds upon** their knowledge by applying analytical tools to more complex environmental matrices and advanced QA/QC scenarios. Meanwhile, CHEM 410/610 may delve into niche analytical topics that do not necessarily align with or duplicate ENSC 400.

2. **Is a preclusion required?** Yes _____ No __X__

3. **If there is an overlap, and no preclusion is required, please explain why not:**

   Although ENSC 400 shares certain analytical techniques with CHEM 210/310 and potentially intersects with some "topics" in CHEM 410/610, **the environmental focus, advanced QA/QC, and real-world applications** make it sufficiently distinct. Students benefit from learning how instrumentation is used specifically in environmental investigations—an area not comprehensively covered in the Chemistry analytical sequence.

4. **Has this overlap been discussed with the Program concerned?** Yes__X__ No _____

   ENSC 400 provides an environmental application focus that **complements** rather than duplicates existing analytical chemistry courses. This proposal was discussed with the Chemistry and Biochemistry department, and it was decided to have CHEM 210-3 *Analytical Chemistry I* as a prerequisite that ENSC 400-3 could build upon. As a graduate course, ENSC 600-3 does not carry a prerequisite.

5. **In offering this course, will UNBC require facilities or staff at other institutions?**

   Yes _____ No __X__

   If yes, please describe requirements:

6. **Is this course replacing an existing course that is included in one or more transfer agreements with external institutions?**

   Yes_____ No __X__

   If "yes," please contact the Articulation Officer in the Office of the Registrar.

D. Resources required

1. **Please describe ADDITIONAL resources required over the next five years to offer this course.**

   i. **Faculty Staffing:**

   No additional faculty staffing: the course will be taught by Dr. Hossein Kazemian, a newly appointed tenure-track faculty member in Environmental Science as his regular teaching load. Dr. Kazemian is Director of NALS (Northern Analytical Laboratory Services) – the course is based on use of NALS equipment.

   ii. **Space (classroom, laboratory, storage, etc.):**
   No additional space: lectures require a normal classroom. Labs will use both an existing chemistry lab (used for CHEM labs) and the NALS facilities.

   iii: Library Holdings: See attached form.

   iii. **Computer (time, hardware, software):**
   No additional computing resources. Course will use equipment already available in NALS.

E. Additional Attached Materials

Course Content and Schedule

Week 1-2: Introduction, Data Analysis & Quality Assurance
Lecture Topics:

- Evolution of analytical methods: Classical to modern instrumentation (Skoog et al., Fundamentals Ch.1-2).
- Experimental design, calibration methods, internal standards, matrix effects.
- Statistical concepts: Precision, accuracy, LOD, LOQ, signal-to-noise ratio, QC charts.
- Overview of instrumentation and facilities at NALS.

Lab:

- Laboratory orientation, safety training, and tour of NALS.
- Introduction to data quality assessment using a simple UV-Vis absorbance experiment.

Week 3: Sample Preparation Techniques
Lecture Topics:

- Importance of sample preparation for environmental matrices (Skoog et al., Fundamentals Ch.27).
- Filtration, centrifugation, liquid-liquid extraction, solid-phase extraction, acid digestion for metals.
- Minimizing contamination and ensuring representativeness of samples.

Lab:

- Preparation of water and soil samples for ICP metals analysis.
- Acid digestion and filtration protocols.

Week 4-6: Atomic and Molecular Spectroscopy
Lecture Topics:

- Atomic Absorption Spectroscopy (AAS), Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES), and ICP-Mass Spectrometry (ICP-MS) principles and their applications in environmental science (Skoog et al., Instrumental Analysis Ch.9-11).
- Molecular spectroscopy: UV-Vis, FTIR, (Ch.13-15).
- Quantitative vs. qualitative spectroscopic methods, standard addition methods, speciation analysis.

Lab:

- Heavy metal quantification in water samples via ICP-MS.
- Identification of organic pollutants using UV-Vis spectroscopy.

Week 7-9: Chromatographic and Hyphenated Techniques
Lecture Topics:

- Gas Chromatography (GC) and High-Performance Liquid Chromatography (HPLC) fundamentals (Skoog et al., Instrumental Analysis Ch.22-24).
- Ion Chromatography for nutrient and anion analysis.
- Hyphenated techniques: GC-MS, LC-MS/MS, addressing complex mixtures, environmental metabolomics.
- Data interpretation: retention times, peak integration, calibration curves.

Lab:

- Analysis of volatile organic compounds (VOCs) in air/water samples using GC-MS.
- Determination of nitrate, phosphate, and sulfate in water using Ion Chromatography.

Week 10-11: Surface, Structural, and Morphological Characterization
Lecture Topics:

- X-ray Diffraction (XRD) for crystalline phases (Skoog et al., Instrumental Analysis Ch.12).
- X-ray Fluorescence (XRF) for elemental composition.
- Scanning Electron Microscopy (SEM) and Energy Dispersive X-ray Spectroscopy (EDS) for morphology and elemental mapping.
- BET surface area analysis for adsorbents and porous materials.

Lab:

- Sediment/Mineral phase identification using XRD.
- Surface area and pore size characterization of adsorbents by BET analysis.

Week 12: Thermal and Electrochemical Techniques
Lecture Topics:

- Thermal Gravimetric Analysis (TGA), Differential Scanning Calorimetry (DSC) for stability and degradation.
- Electrochemical methods: Potentiometry, voltammetry, ion-selective electrodes.

- Environmental sensors and real-time monitoring applications.

Lab:

- Degradation studies on polymeric materials by TGA.
- Determining redox potential and pH in environmental samples using electrochemical probes.

Week 13: Final Project Presentations & Review
Lecture & Lab:

- Undergraduate student presentations of final projects.
- Graduate student presentations highlighting literature review, advanced data analysis, and critical evaluation.
- Peer review of final reports.
- Course wrap-up and synthesis of learning outcomes.

Course Assessments
Undergraduate (ENSC 400):

- Quizzes (3 total): 15%
- Lab Performance, Notebooks & Reports: 40%
- Midterm Exam (Week 7): 20%
- Final Project (Group-based) & Presentation: 25%

Graduate (ENSC 600) will have adjusted assessments to be decided each offering based on the cohort and needs.

F. Other Considerations

1. **First Nations Content*:** Yes _____ No ___X___
   **** Whether a new course has First Nations content is to be determined by the relevant Faculty Council(s).***

   ****If "yes,"** refer the motion to the Senate Committee on Indigenous Initiatives **prior to** SCAAF.

2. **Other Information:** none

4. **Attachment Pages (in addition to required "Library Holdings" Form):** ___0___

G. Authorization

SCCC Reviewed: April 15, 2025

Program / Academic / Administrative Unit: Environmental Science

Faculty(ies): Faculty **of** Environment

Faculty Council Motion Number(s): FEFC 2025:05:08:04

Faculty Council Approval Date(s): May 8, 2025

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

INFORMATION TO BE COMPLETED BY RECORDING SECRETARY AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.12

Moved by: Kriston Rennie **Seconded by:** Rehana Ramzan

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

Library Holdings Form
(to be submitted with SCAAF New Course Approval Motion Form)

PROPOSED NEW COURSE: ENSC 400-3/600-3 Environmental Instrumental Analysis

Library Holdings (to be completed by the appropriate Librarian):

a) Are current library holdings adequate? Yes X No _____

b) If no to a), what monographs / periodicals / E-resources will be needed, and at what estimated cost?

c) If no to a), what is the proposed funding source?

University Librarian (or designate) signature

January 9, 2025
Date

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.15**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW COURSE APPROVAL MOTION FORM

Motion: That the new course ENSC 402-3 *Watershed Science and Management*, be approved as follows:

A. Description of the Course

1. **Proposed semester of first offering:** January 2026
2. **Academic Program:** Environmental Science
3. **Course Subject, Number*, and Credit hours (e.g. CHEM 210-3):** ENSC 402-3
4. **Course Title:** Watershed Science and Management
5. **Goal(s) of Course:**
   - **Theoretical Foundations:** Students will demonstrate a comprehensive understanding of fundamental principles of the hydrological cycle and how hydrological processes are controlled and regulated by other Earth sciences such as atmospheric science, geomorphology and soil science. They will develop a comprehensive understanding of the factors that influence and control effective watershed management, including policy and legislation, community perspectives, and land use planning frameworks.
   - **Practical Proficiency:** Students will develop an integrated understanding of watersheds from both scientific and management perspectives, providing the foundation for real-world decision making. They will also be exposed to guest lectures by practitioners in watershed science and health (e.g., city employees, provincial scientists, Northern Health) and those with contrasting perspectives on watershed management (e.g., First Nations, UNBC planning faculty).
   - **Data Analysis & Interpretation:** Students will be introduced to different datasets from a variety of sources (e.g., biophysical and socio-economic) to develop skills in analyzing and interpreting these datasets using statistical methods.
   - **Professional Communication:** Students will give individual and group presentations on watershed science and management as part of the lectures and seminars, including to practitioners.
   - **Interdisciplinary Applications:** Students will develop skills to integrate process understanding and knowledge from a wide range of backgrounds and perspectives enabling them to contribute to the development of watershed management plans and policy recommendations.
6. **Calendar Course Description:**

This course provides a comprehensive overview of watershed science and the principles underpinning integrated watershed management. It provides students with an understanding of hydrological processes at the watershed scale while considering the broader context of water resource management. It covers the frameworks, policies, and regulatory drivers that affect water resource management, and the role of

government agencies, communities, and Indigenous perspectives in shaping these aspects. This course integrates scientific insights with governance, regulations, and culturally relevant management strategies.

7. **Credit Hours:** 3 credit hours (Normally, UNBC courses are 3 credit hours and may not be repeated for additional credit. If this course falls outside the norm, please complete sections "a)" and "b)" below).

   a) **Can the course be repeated for credit if the subject matter differs substantially?** No
   b) **Is variable credit available for this course?** No

8. **Contact Hours (per week):**

Lecture	3	Seminar	0
Laboratory	0	Other (please specify)	0

9. **Prerequisites (taken prior):** ENSC 202-3 or GEOG 210-3 or permission of instructor

10. **Prerequisites with concurrency (taken prior or simultaneously):** None

11. **Co-requisites (must be taken simultaneously):** None

12. **Preclusions:** NREM 410-3 (which is being deleted by Ecosystem Science and Management).

13. **Course Equivalencies:** None

14. **Grade Mode:** NORMAL (i.e., alpha grade)

15. **Course to be offered:**

each semester	
each year	X
alternating years	

16. **Proposed text / readings:**

Textbooks:

None

Readings:

Scientific articles from journals such as: *Environmental Science & Technology*, *Journal of Environmental Management*, *Nature*, *PLOS-Water, Science of the Total Environment*, *Water Resources Research*.
Government and NGO watershed management and policy documents (e.g., BC Ministry of Water, Lands and Resource Stewardship, Environment and Climate Change Canada, Fraser Basin Council, Nechako Watershed Roundtable)

B. Significance Within Academic Program

This course fills an important gap in the Environmental Science program by providing a 4th-year capstone course in the new minor in "Watershed Science and Management". It provides students with an advanced understanding of both the fundamentals of watershed science (e.g., hydrology, soil science, geomorphology and climate science) and how this understanding informs integrated watershed management. It is designed for students wanting to gain employment in organizations concerned with water and watershed management, including federal and government agencies, consultancy companies, First Nations and NGOs. The course has an ENSC 602-3 counterpart which will serve the needs of

graduate students studying water-related projects in the NRES and other graduate programs.

1. **Anticipated enrolment** 15 undergraduates plus 5 graduates in ENSC 602-3

2. **If there is a proposed enrolment limit, state the limit and explain:** no

3. **Required for:** Major: none Minor: Watershed Science and Management
   Other:

   A forthcoming motion will include this course in the Environmental Science BSc degree

4. **Elective in:** Major: Environmental Science, Wildlife and Fisheries Minor: Aquatic Science, Environmental Science, Forest Ecology and Management Natural Resources Planning and Operations
   Other: technical elective in joint UNBC/UBC Environmental Engineering BASc.

5. **Course required by another major/minor:** none

6. **Course required or recommended by an accrediting agency:** no

7. **Toward what degrees will the course be accepted for credit?** any undergraduate degrees

8. **What other courses are being proposed within the Program this year?** ENSC 400-3 ENSC 600-3

9. **What courses are being deleted from the Program this year?** ENSC 435-3 ENSC 635-3

C. Relation to Other Program Areas

1. **Identify courses in other UNBC Programs that overlap with this course; describe the overlap and comment on its significance:**

Potential overlap with GEOG 310 (Hydrology). This course introduces students to the hydrological cycle. It provides the foundation of the main hydrological processes operating on the surface of the Earth, and the techniques required to monitor and model these processes. The focus of ENSC 402 is the **application of hydrology, in combination with other earth sciences** (e.g., geomorphology, soil science, weather and climate) to provide students with an applied understanding of watershed science. As such it incorporates the social, economic and political aspects of watersheds. As ENSC 402 does not require GEOG 310 as a prerequisite (only ENSC 202 or GEOG 210), there will be some lectures at the start of the course to bring students up-to-speed with hydrological processes. The overlap with GEOG 310 is anticipated to be minimal.

Significance of Overlap

- **Context and Learning Outcomes**: ENSC 402 emphasizes the applied nature of hydrology and other Earth sciences, and how these can be used for watershed management. This is incorporated with an understanding of regulatory and non-regulatory drivers of watershed management, and of the perspectives of First Nations, land owners, communities, and user groups.

- **Complementary, Not Redundant**: Students who have taken GEOG 310 will find ENSC 402/602 builds upon their knowledge by applying hydrological processes to understand more complex, real-world management solutions.

2. **Is a preclusion required?** Yes X No (with NREM 410, which is being deleted)

3. **If there is an overlap, and no preclusion is required, please explain why not:**

   ENSC 402 complements GEOG 310 by providing more applied and integrated applications of hydrological processes within a broad approach to integrated watershed management.

4. **Has this overlap been discussed with the Program concerned?** Yes X No _____

ENSC 402 complements GEOG 310 by providing more applied and integrated applications of hydrological processes within a broad approach to integrated watershed management.

5. **In offering this course, will UNBC require facilities or staff at other institutions?**

Yes _____ No X

If yes, please describe requirements:

6. **Is this course replacing an existing course that is included in one or more transfer agreements with external institutions?**

Yes_____ No X

If "yes," please contact the Articulation Officer in the Office of the Registrar.

D. Resources required

1. **Please describe ADDITIONAL resources required over the next five years to offer this course.**

i. **Faculty Staffing:**

No additional faculty staffing: the course will be taught by Dr. Phil Owens and Dr. Siraj ul Islam as part of their planned course workload.

ii. **Space (classroom, laboratory, storage, etc.):**
Lectures require a regular classroom.

iii: Library Holdings: See attached form.

iii. **Computer (time, hardware, software):**
No additional computing resources.

E. Additional Attached Materials

Course Content and Schedule

Proposed Course Contents:

Week	Topic
PART 1: Watershed Science	
1	Lecture: Introduction to the course and requirement Lecture: Watershed formation, freshwater systems
2	Lecture: Hydrological cycle, precipitation gauges and snow surveys, streamflow generation and measurements Guest Lecture: e.g., BC Ministry of Forests, Water Survey of Canada
3	Lecture: Floodplain hydraulics, flood frequency analysis and risk assessment Guest Lecture: e.g., PG City Water Planner/Manager
4	Lecture: Hydrologic modeling and forecasting, flow routing, flow design and mapping Lecture: Groundwater extraction, pumping test, aquifer health and solutions
5	Lecture: Lake, reservoir and wetland environments and management, climate change impacts Guest Lecture: e.g., Rio Tinto (Nechako Reservoir)
6	Lecture: Environmental hazards in watersheds

Exam 1 – Science
7 No Class (Family Day, Mid-Semester Break)

PART 2: Watershed Management

8 Lecture: Land and river use impacts on water and sediment quality, and overall watershed health
Guest Lecture: e.g., BC WL&RS, Northern Health
9 Lecture: Legislation, policies and principles of watershed governance
Guest Lecture: e.g., Environmental Planning, Env and Sust Studies
10 Lecture: Socioeconomics of watershed management
Seminar: Developing watershed management plans
11 Lecture: Indigenous knowledge and perspectives
Guest Lecture: e.g., First Nations Studies, Lheidli T'enneh
12 Lecture: Resilient watershed management in a changing world
Exam 2 – Management
13 Student project work time – open discussion period
Student presentations
14 Project Report Due

Course Assessments

ENSC 402 (Undergraduate Students)

ACTIVITY	**MARKS**
General Class Participation and Discussion	05%
In-Class Short Activities and Seminar Participation	10%
Exam 1 – Science	25%
Exam 2 – Management	25%
Project Report and Presentation – Literature Review (individual)	15%
Final Project Assignment – Watershed Management Plan (group)	20%
Total	**100%**

F. Other Considerations

1. **First Nations Content*:** Yes X No _____
Whether a new course has First Nations content is to be determined by the relevant Faculty Council(s).

****If "yes,"** refer the motion to the Senate Committee on Indigenous Initiatives **prior to** SCAAF.

2. **Other Information:** none

4. **Attachment Pages (in addition to required "Library Holdings" Form):** 0

G. Authorization

SCCC Reviewed: April 15, 2025

Faculty(ies): Faculty of Environment

Faculty Council Motion Number(s): FEFC 2025:05:08:05

Faculty Council Approval Date(s): May 8, 2025

Senate Committee on Indigenous Initiatives Motion Number:

Senate Committee on Indigenous Initiatives Meeting Date:

INFORMATION TO BE COMPLETED BY RECORDING SECRETARY AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.13

Moved by: Kriston Rennie **Seconded by:** Rehana Ramzan

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

Library Resource Requirements and Consultation Form
(to be submitted with SCAAF New Academic Program Proposal Motion Form)

Completing the Library Resource Requirements and Consultation Form is a critical step in ensuring that the Library can support the program through its resources, teaching, and services. The Library is committed to identifying existing and needed resources that support students in their educational journeys at UNBC.

This form must be submitted to the Library **21 days (3 weeks)** prior to SCAAF New Program Approval deadline.

NEW ACADEMIC PROGRAM PROPOSAL ***(to be completed by Faculty Member/Chair/Dean)***

Name of proposed Program or degree: Minor in Watershed Science and Management

Anticipated start date of program: September 2025

Anticipated enrolment: 5-10

Are the SCAAF Program forms attached: __x__YES _____ NO

Please provide keywords associated with the discipline: watershed, aquatic science, management, planning, environment

Library Resource Requirements ***(to be completed by Librarians)***

Please describe the impact of the following Library service(s) or resource(s):

1. Collections:

a) Required and/or recommended readings and course reserves.

b) Depth of the collection in relevant areas.

- Monographs: LCSH

- Electronic resources *(Will the addition of this program impact the electronic resources required and licenses, ex. impact on simultaneous users, contract considerations:*

- Available Databases:

- Available online journals available by subject:

- Are there discipline or subject specific resources (databases, software) required for pedagogical and/or accreditation purposes? Yes ___ No__

    - If yes, provide name of resource(s) required and total cost:

2. Human Resources:

a) Instruction *(i.e. research guide development, online tutorials, embedded instruction, tours, etc)*:

b) The level of expertise required to support the program *(please provide rationale)*:

___ Generalist

____ Subject Specialist *(i.e. specific skills and/or knowledge are required to support the program)*

c) Reference assistance *(i.e. individual or group support, ongoing support)*

3. Physical space *(i.e. sufficient collaborative study space, individual study areas in the library, etc)*:

4. Collaboration with other libraries or institutions *(i.e. regional programs, distributed programs, libraries in the community, etc)*:

5. Other (i.e. special equipment and/or software):

Library's recommendation *(check one option)*:

___ Proposal has an impact on the Library and can be supported within the Library's current

budget.

___ Proposal cannot be supported without additional budgetary resources; see details above or appended.

___ Proposal has no impact on the Library.

University Librarian (or designate) signature **Date**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.16**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW COURSE APPROVAL MOTION FORM

Motion: That the new course ENSC 602-3 *Watershed Science and Management*, be approved as follows:

A. Description of the Course

1. **Proposed semester of first offering:** January 2026
2. **Academic Program:** Environmental Science
3. **Course Subject, Number*, and Credit hours (e.g. CHEM 210-3):** ENSC 602-3
4. **Course Title:** Watershed Science and Management
5. **Goal(s) of Course:**
   - **Theoretical Foundations:** Students will demonstrate a comprehensive understanding of fundamental principles of the hydrological cycle and how hydrological processes are controlled and regulated by other Earth sciences such as atmospheric science, geomorphology and soil science. They will develop a comprehensive understanding of the factors that influence and control effective watershed management, including policy and legislation, community perspectives, and land use planning frameworks.
   - **Practical Proficiency:** Students will develop an integrated understanding of watersheds from both scientific and management perspectives, providing the foundation for real-world decision making. They will also be exposed to guest lectures by practitioners in watershed science and health (e.g., city employees, provincial scientists, Northern Health) and those with contrasting perspectives on watershed management (e.g., First Nations, UNBC planning faculty).
   - **Data Analysis & Interpretation:** Students will be introduced to different datasets from a variety of sources (e.g., biophysical and socio-economic) to develop skills in analyzing and interpreting these datasets using statistical methods.
   - **Professional Communication:** Students will give individual and group presentations on watershed science and management as part of the lectures and seminars, including to practitioners.
   - **Interdisciplinary Applications:** Students will develop skills to integrate process understanding and knowledge from a wide range of backgrounds and perspectives enabling them to contribute to the development of watershed management plans and policy recommendations.
6. **Calendar Course Description:**

This graduate-level course provides a comprehensive overview of watershed science and the principles underpinning integrated watershed management. It will provide students with an understanding of hydrological processes at the watershed scale while considering the broader context of water resource management. It covers the frameworks, policies and regulatory drivers that affect water resource

management, and the role of government agencies, communities and Indigenous perspectives in shaping these aspects. This course integrates scientific insights with governance, regulations, and culturally relevant management strategies.

7. **Credit Hours:** 3 credit hours (Normally, UNBC courses are 3 credit hours and may not be repeated for additional credit. If this course falls outside the norm, please complete sections "a)" and "b)" below).

   a) **Can the course be repeated for credit if the subject matter differs substantially?** No
   b) **Is variable credit available for this course?** No

8. **Contact Hours (per week):**

Lecture	3	Seminar	0
Laboratory	0	Other (please specify)	0

9. **Prerequisites (taken prior):** none

10. **Prerequisites with concurrency (taken prior or simultaneously):** none

11. **Co-requisites (must be taken simultaneously):** none

12. **Preclusions:** ENSC 402-3 ; NREM 410-3 ; NREM 608-3

13. **Course Equivalencies:** none

14. **Grade Mode:** NORMAL (i.e., alpha grade)

15. **Course to be offered:**

each semester	
each year	X
alternating years	

16. **Proposed text / readings:**

Textbooks:

None

Readings:

Scientific articles from journals such as: *Environmental Science & Technology*, *Journal of Environmental Management*, *Nature*, *PLOS-Water, Science of the Total Environment*, *Water Resources Research*.
Government and NGO watershed management and policy documents (e.g., BC Ministry of Water, Lands and Resource Stewardship, Environment and Climate Change Canada, Fraser Basin Council, Nechako Watershed Roundtable)

B. Significance Within Academic Program

This undergraduate version of this course (ENSC 402-3) fills an important gap in the Environmental Science program by providing a 4th-year capstone course in the new minor in "Watershed Science and Management". It provides students with an advanced understanding of both the fundamentals of watershed science (e.g., hydrology, soil science, geomorphology and climate science) and how this understanding informs integrated watershed management. It is designed for students wanting to gain employment in organizations concerned with water and watershed management, including federal and

government agencies, consultancy companies, First Nations and NGOs.

This course, ENSC 602-3, will serve the needs of graduate students studying water-related projects in the NRES and other graduate programs.

1. **Anticipated enrolment** 15 undergraduates in ENSC 402-3 plus 5 graduates in ENSC 602-3
2. **If there is a proposed enrolment limit, state the limit and explain:** no
3. **Required for:** Major: none Minor: none Other: none
4. **Elective in:** Major: none Minor: none Other: none
5. **Course required by another major/minor:** none
6. **Course required or recommended by an accrediting agency:** no
7. **Toward what degrees will the course be accepted for credit?** any graduate degrees
8. **What other courses are being proposed within the Program this year?** ENSC 400-3 ENSC 600-3
9. **What courses are being deleted from the Program this year?** ENSC 435-3 ENSC 635-3

C. Relation to Other Program Areas

1. **Identify courses in other UNBC Programs that overlap with this course; describe the overlap and comment on its significance:**

This section describes overlap with the undergraduate version of this course (ENSC 402-3); the discussion is not as relevant for ENSC 602-3.

Potential overlap with GEOG 310 (Hydrology). This course introduces students to the hydrological cycle. It provides the foundation of the main hydrological processes operating on the surface of the Earth, and the techniques required to monitor and model these processes. The focus of ENSC 402 is the **application of hydrology, in combination with other earth sciences** (e.g., geomorphology, soil science, weather and climate) to provide students with an applied understanding of watershed science. As such it incorporates the social, economic and political aspects of watersheds. As ENSC 402 does not require GEOG 310 as a prerequisite (only ENSC 202 or GEOG 210), there will be some lectures at the start of the course to bring students up-to-speed with hydrological processes. The overlap with GEOG 310 is anticipated to be minimal.

Significance of Overlap

- **Context and Learning Outcomes**: ENSC 402 emphasizes the applied nature of hydrology and other Earth sciences, and how these can be used for watershed management. This is incorporated with an understanding of regulatory and non-regulatory drivers of watershed management, and of the perspectives of First Nations, land owners, communities, and user groups.
- **Complementary, Not Redundant**: Students who have taken GEOG 310 will find ENSC 402/602 builds upon their knowledge by applying hydrological processes to understand more complex, real-world management solutions.

2. **Is a preclusion required?** Yes __X__ No _____ (with NREM 410, 608 which are being deleted)

3. **If there is an overlap, and no preclusion is required, please explain why not:**

   ENSC 402 complements GEOG 310 by providing more applied and integrated applications of hydrological processes within a broad approach to integrated watershed management.
   .

4. **Has this overlap been discussed with the Program concerned?** Yes__X__ No _____

   ENSC 402 complements GEOG 310 by providing more applied and integrated applications of hydrological processes within a broad approach to integrated watershed management.

5. **In offering this course, will UNBC require facilities or staff at other institutions?**

   Yes _____ No __X__

   If yes, please describe requirements:

6. **Is this course replacing an existing course that is included in one or more transfer agreements with external institutions?**

   Yes_____ No __X__

   If "yes," please contact the Articulation Officer in the Office of the Registrar.

D. Resources required

1. **Please describe ADDITIONAL resources required over the next five years to offer this course.**

   i. **Faculty Staffing:**

   No additional faculty staffing: the course will be taught by Dr. Phil Owens and Dr. Siraj ul Islam as part of their planned course workload.

   ii. **Space (classroom, laboratory, storage, etc.):**
   Lectures require a regular classroom.

   iii: Library Holdings: See attached form.

   iii. **Computer (time, hardware, software):**
   No additional computing resources.

E. Additional Attached Materials

Course Content and Schedule

Proposed Course Contents:
Week Topic

PART 1: Watershed Science
1 Lecture: Introduction to the course and requirement
Lecture: Watershed formation, freshwater systems

2 Lecture: Hydrological cycle, precipitation gauges and snow surveys, streamflow generation and measurements
Guest Lecture: e.g., BC Ministry of Forests, Water Survey of Canada
3 Lecture: Floodplain hydraulics, flood frequency analysis and risk assessment
Guest Lecture: e.g., PG City Water Planner/Manager
4 Lecture: Hydrologic modeling and forecasting, flow routing, flow design and mapping
Lecture: Groundwater extraction, pumping test, aquifer health and solutions
5 Lecture: Lake, reservoir and wetland environments and management, climate change impacts
Guest Lecture: e.g., Rio Tinto (Nechako Reservoir)
6 Lecture: Environmental hazards in watersheds
Exam 1 – Science
7 No Class (Family Day, Mid-Semester Break)

PART 2: Watershed Management

8 Lecture: Land and river use impacts on water and sediment quality, and overall watershed health
Guest Lecture: e.g., BC WL&RS, Northern Health
9 Lecture: Legislation, policies and principles of watershed governance
Guest Lecture: e.g., Environmental Planning, Env and Sust Studies
10 Lecture: Socioeconomics of watershed management
Seminar: Developing watershed management plans
11 Lecture: Indigenous knowledge and perspectives
Guest Lecture: e.g., First Nations Studies, Lheidli T'enneh
12 Lecture: Resilient watershed management in a changing world
Exam 2 – Management
13 Student project work time – open discussion period
Student presentations
14 Project Report Due

Course Assessments

ENSC 402 (Undergraduate Students)

ACTIVITY	**MARKS**
General Class Participation and Discussion	05%
In-Class Short Activities and Seminar Participation	10%
Exam 1 – Science	25%
Exam 2 – Management	25%
Project Report and Presentation – Literature Review (individual)	15%
Final Project Assignment – Watershed Management Plan (group)	20%
Total	**100%**

Graduate (ENSC 602) will have adjusted assessments to be decided each offering based on the cohort and needs.

F. Other Considerations

1. **First Nations Content*:** Yes** _____ No ___X___
   **** Whether a new course has First Nations content is to be determined by the relevant Faculty Council(s).***

   ****If "yes,"** refer the motion to the Senate Committee on Indigenous Initiatives **prior to** SCAAF.

2. **Other Information:** none

4. **Attachment Pages (in addition to required "Library Holdings" Form):** ___0___

G. Authorization (Please ignore — Section to be completed by Committee Recording Secretaries)

1. **SCCC Reviewed:** April 15, 2025
2. **Program / Academic / Administrative Unit:** Environmental Science
3. **Faculty(ies):** Faculty of Environment
4. **Faculty Council Motion Number(s): FEFC 2025:05:08:06**
5. **Faculty Council Approval Date(s): May 8, 2025**
6. **Senate Committee on Indigenous Initiatives Motion Number: n/a**
7. **Senate Committee on Indigenous Initiatives Meeting Date: n/a**

INFORMATION TO BE COMPLETED BY RECORDING SECRETARY AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.14

Moved by: Kriston Rennie **Seconded by:** Rehana Ramzan

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 _____
Date **Chair's Signature**

For recommendation to ___✓___**, or information of** _____ **Senate.**

Library Resource Requirements and Consultation Form
(to be submitted with SCAAF New Academic Program Proposal Motion Form)

Completing the Library Resource Requirements and Consultation Form is a critical step in ensuring that the Library can support the program through its resources, teaching, and services. The Library is committed to identifying existing and needed resources that support students in their educational journeys at UNBC.

This form must be submitted to the Library **21 days (3 weeks)** prior to SCAAF New Program Approval deadline.

NEW ACADEMIC PROGRAM PROPOSAL ***(to be completed by Faculty Member/Chair/Dean)***

Name of proposed Program or degree: Minor in Watershed Science and Management

Anticipated start date of program: September 2025

Anticipated enrolment: 5-10

Are the SCAAF Program forms attached: __x__YES _____ NO

Please provide keywords associated with the discipline: watershed, aquatic science, management, planning, environment

Library Resource Requirements ***(to be completed by Librarians)***

Please describe the impact of the following Library service(s) or resource(s):

1. Collections:

a) Required and/or recommended readings and course reserves.

b) Depth of the collection in relevant areas.

- Monographs: LCSH

- Electronic resources *(Will the addition of this program impact the electronic resources required and licenses, ex. impact on simultaneous users, contract considerations:*

- Available Databases:

- Available online journals available by subject:

- Are there discipline or subject specific resources (databases, software) required for pedagogical and/or accreditation purposes? Yes ___ No__

    - If yes, provide name of resource(s) required and total cost:

2. Human Resources:

a) Instruction *(i.e. research guide development, online tutorials, embedded instruction, tours, etc)*:

b) The level of expertise required to support the program *(please provide rationale)*:

___ Generalist

____ Subject Specialist *(i.e. specific skills and/or knowledge are required to support the program)*

c) Reference assistance *(i.e. individual or group support, ongoing support)*

3. Physical space *(i.e. sufficient collaborative study space, individual study areas in the library, etc)*:

4. Collaboration with other libraries or institutions *(i.e. regional programs, distributed programs, libraries in the community, etc)*:

5. Other (i.e. special equipment and/or software):

Library's recommendation *(check one option)*:

___ Proposal has an impact on the Library and can be supported within the Library's current

budget.

___ Proposal cannot be supported without additional budgetary resources; see details above or appended.

___ Proposal has no impact on the Library.

University Librarian (or designate) signature **Date**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.17**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the new course, ENSC 402-3 *Watershed Science and Management* replace NREM 410-3 *Watershed Management* in the 2024-2025 PDF undergraduate calendar in the following places:

- BSc Integrated in the lists of Eligible courses (two places) on p. 51
- BASc Environmental Engineering (UNBC/UBC Joint Program) list of Technical Electives on p. 109 - be approved as proposed.

1. Effective date: September 2025

2. Rationale for the proposed revisions: NREM 410-3 *Watershed Management* is being deleted by Ecosystem Science and Management and is being replaced with ENSC 402-3 *Watershed Science and Management* by the Environmental Science program where it will be taught each year as part of the teaching load of existing faculty. NREM 410-3 is not required in any degrees, but it is in a number of elective lists in programs within both the Faculty of Environment and the Faculty of Science and Engineering. Since the calendar-described content in NREM 410 is similar to that in ENSC 402, we propose replacing NREM 410 with ENSC 402 in the undergraduate calendar.

3. Implications of the changes for other programs, etc., if applicable: The elective lists in the BSc Integrated, BASc Environmental Engineering (joint UNBC/UBC), Minor in Environmental Science, Forest Ecology and Management Minor in Natural Resources Planning and Operations, and the BSc Major in Wildlife and Fisheries will be updated to remove the deleted NREM 410 course and replace it with the new ENSC 402-3 course. Each of these programs has been consulted. Since this replacement affects programs in both the Faculty of Environment and the Faculty of Science and Engineering there are two motions; this motion is for programs in the Faculty of Science and Engineering.

4. Reproduction of current Calendar entry for the item to be revised:

[In the BSc (Integrated) degree on page 50-51]:

Eligible courses for the Environmental and Earth Sciences Area of Specialization

ENPL 305-3 Environmental Impact Assessment
FSTY 415-3 Forest Soils
FSTY 425-3 Soil Formation and Classification
GEOG 310-3 Hydrology
GEOG 311-3 Drainage Basin Geomorphology
GEOG 405-3 Fluvial Geomorphology
GEOG 411-3 Quaternary and Surficial Geology
GEOG 416-3 Mountains
NREM 410-3 Watershed Management
All upper-division ENSC courses

[In the BSc (Integrated) Coast Mountain College Degree Completion Program on page 51]:

2. Nine credit hours of required courses, as follows:
   ENVS 414-3 Environmental and Professional Ethics
   NREM 410-3 Watershed Management
   NRES 421-1 Professional Writing
   NRES 422-2 Undergraduate Report

[In the BASc Environmental Engineering Degree Program Requirements (UNBC/UBC Joint Program) on page 109]:

Technical electives available at UNBC for the UBC portion of the curriculum in the UBC/UNBC Joint Environmental Engineering Program

The following UNBC courses may be used to meet a Technical Elective requirement in the UBC portion of the Joint UBC/UNBC Environmental Engineering BASc program. Normally, no more than one course from the list may be used. To qualify towards UBC technical elective requirements, the technical elective must be taken prior to transition to UBC.

ENGR 406-3 Environmental Modelling
ENSC 404-3 Waste Management
ENSC 408-3 Storms
ENSC 425-3 Climate Change and Global Warming
ENSC 450-3 Environmental and Geophysical Data Analysis
ENSC 452-3 Reclamation and Remediation of Disturbed Environments
NREM 410-3 Watershed Management

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":

[In the BSc (Integrated) degree on page 50-51]:

Eligible courses for the Environmental and Earth Sciences Area of Specialization

ENPL 305-3 Environmental Impact Assessment
ENSC 402-3 Watershed Science and Management
FSTY 415-3 Forest Soils
FSTY 425-3 Soil Formation and Classification
GEOG 310-3 Hydrology
GEOG 311-3 Drainage Basin Geomorphology
GEOG 405-3 Fluvial Geomorphology
GEOG 411-3 Quaternary and Surficial Geology
GEOG 416-3 Mountains
~~NREM 410-3 Watershed Management~~
All upper-division ENSC courses

[In the BSc (Integrated) Coast Mountain College Degree Completion Program on page 51]:

2. Nine credit hours of required courses, as follows:
   ENSC 402-3 Watershed Science and Management
   ENVS 414-3 Environmental and Professional Ethics
   ~~NREM 410-3 Watershed Management~~
   NRES 421-1 Professional Writing
   NRES 422-2 Undergraduate Report

[In the BASc Environmental Engineering Degree Program Requirements (UNBC/UBC Joint Program) on page 109]:

Technical electives available at UNBC for the UBC portion of the curriculum in the UBC/UNBC Joint Environmental Engineering Program

The following UNBC courses may be used to meet a Technical Elective requirement in the UBC portion of the Joint UBC/UNBC Environmental Engineering BASc program. Normally, no more than one course from the list may be used. To qualify towards UBC technical elective requirements, the technical elective must be taken prior to transition to UBC.

ENGR 406-3 Environmental Modelling
ENSC 402-3 Watershed Science and Management
ENSC 404-3 Waste Management
ENSC 408-3 Storms
ENSC 425-3 Climate Change and Global Warming
ENSC 450-3 Environmental and Geophysical Data Analysis
ENSC 452-3 Reclamation and Remediation of Disturbed Environments
~~NREM 410-3 Watershed Management~~

6. Authorization:

SCCC Reviewed: April 15, 2025

Program / Academic / Administrative Unit: Environmental Science

Faculty(ies): Faculty of Science and Engineering

Faculty Council Motion Number(s): FSE FC 2025.03.25.18
Faculty Council Approval Date(s): March 25, 2025

Faculty Council Motion Number(s): FEFC 2025:05:08:09
Faculty Council Approval Date(s): May 8, 2025

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: 0 pages

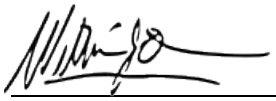
INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.15

Moved by: Kriston Rennie **Seconded by:** Rehana Ramzan

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 

Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.18

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the new course, ENSC 402-3 *Watershed Science and Management* replace NREM 410-3 *Watershed Management* in the 2024-2025 PDF undergraduate calendar in the following places:

- Minor in Environmental Science list of Environmental Pollution and Management choices on p. 118
- Forest Ecology and Management Minor in Natural Resources Planning and Operations "pick four of" list on p. 136
- BSc Major in Wildlife and Fisheries "pick one of" list on p. 192

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:** NREM 410-3 *Watershed Management* is being deleted by Ecosystem Science and Management and is being replaced with ENSC 402-3 *Watershed Science and Management* by the Environmental Science program where it will be taught each year as part of the teaching load of existing faculty. NREM 410-3 is not required in any degrees, but it is in a number of elective lists in programs within both the Faculty of Environment and the Faculty of Science and Engineering. Since the calendar-described content in NREM 410 is similar to that in ENSC 402, we propose replacing NREM 410 with ENSC 402 in the undergraduate calendar.

3. **Implications of the changes for other programs, etc., if applicable:** The elective lists in the BSc Integrated, BASc Environmental Engineering (joint UNBC/UBC), Minor in Environmental Science, Forest Ecology and Management Minor in Natural Resources Planning and Operations, and the BSc Major in Wildlife and Fisheries will be updated to remove the deleted NREM 410 course and replace it with the new ENSC 402-3 course. Each of these programs has been consulted. Since this replacement affects programs in both the Faculty of Environment and the Faculty of Science and Engineering there are two motions; this motion is for programs in the Faculty of Environment.

4. **Reproduction of current Calendar entry for the item to be revised:**

[In the Minor in Environmental Science on page 118]:

Environmental Pollution and Management
ENPL 305-3 Environmental Impact Assessment
ENSC 308-3 Northern Contaminated Environments
ENSC 404-3 Waste Management
ENSC 406-3 Environmental Modelling
ENSC 412-3 Air Pollution
ENSC 452-3 Reclamation and Remediation of Disturbed Environments
ENVE 351-4 Groundwater Flow and Contaminant Transport
NREM 410-3 Watershed Management

[In the Forest Ecology and Management Minor in Natural Resources Planning and Operations on page 136]:

Four of the following courses (with no more than two courses from any single program [e.g., ENPL]):

BIOL 325-3 Ecological Analyses
BIOL 413-3 Wildlife Management
ECON 305-3 Environmental Economics and Environmental Policy
ECON 411-3 Cost-Benefit Analysis
ENPL 105-3 Principles and Practices of Planning
ENPL 304-4 Community Engagement and Inclusion Studio
ENPL 305-3 Environmental Impact Assessment
ENPL 410-3 Land Use Planning
ENPL 411-3 Planning Theory, Process and Implementation
ENVS 326-3 Public Engagement for Sustainability
FSTY 310-3 Forest Economics
FSTY 405-3 Forest Ecosystem Modelling
FSTY 415-3 Forest Soils
GEOG 357-3 Introduction to Remote Sensing
GEOG 413-3 Advanced GIS
GEOG 457-3 Advanced Remote Sensing
NREM 306-3 Society, Policy and Administration
NREM 409-3 Conservation Planning
NREM 410-3 Watershed Management
NREM 413-3 Agroforestry
ORTM 305-3 Protected Area Planning and Management

[In the BSc Major in Wildlife and Fisheries on p. 192]:

One of the following:
BIOL 409-3 Conservation of Aquatic Ecosystems
BIOL 411-3 Conservation Biology
NREM 333-3 Field Applications in Resource Management
NREM 400-4 Natural Resources Planning
NREM 409-3 Conservation Planning
NREM 410-3 Watershed Management

5. <u>Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~"</u>:

[In the Minor in Environmental Science on page 118]:

Environmental Pollution and Management
ENPL 305-3 Environmental Impact Assessment
ENSC 308-3 Northern Contaminated Environments
<u>ENSC 402-3 Watershed Science and Management</u>
ENSC 404-3 Waste Management
ENSC 406-3 Environmental Modelling
ENSC 412-3 Air Pollution
ENSC 452-3 Reclamation and Remediation of Disturbed Environments
ENVE 351-4 Groundwater Flow and Contaminant Transport
~~NREM 410-3 Watershed Management~~

[In the Forest Ecology and Management Minor in Natural Resources Planning and Operations on page 136]:

Four of the following courses (with no more than two courses from any single program [e.g., ENPL]):
BIOL 325-3 Ecological Analyses
BIOL 413-3 Wildlife Management
ECON 305-3 Environmental Economics and Environmental Policy
ECON 411-3 Cost-Benefit Analysis

ENPL 105-3 Principles and Practices of Planning
ENPL 304-4 Community Engagement and Inclusion Studio
ENPL 305-3 Environmental Impact Assessment
ENPL 410-3 Land Use Planning
ENPL 411-3 Planning Theory, Process and Implementation
ENSC 402-3 Watershed Science and Management
ENVS 326-3 Public Engagement for Sustainability
FSTY 310-3 Forest Economics
FSTY 405-3 Forest Ecosystem Modelling
FSTY 415-3 Forest Soils
GEOG 357-3 Introduction to Remote Sensing
GEOG 413-3 Advanced GIS
GEOG 457-3 Advanced Remote Sensing
NREM 306-3 Society, Policy and Administration
NREM 409-3 Conservation Planning
~~NREM 410-3 Watershed Management~~
NREM 413-3 Agroforestry
ORTM 305-3 Protected Area Planning and Management

[In the BSc Major in Wildlife and Fisheries on p. 192]:

One of the following:
BIOL 409-3 Conservation of Aquatic Ecosystems
BIOL 411-3 Conservation Biology
ENSC 402-3 Watershed Science and Management
NREM 333-3 Field Applications in Resource Management
NREM 400-4 Natural Resources Planning
NREM 409-3 Conservation Planning
~~NREM 410-3 Watershed Management~~

6. Authorization:

SCCC Reviewed: April 15, 2025

Program / Academic / Administrative Unit: Environmental Science

Faculty(ies): Faculty of Environment

Faculty Council Motion Number(s): FEFC 2025:05:08:10

Faculty Council Approval Date(s): May 8, 2025

Senate Committee on Indigenous Initiatives Motion Number: not applicable

Senate Committee on Indigenous Initiatives Meeting Date: not applicable

7. Other Information

Attachment Pages: **0** pages

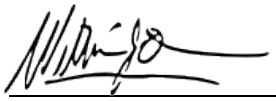
INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.16

Moved by: Kriston Rennie **Seconded by:** Rehana Ramzan

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 

Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.19**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the addition of two new courses (ENSC 400-3 *Environmental Instrumental Analysis* and ENSC 402-2 *Watershed Science and Management*) to the "two of" list in the Upper-Division Requirements of the BSc Major in Environmental Science on page 116 of the 2024/2025 PDF undergraduate calendar, be approved as proposed.

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:** These are two new courses developed by Environmental Science, and this motion is to integrate them into the BSc Major in Environmental Science.

3. **Implications of the changes for other programs, etc., if applicable:** none

4. **Reproduction of current Calendar entry for the item to be revised:**

[In the BSc Major in Environmental Science on page 116]:

Upper-Division Requirements

ENPL 305-3 Environmental Impact Assessment
ENPL 401-3 Environmental Law
ENSC 308-3 Northern Contaminated Environments
ENSC 406-3 Environmental Modelling
ENSC 418-3 Environmental Measurement and Analysis
ENSC 440-(2-6) Internship*
or ENSC 499-(1-6) Independent Study
or an approved 3-credit field course
ENSC 450-3 Environmental and Geophysical Data Analysis
ENVS 414-3 Environmental and Professional Ethics
NREM 306-3 Society, Policy and Administration

Two of the following:
ENSC 404-3 Waste Management
ENSC 412-3 Air Pollution
ENSC 452-3 Reclamation and Remediation of Disturbed Environments
ENVE 351-4 Groundwater Flow and Contaminant Transport

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

[In the BSc Major in Environmental Science on page 116]:

Upper-Division Requirements

ENPL 305-3 Environmental Impact Assessment
ENPL 401-3 Environmental Law

ENSC 308-3 Northern Contaminated Environments
ENSC 406-3 Environmental Modelling
ENSC 418-3 Environmental Measurement and Analysis
ENSC 440-(2-6) Internship*
or ENSC 499-(1-6) Independent Study
or an approved 3-credit field course
ENSC 450-3 Environmental and Geophysical Data Analysis
ENVS 414-3 Environmental and Professional Ethics
NREM 306-3 Society, Policy and Administration
or ORTM 415-3 Conservation, Culture and Society

Two of the following:
ENSC 400-3 Environmental Instrumental Analysis
ENSC 402-3 Watershed Science and Management
ENSC 404-3 Waste Management
ENSC 412-3 Air Pollution
ENSC 452-3 Reclamation and Remediation of Disturbed Environments
ENVE 351-4 Groundwater Flow and Contaminant Transport

6. Authorization:

SCCC Reviewed: April 15, 2025

Program / Academic / Administrative Unit: Environmental Science

Faculty(ies): Faculty of Environment

Faculty Council Motion Number(s): FEFC 2025:05:08:11

Faculty Council Approval Date(s): MAY 8, 2025

Senate Committee on Indigenous Initiatives Motion Number: not applicable

Senate Committee on Indigenous Initiatives Meeting Date: not applicable

7. Other Information

Attachment Pages: **0** pages

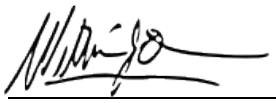
INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.17

Moved by: Kriston Rennie **Seconded by:** Rehana Ramzan

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 

Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.20

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the new course (ENSC 402-2 *Watershed Science and Management*) be added to the Elective Courses in the Minor in Aquatic Science, on page 117 of the 2024/2025 PDF undergraduate calendar, be approved as proposed.

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:** This is to integrate the new course into the Minor in Aquatic Science.

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

[In the Minor in Aquatic Science on page 117]:

Elective Courses*

A minimum of 9 credit hours from the following list:
BIOL 402-3 Aquatic Plants
BIOL 406-3 Fish Ecology
ENGR 254-4 Fluid Mechanics I
ENSC 450-3 Environmental and Geophysical Data Analysis
ENSC 454-3 Snow and Ice
GEOG 311-3 Drainage Basin Geomorphology
GEOG 405-3 Fluvial Geomorphology

*Students must ensure that all prerequisites are fulfilled prior to registering in any course.

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

[In the Minor in Aquatic Science on page 117]:

Elective Courses*

A minimum of 9 credit hours from the following list:
BIOL 402-3 Aquatic Plants
BIOL 406-3 Fish Ecology
ENGR 254-4 Fluid Mechanics I
ENSC 402-3 Watershed Science and Management
ENSC 450-3 Environmental and Geophysical Data Analysis
ENSC 454-3 Snow and Ice
GEOG 311-3 Drainage Basin Geomorphology
GEOG 405-3 Fluvial Geomorphology

*Students must ensure that all prerequisites are fulfilled prior to registering in any course.

6. Authorization:

SCCC Reviewed: April 15, 2025

Program / Academic / Administrative Unit: Environmental Science

Faculty(ies): Faculty of Environment

Faculty Council Motion Number(s): FEFC 2025:05:08:12

Faculty Council Approval Date(s): May 8, 22025

Senate Committee on Indigenous Initiatives Motion Number: not applicable

Senate Committee on Indigenous Initiatives Meeting Date: not applicable

7. Other Information

Attachment Pages: **0** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.18

Moved by: Kriston Rennie **Seconded by:** Rehana Ramzan

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 **Date** **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.21**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the course (GEOG 315-3 *Earth's Critical Zone*) be added to the Elective Courses in the Minor in Soils and the Environment, on page 118 of the 2024/2025 PDF undergraduate calendar, be approved as proposed.

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:** This is to integrate this (relatively new) course into the Minor in Soils and the Environment.

3. **Implications of the changes for other programs, etc., if applicable:** none

4. **Reproduction of current Calendar entry for the item to be revised:**

[In the Minor in Soils and the Environment on page 118]:

Elective Courses*

A minimum of 3 credit hours from the following list:
ENSC 404-3 Waste Management
ENSC 452-3 Reclamation and Remediation of Disturbed Environments
ENVE 351-4 Groundwater Flow and Contaminant Transport
FSTY 415-3 Forest Soils

*Students must ensure that all prerequisites are fulfilled prior to registering in any course.

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

[In the Minor in Soils and the Environment on page 118]:

Elective Courses*

A minimum of 3 credit hours from the following list:
ENSC 404-3 Waste Management
ENSC 452-3 Reclamation and Remediation of Disturbed Environments
ENVE 351-4 Groundwater Flow and Contaminant Transport
FSTY 415-3 Forest Soils
GEOG 315-3 Earth's Critical Zone

*Students must ensure that all prerequisites are fulfilled prior to registering in any course.

6. **Authorization:**

SCCC Reviewed: April 15, 2025

Program / Academic / Administrative Unit: Environmental Science

Faculty(ies): Faculty of Environment

Faculty Council Motion Number(s): FEFC 2025:05:08:13

Faculty Council Approval Date(s): May 8, 2025

Senate Committee on Indigenous Initiatives Motion Number: not applicable

Senate Committee on Indigenous Initiatives Meeting Date: not applicable

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

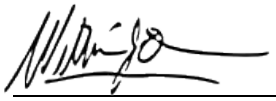
Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.19

Moved by: Kriston Rennie **Seconded by:** Rehana Ramzan

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 **Date**



Chair's Signature

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.22

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW ACADEMIC PROGRAM PROPOSAL

Motion: That the new Minor in Watershed Science and Management be approved as proposed.

1. General Information

Program Title: Minor in Watershed Science and Management

Program Objectives: To provide students with a holistic understanding of how watershed systems function and how they can be managed. Emphasis is given to hydrological and ecological processes in watersheds, and the policy and regulatory requirements for effective and meaningful management. The minor is aimed at students who wish to pursue careers in watershed management, or related fields, including those within provincial government, community organizations, First Nations, NGOs and consultant companies.

Credential upon Completion of the Program: The new minor can accompany any undergraduate major and be so indicated on transcripts.

Program Offering the Degree: Environmental Science

Proposed Start Date: September 2025

Suggested Institutional Priority: High. UNBC has great strength in research and existing courses in the study of watershed systems that crosses departments and faculties from perspectives in science, engineering, planning and health. The proposed minor will allow students interested in this important area to take a concentration of existing courses (plus one new course, ENSC 402 which replaces an existing course) and obtain a credential (minor) recognizing this. The proposed minor will not require any additional resources.

Relationship of Proposed Program to the Mandate of the Institution: The study of watershed science and management fits well within current and future institutional priorities as laid out in Ready: UNBC's Strategic Plan. It also fits soundly within the current and draft future strategic research plan by being highly relevant to the areas of climate action, sustainable environments, natural resources, northern and rural communities, health, society and science.

Implications for the Cooperative Education Option: none

Specialties within Program: none

Related Programs at Other Institutions: we are not aware of any other Minors in Watershed Science and Management in BC.

Relation to Existing Programs: The BSc Major in Environmental Science requires that students select a minor, it is anticipated that this new minor will be a popular choice. It is also anticipated that the new minor will be popular among students enrolled in other majors, especially those in the Faculty of Environment, such as: Forest Ecology, Planning, Wildlife and Fisheries, Conservation Science and Management,

Geography, Outdoor Recreation, etc.

Articulation Arrangement: none

Consultations with Other Institutions: none

2. Program Description:

General Calendar Description:

Minor in Watershed Science and Management

The minor in Watershed Science and Management provides students with an opportunity to obtain a holistic understanding of how watershed systems function and how they can be managed. Emphasis is given to hydrological and ecological processes in watersheds, and the policy and regulatory requirements for effective and meaningful management. The minor is aimed at students who wish to pursue careers in watershed management, or related fields, including those within provincial government, community organizations, First Nations, NGOs, and consultant companies.

Students are required to take a minimum of 21 credit hours. Of these, 15 credit hours are required core courses and 6 credit hours are electives relevant to watershed science and management. The required core courses include 12 credit hours introducing ecology, physical science, policy, and Indigenous perspectives relevant to water, plus a 3-credit-hour capstone course. Students may use up to 6 credit hours of core courses and 3 credit hours of electives to meet the requirements of a major or another minor. **Note:** Some courses may be taught in alternate years; students should consider this when planning their course sequences.

Curriculum:

Required Courses

Lower-Division Requirement

BIOL 110-3 Introductory Ecology
or BIOL 201-3 Ecology*
ENSC 202-3 Introduction to Aquatic Systems
ENVS 230-3 Introduction to Environmental Policy
or NREM 101-3 Introduction to Natural Resources Management and Conservation

Upper-Division Requirement

GEOG 403-3 Indigenous Geographies of Climate Resilience
or NREM 303-3 Aboriginal Perspectives on Land and Resource Management
ENSC 402-3 Watershed Science and Management

Elective Courses

A minimum of 6 credit hours from the following list:
BIOL 302-3 Limnology
BIOL 402-3 Aquatic Plants*
BIOL 409-3 Conservation of Aquatic Ecosystems
BIOL 414-3 Fisheries Management*
ENGR 498-3 Special Topics (when offered as Water Resources Engineering and Management)* `[will eventually be converted in a regular course and have its own code]`
ENPL 401-3 Environmental Law

ENPL 409-4 Indigenous Planning Studio*
ENSC 454-3 Snow and Ice
ENSC 308-3 Northern Contaminated Environments
ENVE 351-4 Groundwater Flow and Contaminant Transport*
GEOG 310-3 Hydrology*
GEOG 311-3 Drainage Basin Geomorphology*
GEOG 315-3 Earth's Critical Zone*
GEOG 405-3 Fluvial Geomorphology*
GEOG 333-3 Geography Field School* (when offered as Methods and Techniques in Ecohydrology) can also include GEOG 498 for additional 3 credits
HHSC 440-3 Special Topics in Health Sciences* (when offered as Indigenous Perspectives; the Power of Water)

*Students must ensure that all prerequisites are fulfilled prior to registering in any course.

3. Need for Program:

Enrolment Projections: 5-10 students per year

Cultural, Social and Economic Needs: Watershed science and management is a growing area with careers in watershed management, or related fields, including those within provincial government, community organizations, First Nations, NGOs and consultant companies.

Labour Market Demands: see above

Other Benefits: see above

4. Faculty:

Faculty list:

The proposed minor is made of existing courses (except its capstone course, ENSC 402 which replaces an existing course, NREM 410) that are part of current degrees and already taught. The required courses are currently taught by:

BIOL 110-3 Introductory Ecology [Caitlin Pitt, Faculty of Environment]
OR *BIOL 201-3 Ecology [Jaimie Gorrell, ESM]
ENSC 202-3 Introduction to Aquatic Systems [Siraj ul Islam, Environmental Science]
ENVS 230-3 Introduction to Environmental Policy [Sinead Earley, School of Planning and Sustainability]
OR NREM 101-3 Introduction to Natural Resources Management and Conservation [Zehra Zawawi, ESM]

GEOG 403-3 Indigenous Geographies of Climate Resilience [TBA, Geography]
OR NREM 303-3 Aboriginal Perspectives on Land and Resource Management [Scott Green, ESM]
ENSC 402-3 Watershed Science and Management [Siraj ul Islam and Phil Owens, Environmental Science]

Expected Teaching Loads: not applicable, courses are taught under existing teaching loads or with existing sessional instructor resources as applicable.

Research Funding: not applicable, the area of Watershed Science and Management is a strong research area at UNBC across the Faculties of Environment, Science and Engineering, Health and Human Science.

5. Program Delivery:

Distance Learning Components: none

Class Size and Structure: as currently exists

Experiential Learning: many of the required and elective courses have strong experiential learning components.

4. Program Resources:

Administrative Requirements: the minor will be administered by the existing Environmental Science program in the Department of Geography, Earth, and Environmental Sciences. No new administrative requirements or support are needed.

Operating Requirements: as the minor is made up of existing courses (except ENSC 402 which is replacing NREM 410, an existing course) there are no additional or new operating requirements.

Capital Requirements: no additional capital requirements

Start-up Costs: no start-up costs

Special Resource Requirements: no special resource requirements

7. Library Resource Requirements: (See attached form)

8. Evaluation:

Academic Quality of Program: not applicable

Methods of Internal Institutional Review: not applicable

Relevant External Program Experts: not applicable

9. Miscellaneous:

Special Features: none

Attachment Pages (in addition to required Library Form): 0 pages

10. Authorization:

SCCC Reviewed: April 15, 2025

Program / Academic / Administrative Unit: Environmental Science

Faculty(ies): Faculty of Environment

Faculty Council Motion Number(s): FEFC 2025:05:08:14

Faculty Council Approval Date(s): May 8, 2025

Senate Committee on Indigenous Initiatives Motion Number: not applicable

Senate Committee on Indigenous Initiatives Meeting Date: not applicable

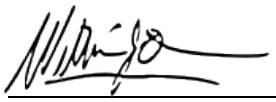
INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.20

Moved by: Bill Owen **Seconded by:** Allan Kranz

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 

Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

Library Resource Requirements and Consultation Form
(to be submitted with SCAAF New Academic Program Proposal Motion Form)

Completing the Library Resource Requirements and Consultation Form is a critical step in ensuring that the Library can support the program through its resources, teaching, and services. The Library is committed to identifying existing and needed resources that support students in their educational journeys at UNBC.

This form must be submitted to the Library **21 days (3 weeks)** prior to SCAAF New Program Approval deadline.

NEW ACADEMIC PROGRAM PROPOSAL ***(to be completed by Faculty Member/Chair/Dean)***

Name of proposed Program or degree: Minor in Watershed Science and Management

Anticipated start date of program: September 2025

Anticipated enrolment: 5-10

Are the SCAAF Program forms attached: __x__YES _____ NO

Please provide keywords associated with the discipline: watershed, aquatic science, management, planning, environment

Library Resource Requirements ***(to be completed by Librarians)***

Please describe the impact of the following Library service(s) or resource(s):

This minor is comprised of courses that are already supported by the Library and can support the proposed additional 5-10 students enrolled in this minor.

1. Collections:

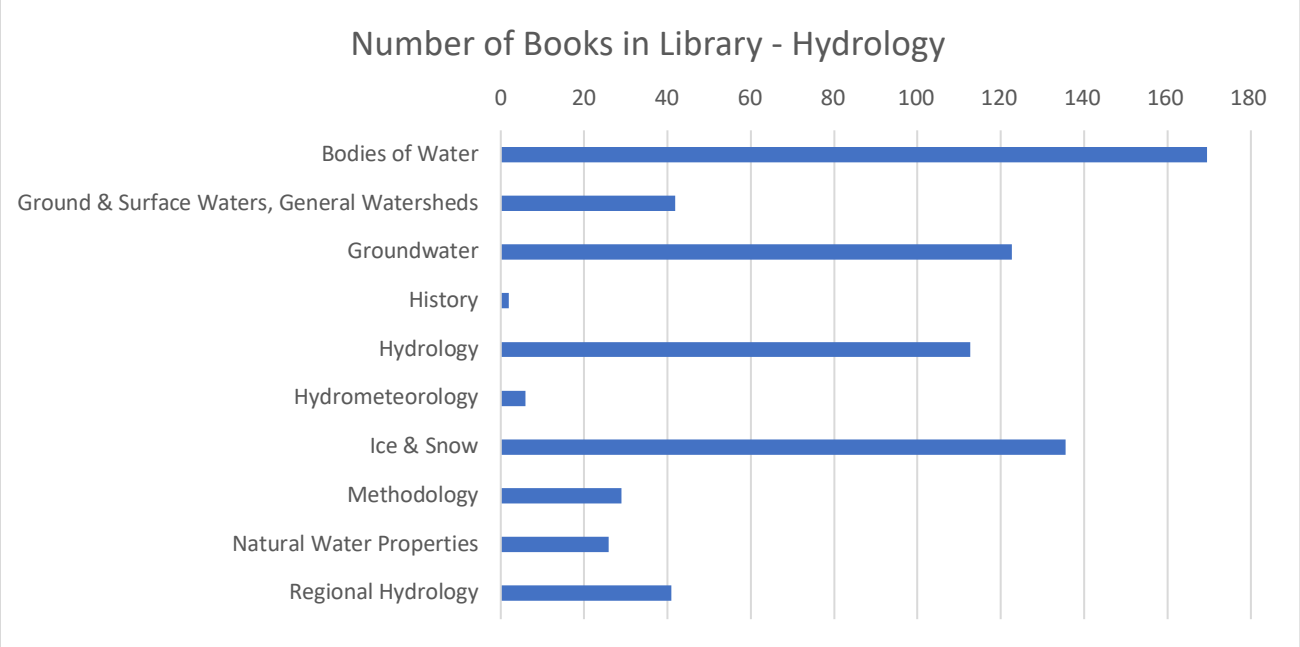
a) Required and/or recommended readings and course reserves.

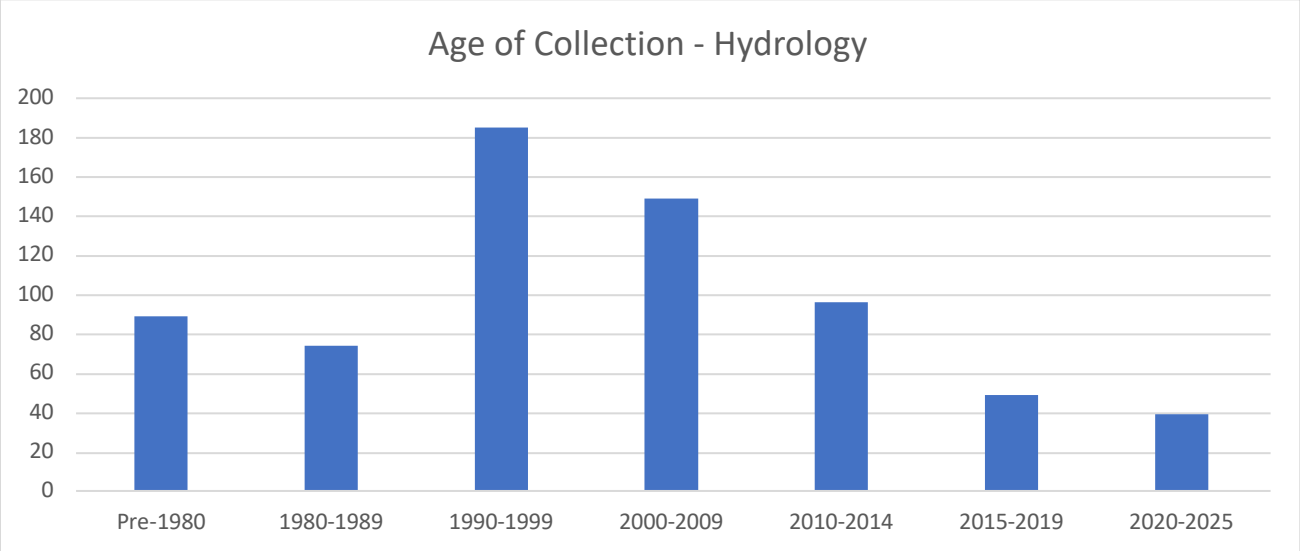
Scientific articles from journals such as: *Environmental Science & Technology*, *Journal of Environmental Management*, *Nature*, *PLOS-Water*, *Science of the Total Environment*, *Water Resources Research*

Government and NGO watershed management and policy documents (e.g., BC Ministry of Water, Lands and Resource Stewardship, Environment and Climate Change Canada, Fraser Basin Council, Nechako Watershed Roundtable)

b) Depth of the collection in relevant areas.

- Monographs: LCSH





- Electronic resources *(Will the addition of this program impact the electronic resources required and licenses, ex. impact on simultaneous users, contract considerations:*
- Available Databases:

Name	Description	Current Subscription Cost
Academic Search Complete	Large, multidisciplinary EBSCO database, covering a wide range of disciplines	~$32,000/yr

BioOne Digital Library	Index covering topics in biology and environmental sciences	Publicly available
Gale Academic OneFile	Large, multidisciplinary Gale database	~$2,600/yr
GreenFile	EBSCO database covering topics on the human impact on the environment	Publicly available
Nature Journals	Online platform for journals from Springer Nature. Full text access limited to titles UNBC subscribes to.	~$25,000/yr
Science Direct	Information platform of scientific, technical, and medical research content from journals, books, series, and reference works published by Elsevier	~$255,000/yr
Web of Science	Index of scholarly literature covering a wide range of topics. Includes current and retrospective bibliographic information, cited reference searching and bibliometric searching	~$24,000/yr

- Available online journals available by subject: (from JCR based on 2023 JIF)

Journal Title	UNBC Availability
Water Research	1995-current
Npj Clean Water	OA 2018-current
International Soil and Water Conservation Research	OA 2013-current
Water Research X	OA 2018-current
Desalination	1995-current
Wiley Interdisciplinary Reviews Water	2014-current
Journal of Water Process Engineering	2014-current
Hydrology and Earth System Sciences	2012-current
Applied Water Science	OA 2011-current
Agricultural Water Management	1995-current (OA 2022-current)

- Are there discipline or subject specific resources (databases, software) required for pedagogical and/or accreditation purposes? Yes ___ No_X_
  - If yes, provide name of resource(s) required and total cost:

2. Human Resources:

a) Instruction *(i.e. research guide development, online tutorials, embedded instruction, tours, etc)*:

Currently, there is good instruction support for the ENSC program, and thus this minor. This minor proposal is not expected to add any additional instruction sessions.

b) The level of expertise required to support the program *(please provide rationale)*:

_X_ Generalist

____ Subject Specialist *(i.e. specific skills and/or knowledge are required to support the program)*

c) Reference assistance *(i.e. individual or group support, ongoing support)*

Reference assistance is currently provided by the main Library reference desk. It is expected that this will continue with this proposed minor.

3. Physical space *(i.e. sufficient collaborative study space, individual study areas in the library, etc)*:

Students in the proposed program will compete with other students for space within the Library. Group study and collaboration space are likely to be the most desirable.

4. Collaboration with other libraries or institutions *(i.e. regional programs, distributed programs, libraries in the community, etc)*:

unknown

5. Other (i.e. special equipment and/or software):

unknown

Library's recommendation *(check one option)*:

_X_ Proposal has an impact on the Library and can be supported within the Library's current budget.

___ Proposal cannot be supported without additional budgetary resources; see details above or appended.

___ Proposal has no impact on the Library.

University Librarian (or designate) signature

March 31, 2025

Date

Date: April 21, 2025

To: Faculty Council, Faculty of Environment

Senate Committee on Academic Affairs

From: Tara Lynne Clapp, Chair, School of Planning and Sustainability

Re: Motions from Planning Program

This set of motions is primarily concerned with representation and nomenclature. The rationales for the changes in titles and descriptions are:

1. **Student First: Communication with student audiences:** The primary driver for changes in course titles and descriptions is to communicate in a more legible and compelling fashion. By doing so the program can better capture the attention of prospective students and communicate more clearly to prospective students what is being taught in the courses.

2. **Communications with future students and employers**: The primary driver for renewal of two of the major names and descriptions is to align the major names with employer and potentially prospective student understanding of what the programs entail.
    a. As the changes in major names reflect the current programs, we do not expect this to change the internal reporting codes.
    b. Further consultation is required before considering an update to the name and description of First Nations Planning major. Planning for this consultation is to begin before the end of W25.

3. **Accreditation Site Team Recommendations**: In 2011 the former Bachelor of Science (Planning) was changed to the Bachelor of Planning. At this time, three majors were introduced. Accreditation reports from two subsequent Site Visit Teams (2012 & 2017) recommended that program naming and course codes be updated to reflect the 2011 degree changes. Specifically, the Site Visit Teams in 2012 and 2017 recommended:
    a. Changing the course code to **PLAN**, and
    b. Changing the program name to Planning in the calendar.
    c. Reconsidering the Major names in alignment with Employer expectations.

    The Program and Major name changes should be incorporated in the 2025-2026 calendar, pending a decision on the need for a separate DQAB review, while the course code change would not be effective until the 2026-2027 calendar.

Additionally, the program motion incorporates the new course NREM 201/ENPL 201-3 Land Policy in British Columbia that is being moved forward by ESM. This course will serve as an introduction to land policy across the majors in Planning.

Thank you for your consideration of these motions –

Tara Lynne Clapp, Chair

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.23

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change from COMM 302-Entrepreneurship to COMM 204-3, on page 162 of the 2024/2025 undergraduate calendar, be approved as proposed.

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:** The change accommodates the proposed re-numbering of COMM 302-3 to COMM 204-3

3. **Implications of the changes for other programs, etc., if applicable:** None.

4. **Reproduction of current Calendar entry for the item to be revised:**

Major in Nature-Based Tourism Management

Students must complete a minimum of 120 credit hours through (a) the common degree requirements, (b) the requirements of an Area of Specialization and (c) elective credit hours in any subject.

Common Degree Requirements

Lower-Division Requirement

100 Level
BIOL 110-3 Introductory Ecology
COMM 100-3 Introduction to Canadian Business
ECON 100-3 Microeconomics
ENPL 104-3 Introduction to Planning
ORTM 100-3 Foundations of Outdoor Recreation and Tourism

One of the following:
- ENVS 101-3 Introduction to Environmental Citizenship
- ENVS 210-3 Environmental Perspectives
- FNST 100-3 The Aboriginal Peoples of Canada
- GEOG 101-3 Planet Earth
- GEOG 102-3 Earth from Above

200 Level
COMM 240-3 Introduction to Marketing
ECON 205-3 Statistics for Business and the Social Sciences
or STAT 240-3 Basic Statistics
ENVS 210-3 Environmental Perspectives
or HIST 360-3 An Introduction to Environmental History
or INTS 225-3 Global Environmental Change
or NREM 225-3 Global Environmental Change: Sustainability
NREM 209-3 The Practice of Conservation
ORTM 200-3 Sustainable Outdoor Recreation and Tourism

ORTM 202-3 Ecotourism and Adventure Tourism
ORTM 205-3 Outdoor Skills and Leadership
ORTM 206-3 Recreation and Leisure Programming

Upper-Division Requirement

300 Level
COMM 302-3 Entrepreneurship
FNST 304-3 Indigenous Environmental Philosophy
or NREM 303-3 Aboriginal Perspectives on Land and Resource Management
ORTM 300-3 Recreation and Tourism Impacts
ORTM 307-3** Land Relations and Communities in Recreation and Tourism
ORTM 332-3 Outdoor, Environmental, and Experiential Education
ORTM 333-3 Field School

400 Level
Nine credit hours from the following:
ORTM 305-3 Protected Area Planning and Management
ORTM 400-3 Conservation Area Design and Management
ORTM 401-3** The Culture of Adventure
ORTM 405-3** Leadership Praxis
ORTM 409-3** Critical Approaches to Outdoor Recreation Activities
ORTM 433-(1-6) Field School II
ORTM 440-(2-6) Internship
ORTM 498-(1-3) Special Topics
ORTM 499-(1-6) Independent Study

****Note:** Students should note some senior-level ORTM classes are offered in alternating years.

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":

Major in Nature-Based Tourism Management

Students must complete a minimum of 120 credit hours through (a) the common degree requirements, (b) the requirements of an Area of Specialization and (c) elective credit hours in any subject.

Common Degree Requirements

Lower-Division Requirement

100 Level
BIOL 110-3 Introductory Ecology
COMM 100-3 Introduction to Canadian Business
ECON 100-3 Microeconomics
ENPL 104-3 Introduction to Planning
ORTM 100-3 Foundations of Outdoor Recreation and Tourism

One of the following:
ENVS 101-3 Introduction to Environmental Citizenship
ENVS 210-3 Environmental Perspectives
FNST 100-3 The Aboriginal Peoples of Canada
GEOG 101-3 Planet Earth
GEOG 102-3 Earth from Above

200 Level

COMM 204-3 Entrepreneurship
COMM 240-3 Introduction to Marketing
ECON 205-3 Statistics for Business and the Social Sciences
or STAT 240-3 Basic Statistics
ENVS 210-3 Environmental Perspectives
or HIST 360-3 An Introduction to Environmental History
or INTS 225-3 Global Environmental Change
or NREM 225-3 Global Environmental Change: Sustainability
NREM 209-3 The Practice of Conservation
ORTM 200-3 Sustainable Outdoor Recreation and Tourism
ORTM 202-3 Ecotourism and Adventure Tourism
ORTM 205-3 Outdoor Skills and Leadership
ORTM 206-3 Recreation and Leisure Programming

Upper-Division Requirement

300 Level
~~COMM 302-3 Entrepreneurship~~
FNST 304-3 Indigenous Environmental Philosophy
or NREM 303-3 Aboriginal Perspectives on Land and Resource Management
ORTM 300-3 Recreation and Tourism Impacts
ORTM 307-3** Land Relations and Communities in Recreation and Tourism
ORTM 332-3 Outdoor, Environmental, and Experiential Education
ORTM 333-3 Field School

400 Level
Nine credit hours from the following:
ORTM 305-3 Protected Area Planning and Management
ORTM 400-3 Conservation Area Design and Management
ORTM 401-3** The Culture of Adventure
ORTM 405-3** Leadership Praxis
ORTM 409-3** Critical Approaches to Outdoor Recreation Activities
ORTM 433-(1-6) Field School II
ORTM 440-(2-6) Internship
ORTM 498-(1-3) Special Topics
ORTM 499-(1-6) Independent Study

6. Authorization:

SCCC Reviewed: March 11, 2025

Program / Academic / Administrative Unit: Nature-Based Tourism (ESM)

Faculty(ies): FE

Faculty Council Motion Number(s): FEFC 2025050825

Faculty Council Approval Date(s): **May 10, 2025**

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

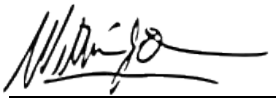
Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.21

Moved by: Todd Whitcombe **Seconded by:** Ehsan Taghizadehghoozhdi

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 **Date**



Chair's Signature

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.24**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change from COMM 302-Entrepreneurship to COMM 204-3, on page 139-142 of the 2024/2025 undergraduate calendar, be approved as proposed.

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:** The changes accommodate the proposed re-numbering of COMM 302-3 to COMM 204-3

3. **Implications of the changes for other programs, etc., if applicable:** None.

4. **Reproduction of current Calendar entry for the item to be revised:**

Major in Public Administration and Community Development

The Public Administration and Community Development major gives students the skills required to function within a range of groups, organizations, and offices. Graduates are able to interact with appropriate professionals, receive their input and reports, and collate a wide range of information and material in service of their group/organization/office. Skills in analysis and synthesis are complemented by an ability to work cooperatively and effectively, and an ability to communicate clearly through written, oral, and graphic media.

The Public Administration and Community Development major requires completion of 120 credit hours, 48 of which must be at the upper-division level. At the lower division, students must take the seven required courses and a minimum of one course from each of the seven categories. At the upper division, students must take the four required courses and a minimum of one course from each of the seven categories. To complete the 120 credit hours, students must take 45 credit hours of electives, of which 15 credit hours must be at the upper division.

It is possible for students to organize their course choices (categories and electives) to achieve a "specialization" of coursework. An Area of Specialization requires eight courses (24 credit hours) in one of the following:

- Local Public Administration
- Aboriginal Community Development
- Planning

Program Requirements

Lower-Division Requirements

COMM 100-3 Introduction to Canadian Business
ECON 100-3 Microeconomics
ECON 101-3 Macroeconomics
ENPL 104-3 Introduction to Planning
FNST 100-3 The Aboriginal Peoples of Canada

GEOG 101-3 Planet Earth
POLS 100-3 Contemporary Political Issues

Select ONE course from each category below:

Community
FNST 217-3 Contemporary Challenges Facing Aboriginal Communities
GEOG 206-3 Social Geography
GEOG 209-3 Migration and Development

Public Administration
ECON 210-3 Introduction to Health Economics and Policy
ENVS 230-3 Introduction to Environmental Policy
NREM 209-3 The Practice of Conservation
POLS 255-3 Introduction to Law in Canada
SOCW 201-3 Introduction to Social Welfare

Governance
ENVS 101-3 Introduction to Environmental Citizenship
HIST 257-3 Public Law in Canada
POLS 200-3 Canadian Government and Politics
POLS 257-3 Public Law in Canada

First Nations
FNST 200-3 Perspectives in First Nations Studies
FNST 249-3 Aboriginal Resource Planning
or ENPL 208-4 Land and Indigenous Reconciliation Studio
NORS 101-3 Introduction to the Circumpolar North

Methods
ECON 205-3 Statistics for Business and the Social Sciences
ENPL 105-3 Principles and Practices of Planning
ENPL 206-3 Planning Analysis and Techniques
FNST 200-3 Perspectives in First Nations Studies
FNST 203-3 Introduction to Traditional Ecological Knowledge
GEOG 204-3 Introduction to GIS
GEOG 205-3 Cartography and Geomatics Economics
COMM 230-3 Organizational Behaviour
GEOG 202-3 Resources, Economies, and Sustainability
INTS 210-3 Globalizations
ORTM 200-3 Sustainable Outdoor Recreation and Tourism
ORTM 202-3 Ecotourism and Adventure Tourism

General
ANTH 102-3 Anthropology: A World of Discovery
ARTS 102-3 Research Writing
COMM 240-3 Introduction to Marketing
ECON 220-3 Global Economic Shifts
ORTM 100-3 Foundations of Outdoor Recreation and Tourism

Upper-Division Requirements

ENPL 313-3 Rural Community Economic Development (CED)
GEOG 424-3 Northern Communities
POLS 332-3 Community Development
POLS 403-3 Social and Health Policy and Administration

Select ONE course from each category below:

Community
COMM 302-3 Entrepreneurship
ENPL 301-3 Sustainable Communities: Structure and Sociology
ORTM 307-3 Land Relations and Communities in Recreation and Tourism
POLS 434-3 Resource Communities in Transition
SOCW 437-3 Social Work with Groups and Communities
SOCW 456-3 Indigenous Wellness: Individuals, Families, and Communities
SOCW 457-3 Individual and Community Wellness for Indigenous Peoples

Public Administration
COMM 330-3 Human Resource Management
ENPL 304-4 Community Engagement and Inclusion Studio
ENPL 401-3 Environmental Law
NREM 306-3 Society, Policy and Administration
POLS 302-3 How Government Works
POLS 344-3 Society, Policy and Administration of Natural Resources
POLS 351-3 Local Services and Public Policy
POLS 360-3 Local Government Finance
SOCW 455-3 Indigenous Governance and Social Policy

Governance
ANTH 410-3 Theory of Nation and State
ENVS 326-3 Public Engagement for Sustainability
GEOG 305-3 Political Ecology: Environmental Knowledge and Decision-Making
POLS 316-3 Municipal Government and Politics
POLS 320-3 Canadian Politics and Policy
POLS 333-3 Politics and Government of BC
POLS 350-3 Law and Municipal Government
POLS 353-3 Project Management in Local Government

First Nations
ANTH 404-3 Comparative Study of Indigenous Peoples of the World
ENPL 409-4 Indigenous Planning Studio
FNST 416-3 Indigenous Issues in International Perspective
GEOG 403-3 Indigenous Geographies of Climate Resilience
GEOG 426-3 Geographies of Culture, Rights and Power
HIST 303-3 British Columbia
HIST 390-3 History of Indigenous People of Canada
NREM 303-3 Aboriginal Perspectives on Land and Resource Management
POLS 415-3 Comparative Northern Development

Methods
ANTH 300-3 Qualitative Methods
ANTH 310-3 Practicing Anthropology
ANTH 421-(3-6) Ethnographic Field Methods
ENPL 305-3 Environmental Impact Assessment
ENPL 319-3 Social Research Methods
ENVS 339-3 Low-Carbon Transitions: Theory and Practice
FNST 300-3 Research Methods in First Nations Studies
GEOG 324-3 Community-Based Research

Economics
COMM 303-3 Introduction to International Business

ECON 305-3 Environmental Economics and Environmental Policy
ECON 307-3 Northern BC in the Global Economy
ECON 331-3 Forestry Economics
ENVS 431-3 Global Environmental Policy: Energy and Climate
GEOG 401-3 Tenure, Conflict, and Resource Geography
INTS 421-3 The Political Economy of Natural Resource Extraction
INTS 425-3 Sustainability Problem Solving
ORTM 300-3 Recreation and Tourism Impacts

General
COMM 332-3 Business and Professional Ethics
COMM 340-3 Marketing Communication
COMM 342-3 Services Marketing
COMM 346-3 Internet Marketing
ENVS 414-3 Environmental and Professional Ethics
FNST 451-3 Traditional Use Studies
or ANTH 451-3 Traditional Use Studies
FNST 498-(3-6) Special Topics in First Nations Studies
GEOG 200-3 British Columbia: People and Places
GEOG 308-3 Health Geography
GEOG 420-3 Environmental Justice
HIST 360-3 An Introduction to Environmental History
POLS 327-3 Leadership and Ethics in Local Government

Areas of Specialization

It is possible for students to organize their course choices (areas and electives) to achieve an Area of Specialization of coursework. For the PACD major, completion of a specialization requires eight courses (24 credit hours) from one of the following:

• Local Public Administration
• Aboriginal Community Development
• Planning

Area of Specialization in Local Public Administration

Note: Students choosing this Area of Specialization should be aware that UNBC also offers a Local Government Administration Certificate through the Department of Political Science, as well as a First Nations Public Administration Certificate through the Department of First Nations Studies.

Lower-Division course choices

COMM 100-3 Introduction to Canadian Business
COMM 230-3 Organizational Behaviour
POLS 255-3 Introduction to Law in Canada

Upper-Division course choices

POLS 316-3 Municipal Government and Politics
POLS 320-3 Canadian Politics and Policy
POLS 327-3 Leadership and Ethics in Local Government
POLS 333-3 Politics and Government of BC
POLS 350-3 Law and Municipal Government
POLS 351-3 Local Services and Public Policy
POLS 360-3 Local Government Finance
POLS 403-3 Social and Health Policy and Administration

Area of Specialization in Aboriginal Community Development

Lower-Division course choices

FNST 200-3 Perspectives in First Nations Studies
FNST 203-3 Introduction to Traditional Ecological Knowledge
FNST 217-3 Contemporary Challenges Facing Aboriginal Communities
FNST 249-3 Aboriginal Resource Planning
or ENPL 208-4 Land and Indigenous Reconciliation Studio

Upper-Division course choices

ANTH 404-3 Comparative Study of Indigenous Peoples of the World
COMM 302-3 Entrepreneurship
ENPL 409-4 Indigenous Planning Studio
FNST 300-3 Research Methods in First Nations Studies
FNST 304-3 Indigenous Environmental Philosophy
FNST 416-3 Indigenous Issues in International Perspective
FNST 451-3 Traditional Use Studies
FNST 498-(3-6) Special Topics in First Nations Studies
GEOG 403-3 Indigenous Geographies of Climate Resilience
HIST 390-3 History of Indigenous People of Canada
NREM 303-3 Aboriginal Perspectives on Land and Resource Management
SOCW 455-3 Indigenous Governance and Social Policy
SOCW 457-3 Individual and Community Wellness for Indigenous Peoples

Area of Specialization in Planning

Note: The Area of Specialization in Planning does not lead to an accredited planning degree. The School of Environmental Planning offers a professional accredited Canadian Institute of Planner degree. Refer to the calendar for further information.

Required Courses

ENPL 104-3 Introduction to Planning
ENPL 105-3 Principles and Practices of Planning
ENPL 301-3 Sustainable Communities: Structure and Sociology
ENPL 304-4 Community Engagement and Inclusion Studio

Four of the following:
ENPL 206-3 Planning Analysis and Techniques
ENPL 208-4 Land and Indigenous Reconciliation Studio
ENPL 305-3 Environmental Impact Assessment
ENPL 313-3 Rural Community Economic Development (CED)
ENPL 319-3 Social Research Methods
ENPL 401-3 Environmental Law
ENPL 409-4 Indigenous Planning Studio
ENVS 326-3 Public Engagement for Sustainability

Electives and Academic Breadth

Forty-five elective credit hours in any subject as necessary to ensure completion of a minimum of 120 credit hours (at least 15 of these elective credit hours must be at the 300 or 400 level) including any additional credit hours necessary to meet the Academic Breadth requirement of the University (see Academic Regulation on Academic Breadth).

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":

Major in Public Administration and Community Development

The Public Administration and Community Development (PACD) major gives students the skills required to function within a range of groups, organizations, and offices. Graduates are able to interact with appropriate professionals, receive their input and reports, and collate a wide range of information and material in service of their group/organization/office. Skills in analysis and synthesis are complemented by an ability to work cooperatively and effectively, and an ability to communicate clearly through written, oral, and graphic media.

The Public Administration and Community Development major requires completion of 120 credit hours, 48 of which must be at the upper-division level. At the lower division, students must take the seven required courses and a minimum of one course from each of the seven categories. At the upper division, students must take the four required courses and a minimum of one course from each of the seven categories. To complete the 120 credit hours, students must take 45 credit hours of electives, of which 15 credit hours must be at the upper division.

It is possible for students to organize their course choices (categories and electives) to achieve a "specialization" of coursework. An Area of Specialization requires eight courses (24 credit hours) in one of the following:

• Local Public Administration
• Aboriginal Community Development
• Planning

Program Requirements

Lower-Division Requirements

COMM 100-3 Introduction to Canadian Business
ECON 100-3 Microeconomics
ECON 101-3 Macroeconomics
ENPL 104-3 Introduction to Planning
FNST 100-3 The Aboriginal Peoples of Canada
GEOG 101-3 Planet Earth
POLS 100-3 Contemporary Political Issues

Select ONE course from each category below:

Community
COMM 204-3 Entrepreneurship
FNST 217-3 Contemporary Challenges Facing Aboriginal Communities
GEOG 206-3 Social Geography
GEOG 209-3 Migration and Development

Public Administration
ECON 210-3 Introduction to Health Economics and Policy
ENVS 230-3 Introduction to Environmental Policy
NREM 209-3 The Practice of Conservation
POLS 255-3 Introduction to Law in Canada
SOCW 201-3 Introduction to Social Welfare

Governance
ENVS 101-3 Introduction to Environmental Citizenship
HIST 257-3 Public Law in Canada

POLS 200-3 Canadian Government and Politics
POLS 257-3 Public Law in Canada

First Nations
FNST 200-3 Perspectives in First Nations Studies
FNST 249-3 Aboriginal Resource Planning
or ENPL 208-4 Land and Indigenous Reconciliation Studio
NORS 101-3 Introduction to the Circumpolar North

Methods
COMM 230-3 Organizational Behaviour
ECON 205-3 Statistics for Business and the Social Sciences
ENPL 105-3 Principles and Practices of Planning
ENPL 206-3 Planning Analysis and Techniques
FNST 200-3 Perspectives in First Nations Studies
FNST 203-3 Introduction to Traditional Ecological Knowledge
GEOG 202-3 Resources, Economies, and Sustainability
GEOG 204-3 Introduction to GIS
GEOG 205-3 Cartography and Geomatics Economics
~~COMM 230-3 Organizational Behaviour~~
~~GEOG 202-3 Resources, Economies, and Sustainability~~
INTS 210-3 Globalizations
ORTM 200-3 Sustainable Outdoor Recreation and Tourism
ORTM 202-3 Ecotourism and Adventure Tourism

General
ANTH 102-3 Anthropology: A World of Discovery
ARTS 102-3 Research Writing
COMM 240-3 Introduction to Marketing
ECON 220-3 Global Economic Shifts
ORTM 100-3 Foundations of Outdoor Recreation and Tourism

Upper-Division Requirements

ENPL 313-3 Rural Community Economic Development (CED)
GEOG 424-3 Northern Communities
POLS 332-3 Community Development
POLS 403-3 Social and Health Policy and Administration

Select ONE course from each category below:

Community
~~COMM 302-3 Entrepreneurship~~
ENPL 301-3 Sustainable Communities: Structure and Sociology
ORTM 307-3 Land Relations and Communities in Recreation and Tourism
POLS 434-3 Resource Communities in Transition
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SOCW 456-3 Indigenous Wellness: Individuals, Families, and Communities
SOCW 457-3 Individual and Community Wellness for Indigenous Peoples

Public Administration
COMM 330-3 Human Resource Management
ENPL 304-4 Community Engagement and Inclusion Studio
ENPL 401-3 Environmental Law
NREM 306-3 Society, Policy and Administration
POLS 302-3 How Government Works

POLS 344-3 Society, Policy and Administration of Natural Resources
POLS 351-3 Local Services and Public Policy
POLS 360-3 Local Government Finance
SOCW 455-3 Indigenous Governance and Social Policy

Governance
ANTH 410-3 Theory of Nation and State
ENVS 326-3 Public Engagement for Sustainability
GEOG 305-3 Political Ecology: Environmental Knowledge and Decision-Making
POLS 316-3 Municipal Government and Politics
POLS 320-3 Canadian Politics and Policy
POLS 333-3 Politics and Government of BC
POLS 350-3 Law and Municipal Government
POLS 353-3 Project Management in Local Government

First Nations
ANTH 404-3 Comparative Study of Indigenous Peoples of the World
ENPL 409-4 Indigenous Planning Studio
FNST 416-3 Indigenous Issues in International Perspective
GEOG 403-3 Indigenous Geographies of Climate Resilience
GEOG 426-3 Geographies of Culture, Rights and Power
HIST 303-3 British Columbia
HIST 390-3 History of Indigenous People of Canada
NREM 303-3 Aboriginal Perspectives on Land and Resource Management
POLS 415-3 Comparative Northern Development

Methods
ANTH 300-3 Qualitative Methods
ANTH 310-3 Practicing Anthropology
ANTH 421-(3-6) Ethnographic Field Methods
ENPL 305-3 Environmental Impact Assessment
ENPL 319-3 Social Research Methods
ENVS 339-3 Low-Carbon Transitions: Theory and Practice
FNST 300-3 Research Methods in First Nations Studies
GEOG 324-3 Community-Based Research

Economics
COMM 303-3 Introduction to International Business
ECON 305-3 Environmental Economics and Environmental Policy
ECON 307-3 Northern BC in the Global Economy
ECON 331-3 Forestry Economics
ENVS 431-3 Global Environmental Policy: Energy and Climate
GEOG 401-3 Tenure, Conflict, and Resource Geography
INTS 421-3 The Political Economy of Natural Resource Extraction
INTS 425-3 Sustainability Problem Solving
ORTM 300-3 Recreation and Tourism Impacts

General
COMM 332-3 Business and Professional Ethics
COMM 340-3 Marketing Communication
COMM 342-3 Services Marketing
COMM 346-3 Internet Marketing
ENVS 414-3 Environmental and Professional Ethics
FNST 451-3 Traditional Use Studies
or ANTH 451-3 Traditional Use Studies
FNST 498-(3-6) Special Topics in First Nations Studies

GEOG 200-3 British Columbia: People and Places
GEOG 308-3 Health Geography
GEOG 420-3 Environmental Justice
HIST 360-3 An Introduction to Environmental History
POLS 327-3 Leadership and Ethics in Local Government

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Area of Specialization in Local Public Administration

Note: Students choosing this Area of Specialization should be aware that UNBC also offers a Local Government Administration Certificate through the Department of Political Science, as well as a First Nations Public Administration Certificate through the Department of First Nations Studies.

Lower-Division course choices

COMM 100-3 Introduction to Canadian Business
COMM 230-3 Organizational Behaviour
POLS 255-3 Introduction to Law in Canada

Upper-Division course choices

POLS 316-3 Municipal Government and Politics
POLS 320-3 Canadian Politics and Policy
POLS 327-3 Leadership and Ethics in Local Government
POLS 333-3 Politics and Government of BC
POLS 350-3 Law and Municipal Government
POLS 351-3 Local Services and Public Policy
POLS 360-3 Local Government Finance
POLS 403-3 Social and Health Policy and Administration

Area of Specialization in Aboriginal Community Development

Lower-Division course choices

COMM 204-3 Entrepreneurship
FNST 200-3 Perspectives in First Nations Studies
FNST 203-3 Introduction to Traditional Ecological Knowledge
FNST 217-3 Contemporary Challenges Facing Aboriginal Communities
FNST 249-3 Aboriginal Resource Planning
or ENPL 208-4 Land and Indigenous Reconciliation Studio

Upper-Division course choices

ANTH 404-3 Comparative Study of Indigenous Peoples of the World
~~COMM 302-3 Entrepreneurship~~
ENPL 409-4 Indigenous Planning Studio
FNST 300-3 Research Methods in First Nations Studies

FNST 304-3 Indigenous Environmental Philosophy
FNST 416-3 Indigenous Issues in International Perspective
FNST 451-3 Traditional Use Studies
FNST 498-(3-6) Special Topics in First Nations Studies
GEOG 403-3 Indigenous Geographies of Climate Resilience
HIST 390-3 History of Indigenous People of Canada
NREM 303-3 Aboriginal Perspectives on Land and Resource Management
SOCW 455-3 Indigenous Governance and Social Policy
SOCW 457-3 Individual and Community Wellness for Indigenous Peoples

Area of Specialization in Planning

Note: The Area of Specialization in Planning does not lead to an accredited planning degree. The School of ~~Environmental~~ Planning offers a professional accredited Canadian Institute of Planner degree. Refer to the calendar for further information.

Required Courses

ENPL 104-3 Introduction to Planning
ENPL 105-3 Principles and Practices of Planning
ENPL 301-3 Sustainable Communities: Structure and Sociology
ENPL 304-4 Community Engagement and Inclusion Studio

Four of the following:
- ENPL 206-3 Planning Analysis and Techniques
- ENPL 208-4 Land and Indigenous Reconciliation Studio
- ENPL 305-3 Environmental Impact Assessment
- ENPL 313-3 Rural Community Economic Development (CED)
- ENPL 319-3 Social Research Methods
- ENPL 401-3 Environmental Law
- ENPL 409-4 Indigenous Planning Studio
- ENVS 326-3 Public Engagement for Sustainability

Electives and Academic Breadth

~~Forty-five e~~Elective credit hours must be taken ~~in any subject~~ as necessary to ensure completion of a minimum of 120 credit hours (at least 15 of these elective credit hours must be at the 300 or 400 level) including any additional credit hours necessary to meet the Academic Breadth requirement of the University (see Academic Regulation on *Academic Breadth*).

6. Authorization:

SCCC Reviewed: March 11, 2025

Program / Academic / Administrative Unit: Public Administration and Community Development (GEES)

Faculty(ies): FE

Faculty Council Motion Number(s): FEFC 2025:05:08:26

Faculty Council Approval Date(s): May 8, 2025

Senate Committee on Indigenous Initiatives Motion Number: n/a

Senate Committee on Indigenous Initiatives Meeting Date: n/a

7. Other Information

Attachment Pages: 0 pages

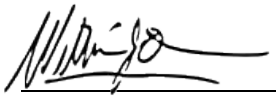
INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.22

Moved by: Todd Whitcombe **Seconded by:** Ehsan Taghizadehghoozhdi

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 

Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.25**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED MOTION

Motion: That the new subject code PLAN (Planning) be approved as proposed, and replace all instances of ENPL across the calendar, including Academic Breadth, Course Prefixes list, Course listings for Planning (239-241), and the Programs that list these courses, as follows:

Program listing a course in ENPL
BSc Integrated
BSc Integrated Coast Mountain
Biology
Minor in Biology/Conservation
Conservation Science and Practice
Economics
Engineering
Planning (*was Environmental Planning*)
Environmental Science
Environmental Studies
First Nations Studies
Forestry
Geography BA
Geography PACD
Health Sciences BHSc
Local Government Administration (Certificate)
Nature Based Tourism
Northern Studies
Wildlife and Fisheries

Specifically, the motion is intended to change the course codes of all the courses in the list of ENPL courses listed on pp 239-241, and courses added after 24/25, as follows:

ENPL 104-3 Planning for Transformation
ENPL 105-3 Dynamics of Community Planning
ENPL 201-3 Land Policy in BC
ENPL 205-3 Environment and Society
ENPL 206-3 How to Shape the Future
ENPL 208-4 Land and Indigenous Reconciliation Studio
ENPL 301-3 Sustainable Communities
ENPL 304-4 Community Engagement and Inclusion Studio
ENPL 305-3 Environmental Impact Assessment

ENPL 313-3 Rural Community Economic Development (CED)
ENPL 318-3 Professional Planning Practice
ENPL 319-3 Social Research Methods
ENPL 320-4 Land Use and Development Studio
ENPL 333-3 Field School in Planning
ENPL 401-3 Environmental Law
ENPL 404-3 Housing: From Concept to Construction
ENPL 409-4 Indigenous Planning Studio
ENPL 410-3 Applied Land Use Planning in BC
ENPL 411-3 Philosophy of Community Change
ENPL 415-4 Sustainable and Inclusive Design Studio
ENPL 417-4 Local Climate Action Studio
ENPL 430-6 Undergraduate Thesis
ENPL 431-3 Professional Report
ENPL 440-(2-6) Internship
ENPL 497-4 Special Topics Studio
ENPL 498-(1-6) Special Topics
ENPL 499-(1-6) Independent Study
ENPL 604-3 Housing: From Concept to Construction
ENPL 605-3 Applied Land Use Planning in British Columbia
ENPL 606-3 Philosophy of Community Change
ENPL 609-4 Indigenous Planning Studio
ENPL 617-4 Local Climate Action Studio
ENPL 619-4 Sustainable and Inclusive Design Studio

List of courses with new course codes as they will appear in 2026/2027 calendars:
~~ENPL~~ PLAN 104-3 Planning for Transformation
~~ENPL~~ PLAN 105-3 Dynamics of Community Planning
~~ENPL~~ PLAN 201-3 Land Policy in BC
~~ENPL~~ PLAN 205-3 Environment and Society
~~ENPL~~ PLAN 206-3 How to Shape the Future
~~ENPL~~ PLAN 208-4 Land and Indigenous Reconciliation Studio
~~ENPL~~ PLAN 301-3 Sustainable Communities
~~ENPL~~ PLAN 304-4 Community Engagement and Inclusion Studio
~~ENPL~~ PLAN 305-3 Environmental Impact Assessment
~~ENPL~~ PLAN 313-3 Rural Community Economic Development (CED)
~~ENPL~~ PLAN 318-3 Professional Planning Practice
~~ENPL~~ PLAN 319-3 Social Research Methods
~~ENPL~~ PLAN 320-4 Land Use and Development Studio
~~ENPL~~ PLAN 333-3 Field School in Planning
~~ENPL~~ PLAN 401-3 Environmental Law
~~ENPL~~ PLAN 404-3 Housing: From Concept to Construction
~~ENPL~~ PLAN 409-4 Indigenous Planning Studio
~~ENPL~~ PLAN 410-3 Applied Land Use Planning in BC
~~ENPL~~ PLAN 411-3 Philosophy of Community Change
~~ENPL~~ PLAN 415-4 Sustainable and Inclusive Design Studio
~~ENPL~~ PLAN 417-4 Local Climate Action Studio
~~ENPL~~ PLAN 430-6 Undergraduate Thesis
~~ENPL~~ PLAN 431-3 Professional Report
~~ENPL~~ PLAN 440-(2-6) Internship
~~ENPL~~ PLAN 497-4 Special Topics Studio
~~ENPL~~ PLAN 498-(1-6) Special Topics
~~ENPL~~ PLAN 499-(1-6) Independent Study
~~ENPL~~ PLAN 604-3 Housing: From Concept to Construction
~~ENPL~~ PLAN 605-3 Applied Land Use Planning in British Columbia

~~ENPL~~ PLAN 606-3 Philosophy of Community Change
~~ENPL~~ PLAN 609-4 Indigenous Planning Studio
~~ENPL~~ PLAN 617-4 Local Climate Action Studio
~~ENPL~~ PLAN 619-4 Sustainable and Inclusive Design Studio

Effective Date: September 2026
The timing of this change reflects the need for sufficient time for implementation.
Any motions to follow for 2026/2027 calendar will reflect the PLAN course code.

Rationale: Courses in the Bachelor of Planning (BPl) are currently using the original ENPL code (Environmental Planning). For graduates and employers of the accredited degree in Planning, "Environmental Planning" is a specific subfield, where the Bachelor of Planning is a first professional accredited degree in the discipline. The Bachelor of Planning offers three majors, only one of which is in the subfield of "Environmental Planning" as understood in the profession. After program changes in 2011 (change from BSc to BPlanning) this change in course code was recommended by the Planning Standards Site Visit Team in 2012 and 2017.

Motion proposed by: Dr. Tara Lynne Clapp, Chair, School of Planning and Sustainability

Academic Program: Planning

Implications for Other Programs / Faculties? Yes
Many other programs include courses where this code would be changed, but the change would not require any action from other programs/faculties. Academic programs that use courses with this prefix as requirements or electives have been consulted. The other calendar uses of the code ENPL are in reference to Academic Breadth (pp. 36 and 48) and pp. 196 Course Prefixes.

SCCC Reviewed: April 15, 2025

Faculty: Faculty of Environment

Faculty Council / Committee Motion Number: 6.22 FEFC 2025050824

Faculty Council / Committee Approval Date: May 8, 2025

Attachment Pages (if applicable): **0** pages

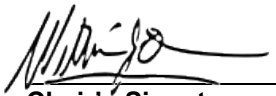
INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.23

Moved by: Todd Whitcombe **Seconded by:** Ehsan Taghizadehghoozhdi

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.26**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change(s) to the Bachelor of Environmental Planning program description, on pages 110 to 114 of the 2024/2025 undergraduate calendar, be approved as proposed.

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:**

The change to the Program name from Environmental Planning to Planning, as well as the changes to the individual Major names is proposed for two reasons:

1. A program name change was suggested in two prior Accreditation Site Visit Team Reports. These reports suggested that the Program was misnamed in relation to what 'environmental planning' means in the Planning profession, and to employers.

2. Since the restructuring into the Five Faculties, and the adoption of the term 'School of Planning and Sustainability,' the program and its majors have needed a simplified and better aligned nomenclature. Changes to the Program and major names will improve alignment and overall will make the program more intelligible to employers and prospective students.

The calendar description changes of the Planning program and its individual majors are intended to be more student-oriented, and more legible to non-planners.

3. **Implications of the changes for other programs, etc., if applicable:**

4. **Reproduction of current Calendar entry for the item to be revised:**

Environmental Planning (BPl)

Tara Lynne Clapp, Associate Professor and Chair
Mark Groulx, Associate Professor
Rylan Graham, Assistant Professor
Theresa Healy, Assistant Professor
Ray Chipeniuk, Adjunct Professor
Daniela Fisher, Adjunct Professor
Richard Krehbiel, Adjunct Professor
Finlay Sinclair, Adjunct Professor

Website: www.unbc.ca/environmental-planning

The degree provides a broad education in environmental planning. The focus is on understanding the relationship between people and the environment, reducing the environmental impact of human activities, and responding and adapting to environmental change.

The study of planning examines public processes that improve the quality of decisions affecting the environment. Responsible planning integrates various private and public interests and identifies viable,

workable options. Planners play a vital role in decision-making processes concerning the future of human settlements, resource management, environmental protection, human health and well-being, economic development, and many other areas. Ultimately, the work of planners becomes part of, or a catalyst to, public policy.

Environmental Planning offers a comprehensive program of courses, such as environmental assessment, sustainable and inclusive design, housing, First Nations planning, land use planning, and sustainable communities. Each course provides a creative and challenging learning environment for students to tackle today's most contentious issues such as sustainability, climate change, biodiversity, environmental stewardship, and urban sprawl. Environmental Planning offers unique perspectives on a rapidly evolving field of study and solutions for an increasingly complex world. Environmental Planning is dedicated to upholding professional standards of practice and is accredited by the Professional Standards Board (PSB) which is recognized by the Canadian Institute of Planners (CIP) and the Planning Institute of British Columbia (PIBC). Accreditation is a system for promoting national standards of education in planning and for recognizing educational institutions for a level of performance, integrity, and quality.

Accreditation benefits students in Environmental Planning in three ways:
- Current students can apply for Student Membership in PIBC.
- Graduates are eligible for Full Membership in PIBC and CIP after years of professional planning experience.
- Employers in the planning field look for students graduating from an accredited planning program, thus significantly improving graduates' job prospects.

Three majors are available to students completing the Bachelor of Planning:
- Northern and Rural Community Planning
- First Nations Planning
- Natural Resources Planning

Planning students complete a set of program requirements totaling 78 credit hours in addition to completing the specialized course requirements for each major.

Note: Some upper-division courses may be taught in alternate years; students should consider this when planning their course sequences.

Program Requirements for all Majors in Planning

Lower-Division General Environmental Planning Requirement

100 Level
ECON 100-3 Microeconomics
ENPL 104-3 Introduction to Planning
ENPL 105-3 Principles and Practices of Planning
FNST 100-3 The Aboriginal Peoples of Canada

One of the following:
ENGL 170-3 Writing and Communication Skills
NRES 100-3 Communications in Natural Resources and Environmental Studies

200 Level
ENPL 206-3 Planning Analysis and Techniques
ENPL 208-4 Land and Indigenous Reconciliation Studio
GEOG 204-3 Introduction to GIS
GEOG 210-3 Introduction to Earth Science
POLS 200-3 Canadian Government and Politics

One of the following:

ECON 205-3 Statistics for Business and the Social Sciences
STAT 240-3 Basic Statistics
STAT 371-3 Probability and Statistics for Scientists and Engineers

Upper-Division General Environmental Planning Requirement

300 Level
ENPL 301-3 Sustainable Communities: Structure and Sociology
ENPL 304-4 Community Engagement and Inclusion Studio
ENPL 305-3 Environmental Impact Assessment
ENPL 318-3 Professional Planning Practice
ENPL 320-4 Land Use and Development Studio
FNST 300-3 Research Methods in First Nations
or GEOG 324-3 Community-Based Research
GEOG 300-3 Intermediate GIS
POLS 380-3 Law and Indigenous People

400 Level
ENPL 401-3 Environmental Law
ENPL 404-3 Housing: From Concept to Construction
ENPL 410-3 Land Use Planning
ENPL 411-3 Planning Theory, Process and Implementation
ENVS 414-3 Environmental and Professional Ethics
GEOG 424-3 Northern Communities
or ORTM 307-3 Land Relations and Communities in Recreation and Tourism

Major Requirement
Students must choose to specialize in one major. All course requirements in the major must be completed.

Major in Northern and Rural Community Planning

The focus of this major is to promote an understanding of the complexity and diversity of environmental problems, to develop an appreciation of community change processes, and to provide planners with knowledge which will improve the quality of the built environment and reduce the impact of human activities on the natural world. The unique planning requirements of smaller communities and rural regions demand a grounding in both physical and social science methods and an understanding of the relationship between northern communities and surrounding rural resource regions. Environmental planning necessitates strategic thought and action combined with knowledge grounded in professional practice. The Northern and Rural Community Planning major combines concepts such as bioregionalism, sustainability, and inclusion within the context of physical land-use planning, social planning, and community engagement.

Northern and Rural Community Planning is the application of environmental planning principles and practices to the often unique social, economic, and ecological issues confronting northern and circumpolar communities in Canada and elsewhere in the northern hemisphere. Successfully addressing these issues requires an appreciation of how and why communities change, an appreciation of the place and function of northern communities and rural regions in the global environment, and a grounding in both physical and social science methods of research and analysis.

Program requirement for all majors in planning: 78 credit hours
Major requirement: 13 credit hours
Major elective requirement: 19 credit hours
General elective requirement: elective credit hours as necessary to ensure the completion of 120 credit hours.

The minimum requirement for a Bachelor of Planning with a major in Northern and Rural Community Planning is 120 credit hours.

Lower-Division Requirements

BIOL 110-3 Introductory Ecology
ENVS 101-3 Introduction to Environmental Citizenship
or GEOG 206-3 Social Geography

A minimum of 9 credit hours from the following:
ANTH 213-3 Peoples and Cultures
ECON 206-3 Methods of Economic Evaluation
GEOG 101-3 Planet Earth
GEOG 200-3 British Columbia: People and Places
GEOG 202-3 Resources, Economies, and Sustainability
GEOG 206-3 Social Geography
INTS 100-3 Introduction to Global Studies
INTS 210-3 Globalizations
MATH 115-3 Precalculus
NREM 110-3 Food, Agriculture, and Society
ORTM 206-3 Recreation and Leisure Programming
POLS 100-3 Contemporary Political Issues
SOCW 201-3 Introduction to Social Welfare

Upper-Division Requirements

ENPL 415-4 Sustainable and Inclusive Design Studio
POLS 350-3 Law and Municipal Government

One of the following:
ENPL 409-4 Indigenous Planning Studio
ENPL 417-4 Local Climate Action Studio
ENPL 497-4 Special Topics Studio

One of the following:
NREM 306-3 Society, Policy and Administration
POLS 316-3 Municipal Government and Politics
POLS 320-3 Canadian Politics and Policy

A minimum of 3 credit hours from the following:
ANTH 405-3 Landscapes, Place and Culture
ANTH 413-3 Environmental Anthropology
ANTH 423-3 Urban Anthropology
ECON 411-3 Cost-Benefit Analysis
ENPL 333-3 Field School in Planning
ENPL 430-6 Undergraduate Thesis
ENPL 431-3 Professional Report
ENPL 440-(2-6) Internship
ENSC 404-3 Waste Management
FNST 303-3 First Nations Religion and Philosophy
GEOG 305-3 Political Ecology: Environmental Knowledge and Decision-Making
GEOG 332-3 Community Development
GEOG 403-3 Indigenous Geographies of Climate Resilience
GEOG 424-3 Northern Communities
HIST 360-3 An Introduction to Environmental History
INTS 304-3 International Development

or GEOG 306-3 Critical Development Geographies
NREM 306-3 Society, Policy and Administration
POLS 316-3 Municipal Government and Politics
POLS 320-3 Canadian Politics and Policy
POLS 351-3 Local Services and Public Policy
POLS 360-3 Local Government Finance
POLS 415-3 Comparative Northern Development
POLS 434-3 Resource Communities in Transition

Students must ensure that all prerequisites are fulfilled prior to registering in any course.

Students are encouraged to use the general electives to take a minor offered in Geography, Political Science, First Nations Studies, or other fields associated with community development.

Major in First Nations Planning

First Nations communities have significant and growing demands for qualified planners. The opportunities for skilled planners increase as many First Nations move to define land claims in Canada, potentially giving First Nations significant responsibilities for land and community planning. However, planning by and with First Nations requires specific skills and abilities in the planners, whether or not they themselves are First Nation.

For most First Nations communities, few distinctions are made between ecological/environmental planning and planning for social and cultural needs which are developed from within, and are grounded in, the ecosystem. First Nations planning must necessarily integrate all of these domains. Many First Nations wish to remain grounded in tradition and seek to move into the future through sound community economic development and skilled land management. Most face significant community development needs, including infrastructure development, housing, and health planning. Students need not only a sound grasp of planning principles, but also an understanding of the protocols, history, social structure, and ecology of Canadian First Nations. Cross-cultural translation skills, community participation techniques, and a solid grounding in ethics are required.

Program requirement for all majors in planning: 78 credit hours
Major requirement: 13 credit hours
Major elective requirement: 19 credit hours
General elective requirement: elective credit hours as necessary to ensure the completion of 120 credit hours.

The minimum requirement for a Bachelor of Planning with a major in First Nations Planning is 120 credit hours.

Lower-Division Requirements

BIOL 110-3 Introductory Ecology
FNST 131-3 A First Nations Language: Level 1

A minimum of 9 credit hours from the following:
ANTH 205-3 Introduction to Archaeology
ANTH 213-3 Peoples and Cultures
ENVS 101-3 Introduction to Environmental Citizenship
ENVS 230-3 Introduction to Environmental Policy
FNST 161-3 A First Nations Culture: Level 1
FNST 200-3 Perspectives in First Nations Studies
FNST 203-3 Introduction to Traditional Ecological Knowledge
HHSC 102-3 Introduction to Health Sciences II: Rural and Aboriginal Issues
MATH 115-3 Precalculus

NREM 110-3 Food, Agriculture, and Society
NREM 210-4 Integrated Resource Management

Upper-Division Requirements

ENPL 409-4 Indigenous Planning Studio
FNST 303-3 First Nations Religion and Philosophy
or FNST 304-3 Indigenous Environmental Philosophy

One of the following:
ENPL 415-4 Sustainable and Inclusive Design Studio
ENPL 417-4 Local Climate Action Studio
ENPL 497-4 Special Topics Studio

A minimum of 6 credit hours from the following:
ANTH 404-3 Comparative Study of Indigenous Peoples of the World
BIOL 350-3 Ethnobotany
ENPL 333-3 Field School in Planning
ENPL 430-6 Undergraduate Thesis
ENPL 431-3 Professional Report
ENPL 440-(2-6) Internship
ENVS 326-3 Public Engagement for Sustainability
FNST 303-3 First Nations Religion and Philosophy
FNST 304-3 Indigenous Environmental Philosophy
FNST 305-3 Seminar in First Nations Studies
FNST 407-3 First Nations Perspectives on Race, Class, Gender and Power
GEOG 403-3 Indigenous Geographies of Climate Resilience
GEOG 420-3 Environmental Justice
HIST 390-3 History of Indigenous People of Canada
NREM 303-3 Aboriginal Perspectives on Land and Resource Management
ORTM 307-3 Land Relations and Communities in Recreation and Tourism
POLS 350-3 Law and Municipal Government
SOCW 455-3 Indigenous Governance and Social Policy
SOCW 457-3 Individual and Community Wellness for Indigenous Peoples

In addition to FNST 131-3 and FNST 303-3 or 304-3, students must select a minimum of three FNST courses (9 credit hours) from the upper- and lower-division lists.

Students must ensure that all prerequisites are fulfilled prior to registering in any courses.

Students are encouraged to use the general electives to take a minor offered in First Nations Studies or other courses associated with aboriginal and First Nations issues.

Major in Natural Resources Planning

The major in Natural Resources Planning is designed to provide students with an understanding of the complexities of including the natural and cultural environment in planning decision-making. The major is intended to address both project-level and large-scale environmental planning issues that occur in developments that have an impact on the natural environment.

The objective of this major is to familiarize students with planning and decision-making in a variety of sectors that include provincial land use planning, environmental assessment, watershed planning, and integrated resource and environmental management. These areas of planning are characterized by complex and intricate questions about how to use our natural resources and who should decide. The multidimensional aspects of environmental management include natural and cultural complexity, different desired futures, value differences, assessment and monitoring tools, and integration methods. This major emphasizes an understanding of planning in both the substantive realm (natural and social sciences) and

the procedural realm (the process of including people in the decision-making process).

Students enrolled in the Natural Resources Planning major must successfully complete 120 credit hours. Students interested in working with biological and environmental aspects of natural resource planning should take BIOL 103/ BIOL 123 and BIOL 104/124 as elective courses and BIOL 201 as the ecology elective to satisfy prerequisites for many of the other biological and environmental courses. Those students interested in the environmental sciences should take first- and second-year Chemistry courses as part of the general electives. Students interested in integrated natural resource planning should take BIOL 104/124 and a mix of courses in areas of Political Science, First Nations Studies (FNST or ENPL), Environmental Science (ENSC), Geography, Outdoor Recreation and Tourism Management, International Studies, and Economics.

Program requirement for all majors in planning: 78 credit hours
Major requirement: 18 credit hours
Major elective requirement: 16 credit hours
General elective requirement: elective credit hours as necessary to ensure the completion of 120 credit hours.

The minimum requirement for a Bachelor of Planning with a major in Natural Resources Planning is 120 credit hours.

Lower-Division Requirements

BIOL 110-3 Introductory Ecology
or BIOL 201-3 Ecology
GEOG 205-3 Cartography and Geomatics
NREM 210-4 Integrated Resource Management

A minimum of 9 credit hours from the following:
- BIOL 103-3 Introductory Biology I
  and BIOL 123-1 Introductory Biology I Laboratory
- BIOL 104-3 Introductory Biology II
  and BIOL 124-1 Introductory Biology II Laboratory
- CHEM 100-3 General Chemistry I
  and CHEM 120-1 General Chemistry Lab I
- ENSC 201-3 Weather and Climate
- ENSC 202-3 Introduction to Aquatic Systems
- FNST 100-3 The Aboriginal Peoples of Canada
- FNST 203-3 Introduction to Traditional Ecological Knowledge
- FSTY 205-3 Introduction to Soil Science
- INTS 100-3 Introduction to Global Studies
- MATH 115-3 Precalculus
- NREM 101-3 Introduction to Natural Resources Management and Conservation
- NREM 110-3 Food, Agriculture, and Society
- NREM 203-3 Resource Inventories and Measurements
- NREM 204-3 Introduction to Wildlife and Fisheries
- ORTM 200-3 Sustainable Outdoor Recreation and Tourism

Upper-Division Requirements

ENPL 409-4 Indigenous Planning Studio
NREM 400-4 Natural Resources Planning

One of the following:
- ENPL 415-4 Sustainable and Inclusive Design Studio
- ENPL 417-4 Local Climate Action Studio

ENPL 497-4 Special Topics Studio

A minimum of 3 credit hours from the following:
BIOL 302-3 Limnology
BIOL 411-3 Conservation Biology
ECON 305-3 Environmental Economics and Environmental Policy
ECON 331-3 Forestry Economics
ECON 411-3 Cost-Benefit Analysis
ENPL 333-3 Field School in Planning
ENPL 430-6 Undergraduate Thesis
ENPL 431-3 Professional Report
ENPL 440-(2-6) Internship
ENSC 308-3 Northern Contaminated Environments
ENSC 312-3 Biometeorology
ENSC 404-3 Waste Management
ENSC 412-3 Air Pollution
ENSC 425-3 Climate Change and Global Warming
ENVS 326-3 Public Engagement for Sustainability
FNST 451-3 Traditional Use Studies
GEOG 401-3 Tenure, Conflict, and Resource Geography
NREM 303-3 Aboriginal Perspectives on Land and Resource Management
NREM 413-3 Agroforestry
ORTM 300-3 Recreation and Tourism Impacts
ORTM 305-3 Protected Area Planning and Management
POLS 344-3 Society, Policy and Administration of Natural Resources or
NREM 306-3 Society, Policy and Administration
POLS 350-3 Law and Municipal Government

Students must ensure that all prerequisites are fulfilled prior to registering in any course.

Students are encouraged to use the general electives to take a minor offered in areas of Geography, Political Science, First Nations Studies, or other fields associated with community development.

Minor in Planning

The minor in Planning is designed to provide students with an opportunity to acquire a basic knowledge of planning theory and methods. The minor consists of 12 required credit hours (four designated courses) and 6 credit hours of upper-division elective courses listed below. A maximum of 6 credit hours (two courses) used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in Planning.

Requirements
ENPL 104-3 Introduction to Planning
ENPL 105-3 Principles and Practices of Planning
ENPL 301-3 Sustainable Communities: Structure and Sociology
ENPL 411-3 Planning Theory, Process and Implementation

Electives
Two of the following:
ENPL 305-3 Environmental Impact Assessment
ENPL 318-3 Professional Planning Practice
ENPL 404-3 Housing: From Concept to Construction
ENPL 410-3 Land Use Planning
ENPL 415-4 Sustainable and Inclusive Design Studio

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":

~~Environmental~~ Planning (BPI)

Tara Lynne Clapp, Associate Professor and Chair
Mark Groulx, Associate Professor
Rylan Graham, Assistant Professor
Theresa Healy, Assistant Professor
Ray Chipeniuk, Adjunct Professor
Daniela Fisher, Adjunct Professor
Richard Krehbiel, Adjunct Professor
Finlay Sinclair, Adjunct Professor

Website: www.unbc.ca/~~environmental-~~planning

~~The degree provides a broad education in environmental planning. The focus is on understanding the relationship between people and the environment, reducing the environmental impact of human activities, and responding and adapting to environmental change.~~

~~The study of planning examines public processes that improve the quality of decisions affecting the environment. Responsible planning integrates various private and public interests and identifies viable, workable options. Planners play a vital role in decision-making processes concerning the future of human settlements, resource management, environmental protection, human health and well-being, economic development, and many other areas. Ultimately, the work of planners becomes part of, or a catalyst to, public policy.~~

~~Environmental Planning offers a comprehensive program of courses, such as environmental assessment, sustainable and inclusive design, housing, First Nations planning, land use planning, and sustainable communities. Each course provides a creative and challenging learning environment for students to tackle today's most contentious issues such as sustainability, climate change, biodiversity, environmental stewardship, and urban sprawl. Environmental Planning offers unique perspectives on a rapidly evolving field of study and solutions for an increasingly complex world. Environmental Planning is dedicated to upholding professional standards of practice and is accredited by the Professional Standards Board (PSB) which is recognized by the Canadian Institute of Planners (CIP) and the Planning Institute of British Columbia (PIBC). Accreditation is a system for promoting national standards of education in planning and for recognizing educational institutions for a level of performance, integrity, and quality.~~

~~Accreditation benefits students in Environmental Planning in three ways:~~
~~• Current students can apply for Student Membership in PIBC.~~
~~• Graduates are eligible for Full Membership in PIBC and CIP after years of professional planning experience.~~
~~• Employers in the planning field look for students graduating from an accredited planning program, thus significantly improving graduates' job prospects.~~

~~Three majors are available to students completing the Bachelor of Planning:~~
~~• Northern and Rural Community Planning~~
~~• First Nations Planning~~
~~• Natural Resources Planning~~

The Bachelor of Planning prepares graduates to shape the future of communities and regions in northern British Columbia and beyond. Graduates lead fulfilling careers working with local governments, First Nations, nonprofits, government agencies, and private sector consulting firms. The Bachelor of Planning prepares graduates for these careers by enabling students to develop knowledge, skills, and perspectives that professionals need to thrive in an increasingly dynamic world.

Planners are a catalyst to public policy and community change processes and must be keenly attuned to

relationships between people and the places they live. Students in the Bachelor of Planning learn about the cultural, ecological, economic, and ethical dimensions of these relationships. Students also experience these relationships when working with community partners in a progression of studio courses. In studio courses, students put theories into action by working on applied projects that address real-world problems. Many classes are taught by professionals, including active practitioners.

By navigating a creative and challenging learning environment, students develop and hone capacities for adaptability, collaboration, communication, critical thinking, policy-informed decision making, and technical analysis. Paired with foundational knowledge in community engagement, human settlements, Indigenous ways of knowing, and land use planning, these skills prepare graduates to promote necessary transformation. Key areas of focus include climate action, reconciliation, sustainable urban development, community resilience, and human-ecosystem health.

Students choose one of three majors: Community Planning; First Nations Planning; or Environmental Planning. Each major develops skills and knowledge necessary to work in specific areas of practice. The Bachelor of Planning degree requires 120 credit hours, which includes two core studio courses and three additional studios that help students specialize in their chosen major.

The Bachelor of Planning is an accredited professional program. By pursuing a degree accredited by the Professional Standards Board, students:

- gain access to valuable networking opportunities through a free student membership in the Planning Institute of British Columbia
- accelerate their career by getting fast-tracked on the path to becoming a Registered Professional Planner
- enhance their job prospects by attaining an accredited degree that is preferred among prospective employers

Planning students complete a set of program requirements totaling 78 credit hours in addition to completing the specialized course requirements for each major.

Note: Some upper-division courses may be taught in alternate years; students should consider this when planning their course sequences.

Program Requirements for all Majors in Planning

Lower-Division General ~~Environmental~~ Planning Requirement

100 Level
~~ECON 100-3 Microeconomics~~
ENPL 104-3 ~~Introduction to Planning~~ Planning for Transformation
ENPL 105-3 ~~Principles and Practices of Planning~~ Dynamics of Community Planning
FNST 100-3 The Aboriginal Peoples of Canada

One of the following:
ECON 100-3 Microeconomics
GEOG 210-3 Introduction to Earth Science

One of the following:
ENGL 170-3 Writing and Communication Skills
NRES 100-3 Communications in Natural Resources and Environmental Studies

200 Level
ENPL 201-3 Land Policy in British Columbia
ENPL 206-3 ~~Planning Analysis and Techniques~~ How to Shape the Future
ENPL 208-4 Land and Indigenous Reconciliation Studio
GEOG 204-3 Introduction to GIS

~~GEOG 210-3 Introduction to Earth Science~~
POLS 200-3 Canadian Government and Politics

One of the following:
ECON 205-3 Statistics for Business and the Social Sciences
STAT 240-3 Basic Statistics
STAT 371-3 Probability and Statistics for Scientists and Engineers

Upper-Division General ~~Environmental~~ Planning Requirement

300 Level
ENPL 301-3 Sustainable Communities~~: Structure and Sociology~~
ENPL 304-4 Community Engagement and Inclusion Studio
ENPL 305-3 Environmental Impact Assessment
ENPL 318-3 Professional Planning Practice
ENPL 320-4 Land Use and Development Studio
FNST 300-3 Research Methods in First Nations
or GEOG 324-3 Community-Based Research
GEOG 300-3 Intermediate GIS
POLS 380-3 Law and Indigenous People

400 Level
ENPL 401-3 Environmental Law
ENPL 404-3 Housing: From Concept to Construction
ENPL 410-3 Applied Land Use Planning in British Columbia
ENPL 411-3 ~~Planning Theory, Process and Implementation~~ Philosophy of Community Change
ENVS 414-3 Environmental and Professional Ethics
GEOG 424-3 Northern Communities
or ORTM 307-3 Land Relations and Communities in Recreation and Tourism

Major Requirement
Students must choose to specialize in one major. All course requirements in the major must be completed.

Major in ~~Northern and Rural~~ Community Planning

~~The focus of this major is to promote an understanding of the complexity and diversity of environmental problems, to develop an appreciation of community change processes, and to provide planners with knowledge which will improve the quality of the built environment and reduce the impact of human activities on the natural world. The unique planning requirements of smaller communities and rural regions demand a grounding in both physical and social science methods and an understanding of the relationship between northern communities and surrounding rural resource regions. Environmental planning necessitates strategic thought and action combined with knowledge grounded in professional practice. The Northern and Rural Community Planning major combines concepts such as bioregionalism, sustainability, and inclusion within the context of physical land-use planning, social planning, and community engagement.~~

~~Northern and Rural Community Planning is the application of environmental planning principles and practices to the often unique social, economic, and ecological issues confronting northern and circumpolar communities in Canada and elsewhere in the northern hemisphere. Successfully addressing these issues requires an appreciation of how and why communities change, an appreciation of the place and function of northern communities and rural regions in the global environment, and a grounding in both physical and social science methods of research and analysis.~~

With a major in Community Planning, students are prepared to become leaders in community change. Students in this major learn the tools of community engagement, collaboration, and policy, along with

their application to the materials of built form, land use, and community dynamics. Students develop leadership in an active and experiential learning culture. Through practice, students form a strategic perspective that combines knowledge and action necessary to advance the needs of resilient, prosperous, and healthy northern communities.

Situated within the living laboratory of the provincial north, the realities of planning in northern cities, rural and remote regions, and small communities deeply inform the themes in this major. Facing the local and regional dimensions of global challenges like climate change, social inequality, urban sprawl, and ecosystem decline, students learn to promote sustainable development and economic reconciliation. Through their learning, students identify their role in the transformations that will define the next century.

Program requirement for all planning majors: 78 credit hours
Major requirement: 13 credit hours
Major elective requirement: 19 credit hours
General elective requirement: elective credit hours as necessary to ensure the completion of 120 credit hours.

The minimum requirement for a Bachelor of Planning with a major in ~~Northern and Rural~~ Community Planning is 120 credit hours.

Lower-Division Requirements

BIOL 110-3 Introductory Ecology
ENVS 101-3 Introduction to Environmental Citizenship
or GEOG 206-3 Social Geography

A minimum of 9 credit hours from the following:
ANTH 213-3 Peoples and Cultures
ECON 206-3 Methods of Economic Evaluation
GEOG 101-3 Planet Earth
GEOG 200-3 British Columbia: People and Places
GEOG 202-3 Resources, Economies, and Sustainability
GEOG 206-3 Social Geography
INTS 100-3 Introduction to Global Studies
INTS 210-3 Globalizations
MATH 115-3 Precalculus
NREM 110-3 Food, Agriculture, and Society
ORTM 206-3 Recreation and Leisure Programming
POLS 100-3 Contemporary Political Issues
SOCW 201-3 Introduction to Social Welfare

Upper-Division Requirements

ENPL 415-4 Sustainable and Inclusive Design Studio
POLS 350-3 Law and Municipal Government

One of the following:
ENPL 409-4 Indigenous Planning Studio
ENPL 417-4 Local Climate Action Studio
ENPL 497-4 Special Topics Studio

One of the following:
NREM 306-3 Society, Policy and Administration
POLS 316-3 Municipal Government and Politics
POLS 320-3 Canadian Politics and Policy

A minimum of 3 credit hours from the following:

ANTH 405-3 Landscapes, Place and Culture
ANTH 413-3 Environmental Anthropology
ANTH 423-3 Urban Anthropology
ECON 411-3 Cost-Benefit Analysis
ENPL 333-3 Field School in Planning
ENPL 430-6 Undergraduate Thesis
ENPL 431-3 Professional Report
ENPL 440-(2-6) Internship
ENSC 404-3 Waste Management
FNST 303-3 First Nations Religion and Philosophy
GEOG 305-3 Political Ecology: Environmental Knowledge and Decision-Making
GEOG 332-3 Community Development
GEOG 403-3 Indigenous Geographies of Climate Resilience
GEOG 424-3 Northern Communities
HIST 360-3 An Introduction to Environmental History
INTS 304-3 International Development
or GEOG 306-3 Critical Development Geographies
NREM 306-3 Society, Policy and Administration
POLS 316-3 Municipal Government and Politics
POLS 320-3 Canadian Politics and Policy
POLS 351-3 Local Services and Public Policy
POLS 360-3 Local Government Finance
POLS 415-3 Comparative Northern Development
POLS 434-3 Resource Communities in Transition

Students must ensure that all prerequisites are fulfilled prior to registering in any course.

Students are encouraged to use the general electives to take a minor offered in Geography, Political Science, First Nations Studies, or other fields associated with community development.

Major in First Nations Planning

First Nations communities have significant and growing demands for qualified planners. The opportunities for skilled planners increase as many First Nations move to define land claims in Canada, potentially giving First Nations significant responsibilities for land and community planning. However, planning by and with First Nations requires specific skills and abilities in the planners, whether or not they themselves are First Nation.

For most First Nations communities, few distinctions are made between ecological/environmental planning and planning for social and cultural needs which are developed from within, and are grounded in, the ecosystem. First Nations planning must necessarily integrate all of these domains. Many First Nations wish to remain grounded in tradition and seek to move into the future through sound community economic development and skilled land management. Most face significant community development needs, including infrastructure development, housing, and health planning. Students need not only a sound grasp of planning principles, but also an understanding of the protocols, history, social structure, and ecology of Canadian First Nations. Cross-cultural translation skills, community participation techniques, and a solid grounding in ethics are required.

Program requirement for all planning majors:	78 credit hours
Major requirement:	13 credit hours
Major elective requirement:	19 credit hours

General elective requirement: elective credit hours as necessary to ensure the completion of 120 credit hours.

The minimum requirement for a Bachelor of Planning with a major in First Nations Planning is 120 credit

hours.

Lower-Division Requirements

BIOL 110-3 Introductory Ecology
FNST 131-3 A First Nations Language: Level 1

A minimum of 9 credit hours from the following:
- ANTH 205-3 Introduction to Archaeology
- ANTH 213-3 Peoples and Cultures
- ENVS 101-3 Introduction to Environmental Citizenship
- ENVS 230-3 Introduction to Environmental Policy
- FNST 161-3 A First Nations Culture: Level 1
- FNST 200-3 Perspectives in First Nations Studies
- FNST 203-3 Introduction to Traditional Ecological Knowledge
- HHSC 102-3 Introduction to Health Sciences II: Rural and Aboriginal Issues
- MATH 115-3 Precalculus
- NREM 110-3 Food, Agriculture, and Society
- NREM 210-4 Integrated Resource Management

Upper-Division Requirements

ENPL 409-4 Indigenous Planning Studio
FNST 303-3 First Nations Religion and Philosophy
or FNST 304-3 Indigenous Environmental Philosophy

One of the following:
- ENPL 415-4 Sustainable and Inclusive Design Studio
- ENPL 417-4 Local Climate Action Studio
- ENPL 497-4 Special Topics Studio

A minimum of 6 credit hours from the following:
- ANTH 404-3 Comparative Study of Indigenous Peoples of the World
- BIOL 350-3 Ethnobotany
- ENPL 333-3 Field School in Planning
- ENPL 430-6 Undergraduate Thesis
- ENPL 431-3 Professional Report
- ENPL 440-(2-6) Internship
- ENVS 326-3 Public Engagement for Sustainability
- FNST 303-3 First Nations Religion and Philosophy
- FNST 304-3 Indigenous Environmental Philosophy
- FNST 305-3 Seminar in First Nations Studies
- FNST 407-3 First Nations Perspectives on Race, Class, Gender and Power
- GEOG 403-3 Indigenous Geographies of Climate Resilience
- GEOG 420-3 Environmental Justice
- HIST 390-3 History of Indigenous People of Canada
- NREM 303-3 Aboriginal Perspectives on Land and Resource Management
- ORTM 307-3 Land Relations and Communities in Recreation and Tourism
- POLS 350-3 Law and Municipal Government
- SOCW 455-3 Indigenous Governance and Social Policy
- SOCW 457-3 Individual and Community Wellness for Indigenous Peoples

In addition to FNST 131-3 and FNST 303-3 or 304-3, students must select a minimum of three FNST courses (9 credit hours) from the upper- and lower-division lists.

Students must ensure that all prerequisites are fulfilled prior to registering in any courses.

Students are encouraged to use the general electives to take a minor offered in First Nations Studies or other courses associated with aboriginal and First Nations issues.

Major in ~~Natural Resources~~ Environmental Planning

~~The major in Natural Resources Planning is designed to provide students with an understanding of the complexities of including the natural and cultural environment in planning decision-making. The major is intended to address both project-level and large-scale environmental planning issues that occur in developments that have an impact on the natural environment.~~

~~The objective of this major is to familiarize students with planning and decision-making in a variety of sectors that include provincial land use planning, environmental assessment, watershed planning, and integrated resource and environmental management. These areas of planning are characterized by complex and intricate questions about how to use our natural resources and who should decide. The multidimensional aspects of environmental management include natural and cultural complexity, different desired futures, value differences, assessment and monitoring tools, and integration methods. This major emphasizes an understanding of planning in both the substantive realm (natural and social sciences) and the procedural realm (the process of including people in the decision-making process).~~

~~Students enrolled in the Natural Resources Planning major must successfully complete 120 credit hours. Students interested in working with biological and environmental aspects of natural resource planning should take BIOL 103/ BIOL 123 and BIOL 104/124 as elective courses and BIOL 201 as the ecology elective to satisfy prerequisites for many of the other biological and environmental courses. Those students interested in the environmental sciences should take first- and second-year Chemistry courses as part of the general electives. Students interested in integrated natural resource planning should take BIOL 104/124 and a mix of courses in areas of Political Science, First Nations Studies (FNST or ENPL), Environmental Science (ENSC), Geography, Outdoor Recreation and Tourism Management, International Studies, and Economics.~~

Skilled environmental planners have a sound grounding in environmental science and know how to operate within and utilize provincial land use policy. As environmental planning work increasingly interfaces with First Nations planning, they also require a deep appreciation of the complex interactions between natural, cultural, and economic spheres of planning. Drawing from courses across diverse disciplines, students in the environmental planning major learn how multiple interacting systems come together to produce social and environmental outcomes.

As a globally-relevant resource region, northern British Columbia is the ideal place for students to develop deep competency with planning and decision-making in a variety of sectors. The dynamics of the region expose students to real-world test cases in conservation, environmental assessment, Indigenous rights and title, integrated resource and environmental management, provincial land use planning, and watershed planning. Students in the major learn to operate within project-level and large-scale environmental planning contexts to ensure regional development is ecologically sustainable.

Program requirement for all planning majors: 78 credit hours
Major requirement: ~~18~~ 14 credit hours
Major elective requirement: 16 credit hours
General elective requirement: elective credit hours as necessary to ensure the completion of 120 credit hours.

The minimum requirement for a Bachelor of Planning with a major in ~~Natural Resources~~ Environmental Planning is 120 credit hours.

Lower-Division Requirements

BIOL 110-3 Introductory Ecology

or BIOL 201-3 Ecology
GEOG 205-3 Cartography and Geomatics
~~NREM 210-4 Integrated Resource Management~~

A minimum of 9 credit hours from the following:
BIOL 103-3 Introductory Biology I
and BIOL 123-1 Introductory Biology I Laboratory
BIOL 104-3 Introductory Biology II
and BIOL 124-1 Introductory Biology II Laboratory
CHEM 100-3 General Chemistry I
and CHEM 120-1 General Chemistry Lab I
ENSC 201-3 Weather and Climate
ENSC 202-3 Introduction to Aquatic Systems
FNST 100-3 The Aboriginal Peoples of Canada
FNST 203-3 Introduction to Traditional Ecological Knowledge
FSTY 205-3 Introduction to Soil Science
INTS 100-3 Introduction to Global Studies
MATH 115-3 Precalculus
NREM 101-3 Introduction to Natural Resources Management and Conservation
NREM 110-3 Food, Agriculture, and Society
NREM 203-3 Resource Inventories and Measurements
NREM 204-3 Introduction to Wildlife and Fisheries
ORTM 200-3 Sustainable Outdoor Recreation and Tourism

Upper-Division Requirements

ENPL 409-4 Indigenous Planning Studio
NREM 400-4 Natural Resources Planning

One of the following:
ENPL 415-4 Sustainable and Inclusive Design Studio
ENPL 417-4 Local Climate Action Studio
ENPL 497-4 Special Topics Studio

A minimum of 3 credit hours from the following:
BIOL 302-3 Limnology
BIOL 411-3 Conservation Biology
ECON 305-3 Environmental Economics and Environmental Policy
ECON 331-3 Forestry Economics
ECON 411-3 Cost-Benefit Analysis
ENPL 333-3 Field School in Planning
ENPL 430-6 Undergraduate Thesis
ENPL 431-3 Professional Report
ENPL 440-(2-6) Internship
ENSC 308-3 Northern Contaminated Environments
ENSC 312-3 Biometeorology
ENSC 404-3 Waste Management
ENSC 412-3 Air Pollution
ENSC 425-3 Climate Change and Global Warming
ENVS 326-3 Public Engagement for Sustainability
FNST 451-3 Traditional Use Studies
GEOG 401-3 Tenure, Conflict, and Resource Geography
NREM 303-3 Aboriginal Perspectives on Land and Resource Management
NREM 306-3 Society, Policy and Administration
NREM 413-3 Agroforestry
ORTM 300-3 Recreation and Tourism Impacts

ORTM 305-3 Protected Area Planning and Management
POLS 344-3 Society, Policy and Administration of Natural Resources or
POLS 350-3 Law and Municipal Government

Students must ensure that all prerequisites are fulfilled prior to registering in any course.

Students are encouraged to use the general electives to take a minor offered in areas of Geography, Political Science, First Nations Studies, or other fields associated with community development.

Minor in Planning

The minor in Planning is designed to provide students with an opportunity to acquire a basic knowledge of planning theory and methods. The minor consists of 12 required credit hours (four designated courses) and 6 credit hours of upper-division elective courses listed below. A maximum of 6 credit hours (two courses) used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in Planning.

Requirements

ENPL 104-3 Introduction to Planning
ENPL 105-3 Principles and Practices of Planning
ENPL 301-3 Sustainable Communities: Structure and Sociology
ENPL 411-3 Planning Theory, Process and Implementation

Electives

Two of the following:
ENPL 305-3 Environmental Impact Assessment
ENPL 318-3 Professional Planning Practice
ENPL 404-3 Housing: From Concept to Construction
ENPL 410-3 Land Use Planning
ENPL 415-4 Sustainable and Inclusive Design Studio

6. Authorization:

SCCC Reviewed: April 15, 2025

Program / Academic / Administrative Unit: 2025 02 27 School of Planning and Sustainability

Faculty(ies): Faculty of Environment

Faculty Council Motion Number(s): 6.21 FEFC 2025050823

Faculty Council Approval Date(s): May 8, 2025

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: 0 pages

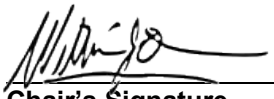
INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.24

Moved by: Todd Whitcombe **Seconded by:** Ehsan Taghizadehghoozhdi

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 

Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.27

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That changes to the course title and description of ENPL 104-3 Introduction to Planning on page 239 of the 2024/2025 undergraduate calendar, be approved as proposed.

1. **Effective Date:** September 2025

2. **Rationale for the proposed revisions:** Changes to this course title and description are intended to communicate to students what is taught in the course to students without experience in Planning.

3. **Implications of the changes for other programs, etc., if applicable:** ENPL 104 is used in 8 programs across UNBC, and is required in four of those, elective in the other four. All programs using the course were consulted, and the changes were acceptable to all.

4. **Reproduction of current Calendar entry for the item to be revised:**

   ENPL 104-3 Introduction to Planning This course introduces students to the practice of planning and an overview of the history, techniques and applications in planning. The course emphasizes the role of the public, politicians, and planners in the field of planning.
   Prerequisite(s): None

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   ENPL 104-3 ~~Introduction to Planning~~ Planning for Transformation ~~This course introduces students to the practice of planning and an overview of the history, techniques and applications in planning. The course emphasizes the role of the public, politicians, and planners in the field of planning.~~ Planning offers the potential for transformation. Through diverse historical lenses, this course examines the successes and failures of planning. Students learn about the distinct cultural, legislative, and geographic contexts of planning in Indigenous and Western communities. The foundational course prepares students to work at local and regional scales to promote positive change in a world faced by global climate catastrophes, social inequality, and threats to ecosystem and human health.
   Prerequisite(s): None

6. **Authorization:**

   SCCC Reviewed: April 15, 2025

   Program / Academic / Administrative Unit: 2025 02 27 School of Planning and Sustainability

   Faculty(ies): Faculty of Environment

   Faculty Council Motion Number(s): 6.13 FEFC 2025050815

   Faculty Council Approval Date(s): May 8, 2025

   Senate Committee on Indigenous Initiatives Motion Number: N/A

   Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: 0 pages

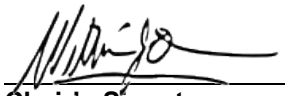
INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.25

Moved by: Todd Whitcombe **Seconded by:** Ehsan Taghizadehghoozhdi

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 

Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.28**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That changes to the course title, description and prerequisites of ENPL 105-3 Principles and Practices of Planning on page 239 of the 2024/2025 undergraduate calendar, be approved as proposed.

1. **Effective Date:** September 2025

2. **Rationale for the proposed revisions:** Changes to this course title and description make minor adjustments to how the course is communicated to students. The prerequisite is not required for students to be successful in the course.

3. **Implications of the changes for other programs, etc., if applicable:** ENPL 105 is used in 5 programs across UNBC, and is required in one of those, elective in the other four. All programs using the course were consulted, and the changes were acceptable to all.

4. **Reproduction of current Calendar entry for the item to be revised:**

ENPL 105-3 Principles and Practices of Planning This course introduces land use planning structures, processes, and dynamics. Through experiential learning, students situate land use planning principles and practices in the context of the external forces that affect planning and development outcomes: economic, environmental, social, and political.
Prerequisite(s): ENPL 104-3 or permission of the instructor
Preclusion(s): ENPL 204-3

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

ENPL 105-3 ~~Principles and Practices of Planning~~ Dynamics of Community Planning
~~This course introduces land use planning structures, processes, and dynamics. Through experiential learning, students situate land use planning principles and practices in the context of the external forces that affect planning and development outcomes: economic, environmental, social, and political.~~
This course introduces key concepts in community planning within the Canadian context. The course emphasizes the dynamic interplay of external forces that shape communities, including economic, environmental, political, and social factors. Students gain a comprehensive understanding of how these forces influence policy development and implementation. Through experiential learning, students apply their knowledge to develop a community plan that is sustainable, equitable, and innovative.
Prerequisite(s): ~~ENPL 104-3 or permission of the instructor~~
Preclusion(s): ENPL 204-3

6. **Authorization:**

SCCC Reviewed: April 15, 2025

Program / Academic / Administrative Unit: 2025 02 27 School of Planning and Sustainability

Faculty(ies): Faculty of Environment

Faculty Council Motion Number(s): 6.14 FEFC 2025050816

Faculty Council Approval Date(s): May 8, 2025

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

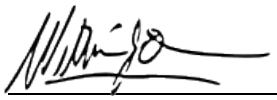
Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.26

Moved by: Todd Whitcombe **Seconded by:** Ehsan Taghizadehghoozhdi

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 **Date**



Chair's Signature

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.29

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That changes to the course title, description and prerequisite to ENPL 206-3 Planning Analysis and Technique on page 239 of the 2024/2025 undergraduate calendar, be approved as proposed.

1. **Effective Date:** September 2025

2. **Rationale for the proposed revisions:** Changes to this course title and description are intended to communicate to students what is taught in the course and clarify its relevance to a broader set of students. The prerequisite is not required for students to be successful in the course.

3. **Implications of the changes for other programs, etc., if applicable:** ENPL 206 is used as an elective in two other programs, and both of these programs were supportive of the changes.

4. **Reproduction of current Calendar entry for the item to be revised:**

   ENPL 206-3 Planning Analysis and Techniques This course provides background knowledge and skills needed for futures studies. The course covers qualitative and quantitative techniques used in the field of planning. Specific areas covered include: scenario and future studies; forecasting, backcasting and other prediction techniques; and policy analysis.
   Prerequisite(s): ECON 205-3 or permission of the instructor

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   ~~**ENPL 206-3 Planning Analysis and Techniques** This course provides background knowledge and skills needed for futures studies. The course covers qualitative and quantitative techniques used in the field of planning. Specific areas covered include: scenario and future studies; forecasting, backcasting and other prediction techniques; and policy analysis.~~
   ~~*Prerequisite(s): ECON 205-3 or permission of the instructor*~~

   ENPL 206-3 How to Shape the Future This course provides background knowledge and skills needed to craft the future. The course covers qualitative and quantitative techniques used in the fields of design, planning, public health, and resource management. Through this hands-on and applied course, students build a toolkit required to help communities anticipate, envision, and shape the future. Specific topics include criteria and indicators, population projections, scenario planning, site planning, and 3D design and visualization.

6. **Authorization:**

   SCCC Reviewed: April 15, 2025

   Program / Academic / Administrative Unit: 2025 02 27 School of Planning and Sustainability

   Faculty(ies): Faculty of Environment

   Faculty Council Motion Number(s): 6.15 FEFC 2025050817

   Faculty Council Approval Date(s): May 8, 2025

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: 0 pages

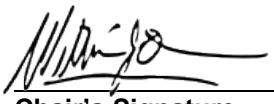
INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.27

Moved by: Todd Whitcombe **Seconded by:** Ehsan Taghizadehghoozhdi

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 **Date**  **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.30**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That changes to the course title and description of ENPL 301-3 Sustainable Communities: Structure and Sociology on page 239 of the 2024/2025 undergraduate calendar, be approved as proposed.

1. **Effective Date:** September 2025

2. **Rationale for the proposed revisions:** Changes to this course title and description are intended to improve the communication of what is taught in this course to prospective students.

3. **Implications of the changes for other programs, etc., if applicable:** ENPL 301 is used in 7 programs across UNBC, and is a 'short-list' choice or requirement in two of those, elective in the other five. All programs using the course were consulted, and the changes were acceptable to all.

4. **Reproduction of current Calendar entry for the item to be revised:**

   ENPL 301-3 Sustainable Communities: Structure and Sociology This course focuses on the social dimension of planning, including the organization, function, development, and decline of human settlements. Students learn about the sociology of community and the relations between social interaction and physical structures. Topics include social impact assessments, indicators of sustainable communities, and current planning programs (e.g., healthy communities, new urbanism, and Smart Growth).
   Prerequisite(s): None

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   ENPL 301-3 Sustainable Communities~~: Structure and Sociology~~ ~~This course focuses on the social dimension of planning, including the organization, function, development, and decline of human settlements. Students learn about the sociology of community and the relations between social interaction and physical structures. Topics include social impact assessments, indicators of sustainable communities, and current planning programs (e.g., healthy communities, new urbanism, and Smart Growth).~~
   This course explores the concept of sustainability within built and natural environments, focusing on the interplay between planning and sustainable development. Students develop a comprehensive, systems-based understanding of sustainability, examining how economic, environmental, and social dimensions intersect and influence each other. This course covers the use of indicators to measure and evaluate the effectiveness of planning initiatives, equipping students with tools to assess progress towards sustainable planning outcomes.
   Prerequisite(s): None

6. **Authorization:**

   SCCC Reviewed: April 15, 2025

   Program / Academic / Administrative Unit: 2025 02 27 School of Planning and Sustainability

   Faculty(ies): Faculty of Environment

   Faculty Council Motion Number(s): 6/16 FEFC 2025050818

Faculty Council Approval Date(s): May 8, 2025

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: 0 pages

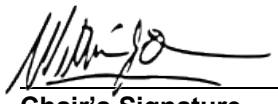
INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.28

Moved by: Todd Whitcombe **Seconded by:** Ehsan Taghizadehghoozhdi

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 

Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.31**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That changes to the course name, number and prerequisite to ENPL 410-3 Land Use Planning on page 240 of the 2024/2025 undergraduate calendar, be approved as proposed.

1. **Effective Date:** September 2025

2. **Rationale for the proposed revisions:** Changes to this course title and description are intended to communicate to students what is taught in the course and clarify its relevance to a broader set of students. The prerequisite update will ensure incoming students have the knowledge and skills required to be successful in the course.

3. **Implications of the changes for other programs, etc., if applicable:** ENPL 410 is used as an elective in one other program. This program was consulted and had no objections to the changes.

4. **Reproduction of current Calendar entry for the item to be revised:**

   ENPL 410-3 Land Use Planning An evaluation of land use planning at the federal, provincial, and municipal levels. The course will familiarize students with theories of property rights and their applications to land use planning and tenure systems.
   Prerequisite(s): 60 credit hours and ENPL 105-3 or permission of the instructor
   Preclusion(s): ENPL 605-3

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   ~~**ENPL 410-3 Land Use Planning** An evaluation of land use planning at the federal, provincial, and municipal levels. The course will familiarize students with theories of property rights and their applications to land use planning and tenure systems.~~
   ENPL 410-3 Applied Land Use Planning in British Columbia In this course, students apply knowledge of land use planning to case studies grounded in the laws and landscapes of British Columbia. Case studies cover a range of professional planning contexts, including urban, rural, and regional areas; agricultural areas; First Nation reserves; protected areas; and joint land use initiatives between the province and Indigenous governing bodies.
   Prerequisite(s): ~~60~~ 75 credit hours and ENPL 105-3 or permission of the instructor
   Preclusion(s): ENPL 605-3

6. **Authorization:**

   Program / Academic / Administrative Unit: 2025 02 27 School of Planning and Sustainability

   SCCC Reviewed: April 15, 2025

   Faculty(ies): Faculty of Environment

   Faculty Council Motion Number(s): 6.17 FEFC 2025050819

   Faculty Council Approval Date(s): May 8, 2025

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: 0 pages

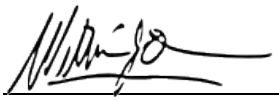
INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.29

Moved by: Todd Whitcombe **Seconded by:** Ehsan Taghizadehghoozhdi

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 

Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.32**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That changes to the course title and description and prerequisite to ENPL 411-3 Planning Theory, Process and Implementation on page 240 of the 2024/2025 undergraduate calendar, be approved as proposed.

1. **Effective Date:** September 2025

2. **Rationale for the proposed revisions:** Changes to this course title and description are intended to communicate to students what is taught in the course and clarify its relevance to a broader set of students.

3. **Implications of the changes for other programs, etc., if applicable:** ENPL 411 is used as an elective in one other program. This program was consulted and raised no objections, may review its use at next program review.

4. **Reproduction of current Calendar entry for the item to be revised:**

   ENPL 411-3 Planning Theory, Process and Implementation Theories of planning and how theory informs planning practice. How planners manage planning processes, how plans are implemented. Use of communicative skills is important in expediting implementation within the political environment of planning practice.
   Prerequisite(s): 60 credit hours and ENPL 105-3 or permission of the instructor

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   ~~**ENPL 411-3 Planning Theory, Process and Implementation** Theories of planning and how theory informs planning practice. How planners manage planning processes, how plans are implemented. Use of communicative skills is important in expediting implementation within the political environment of planning practice.~~
   ENPL 411-3 Philosophy of Community Change How do we bring about change for the common good in a diverse and increasingly fragmented society? This question frustrates and animates professionals across public domains, in community development, health, planning, natural resources management, and social policy. In this course, students learn philosophies of the common good, how such philosophies interact with other forms of knowledge such as science, and how 'the good and the right' are mobilized in public argument and decisions.
   Prerequisite(s): 60 credit hours and ENPL 105-3 or permission of the instructor

6. **Authorization:**

   Program / Academic / Administrative Unit: 2025 02 27 School of Planning and Sustainability

   SCCC Reviewed: April 15, 2025

   Faculty(ies): Faculty of Environment

   Faculty Council Motion Number(s): 6.18 FEFC 2025050820

   Faculty Council Approval Date(s): May 8, 2020

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: 0 pages

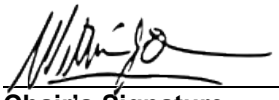
INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.30

Moved by: Todd Whitcombe **Seconded by:** Ehsan Taghizadehghoozhdi

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 

Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.33**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That changes to the course title and description of ENPL 605-3 Land Use Planning on page 127 of the 2024/2025 graduate calendar, be approved as proposed.

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:** Proposed revision to ENPL 605-3 Land Use Planning is a part of a broader refresh of the Planning curriculum. This change to title and description are intended to communicate the intention of the course more clearly to prospective students. The changes made here relate to changes made to ENPL 410-3, which is taught as an integrated course.

3. **Implications of the changes for other programs, etc., if applicable:**

4. **Reproduction of current Calendar entry for the item to be revised:**

   ENPL 605-3 Land Use Planning An evaluation of land use planning at the federal, provincial, and municipal levels. The course will familiarize students with theories of property rights and their applications to land use planning and tenure systems.
   Preclusion(s): ENPL 410-3

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   ~~**ENPL 605-3 Land Use Planning** An evaluation of land use planning at the federal, provincial, and municipal levels. The course will familiarize students with theories of property rights and their applications to land use planning and tenure systems.~~
   ENPL 605-3 Applied Land Use Planning in British Columbia In this advanced course, students apply knowledge of land use planning to case studies grounded in the laws and landscapes of British Columbia. Case studies cover a range of professional planning contexts, including urban, rural, and regional areas; agricultural areas; First Nation reserves; protected areas; and joint land use initiatives between the province and Indigenous governing bodies.
   Preclusion(s): ENPL 410-3

6. **Authorization:**

   Program / Academic / Administrative Unit: 2025 02 27 School of Planning and Sustainability

   SCCC Reviewed: April 15, 2025

   Faculty(ies): Faculty of Environment

   Faculty Council Motion Number(s): 6.19 FEFC 2025050821

   Faculty Council Approval Date(s): May 8, 2025

   Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: 0 pages

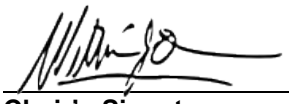
INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.31

Moved by: Todd Whitcombe **Seconded by:** Ehsan Taghizadehghoozhdi

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 

Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.34**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That changes to the course title and description of ENPL 606-3 Planning Theory, Process and Implementation on page 127 (of the printed) of the 2024/2025 graduate calendar, be approved as proposed.

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:** Proposed revision to ENPL 606-3 Planning Theory, Process and Implementation is a part of a broader update of the Planning curriculum. At the graduate level, changes to this course will clarify its relevance to a broader set of students, particularly in the NRES graduate program. Changes here align updates to ENPL 606 with changes to ENPL 411-3, which is an integrated course.

3. **Implications of the changes for other programs, etc., if applicable:**

4. **Reproduction of current Calendar entry for the item to be revised:**

   ENPL 606-3 Planning Theory, Process and Implementation Theories of planning and how theory informs planning practice. How planners manage planning processes, how plans are implemented. Use of communicative skills is important in expediting implementation within the political environment of planning practice.
   Preclusion(s): ENPL 411-3, ENVS 606-3

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   ~~**ENPL 606-3 Planning Theory, Process and Implementation** Theories of planning and how theory informs planning practice. How planners manage planning processes, how plans are implemented. Use of communicative skills is important in expediting implementation within the political environment of planning practice.~~
   ENPL 606-3 Philosophy of Community Change How do we bring about change for the common good in a diverse and increasingly fragmented society? This question frustrates and animates professionals across public domains in community development, health, planning, natural resources management, and social policy. In this advanced course, students learn philosophies of the common good, how such philosophies interact with other forms of knowledge such as science, and how 'the good and the right' are mobilized in public argument and decisions.
   Preclusion(s): ENPL 411-3; ENVS 606-3

6. **Authorization:**

   SCCC Reviewed: April 15, 2025

   Program / Academic / Administrative Unit: 2025 02 27 School of Planning and Sustainability

   Faculty(ies): Faculty of Environment

   Faculty Council Motion Number(s): 6.20 FEFC 2025050822

Faculty Council Approval Date(s): May 8, 2025

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

7. Other Information

Attachment Pages: 0 pages

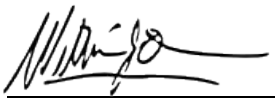
INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.32

Moved by: Todd Whitcombe **Seconded by:** Ehsan Taghizadehghoozhdi

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 

Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.35**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change to the preclusion in the course description for NURS 202-3 Pathophysiological Concepts, on page 279 of the 2024/2025 PDF undergraduate calendar, be approved as proposed.

1. **Effective date: September 2025**

2. **Rationale for the proposed revisions:**

   HHSC 301-3 is no longer offered at UNBC and has been replaced with a different course number (HHSC 405-3), which was approved at the Senate Meeting on Feb. 28, 2018. HHSC 301-3 is currently listed as a preclusion for NURS 202-3.

   HHSC 405 is taught with a different focus, aimed at encouraging a broad understanding of pathophysiology within the health sciences, and with particular emphasis on research. It is not equivalent to a clinically-oriented pathophysiology course such as NURS 202.

3. **Implications of the changes for other programs, etc., if applicable:**

   The Health Sciences program has been consulted regarding removing HHSC 301-3 from the NURS 202-3 preclusions. The Health Sciences program has also been consulted about creating a reciprocal motion to remove NURS 202-3 from the current HHSC 405-3 Pathophysiology course preclusion, and they agree that these changes are appropriate and necessary.

4. **Reproduction of current Calendar entry for the item to be revised:**

   NURS 202-3 Pathophysiological Concepts This course uses a conceptual approach to examine pathological mechanisms of altered states in human physiology. Topics include the etiology, cellular metabolism, tissue alterations, functional changes, and age-related differences involved in each process.

   Prerequisite(s): HHSC 111-4 and HHSC 112-4, or BIO 111-3 and BIO 112-3 and BIO 105-3 at CNC, or BIOL 131-3, BIOL 132-3, and BIOL 133-3 at CMTN, or equivalent
   Preclusion(s): HHSC 301-3
   Major Restriction: Restricted to students in the NCBNP

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   NURS 202-3 Pathophysiological Concepts This course uses a conceptual approach to examine pathological mechanisms of altered states in human physiology. Topics include the etiology, cellular metabolism, tissue alterations, functional changes, and age-related differences involved in each process.

   Prerequisite(s): HHSC 111-4 and HHSC 112-4~~,~~; or BIO105-3 and BIO 111-3 and BIO 112-3 ~~and BIO 105-3~~ at CNC~~,~~; or BIOL 131-3 and~~,~~ BIOL 132-3 and~~,~~ and BIOL 133-3 at CMTN~~,~~; or equivalent
   ~~Preclusion(s): HHSC 301-3~~
   Major Restriction: Restricted to students in the NCBNP

6. **Authorization**:

Program / Academic / Administrative Unit: School of Nursing

SCCC Reviewed: May 13, 2025

Faculty(ies): Faculty of Human and Health Sciences

Faculty Council Motion Number(s): FHHSFC.2025.05.15.02

Faculty Council Approval Date(s): May 15, 2025

Senate Committee on Indigenous Initiatives Motion Number:

Senate Committee on Indigenous Initiatives Meeting Date:

7. **Other Information**

Attachment Pages: **0** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.33

Moved by: Fei Tong **Seconded by:** Nicole Neufeld

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.36**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change to the preclusion in the course description for NURS 205-3 Introduction to First Nations Health, on page 279 of the 2024/2025 PDF undergraduate calendar, be approved as proposed.

1. **Effective date: September 2025**

2. **Rationale for the proposed revisions:**

There are significant gaps in sections, goals, and objectives in FNST 302 that are covered in NURS 205. One specific component that is lacking in FNST 302 is the nursing lens and building of the foundational concepts, which is present in NURS 205. The sections that do not appear to be included in FNST 302 are:

- Current barriers to health and culturally sensitive nursing implications,
- Aspects of health related to Indigenous groups such as poverty, women's health, mental health issues,
- The effects of the social determinants of health,
- Integration of the Truth and Reconciliation Commission's calls to action

Course Goals and Learning Objectives that do not appear to be included in FNST 302 are:

- Discuss the impact of social determinants of health for Indigenous populations.
- Analyze patterns of health and illness for Indigenous populations.
- Recognize the barriers faced by Indigenous groups in accessing health services.
- Compare Indigenous ways of knowing and healing to Western medicine.

Because of this, nursing students can no longer substitute FNST 302-3 and need to take NURS 205-3.

3. **Implications of the changes for other programs, etc., if applicable:**

The First Nations Studies program has been consulted regarding removing FNST 302-3 from the NURS 205-3 preclusions and they agree with this decision. The First Nations Studies program will create a reciprocal motion to remove NURS 205-3 from the current FNST 302-3 course preclusion.

4. **Reproduction of current Calendar entry for the item to be revised:**

NURS 205-3 Introduction to First Nations Health This course provides an overview of First Nations health, factors influencing health status, and issues arising from northern and remote living. Historical events and their impact on health are introduced. Current barriers to health, along with culturally sensitive nursing implications, are explored.

Pre- or Corequisite(s): ANTH 213-3 or equivalent. Admission for non-nursing students by permission of the instructor
Preclusion(s): FNST 302-3

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

NURS 205-3 Introduction to First Nations Health This course provides an overview of First Nations health, factors influencing health status, and issues arising from northern and remote living. Historical events and their impact on health are introduced. Current barriers to health, along with culturally sensitive nursing implications, are explored.

Pre- or Corequisite(s): ANTH 213-3, or ANTH 101-3 at CNC, or ANTH 102-3 at CMTN, or equivalent.
Admission for non-nursing students by permission of the instructor
~~Preclusion(s): FNST 302-3~~

6. **Authorization:**

Program / Academic / Administrative Unit: School of Nursing

SCCC Reviewed: May 13, 2025

Faculty(ies): Faculty of Human and Health Sciences

Faculty Council Motion Number(s): FHHSFC.2025.05.15.03

Faculty Council Approval Date(s): May 15, 2025

Senate Committee on Indigenous Initiatives Motion Number:

Senate Committee on Indigenous Initiatives Meeting Date:

7. **Other Information**

Attachment Pages: **0** pages

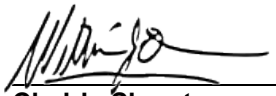
INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.34

Moved by: Fei Tong **Seconded by:** Nicole Neufeld

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.37**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change to the preclusion in the course description for NURS 206-3 Basic Nutrition on page 279 of the 2024/2025 PDF undergraduate calendar, be approved as proposed.

1. **Effective date: September 2025**

2. **Rationale for the proposed revisions:**

   ANTH 311-3 is no longer equivalent to NURS 206-3. ANTH 311-3 does not break down nutrients or view content through a health and healing context for disease.

   HHSC 311-3 is no longer equivalent to NURS 206-3. While HHSC 311-3 has similar objectives to NURS 206-3, it is missing key components including fluid and electrolytes, nutrition in the healthcare setting, and the GI tract. While chronic diseases are addressed in HHSC 311-3, the level of detail provided is unclear.

   Because of this, nursing students can no longer substitute ANTH 311-3 or HHSC 311-3, and need to take NURS 206-3.

3. **Implications of the changes for other programs, etc., if applicable:** The Anthropology and Health Sciences programs have been consulted regarding removing ANTH 311-3 and HHSC 311-3, respectively, from the NURS 206-3 preclusions and creating reciprocal motions to remove NURS 206-3 from the ANTH 311-3 and HHSC 311-3 course preclusions.

4. **Reproduction of current Calendar entry for the item to be revised:**

   NURS 206-3 Basic Nutrition This course examines the nutritional needs of specific client groups throughout the lifespan and in various states of wellness and illness. The course reviews the physiology of carbohydrate, fat, protein, and energy metabolism. Topics include enteral and parenteral nutrition, trends and issues in nutritional practice, and the psychosocial and cultural aspects of food and eating behaviours.

   Preclusion(s): ANTH 311-3, HHSC 311-3
   Major Restriction: Restricted to students in the NCBNP

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   NURS 206-3 Basic Nutrition This course examines the nutritional needs of specific client groups throughout the lifespan and in various states of wellness and illness. The course reviews the physiology of carbohydrate, fat, protein, and energy metabolism. Topics include enteral and parenteral nutrition, trends and issues in nutritional practice, and the psychosocial and cultural aspects of food and eating behaviours.

   ~~Preclusion(s): ANTH 311-3, HHSC 311-3~~
   Major Restriction: Restricted to students in the NCBNP

6. **Authorization:**

Program / Academic / Administrative Unit: School of Nursing

SCCC Reviewed: May 13, 2025

Faculty(ies): Faculty of Human and Health Sciences

Faculty Council Motion Number(s): FHHSFC.2025.05.15.04

Faculty Council Approval Date(s): May 15, 2025

Senate Committee on Indigenous Initiatives Motion Number:

Senate Committee on Indigenous Initiatives Meeting Date:

7. **Other Information**

Attachment Pages: **0** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.35

Moved by: Fei Tong **Seconded by:** Nicole Neufeld

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.38**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change to the preclusion in the course description for NURS 308-3 Ethics and Law in Nursing, on page 280 of the 2024/2025 PDF undergraduate calendar, be approved as proposed.

1. **Effective date: September 2025**

2. **Rationale for the proposed revisions:**

Although HHSC 201-3 was similar to NURS 308-3 when it was first created, it is now missing all content related to professional responsibilities and accountabilities of the nursing profession (which encompasses approximately 1/3 of the course), nursing-specific roles under various pieces of healthcare legislation, and the role of the British Columbia College of Nurses and Midwives (BCCNM) as the regulatory body for Registered Nurses in British Columbia, in addition to a number of full-lecture topics. For example:

- charting/documentation responsibilities of nurses separate and apart from just managing medical information (the latter is covered),
- privacy and confidentiality beyond just medical information,
- Patient Safety and Learning System (PSLS) requirements and incident reporting responsibilities,
- research ethics through a nursing lens,
- mental health issues and legislation through a nursing lens,
- negligence and professional misconduct,
- the RN-specific regulation under the BC Health Professions Act,
- the Canadian Nurses' Association (2017) Code of Ethics, and the BCCNM Professional Standards and Practice Standards for Registered Nurses (these key documents for nursing practice are interwoven throughout the entire course).

The School of Nursing has also experienced issues with transferability of ethics courses from other institutions that have been articulated to HHSC 201-3, but are similarly missing the above content regarding nursing-related and nursing-specific legislation, professional responsibilities and accountabilities of the nursing profession, as well as other mandatory topics in NURS 308.

Given the above, nursing students can no longer substitute HHSC 201-3 and are required to take NURS 308-3.

3. **Implications of the changes for other programs, etc., if applicable:**

The Health Sciences program has been consulted regarding reciprocal removal of NURS 308-3 from the course description/preclusion for HHSC 201-3 and they agree that this change is appropriate and necessary.

4. **Reproduction of current Calendar entry for the item to be revised:**

NURS 308-3 Ethics and Law in Nursing This course examines ethical reasoning and the use of ethical theory in nursing practice decisions, as well as health care law as it relates to nursing practice. Special focus is placed on the meaning and use of relevant legislation and case law, professional standards of practice, and the Canadian nursing code of ethics.

Prerequisites: NURS 220-5, or permission of the Chair
Precluded: HHSC 201-3

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":

NURS 308-3 Ethics and Law in Nursing This course examines ethical reasoning and the use of ethical theory in nursing practice decisions, as well as health care law as it relates to nursing practice. Special focus is placed on the meaning and use of relevant legislation and case law, professional standards of practice, and the Canadian nursing code of ethics.

Prerequisites: NURS 220-5, or permission of the Chair
~~*Precluded:* HHSC 201-3~~

6. Authorization:

Program / Academic / Administrative Unit: School of Nursing

SCCC Reviewed: May 13, 2025

Faculty(ies): Faculty of Human and Health Sciences

Faculty Council Motion Number(s): FHHSFC.2025.05.15.05

Faculty Council Approval Date(s): May 15, 2025

Senate Committee on Indigenous Initiatives Motion Number:

Senate Committee on Indigenous Initiatives Meeting Date:

7. Other Information

Attachment Pages: **0** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.36

Moved by: Fei Tong **Seconded by:** Nicole Neufeld

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.39**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW COURSE APPROVAL MOTION FORM

Motion: That the new course NURS 460-3 Health, Justice, and the Environment be approved as follows:

A. Description of the Course

1. **Proposed semester of first offering:** May 2025

2. **Academic Program:** Nursing

3. **Course Subject, Number*, and Credit hours (e.g. CHEM 210-3):** NURS 460-3

4. **Course Title:** Health, Justice, and the Environment

5. **Goal(s) of Course:**
   By the end of this course, learners will be able to:
   - Apply critical thinking to consider the ways in which human health is connected to ecosystems and the planet.
   - Employ systems thinking and an eco-social lens to planetary health issues in Canada.
   - Identify mechanisms of human exposure to environmental health harms across the lifespan.
   - Recognize the detrimental human and ecosystem health effects of environmental degradation, pollution, climate change, and biodiversity loss.
   - Apply principles of environmental and climate justice to contexts in Northern British Columbia.
   - Recognize the complexity of 'wicked problems' in planetary health contexts in Canada.
   - Explore the role and impacts of policy on planetary health at the municipal, provincial, and national levels.
   - Using critical thinking, apply course concepts to specific health/environment interfaces such as the built environment, food systems and healthcare systems.

6. **Calendar Course Description:**

   This course explores the health impacts of pressing ecological crises including pollution, climate change, and biodiversity loss, and the equity dimensions of these crises. A systems-thinking approach is taken to explore both social and ecological determinants of health. The equity focus considers environmental racism in Northern British Columbia and the need to develop environmental and climate health justice praxis in Canadian nursing and health professions. Students gain an appreciation of the complexity of wicked problems in the context of health, justice, and the environment in Canada.

7. **Credit Hours:** 3 credit hours (Normally, UNBC courses are 3 credit hours and may not be repeated for additional credit. If this course falls outside the norm, please complete sections "a)" and "b)" below).

   a) Can the course be repeated for credit if the subject matter differs substantially?

Yes* ____ No ___X___

* If "yes," please indicate the maximum number** of credit hours which may be applied to a student's degree using this course: **#**

** If the course may be taken more than once but will only ever be offered for 3 credit hours, for example, per offering, the credit hours are simply expressed as "3" and the following notation (with the correct number of credit hours noted) is included within the Calendar Course Description:
"This course may be repeated to a maximum of XX credit hours if the material is substantially different."

b) Is variable credit available for this course? Yes____ No ___X___

Variable credit is denoted by the following examples:

i) "3-6": in this example, the course may be offered for 3, 4, 5, OR 6 credit hours during a single offering. In this example, the course number would be expressed as CHEM 210-(3-6).

ii) "3,6": in this example, the course may be offered for EITHER 3 or 6 credit hours during a single offering. In this example, the course number would be expressed as CHEM 210-(3,6).

8. Contact Hours (per week):

Lecture	2	Seminar	#
Laboratory	#	Other (please specify)	Online discussions: 2

9. Prerequisites (taken prior):

10. Prerequisites with concurrency (taken prior or simultaneously): NURS 220-5 or permission of the instructor

11. Co-requisites (must be taken simultaneously): none

12. Preclusions: NURS 660

13. Course Equivalencies: none

14. Grade Mode: NORMAL (i.e., alpha grade)

15. Course to be offered:

each semester	____
each year	X
alternating years	____

16. Proposed text / readings:

Module 1 Readings

- Prescott, S. L., & Logan, A. C. (2019). Planetary health: From the wellspring of holistic medicine to personal and public health imperative. *Explore, 15*(2), 98–106. https://doi.org/gfgpcf
- Redvers N. (2021). The determinants of planetary health. *The Lancet. Planetary Health*, *5*(3), e111–e112. https://doi.org/10.1016/S2542-5196(21)00008-5
- Redvers, N., Celidwen, Y., Schultz, C., Horn, O., Githaiga, C., Vera, M., Perdrisat, M., Mad Plume, L., Kobei, D., Kain, M. C., Poelina, A., Rojas, J. N., & Blondin, B. (2022). The determinants of planetary health: an Indigenous consensus perspective. *The Lancet. Planetary Health*, *6*(2), e156–e163. https://doi.org/10.1016/S2542-5196(21)00354-5

Ecological Determinants of Health

- Canadian Public Health Association. (2015). *Addressing the ecological determinants of health.* https://www.cpha.ca/sites/default/files/assets/policy/edh-discussion_e.pdf. Please read pp. iv - 13 (up to "Imagining a better future")

Justice and Equity

- Bravemen, P., & Gruskin, S. (2003). Defining equity in health. *J Epidemiol Community Health, 57*, 254-258. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1732430/pdf/v057p00254.pdf

Wicked Problems

- National Collaborating Centre for Public Policy. (2013). *Wicked problems and public policy*. https://www.ncchpp.ca/docs/WickedProblems_FactSheet_NCCHPP.pdf

Recommended Readings

- Lerner, H., & Berg, C. (2017). A comparison of three holistic approaches to health: One Health, EcoHealth, and Planetary Health. *Frontiers in Veterinary Science, 4*, 163. https://doi.org/10.3389/fvets.2017.0016

Module 2:
Active Hope

- Macy, J., & Johnstone, C. (2022). *Active hope: How to face the mess with unexpected resilience and creative power.* New World. Chapter One pp. 1-5. To access, go to https://www.activehope.info/the-book and scroll down to where it says: "To get a taste of what it offers, you can read or download a pdf of the introduction and first two chapters from this link." Chapter Three: pp. 43-56 click Active Hope Chapter 3 (pdf)

- Kimmerer, R. W. (2014). Returning the gift. *Minding Nature*, *7*(2), 18-24. https://www.turtlelodge.org/wp-content/uploads/2017/08/Kimmerer-Returning-the-Gift.pdf

Systems Thinking

- Heinberg, R. (2018). Systems thinking, critical thinking, and personal resilience. *Resilience.* https://www.resilience.org/stories/2018-05-24/systems-thinking-critical-thinking-and-personal-resilience/

- Voulvoulis, N., Giakoumis, T., Hunt, C., Kioupi, V., Petrou, N., Souliotis, I., & Vaghela, C. J. G. E. C. (2022). Systems thinking as a paradigm shift for sustainability transformation. *Global Environmental Change*, *75*, 102544. https://doi.org/10.1016/j.gloenvcha.2022.102544

Connection with Nature

- Zelenski, J., Warber, S., Robinson, J. M., Logan, A. C., Prescott, S. L. (2023). Nature connection: Providing a pathway from personal to planetary health. *Challenges, 14*(1):16. https://doi.org/10.3390/challe14010016

- Guzmán, C. A. F., Aguirre, A. A., Astle, B., Barros, E., Bayles, B., Chimbari, M., ... & Zylstra, M. (2021). A framework to guide planetary health education. *The Lancet Planetary Health*, *5*(5), e253-e255. https://doi.org/10.1016/S2542-5196(21)00110-8

Module 3:
Environmental Health Sciences

- Chapter 1, “Introduction to Environmental Health”, pages 3-20 in: Frumkin, H. (Ed.). (2016). *Environmental health: From global to local* (3rd ed.). Jossey-Bass. (Available through the UNBC library, please download chapter and return e-text) (17 pages)

- Boyd, D. R., & Genuis, S. J. (2008). The environmental burden of disease in Canada: respiratory disease, cardiovascular disease, cancer, and congenital affliction. *Environmental research*, *106*(2), 240–249. https://doi.org/10.1016/j.envres.2007.08.009 (7 pages)

- Leffers, J. (2023). Harmful environmental exposures and vulnerable populations. In R. McDermott-Levy, K. P. Jackman-Murphy, J. Leffers, & A. Cantu (Eds.), *Environmental health in nursing* (3rd ed.), pp. 19–27. Alliance of Nurses for Healthy Environments. https://envirn.org/e-textbook/ (Need to visit website and download textbook) (8.5 pages)

- Martin, S. C., & Larivière, C. (2014). Community Health Risk Assessment of Primary Aluminum Smelter Emissions. *Journal of Occupational & Environmental Medicine*, *56*(Supplement 5S), S33–S39. https://doi.org/10.1097/JOM.0000000000000135 (6 pages)

- Pages 9-10 only, "Provincial Spotlights: British Columbia-Northern Health" in: Hoogeveen, D., Brubacher, J., Leduc, M., Lou, H. (2022) *Assessing health impacts of industrial development in Canadian environmental assessment: A preliminary review to inform a jurisdictional scan*, Simon Fraser University, Faculty of Health Sciences Rapid Review, Burnaby, B.C. https://www.northernhealth.ca/sites/northern_health/files/services/office-health-resource-development/documents/assessing-health-impacts-industrial-development.pdf (2 pages)

Module 4: Linking Planetary Health with Nursing Practice and Healthcare

- Nursing Practice. (1995). In A. M. Pope, M. A. Snyder, & L. H. Mood, *Nursing, Health, & The Environment* (1st ed., pp. 39–48). National Academy Press. (10 pp. see pdf)

Key position statements:

- Canadian Nurses Association & Canadian Association of Nurses for the Environment (2024) *Position statement: Planetary Health* https://cane-aiie.ca/CNA-Planetary-Health-position-statement_E.pdf (5 pages)

- Canadian Nurses Association & Canadian Medical Association (2009) *Joint position statement: Environmentally responsible activity in the health-care sector* (5 pages)

- Canadian Nurses Association (2017) *Nurses and Environmental Health*. (6 pages)

Assessment Tools:

- Planned Parenthood Green Choices (2017). *Environmental Health Assessment Form. https://envirn.org/wp-content/uploads/2017/03/Environmental-Health-Assessment-Form-Color.pdf* (2 pages)

- Sattler, B. (2007). *Hospital Environmental Health Assessment Tool. https://envirn.org/wp-content/uploads/2017/03/hospital-environmental-health-assessment-tool1.pdf* (3 pages)

- Lenzen, M., Malik, A., Li, M., Fry, J., Weisz, H., Pichler, P. P., Chaves, L. S. M., Capon, A., & Pencheon, D. (2020). The environmental footprint of health care: a global assessment. *The Lancet. Planetary health*, *4*(7), e271–e279. https://doi.org/10.1016/S2542-5196(20)30121-2 (8 pages)

- Fidler, L., Green, S., & Wintemute, K. (2022). Pressurized metered-dose inhalers and their impact on climate change. *CMAJ, 194* (12): E460. doi: 10.1503/cmaj.211747 (1 page)

- Healthcare without harm (2024) *Priority chemicals of concern reference (US and Canada).* https://noharm-uscanada.org/content/us-canada/priority-chemicals-concern-reference

Module 5: Environmental Justice, Environmental Racism, and Policy

- Amiri, A., & Zhao, S. (2019). Working with an environmental justice community: Nurse observation, assessment, and intervention. *Nursing Forum, 54*(2), 270–279. https://doi.org/jdhn

- Evans-Agnew, R., LeClair, J., & Sheppard, D. A. (2024). Just-relations and responsibility for planetary -health: The global nurse agenda for climate justice. *Nursing inquiry, 31*(1), e12563. https://doi.org/10.1111/nin.12563

- Kerr, R., Cook, C., Chaney, N. J., Sotor, M., & Huffling, N. (2022). Nurses heal environmental injustice through community partnerships. *Environmental Justice, 15*(2), 90-97. https://doi.org/jdh3

- LeClair, J., Watts, T., & Zahner, S. (2021). Nursing strategies for environmental justice: A scoping review. *Public Health Nursing, 38*(2), 296–308. https://doi.org/10.1111/phn.12840

- Mangwanda, B. (2021). *Environmental racism story map and dashboard: Enhancing access to environmental justice for racialized and Indigenous communities in BC.* https://sustain.ubc.ca/sites/default/files/2020-100_Environmental%20Racism%20Story%20Map_Mangwanda.pdf

Module 6:
Climate Change and Health; Mental Health

- Environment and Climate Change Canada (2024) *Greenhouse gas emissions: drivers and impacts.* https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/greenhouse-gas-emissions-drivers-impacts.html (~2 pages)

- National Collaborating Centre for Indigenous Health (NCCIH). (2022). Climate Change and Indigenous People's health in Canada. (Reprinted with permission from P. Berry & R. Schnitter [eds.], Health of Canadians in a changing climate: Advancing our knowledge for action [Chapter 2]. Government of Canada) https://www.nccih.ca/Publications/Lists/Publications/Attachments/10367/Climate_Change_and_Indigenous_Peoples_Health_EN_Web_2022-03-22.pdf Pages 19-37 and 42-47 of this document. (25 pages)

- Berry, P., Enright, P., Varangu, L., Singh, S., Campagna, C., Gosselin, P., Demers-Bouffard, D., Thomson, D., Ribesse, J., & Elliott, S. (2022). Adaptation and Health System Resilience. In Berry, P., & Schnitter, R. (Eds.). (2022). Health of Canadians in a Changing Climate: Advancing our Knowledge for Action. Resilient Health Systems Fact Sheet. Ottawa, ON: Government of Canada. https://changingclimate.ca/site/assets/uploads/sites/5/2022/02/Resilient-Health-Systems-Fact-Sheet-EN.pdf (4 pages)

- Su, Y. (2021). Wildfire and flood disasters are causing 'climate migration' within Canada. *The Conversation.* https://theconversation.com/wildfire-and-flood-disasters-are-causing-climate-migration-within-canada-167730 (2 pages)

- Executive summary only, pages 6-8 in Whitmore-Williams, S.C., Manning, C., Krygsman, K., & Speiser, M. (2017). *Mental health and our changing climate: Impacts, implications and guidance.* Washington, D.C.: American Psychological Association and EcoAmerica. https://www.apa.org/news/press/releases/2017/03/mental-health-climate.pdf (3 pages).

Module 7:
Biodiversity and Ecosystem Health

- Aronson, J. C., Blatt, C. M. Blatt, & Aronson, T. B. (2016). Restoring ecosystem health to improve human health and well-being: physicians and restoration ecologists unite in a common cause. *Ecology and Society 21*(4): 39. https://www.jstor.org/stable/26270035?seq=1

- Breed, M. F., Cross, A. T., Wallace, K., Bradby, K., Flies, E., Goodwin, N., Jones, M., Orlando, L., Skelly, C., Weinstein, P., & Aronson, J. (2021). Ecosystem restoration: A public health intervention. *EcoHealth*, *18*(3), 269–271. https://doi.org/10.1007/s10393-020-01480-1

- Landrigan, P. J., Britt, M., Fisher, S., Holmes, A., Kumar, M., Mu, J., Rizzo, I., Sather, A., Yousuf, A., & Kumar, P. (2024). Assessing the human health benefits of climate mitigation, pollution prevention, and biodiversity preservation. *Annals of Global Health, 90*(1), 1-23. https://doi.org/mj3c

- Nourish Leadership. (2024). *Stories of change nourishing health care innovation: Vancouver Coastal Health's planetary menus pilot - A first in Canada.* https://20441233.fs1.hubspotusercontent-

na1.net/hubfs/20441233/Stories%20of%20Change/2024%20VGH%20Planetary%20Health%20Project.pdf

- Pfenning-Butterworth, A., Buckley, L. B., Drake, J. M., Farner, J. E., Farrell, M. J., Gehman, A. M., Mordecai, E. A., Stephens, P. R., Gittleman, J. L., & Davies, T. J. (2024). Interconnecting global threats: climate change, biodiversity loss, and infectious diseases. *The Lancet. Planetary health*, *8*(4), e270–e283. https://doi.org/10.1016/S2542-5196(24)00021-4

Module 8:
Research Methods

- Berkovic, D. (2023). Researcher positionality. In D. Ayton, T. Tsindos, & D. Berkovic (Eds.), *Qualitative research-a practical guide for health and social care researchers and practitioners.* Council of Australian University Librarians Open Educational Resources Collective. https://oercollective.caul.edu.au/qualitative-research/chapter/__unknown__-27/

- Mc Dermott-Levy, R. (2023) The integrative model for environmental health and the modified integrative model for environmental health. In R. McDermott-Levy, K.P. Jackman-Murphy, J. Leffers, & A.G. Cantu, A.(eds). *Environmental health in nursing* (3rd ed.) (pp. 387-388). Alliance of Nurses for Healthy Environments. https://envirn.org/e-textbook/

- Trushna, T., Diwan, V., Nandi, S. S., Aher, S. B., Tiwari, R. R., & Sabde, Y. D. (2020). A mixed-methods community-based participatory research to explore stakeholder's perspectives and to quantify the effect of crop residue burning on air and human health in Central India: Study protocol. *BMC Public Health*, *20*(1), 1824. https://doi.org/10.1186/s12889-020-09844-6

Advocacy Skills

- Registered Nurses' Association of Ontario (2015). *Taking action: A toolkit for becoming politically involved. https://rnao.ca/sites/rnao-ca/files/Taking_Action_Political_Action_Toolkit_Final_0.pdf pp. 53-71*(Media Relations Strategy and Use of Social Media)

- Long, T. (2014). Public advocacy writing. *Nurse author & editor.* https://doi-org.prxy.lib.unbc.ca/10.1111/j.1750-4910.2014.tb00185.x

- Bucic, S.B (2023) Case study in environmental health advocacy and Jackman-Murphy, K.P. (2023) Acts of nursing advocacy. In R. McDermott-Levy, K.P. Jackman-Murphy, J. Leffers, & A.G. Cantu, A.(eds). *Environmental health in nursing* (3rd ed.) (pp.364-366; pp370-374). Alliance of Nurses for Healthy Environments. https://envirn.org/e-textbook/

B. Significance Within Academic Program

1. Anticipated enrolment 20

2. If there is a proposed enrolment limit, state the limit and explain: 20 undergraduate and 6 graduate students maximum. Due to the compressed nature of the course, the extensive online discussion board participation required by students (and moderation required by instructors), it is felt that this is the limit of being pedagogically sound for this upper-division course requiring mastery of complex knowledge (Taft et al., 2019). It has been found that, in addition to pedagogical benefits of allowing for richer instructor feedback, the ability to engage with students increases student motivation, can improve a sense of student belonging and, in this case, can provide opportunities for students from different years and/or campuses to interact (Dykman & Davis, 2008).

Dykman, C.A., & Davis, C.K. (2008) Online education forum, part three: A quality online educational experience. *Journal of Information Systems Education, 19*(3), 281-289

Taft, S. H., Kesten, K., & El-Banna, M. M. (2019). One Size Does Not Fit All: Toward an Evidence-Based Framework for Determining Online Course Enrollment Sizes in Higher Education. *Online Learning*, *23*(3). https://doi.org/10.24059/olj.v23i3.1534

3. **Required for:** Major: _____ Minor: _____ Other:_____

4. **Elective in:** Major: X Minor: _____ Other:_____

5. **Course required by another major/minor:**

N/A

6. **Course required or recommended by an accrediting agency:** No

7. **Toward what degrees will the course be accepted for credit?** Can be used as elective credit for: BScN or other programs by permission

8. **What other courses are being proposed within the Program this year?**

9. **What courses are being deleted from the Program this year?**

C. Relation to Other Program Areas

1. **Identify courses in other UNBC Programs that overlap with this course; describe the overlap and comment on its significance:** None

2. **Is a preclusion required?** Yes_____No X

3. **If there is an overlap, and no preclusion is required, please explain why not: N/A**

4. **Has this overlap been discussed with the Program concerned?** Yes N/A No

5. **In offering this course, will UNBC require facilities or staff at other institutions?**

   Yes _____ No X

   If yes, please describe requirements:

6. **Is this course replacing an existing course that is included in one or more transfer agreements with external institutions?**

   Yes_____ No X

   If "yes," please contact the Articulation Officer in the Office of the Registrar.

D. Resources required

1. **Please describe ADDITIONAL resources required over the next five years to offer this course.**

   i. **Faculty Staffing:** 3SCH worth of faculty teaching time each year (including NURS 660)

   ii. **Space (classroom, laboratory, storage, etc.):** none

   iii: **Library Holdings:** see attached form

iv. Computer (time, hardware, software): Web shell for online course delivery. Will utilize existing UNBC resources of Moodle, Kaltura, and related storage space.

E. Additional Attached Materials:

- Syllabus NURS 498, Special Topics in Nursing and Health, May, 2024 (this is the same course, which was offered as a "special topics" course in the past)
- Student-Led Seminar, assignment description and rubric, NURS 498/680, Spring 2024
- Personal Reflection Assignment, description and rubric, NURS 498/680, Spring 2024
- Advocacy Assignment, description and rubric, NURS 498, Spring 2024

F. Other Considerations

1. First Nations Content*: Yes** _____ No _____
**** Whether a new course has First Nations content is to be determined by the relevant Faculty Council(s).***

****If "yes,"** refer the motion to the Senate Committee on Indigenous Initiatives **prior to** SCAAF.

2. Other Information: This course, NURS 460 is intended to be taught online with students from NURS 660 (separate motion) within the same Moodle shell. Graduate students have different assignments and greater expectations for quality of work. Enrollment includes up to 20 undergraduate and up to 6 graduate students.

3. Attachment Pages (in addition to required "Library Holdings" Form): 20 pages

G. Authorization

SCCC Reviewed: March 11, 2025

1. Faculty(ies): Health and Human Sciences

2. Faculty Council Motion Number(s): FHHS.2025.01.16.06

3. Faculty Council Approval Date(s): January 16, 2025

4. Senate Committee on Indigenous Initiatives Motion Number:

5. Senate Committee on Indigenous Initiatives Meeting Date:

INFORMATION TO BE COMPLETED BY RECORDING SECRETARY AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF

Moved by: **Seconded by:**

Committee Decision:

Approved by SCAAF: _____ _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): ___S-202506.40___

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW COURSE APPROVAL MOTION FORM

Motion: That the new course NURS 660-3 Health, Justice, and the Environment be approved as follows:

A. Description of the Course

1. **Proposed semester of first offering:** May 2025

2. **Academic Program:** Nursing

3. **Course Subject, Number*, and Credit hours (e.g. CHEM 210-3):** NURS 660-3

4. **Course Title:** Health, Justice, and the Environment

5. **Goal(s) of Course:**
   By the end of this course, learners will be able to:
   - Apply critical thinking to consider the ways in which human health is connected to ecosystems and the planet.
   - Employ systems thinking and an eco-social lens to planetary health issues in Canada.
   - Identify mechanisms of human exposure to environmental health harms across the lifespan.
   - Recognize the detrimental human and ecosystem health effects of environmental degradation, pollution, climate change, and biodiversity loss.
   - Apply principles of environmental and climate justice to contexts in Northern British Columbia.
   - Recognize the complexity of 'wicked problems' in planetary health contexts in Canada.
   - Explore the role and impacts of policy on planetary health at the municipal, provincial, and national levels.
   - Using critical thinking, apply course concepts to specific health/environment interfaces such as the built environment, food systems and healthcare systems.

6. **Calendar Course Description:**

   This advanced course explores the health impacts of pressing ecological crises including pollution, climate change, and biodiversity loss, and the equity dimensions of these crises. A systems-thinking approach is taken to explore both social and ecological determinants of health. The equity focus considers environmental racism in Northern British Columbia and the need to develop environmental and climate health justice praxis in Canadian nursing and health professions. Students gain an appreciation of the complexity of wicked problems in the context of health, justice, and the environment in Canada.

7. **Credit Hours:** 3 credit hours (Normally, UNBC courses are 3 credit hours and may not be repeated for additional credit. If this course falls outside the norm, please complete sections "a)" and "b)" below).

   a) Can the course be repeated for credit if the subject matter differs substantially?

Yes* ____ No ___X___

* If "yes," please indicate the maximum number** of credit hours which may be applied to a student's degree using this course: **#**

** If the course may be taken more than once but will only ever be offered for 3 credit hours, for example, per offering, the credit hours are simply expressed as "3" and the following notation (with the correct number of credit hours noted) is included within the Calendar Course Description:
"This course may be repeated to a maximum of XX credit hours if the material is substantially different."

b) Is variable credit available for this course? Yes____ No ___X___

Variable credit is denoted by the following examples:

i) "3-6": in this example, the course may be offered for 3, 4, 5, OR 6 credit hours during a single offering. In this example, the course number would be expressed as CHEM 210-(3-6).

ii) "3,6": in this example, the course may be offered for EITHER 3 or 6 credit hours during a single offering. In this example, the course number would be expressed as CHEM 210-(3,6).

8. Contact Hours (per week):

Lecture	2	Seminar	#
Laboratory	#	Other (please specify)	Online discussions: 2

9. Prerequisites (taken prior):

10. Prerequisites with concurrency (taken prior or simultaneously): Permission of the instructor

11. Co-requisites (must be taken simultaneously): none

12. Preclusions: NURS 460

13. Course Equivalencies: none

14. Grade Mode: NORMAL (i.e., alpha grade)

15. Course to be offered:

each semester	____
each year	X
alternating years	____

16. Proposed text / readings:

Module 1 Readings

- Prescott, S. L., & Logan, A. C. (2019). Planetary health: From the wellspring of holistic medicine to personal and public health imperative. *Explore, 15*(2), 98–106. https://doi.org/gfgpcf
- Redvers N. (2021). The determinants of planetary health. *The Lancet. Planetary Health*, *5*(3), e111–e112. https://doi.org/10.1016/S2542-5196(21)00008-5
- Redvers, N., Celidwen, Y., Schultz, C., Horn, O., Githaiga, C., Vera, M., Perdrisat, M., Mad Plume, L., Kobei, D., Kain, M. C., Poelina, A., Rojas, J. N., & Blondin, B. (2022). The determinants of planetary health: an Indigenous consensus perspective. *The Lancet. Planetary Health*, *6*(2), e156–e163. https://doi.org/10.1016/S2542-5196(21)00354-5

Ecological Determinants of Health

- Canadian Public Health Association. (2015). *Addressing the ecological determinants of health.* https://www.cpha.ca/sites/default/files/assets/policy/edh-discussion_e.pdf. Please read pp. iv - 13 (up to "Imagining a better future")

Justice and Equity

- Bravemen, P., & Gruskin, S. (2003). Defining equity in health. *J Epidemiol Community Health, 57*, 254-258. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1732430/pdf/v057p00254.pdf

Wicked Problems

- National Collaborating Centre for Public Policy. (2013). *Wicked problems and public policy*. https://www.ncchpp.ca/docs/WickedProblems_FactSheet_NCCHPP.pdf

Recommended Readings

- Lerner, H., & Berg, C. (2017). A comparison of three holistic approaches to health: One Health, EcoHealth, and Planetary Health. *Frontiers in Veterinary Science, 4*, 163. https://doi.org/10.3389/fvets.2017.0016

Module 2:
Active Hope

- Macy, J., & Johnstone, C. (2022). *Active hope: How to face the mess with unexpected resilience and creative power.* New World. Chapter One pp. 1-5. To access, go to https://www.activehope.info/the-book and scroll down to where it says: "To get a taste of what it offers, you can read or download a pdf of the introduction and first two chapters from this link." Chapter Three: pp. 43-56 click Active Hope Chapter 3 (pdf)

- Kimmerer, R. W. (2014). Returning the gift. *Minding Nature*, *7*(2), 18-24. https://www.turtlelodge.org/wp-content/uploads/2017/08/Kimmerer-Returning-the-Gift.pdf

Systems Thinking

- Heinberg, R. (2018). Systems thinking, critical thinking, and personal resilience. *Resilience.* https://www.resilience.org/stories/2018-05-24/systems-thinking-critical-thinking-and-personal-resilience/

- Voulvoulis, N., Giakoumis, T., Hunt, C., Kioupi, V., Petrou, N., Souliotis, I., & Vaghela, C. J. G. E. C. (2022). Systems thinking as a paradigm shift for sustainability transformation. *Global Environmental Change*, *75*, 102544. https://doi.org/10.1016/j.gloenvcha.2022.102544

Connection with Nature

- Zelenski, J., Warber, S., Robinson, J. M., Logan, A. C., Prescott, S. L. (2023). Nature connection: Providing a pathway from personal to planetary health. *Challenges, 14*(1):16. https://doi.org/10.3390/challe14010016

- Guzmán, C. A. F., Aguirre, A. A., Astle, B., Barros, E., Bayles, B., Chimbari, M., ... & Zylstra, M. (2021). A framework to guide planetary health education. *The Lancet Planetary Health*, *5*(5), e253-e255. https://doi.org/10.1016/S2542-5196(21)00110-8

Module 3:
Environmental Health Sciences

- Chapter 1, “Introduction to Environmental Health”, pages 3-20 in: Frumkin, H. (Ed.). (2016). *Environmental health: From global to local* (3rd ed.). Jossey-Bass. (Available through the UNBC library, please download chapter and return e-text) (17 pages)

- Boyd, D. R., & Genuis, S. J. (2008). The environmental burden of disease in Canada: respiratory disease, cardiovascular disease, cancer, and congenital affliction. *Environmental research*, *106*(2), 240–249. https://doi.org/10.1016/j.envres.2007.08.009 (7 pages)

- Leffers, J. (2023). Harmful environmental exposures and vulnerable populations. In R. McDermott-Levy, K. P. Jackman-Murphy, J. Leffers, & A. Cantu (Eds.), *Environmental health in nursing* (3rd ed.), pp. 19–27. Alliance of Nurses for Healthy Environments. https://envirn.org/e-textbook/ (Need to visit website and download textbook) (8.5 pages)

- Martin, S. C., & Larivière, C. (2014). Community Health Risk Assessment of Primary Aluminum Smelter Emissions. *Journal of Occupational & Environmental Medicine*, *56*(Supplement 5S), S33–S39. https://doi.org/10.1097/JOM.0000000000000135 (6 pages)

- Pages 9-10 only, "Provincial Spotlights: British Columbia-Northern Health" in: Hoogeveen, D., Brubacher, J., Leduc, M., Lou, H. (2022) *Assessing health impacts of industrial development in Canadian environmental assessment: A preliminary review to inform a jurisdictional scan*, Simon Fraser University, Faculty of Health Sciences Rapid Review, Burnaby, B.C. https://www.northernhealth.ca/sites/northern_health/files/services/office-health-resource-development/documents/assessing-health-impacts-industrial-development.pdf (2 pages)

Module 4: Linking Planetary Health with Nursing Practice and Healthcare

- Nursing Practice. (1995). In A. M. Pope, M. A. Snyder, & L. H. Mood, *Nursing, Health, & The Environment* (1st ed., pp. 39–48). National Academy Press. (10 pp. see pdf)

Key position statements:

- Canadian Nurses Association & Canadian Association of Nurses for the Environment (2024) *Position statement: Planetary Health* https://cane-aiie.ca/CNA-Planetary-Health-position-statement_E.pdf (5 pages)

- Canadian Nurses Association & Canadian Medical Association (2009) *Joint position statement: Environmentally responsible activity in the health-care sector* (5 pages)

- Canadian Nurses Association (2017) *Nurses and Environmental Health*. (6 pages)

Assessment Tools:

- Planned Parenthood Green Choices (2017). *Environmental Health Assessment Form. https://envirn.org/wp-content/uploads/2017/03/Environmental-Health-Assessment-Form-Color.pdf* (2 pages)

- Sattler, B. (2007). *Hospital Environmental Health Assessment Tool. https://envirn.org/wp-content/uploads/2017/03/hospital-environmental-health-assessment-tool1.pdf* (3 pages)

- Lenzen, M., Malik, A., Li, M., Fry, J., Weisz, H., Pichler, P. P., Chaves, L. S. M., Capon, A., & Pencheon, D. (2020). The environmental footprint of health care: a global assessment. *The Lancet. Planetary health*, *4*(7), e271–e279. https://doi.org/10.1016/S2542-5196(20)30121-2 (8 pages)

- Fidler, L., Green, S., & Wintemute, K. (2022). Pressurized metered-dose inhalers and their impact on climate change. *CMAJ, 194* (12): E460. doi: 10.1503/cmaj.211747 (1 page)

- Healthcare without harm (2024) *Priority chemicals of concern reference (US and Canada).* https://noharm-uscanada.org/content/us-canada/priority-chemicals-concern-reference

Module 5: Environmental Justice, Environmental Racism, and Policy

- Amiri, A., & Zhao, S. (2019). Working with an environmental justice community: Nurse observation, assessment, and intervention. *Nursing Forum, 54*(2), 270–279. https://doi.org/jdhn

- Evans-Agnew, R., LeClair, J., & Sheppard, D. A. (2024). Just-relations and responsibility for planetary -health: The global nurse agenda for climate justice. *Nursing inquiry, 31*(1), e12563. https://doi.org/10.1111/nin.12563

- Kerr, R., Cook, C., Chaney, N. J., Sotor, M., & Huffling, N. (2022). Nurses heal environmental injustice through community partnerships. *Environmental Justice, 15*(2), 90-97. https://doi.org/jdh3

- LeClair, J., Watts, T., & Zahner, S. (2021). Nursing strategies for environmental justice: A scoping review. *Public Health Nursing, 38*(2), 296–308. https://doi.org/10.1111/phn.12840

- Mangwanda, B. (2021). *Environmental racism story map and dashboard: Enhancing access to environmental justice for racialized and Indigenous communities in BC.* https://sustain.ubc.ca/sites/default/files/2020-100_Environmental%20Racism%20Story%20Map_Mangwanda.pdf

Module 6:
Climate Change and Health; Mental Health

- Environment and Climate Change Canada (2024) *Greenhouse gas emissions: drivers and impacts.* https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/greenhouse-gas-emissions-drivers-impacts.html (~2 pages)

- National Collaborating Centre for Indigenous Health (NCCIH). (2022). Climate Change and Indigenous People's health in Canada. (Reprinted with permission from P. Berry & R. Schnitter [eds.], Health of Canadians in a changing climate: Advancing our knowledge for action [Chapter 2]. Government of Canada) https://www.nccih.ca/Publications/Lists/Publications/Attachments/10367/Climate_Change_and_Indigenous_Peoples_Health_EN_Web_2022-03-22.pdf Pages 19-37 and 42-47 of this document. (25 pages)

- Berry, P., Enright, P., Varangu, L., Singh, S., Campagna, C., Gosselin, P., Demers-Bouffard, D., Thomson, D., Ribesse, J., & Elliott, S. (2022). Adaptation and Health System Resilience. In Berry, P., & Schnitter, R. (Eds.). (2022). Health of Canadians in a Changing Climate: Advancing our Knowledge for Action. Resilient Health Systems Fact Sheet. Ottawa, ON: Government of Canada. https://changingclimate.ca/site/assets/uploads/sites/5/2022/02/Resilient-Health-Systems-Fact-Sheet-EN.pdf (4 pages)

- Su, Y. (2021). Wildfire and flood disasters are causing 'climate migration' within Canada. *The Conversation.* https://theconversation.com/wildfire-and-flood-disasters-are-causing-climate-migration-within-canada-167730 (2 pages)

- Executive summary only, pages 6-8 in Whitmore-Williams, S.C., Manning, C., Krygsman, K., & Speiser, M. (2017). *Mental health and our changing climate: Impacts, implications and guidance.* Washington, D.C.: American Psychological Association and EcoAmerica. https://www.apa.org/news/press/releases/2017/03/mental-health-climate.pdf (3 pages).

Module 7:
Biodiversity and Ecosystem Health

- Aronson, J. C., Blatt, C. M. Blatt, & Aronson, T. B. (2016). Restoring ecosystem health to improve human health and well-being: physicians and restoration ecologists unite in a common cause. *Ecology and Society 21*(4): 39. https://www.jstor.org/stable/26270035?seq=1

- Breed, M. F., Cross, A. T., Wallace, K., Bradby, K., Flies, E., Goodwin, N., Jones, M., Orlando, L., Skelly, C., Weinstein, P., & Aronson, J. (2021). Ecosystem restoration: A public health intervention. *EcoHealth*, *18*(3), 269–271. https://doi.org/10.1007/s10393-020-01480-1

- Landrigan, P. J., Britt, M., Fisher, S., Holmes, A., Kumar, M., Mu, J., Rizzo, I., Sather, A., Yousuf, A., & Kumar, P. (2024). Assessing the human health benefits of climate mitigation, pollution prevention, and biodiversity preservation. *Annals of Global Health, 90*(1), 1-23. https://doi.org/mj3c

- Nourish Leadership. (2024). *Stories of change nourishing health care innovation: Vancouver Coastal Health's planetary menus pilot - A first in Canada.* https://20441233.fs1.hubspotusercontent-

na1.net/hubfs/20441233/Stories%20of%20Change/2024%20VGH%20Planetary%20Health%20Project.pdf

- Pfenning-Butterworth, A., Buckley, L. B., Drake, J. M., Farner, J. E., Farrell, M. J., Gehman, A. M., Mordecai, E. A., Stephens, P. R., Gittleman, J. L., & Davies, T. J. (2024). Interconnecting global threats: climate change, biodiversity loss, and infectious diseases. *The Lancet. Planetary health*, *8*(4), e270–e283. https://doi.org/10.1016/S2542-5196(24)00021-4

Module 8:
Research Methods

- Berkovic, D. (2023). Researcher positionality. In D. Ayton, T. Tsindos, & D. Berkovic (Eds.), *Qualitative research-a practical guide for health and social care researchers and practitioners.* Council of Australian University Librarians Open Educational Resources Collective. https://oercollective.caul.edu.au/qualitative-research/chapter/__unknown__-27/
- Mc Dermott-Levy, R. (2023) The integrative model for environmental health and the modified integrative model for environmental health. In R. McDermott-Levy, K.P. Jackman-Murphy, J. Leffers, & A.G. Cantu, A.(eds). *Environmental health in nursing* (3rd ed.) (pp. 387-388). Alliance of Nurses for Healthy Environments. https://envirn.org/e-textbook/
- Trushna, T., Diwan, V., Nandi, S. S., Aher, S. B., Tiwari, R. R., & Sabde, Y. D. (2020). A mixed-methods community-based participatory research to explore stakeholder's perspectives and to quantify the effect of crop residue burning on air and human health in Central India: Study protocol. *BMC Public Health*, *20*(1), 1824. https://doi.org/10.1186/s12889-020-09844-6

Advocacy Skills

- Registered Nurses' Association of Ontario (2015). *Taking action: A toolkit for becoming politically involved. https://rnao.ca/sites/rnao-ca/files/Taking_Action_Political_Action_Toolkit_Final_0.pdf pp. 53-71*(Media Relations Strategy and Use of Social Media)
- Long, T. (2014). Public advocacy writing. *Nurse author & editor.* https://doi-org.prxy.lib.unbc.ca/10.1111/j.1750-4910.2014.tb00185.x
- Bucic, S.B (2023) Case study in environmental health advocacy and Jackman-Murphy, K.P. (2023) Acts of nursing advocacy. In R. McDermott-Levy, K.P. Jackman-Murphy, J. Leffers, & A.G. Cantu, A.(eds). *Environmental health in nursing* (3rd ed.) (pp.364-366; pp370-374). Alliance of Nurses for Healthy Environments. https://envirn.org/e-textbook/

B. Significance Within Academic Program

1. Anticipated enrolment 6

2. If there is a proposed enrolment limit, state the limit and explain: 20 undergraduate and 6 graduate students maximum. Due to the compressed nature of the course, the extensive online discussion board participation required by students (and moderation required by instructors), it is felt that this is the limit of being pedagogically sound for this upper-division course requiring mastery of complex knowledge (Taft et al., 2019). It has been found that, in addition to pedagogical benefits of allowing for richer instructor feedback, the ability to engage with students increases student motivation, can improve a sense of student belonging and, in this case, can provide opportunities for students from different years and/or campuses to interact (Dykman & Davis, 2008).

Dykman, C.A., & Davis, C.K. (2008) Online education forum, part three: A quality online educational experience. *Journal of Information Systems Education, 19*(3), 281-289

Taft, S. H., Kesten, K., & El-Banna, M. M. (2019). One Size Does Not Fit All: Toward an Evidence-Based Framework for Determining Online Course Enrollment Sizes in Higher Education. *Online Learning*, *23*(3). https://doi.org/10.24059/olj.v23i3.1534

3. **Required for:** Major: _____ Minor: _____ Other:_____

4. **Elective in:** Major: X Minor: _____ Other:_____

5. **Course required by another major/minor:**

N/A

6. **Course required or recommended by an accrediting agency:** No

7. **Toward what degrees will the course be accepted for credit?** Can be used as elective credit for: MScN or other programs by permission

8. **What other courses are being proposed within the Program this year?**

9. **What courses are being deleted from the Program this year?**

C. Relation to Other Program Areas

1. **Identify courses in other UNBC Programs that overlap with this course; describe the overlap and comment on its significance:** None

2. **Is a preclusion required?** Yes_____ No X

3. **If there is an overlap, and no preclusion is required, please explain why not: N/A**

4. **Has this overlap been discussed with the Program concerned?** Yes N/A No

5. **In offering this course, will UNBC require facilities or staff at other institutions?**

   Yes _____ No X

   If yes, please describe requirements:

6. **Is this course replacing an existing course that is included in one or more transfer agreements with external institutions?**

   Yes_____ No X

   If "yes," please contact the Articulation Officer in the Office of the Registrar.

D. Resources required

1. **Please describe ADDITIONAL resources required over the next five years to offer this course.**

   i. **Faculty Staffing:** 3SCH worth of faculty teaching time each year (including NURS 460)

   ii. **Space (classroom, laboratory, storage, etc.):** none

   iii: **Library Holdings:** see attached form

iv. Computer (time, hardware, software): Web shell for online course delivery. Will utilize existing UNBC resources of Moodle, Kaltura, and related storage space.

E. Additional Attached Materials:

- Syllabus NURS 680, Special Topics in Nursing and Health, May, 2024 (this is the same course which was offered as a "special topics" course in the past)
- Student-Led Seminar, assignment description and rubric, NURS 498/680, Spring 2024
- Personal Reflection Assignment, description and rubric, NURS 498/680, Spring 2024
- Advocacy Assignment, description and rubric, NURS 680, Spring 2024

F. Other Considerations

1. First Nations Content*: Yes** _____ No _____
**** Whether a new course has First Nations content is to be determined by the relevant Faculty Council(s).***

****If "yes,"** refer the motion to the Senate Committee on Indigenous Initiatives **prior to** SCAAF.

2. Other Information: This course, NURS 660 is intended to be taught online with students from NURS 460 (separate motion) within the same Moodle shell. Graduate students have different assignments and greater expectations for quality of work. Enrollment includes up to 20 undergraduate and up to 6 graduate students.

3. Attachment Pages (in addition to required "Library Holdings" Form): 20 pages

G. Authorization

SCCC Reviewed: March 11, 2025

1. Faculty(ies): Health and Human Sciences

2. Faculty Council Motion Number(s): FHHS.2025.01.16.06

3. Faculty Council Approval Date(s): January 16, 2025

4. Senate Committee on Indigenous Initiatives Motion Number:

5. Senate Committee on Indigenous Initiatives Meeting Date:

INFORMATION TO BE COMPLETED BY RECORDING SECRETARY AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF

Moved by: **Seconded by:**

Committee Decision:

Approved by SCAAF: _____ _____
Date **Chair's Signature**

For recommendation to ___✓___, or information of _____ Senate.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.41

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW ACADEMIC PROGRAM PROPOSAL

Motion: That the new Master of Engineering be approved as proposed.

A. General Information

Program Title: Master of Engineering

Program Objectives: Upon completion of the program, the student will have a blend of technical expertise, problem-solving skills, and professional competencies.

1. Technical Expertise: in-depth understanding of core concepts and practices within one engineering discipline (e.g., structural design, transportation, hydrotechnical, geotechnical, environmental); ability to apply engineering science and techniques to analyse, design, and optimize systems, components, or processes; proficiency in modern engineering tools, software, and techniques used in their field.

2. Problem-Solving and Innovation: ability to identify, formulate, and solve complex engineering problems using advanced methodologies; capacity to innovate and develop new solutions, methods, or technologies for emerging challenges in engineering.

3. Research and Analytical Skills: proficiency in collecting and analysing data to inform engineering decisions or research projects; ability to evaluate systems, designs, or methods critically and recommend improvements; experience with planning and executing projects, including project-based research or design.

4. Professional Communication: ability to produce clear and concise reports, technical documentation, or academic papers; skills to present ideas, designs, and findings effectively to technical and non-technical audiences; ability to work effectively in multidisciplinary teams, often across cultural or organizational boundaries.

5. Leadership and Project Management: capacity to lead engineering teams and manage large-scale projects, ensuring timely delivery and adherence to standards; understanding of financial and logistical considerations in engineering projects; commitment to ethical practices and adherence to professional standards in engineering work.

6. Sustainability and Social Responsibility: knowledge of how to incorporate environmental and sustainability considerations into engineering designs and processes; awareness of the societal, environmental, and economic implications of engineering decisions.

7. Lifelong Learning: ability to learn and adapt to new technologies, methodologies, and trends in the engineering field; commitment to ongoing education, certification, or licensure to maintain and expand expertise.

Credential upon Completion of the Program: Master of Engineering

Program Offering the Degree: School of Engineering

Proposed Start Date: September 2026

Suggested Institutional Priority: High.

This proposed degree program is an essential part of the evolution of UNBC's School of Engineering. The School of Engineering was formed to deliver two new engineering undergraduate programs, civil and environmental engineering which started in 2019, in conjunction with the joint UNBC/UBC environmental engineering program, which started in 2002. The School of Engineering also offers a Master of Engineering in Integrated Wood Design since 2015, and a Master of Applied Science in Engineering since 2022. A PhD proposal is currently under review by the Provincial Degree Quality Assurance Board, having been approved to proceed to Stage 2.

The Master of Engineering in Integrated Wood Design has experienced a marked decrease in student enrolment while the MASc has seen steady growth. Offering a course-based program at the MEng level will help attract more students without the need to create additional courses, as several graduate-level courses are already offered for the Master of Engineering in Integrated Wood Design and for the several disciplines covered by the MASc. MEng students will be able to select from existing courses to tailor their program towards one engineering discipline. The course-based MEng can also serve as an alternative path for MASc students that decide or are forced to terminate their research projects.

Relationship of Proposed Program to the Mandate of the Institution: The focus of the engineering faculty on sustainable construction, sustainable wastewater treatment, distributed systems, sustainable management of infrastructure, and remediation of contaminated soils is in direct alignment with UNBCs core mission and vision of being in the north and for the north and Canada's Green University. The MEng program will focus on the design of solution for local problems that can also be applied globally.

Implications for the Co-operative Education Option: A co-op option will be offered to MEng students but will not be mandatory.

Specialties within Program: Civil Engineering and Environmental Engineering

Related Programs at Other Institutions in BC: UBC offers MEng programs in Geological Eng, Mining Eng, Biomedical Eng., Civil Eng., Mechanical Eng., Mechatronics Design, Electrical and Computer Eng., Chemical and Biological Eng., Naval Architecture and Marine Eng., and Clean Energy. UVic offers MEng programs in Biomedical Engineering, Electrical and Computer Science Engineering, Mechanical Engineering, Industrial Ecology, Applied Data Science, and Building Envelopes and Structures. SFU offers MEng programs in Sustainable Energy Engineering, Smart Manufacturing and Systems, and Engineering Science.

Relation to Existing Programs: The MEng program will rely on the courses currently offered for the MASc in Engineering and the MEng in Integrated Wood Design. The proposed Master of Engineering program will share resources with the existing graduate programs in the School of Engineering, viz., the MASc in Engineering, the MEng in Integrated Wood Design, and the upcoming PhD in Engineering.

Articulation Arrangement: There are no articulation arrangements.

Consultations with Other Institutions: Consultations will be held prior to submitting the stage 1 review document to DQuAB.

B. Program Description

General Calendar Description: The Master of Engineering at UNBC is a course-based graduate program that allows engineering graduates to specialize in specific topics of Civil Engineering and Environmental Engineering.

More specifically, the objective of the Master of Engineering program is to prepare its graduates for leadership roles in industry or advanced technical positions.

Curriculum: The Master of Engineering is a course-based degree developed for students who wish to upgrade their competencies in specific areas of Civil Engineering and Environmental Engineering. The students will select courses according to their objectives and are required to obtain 30 CH to conclude the program.

The following courses will be available for selection:
ENGR 606-3 Environmental Modelling
ENGR 621-3 Ecological Engineering and Design
ENGR 638-4 Rock Mechanics
ENGR 640- Advanced Structural Concrete Design
ENGR 641-3 Bridge Engineering
ENGR 700-3 Technical Writing
ENGR 798-3 Special Topics: Sustainable infrastructure
ENGR 616-3 Advanced Project Management
ENGR 658-3 Advanced Treatment Processes for Water and Wastewater
ENGR 672- Advanced Pavement Design
ENGR 798-3 Special Topics: Water Resources Engineering and Management
IENG 611-3 Introduction to Wood as a Building Material
IENG 613-3 Wood Design 1
IENG 614-3 Building Acoustics and Vibration
IENG 624-3 Envelope design
IENG 626-3 Sustainable Design 1
IENG 650-3 CAD/BIM
IENG 722-3 Project Design II
IENG 723-3 Wood Design 2
IENG 727-3 Wood Processing
IENG 729-3 Structural Dynamics and Seismic Design
IENG 738-3 Finite element analysis

Students will also be allowed to select up to two 400-level Engineering courses.
Students who do not hold a license to practice engineering in Canada or are not holders of an engineering degree awarded in Canada will be required to take ENGR 410-3 Professional Practice and Law.

C. Need for Program

This program is required to increase student attraction to the School of Engineering. A course-based MEng will also allow MASc in Engineering students an alternative path for degree completion.

Enrolment Projections:
Students will be admitted two times per year, in September and January. Enrolment is estimated at 10 students per year, evenly split between domestic and international, with no viable minimum, since students in the program will take courses that are already offered.

Cultural, Social and Economic Needs: Local professionals will have the opportunity to advance their skills in specific disciplines without the need to travel or relocate.

Labour Market Demands:

The program will equip graduates with the advanced knowledge and skills needed for related jobs (as identified in BC 2024 Labour Market Outlook: Engineering managers, and Civil Engineers) and practical projects. Businesses and employers in the engineering community will have the opportunity to utilize those skills in their projects through these workers. The province will benefit from higher productivity and better quality of service, as program graduates will be able to implement in industry the skills learned as part of their training.

A few examples of specific areas which would benefit are: construction (labour force management and wellbeing, development of new materials and techniques, sustainable buildings), environmental (energy efficiency, remediation, renewable energy, resource recovery from waste, waste management), geotechnical (ground stability), hydrotechnical (dam safety, flood management and prevention), municipal (water and wastewater systems), structural (wood construction, seismic resilience), transportation engineering (pavement resilience in cold regions)

Other Benefits:

The program will support societal and cultural values of protecting the environment and improving infrastructure through the dissemination of knowledge. The program is expected to improve the understanding and collaboration between communities and institutions to better utilize natural resources and provide essential infrastructure to society.

The proposed program is designed to promote the latest knowledge and advanced engineering technology. Consequently, this is expected to fulfill a demand for additional personnel in existing and new businesses to adapt to the new knowledge and technology. Program graduates will help Canada reach the goals established in Canada's Innovation and Skills Plan, as the advanced knowledge and skills gained by the graduates is applied in their professional activities. These skills will help BC meet some of the goals established in the StrongerBC for everyone – Future Ready Action Plan, contributing specifically to develop affordable housing alternatives and improving the resilience of our infrastructure to climate change. At the local government level, the School of Engineering is working with the City of Prince George to develop a digital twin of the city that will support the development and implementation of several improvements to the city's infrastructure. Engineering students at all levels, including the MEng, will participate in this project.

Other areas that are strategic to BC are mining and transportation. Engineering faculty and students currently work in projects to solve problems in the mining industry, such as water management, tailings stability, and tailings decommissioning. Transportation projects currently under development by Engineering faculty include enhancing pavement resilience in cold regions, reusing waste for road construction, and traffic management during natural disasters.

D. Faculty

Faculty list:

Ali, Faran
Branscomb, Richard
Cherian, Chinchu
Dziedzic, Mauricio
El-Hakim, Mohab
Garcia-Becerra, June
Gehloff, Maik
Helle, Steve
Iorhemen, Oliver
Iqbal, Asif
Kamali, Mohammad
Li, Jianbing

Linklater, Natalie
Raoufi, Mohammad
Roberts, Deborah
Sui, Jueyi
Tannert, Thomas
Thring, Ron
Tong, Fei
Wood-Adams, Paula
Zheng, Wenbo
Zhou, Jianhui

Expected Teaching Loads:

Teaching loads are not expected to be affected due to the proposed program, as students will enrol in courses that are already offered.

E. Program Delivery

The program will rely on existing courses.

Distance Learning Components:
All courses will be offered in-person.

Class Size and Structure:
Class size will typically be geared towards classes of 10-30 students.

Experiential Learning:
Most of the courses offered include design problems, thus including experiential learning component.

F. Program Resources

Administrative Requirements:

1. Some of the time of one Administrative Assistant for the School of Engineering will be required to support this program.
2. Resources in the Graduate Office will be required to process applications, admissions, maintenance, and graduation administrative processes.
3. Resources in the International office will be required since we predict that some of our students will be international.

Operating Requirements:
The School of Engineering will support all operational requirements for this program.

Capital Requirements:
There are no capital requirements from UNBC.

Start-up Costs:
There are no start-up costs associated with this program.

Special Resource Requirements:
There are no special resource requirements associated with this program.

G. Library Resource Requirements (See attached form)

H. Evaluation

Academic Quality of Program:

The academic quality of the MEng program will be evaluated using multiple methods.

1. Course feedback from students to professors.
2. Program feedback from students and professors in a yearly survey.
3. Collection and analysis of program outputs (student success in the employment market).

Methods of Internal Institutional Review:

We will follow the internal UNBC DQAB program review policy and procedure.

Relevant External Program Experts:

This is part of the internal DQAB review process.

I. Miscellaneous

Special Features:

Attachment Pages (in addition to required Library Form): 11 pages

J. Authorization

SCCC Reviewed: March 11, 2025

Faculty: Science and Engineering

Faculty Council Motion Number(s): FSE FC 2025.03.25.15

Faculty Council Approval Date(s): March 25, 2025

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.37

Moved by: David Casperson **Seconded by:** Ben Daniel

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

Program Overview – University of Northern British Columbia _ MEng in Engineering

a) An overview of the organization's history, mission, and academic goals;

UNBC was envisioned as a University "in the North – for the North" and built to transform the quality of life in Northern B.C., the province, and beyond. The University was founded in 1990 and opened the doors of its Prince George Campus in 1994. It has grown significantly over the past 34 years to be an institution with over 16,000 graduates offering various types of programming on campuses throughout Northern B.C. In the spirit of its Carrier motto - 'En cha huna ' - UNBC celebrates diversity and intends to reflect and foster the rich cultural diversity of Northern B.C. and its peoples. UNBC is committed to serving a vast region by building partnerships and by being innovative, resourceful, and responsive to student and community needs. In 2023 UNBC launched its 5-year Strategic Plan, 'Ready', defining our mission to, 'Ignite, Inspire. Lead Change', and to focus on four themes through which this can be achieved; *Cultivate Curiosity, Act on Truth & Reconciliation, Empower Northern Communities, and Foster Local Solutions for Global Impact*.

The *School of Engineering*'s vision aligns directly with Ready, fostering disciplinary progress while exploring emerging areas of scholarship at interfaces between disciplines, providing unique insights into and solutions for global questions, and engaging in ways that are recognized internationally through contribution to the advancement of knowledge, and its value to rural and remote communities, citizens and industries.

b) Proposed credential to be awarded, including the level and category of the degree and the specific discipline or field of study;

Credential: Master of Engineering / Level: Master's / Discipline: Engineering

c) Location of where the proposed degree program will be offered;

University of Northern British Columbia, Prince George campus.

d) Faculty or school(s) offering the proposed degree program;

School of Engineering, Faculty of Science & Engineering.

e) Anticipated program start date;

September 2026.

f) Anticipated completion time in years and semesters;

1 to 2 years (up to 5 Semesters).

g) Expected number of students at launch and at steady state;

At launch: 10 / Steady state: 40

h) A summary of the proposed program, including:

- Aims, goals, and/or objectives of the proposed program;

The Master of Engineering is a course-based program designed for engineers wishing to upgrade their training. The aim is to expand the options available for advanced studies in engineering at UNBC, leveraging the breadth of knowledge areas recently established at UNBC with the consolidation of its School of Engineering. The goal is to educate and train graduates through relevant and applicable topics, to build careers in engineering companies, government agencies, NGOs, and academic and research organizations, and to build capacity for the advancement of healthy, productive, thriving communities in the North.

- Anticipated contribution of the proposed program to the mandate and strategic plan of the institution;

A generalist Master of Engineering program is not currently offered in northern BC. Introducing this program would align with the province's goal of expanding post-secondary opportunities in all regions. It would give northern BC residents access to graduate-level education in Civil and Environmental Engineering close to home, eliminating the need to relocate. This program would fulfill UNBC's commitment to equitable education, support BC's knowledge-based economy, drive regional development, enable research in engineering relevant to northern BC, and strengthen UNBC's research capacity, contributing to the training of researchers for a knowledge-driven society. Besides expanding access to graduate-level engineering education, the program aligns with UNBC's strategic priorities, helps build community partnerships and enhances faculty recruitment and retention. It would allow UNBC to elevate its community profile, and enhance partnerships with other institutions, industries, and communities.

- Linkages between the learning outcomes and the curriculum design and whether a work- integrated learning experience is required for degree completion;

Standard	**Learning Outcomes**	**Curriculum Design**
Depth and Breadth of Knowledge	Depth of Knowledge 1. Advanced Engineering Expertise Breadth of Knowledge 3. Interdisciplinary Engineering Applications 4. Global and Societal Impact 5. Systems Thinking 6. Engineering Policy and Standards	Depth of knowledge is achieved through advanced coursework on specific engineering topics. Breadth of knowledge is also through a student's being able to select courses in diverse topics and attending interdisciplinary seminars while enrolled in the program.
Knowledge of Methodologies	1. Critical Evaluation of Methodologies 2. Emerging Methodologies	Each advanced course will present different problem-solving methodologies as well as allow the students to become acquainted with the latest trends in engineering design.
Application of Knowledge	1. Problem-Solving Excellence 2. Knowledge Translation and Application	Most courses will be design-based and focus on solving real problems, therefore contributing to achieving these learning outcomes.
Communication Skills	Effectively communicate engineering concepts, methodologies, and design findings to diverse audiences, including technical experts, policymakers, and non-specialist public.	Delivery of seminars, course reports, as well as presentation to diverse audiences, both on and off-campus will be part of a student's activities during the program.
Awareness of Limits of Knowledge	Critical Evaluation of Engineering Knowledge: Critically assess current literature and identify limitations.	Each course will present the limits of current knowledge in the discipline and build awareness of limitations and current research trends to expand the limits of knowledge in the specific topic.
Professional Capacity/ Autonomy	Professional Capacity 1. Leadership in Engineering Practice 2. Application of Engineering Knowledge 3. Professional Collaboration 4. Knowledge Mobilization Autonomy 1. Independent Leadership 2. Ethical Decision-Making 3. Responsibility and Accountability 4. Continual Professional Development	Master of Engineering students will gain professional capacity and autonomy by developing independent solutions to real problems by applying the knowledge gained from each course and using state-of-the art methods and tools.

Work-integrated learning experience is not required for degree completion but may be part of a student's path when a course project includes close collaboration with industry. The program has been structured to allow its graduates to

pursue diverse career pathways: industry, government, and consulting.

- Delivery methods (in-person, online, combination of in-person and online (provide ratio of each delivery method), or other (explain));

A range of in-person delivery methods will be utilized including classroom and laboratory instruction, group seminars, discussion groups, and industry collaboration. The program is essentially 100% in-person.

- Program strengths; and,

A broad selections of advanced engineering courses to choose from. Students will be encouraged to focus on one major area in Civil or Environmental Engineering, and select a few courses in another area to fulfill program requirements and broaden their expertise; Course projects focused on societal and economic issues relevant for Northern communities with solutions that can also be applied globally; Strong experiential learning, as most of our courses involve laboratory and/or field components; Exposure to disciplinary and interdisciplinary environments, as students from different areas will learn about each other's projects in diverse opportunities, such as interdisciplinary seminars and institutional events showcasing their work.

- Classification of Instructional Program (CIP) Code (minimum 4-digit; 6-digit preferred).

14.0101 Engineering, general

i) Name, title, phone number, and e-mail address of the institutional contact person if more information is required.

Dr. Deborah Roberts, Dean, Faculty of Science and Engineering, Deborah.Roberts@unbc.ca, 250 960 5205
Prof. Mauricio Dziedzic, Chair, School of Engineering, Mauricio.Dziedzic@unbc.ca, 250 960 5114

Standard 1 Benefits to Students

The institution must demonstrate that the proposed degree will provide benefits to students.

Criterion Question	Institution Response
Who is the targeted student population?	Direct graduates from Bachelor of Applied Science, especially from Civil and Environmental disciplines, both domestic and international, and also industry professionals looking to advance their education.
What specific need is there for the proposed program and how will it benefit the targeted student population?	Specific need: This program meets the needs of northern BC students, in the provision for the first time of regionally local access to dedicated advanced level engineering training opportunities. This proposed program directly fulfils the need identified at the provincial level for advanced skills in Civil Engineering and Environmental Engineering in Canada, as highlighted in the Government of Canada job outlook, and applicable to BASc, MASc and PhD graduates. The program broadens the scope of graduate instruction available to Advanced Wood Engineering, Cold Regions Engineering, Environmental Engineering, Environmental Remediation, Geotechnical Engineering, Hydrotechnical Engineering, Structural Engineering, Transportation Engineering. At UNBC, the program meets the needs of an expanding School of Engineering faculty, and the specific needs of students currently graduating from UNBC's Bachelor of Applied Sciences programs with little option for continued studies at UNBC. Benefit to students: The students will directly benefit by being able to continue their professional training in Civil Engineering and Environmental Engineering at UNBC, rather than having to seek opportunities far away from the region. Furthermore, a Master's degree is often required for engineers in consulting and research jobs to advance their careers. Students in this program will graduate with the qualities and skills needed for employment requiring the ability to make informed judgements on complex issues in specialist fields, and innovate in tackling and solving problems, in line with degree level standards.
Will the proposed program provide specific benefits to Indigenous students in BC's post-secondary system and/or at your institution? If so, describe.	UNBC's connection to Indigenous communities and focused student supports will help attract Indigenous students to the proposed program, thereby creating more opportunities in advanced studies for Indigenous people. UNBC's First Nations Centre offers a wide variety of programs, services, and activities that help to improve educational outcomes for Indigenous students, create awareness and understanding of Indigenous perspectives and worldviews, and celebrate Indigenous culture. Engineering faculty will continue engaging with Indigenous communities to explore research topics that are relevant and valuable to these communities and may also help attract Indigenous students to the proposed program.

Will the proposed program specifically benefit those traditionally underserved and underrepresented students in BC's post-secondary system and/or at your institution? If so, describe.	UNBC has been striving to promote equity, diversity and inclusion in all its programs. Program students will be asked to consider all impacts of their research, including social, economic, and environmental, when they propose solutions to design problems posed in course work, and in all communications of their results. Awareness of these impacts can lead to designing solutions that promote EDI. UNBC programs have a lower tuition fee for domestic students than other programs in the province, and the students would also avoid the cost of moving away from the region to attend other universities.
What specific opportunities are available to program graduates for further study, and at which institutions? If the expectation is that the degree is terminal, state that is the case. Provide evidence of discussions with other post-secondary institutions with regard to advanced degree opportunities in an appendix.	At UNBC, MEng graduates would be able to do further studies at the Master of Applied Science in Engineering, a thesis-based program, and at the PhD in Engineering currently pending approval for implementation. In other Higher Education Institutions, MEng graduates would also be able to continue their studies at MASc thesis-based and PhD programs, such as those offered at the University of British Columbia, University of Victoria, and Simon Fraser University, in British Columbia. They would also be able to continue their studies at these levels at other universities in Canada and abroad. *Correspondence is included in an appendix for Standard 1*
What is the anticipated tuition fee for the program by year and by credit/unit? Include both proposed domestic and international tuition.	The expected tuition fee should align with that currently practiced for UNBC's Master of Engineering in Integrated Wood Design, i.e., $512.00 and $716.80 per credit hour for domestic and international students, respectively. This corresponds to full costs of $16,896.00 and $23,645.00, respectively.
What are the tuition fees for similar programs at this degree level at other post- secondary institutions in the province? If the tuition fee is higher than fees for similar programs in BC, what is the rationale for the higher rate and what actions will the institution take to mitigate student tuition costs?	Domestic and international students fees: UBC: $20,000- $30,000 / year UVic: $19,485 - $27,060 / year SFU: $8,430 - $27,154 / year

Standard 2 System Coordination and Program Duplication

The institution must establish that the proposed program fills a need within the post-secondary system and that there is no unnecessary duplication with existing programs.

A. System Context

Use the table below to list all similar degree programs at the same level at other private and public post-secondary institutions in BC. (Add as many lines as required.)

Institution offering similar program	Name of degree program	How the proposed program differs
University of British Columbia, Vancouver	Master of Engineering in: Geological Eng, Mining Eng, Biomedical Eng., Civil Eng., Mechatronics	There is some overlap in the coverage of the proposed program with the MEng in Civil Engineering and in Clean Energy. UNBC courses will focus on northern issues and

	Design, Electrical and Computer Eng., Chemical and Biological Eng., Naval Architecture and Marine Eng., Clean Energy	cover specific areas not currently emphasized at UBC, such as river ice hydraulics, pavement engineering, oil spills, and first nations water security.
University of Victoria	Master of Engineering in: Biomedical Engineering, Electrical and Computer Science Engineering, Mechanical Engineering, Industrial Ecology, Applied Data Science, Building Envelopes and Structures	The disciplines covered are different.
Simon Fraser University	Master of Engineering in: Sustainable Energy Engineering, Smart Manufacturing and Systems, Engineering Science	The disciplines covered are different.

B. Consultation with Other BC Post-Secondary Institutions

For each institution in the preceding list that offers a similar program at the same level, summarize the form of consultation that occurred with that institution and materials used, and briefly describe the institution's feedback. (Add as many lines as required.)

Name, position, and institution of person consulted	Method of consultation and materials used	Feedback and applicant's response
Dr. James Olson, Dean of Engineering, University of British Columbia	Contact by email, SCAAf approved motion will be shared.	UBC indicated …
Dr. Mina Hoorfar, Dean, Faculty of Engineering & Computer Science, University of Victoria	Contact by email, SCAAf approved motion will be shared.	UVic indicated …
Dr. Eugene Fiume, Dean, Faculty of Applied Sciences, Simon Fraser University	Contact by email, SCAAf approved motion will be shared.	SFU stated that …

C. Rationale for Duplication

If programs with similar learning objectives are currently available in the region or online within the province, what is the specific rationale for establishing another program?

No similar program is available in northern British Columbia or online within the province.

D. Collaboration

Describe how the institution will collaborate and/or share resources with other institutions offering related programs, including articulation and laddering agreements. Provide resource sharing agreements and articulating and laddering agreements in the appendix.

The current collaborations with UBC, UVic, and SFU establish the goodwill necessary to pursue future collaborations that will evolve organically once interests arise about each other's course offerings to be pursued by students under the Western Deans agreement. These collaborations may then lead to formal agreements.

Standard 3 Social and Economic Benefits

The institution must demonstrate that the proposed program will serve the economic and social needs of British Columbians.

A. Social and Economic Benefits

Criterion Question	Institution Response

What social and economic benefits would the program offer the community, region, or province?	The program will support societal and cultural values of protecting the environment and improving infrastructure through the dissemination of knowledge. The program is expected to improve the understanding and collaboration between communities and institutions to better utilize natural resources and provide essential infrastructure to society. The program will equip graduates with the advanced knowledge and skills needed for related jobs (as identified in BC 2024 Labour Market Outlook: Engineering managers, Civil Engineers, and post-secondary researchers, teachers, and instructors), and practical projects. Businesses and employers in the engineering community will have the opportunity to utilize those skills in their projects through these workers. The province will benefit from higher productivity and better quality of service, as program graduates will be able to implement in industry the skills learned as part of their training. A few examples of specific areas which would benefit are: construction (labour force management and wellbeing, development of new materials and techniques, sustainable buildings), environmental (energy efficiency, remediation, renewable energy, resource recovery from waste, waste management), geotechnical (ground stability), hydrotechnical (dam safety, flood management and prevention), municipal (water and wastewater systems), structural (wood construction, seismic resilience), transportation engineering (pavement resilience in cold regions).
Reference specific government and community initiatives, plans, and priorities that the proposed program supports.	The proposed program is designed to promote the latest knowledge and advanced engineering technology. Consequently, this is expected to fulfill a demand for additional personnel in existing and new businesses to adapt to the new knowledge and technology. Program graduates will help Canada reach the goals established in Canada's Innovation and Skills Plan, as the advanced knowledge and skills gained by the graduates is applied in their professional activities. These skills will help BC meet some of the goals established in the StrongerBC for everyone – Future Ready Action Plan, contributing specifically to develop affordable housing alternatives and improving the resilience of our infrastructure to climate change. At the local government level, the School of Engineering is working with the City of Prince George to develop a digital twin of the city that will support the development and implementation of several improvements to the city's infrastructure. Engineering students at all levels, including the MEng, will participate in this project. Other areas that are strategic to BC are mining and transportation. Engineering faculty and students currently work in projects to solve problems in the mining industry, such as water management, tailings stability, and tailings decommissioning. Transportation projects currently under development by Engineering faculty include enhancing pavement resilience in cold regions, reusing waste for road construction, and traffic management during natural disasters.

What occupations are students most likely to seek or advance in immediately after graduating (limit to 2-3 occupations)? In an appendix, provide written correspondence from a number of potential employers supporting the proposed degree program, stating their organization's total staff numbers and how many of their current staff positions could be filled by program graduates.	*0016 Senior Managers* – Construction, transportation, production, and utilities which includes various senior leadership roles. *0211 Engineering Managers* which includes engineering research and development directors, Engineering department managers and engineering managers. *4012 Post-secondary teaching and research assistants*, which will be available to interested students once they are engaged in the program. *Correspondence with potential employers is included in an appendix for Standard 3*

B. Engagement with Indigenous Peoples

Criterion Question	Institution Response
What is the institution's plan to incorporate Indigenous content in the program?	The program supports UNBC's strategic priority to act on truth and reconciliation, as it will continue embracing existing knowledge when developing solutions for First Nations communities as part of our research projects. Indigenous content is incorporated through research projects that specifically address Indigenous issues, such as water security, and by First Nations consultation in projects that involve their traditional lands. We will continue collaborating with BC's First Nations communities, building on relationships developed during past projects such as: Water security with Lheidli T'enneh First Nation; Wastewater system upgrades for the Stellat'en First Nation community; An agrivoltaics system for the Osoyoos First Nation community.
How did the institution work on this application with local First Nations on whose territory the institution is located, and with other First Nations or Indigenous groups or experts?	The *Lheidli T'enneh* are an Indigenous community of people in and around the city of Prince George, British Columbia. The consultation process involved reaching out by email to their educational coordinator to explain the scope of the proposed program and how it may affect the Lheidli T'enneh community. Additionally, the School of Engineering reached out to the *Stellat'en* and the *Osoyoos* First Nations, previous research project partners, via their respective websites, indicating our intent on submitting the current proposal, seeking their input, and a strengthened collaboration. No responses had been received at the time of submission. *Correspondence is included in an appendix for Standard 3*

C. Engagement with Employers, Community Groups, and Professional Organizations

Criterion Question	Institution Response
Describe the engagement process with relevant employers, community organizations, professional bodies, and program advisory committees. Summarize the materials used and the feedback received from these groups, and state how the proposed program changed in response to feedback. Provide documented evidence of engagement in an	An online survey was conducted and sent to the UNBC School of Engineering Industry Advisory Board members and other local practitioners. ?? responses were obtained from ?? different organizations. *The survey questions and full results are presented in an appendix for Standard 3*.

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appendix.	
If the program is primarily relevant to public sector employment, describe the support the program has from government ministries or other public sector employers and explain how the proposed program changed in response to feedback. Provide documented evidence of engagement in an appendix.	Not applicable.
If the program relates to a regulated profession, summarize the feedback provided by the regulatory or licensing bodies and the responsible Ministry. Provide documented evidence of engagement in an appendix or state "Not Applicable".	Not applicable.

Standard 4 Institutional Resources

The institution must show it has access to sufficient resources to implement and sustain the program.

Criterion Question	Institution Response
Explain how the proposed program relates to the overall academic plan of the institution or advances the mandate of the institution.	Offering this program in the North will fulfill a significant promise within UNBC's mandate to offer equitable educational opportunities to the people of northern BC. It will support BC's growing knowledge-based economy and act as an engine for development. Students will have the opportunity to pursue advanced training in areas of engineering relevant to northern BC and beyond. The program supports UNBC's mandate to expand programming aligned with high demand occupations and priority sectors. It will strengthen UNBC's presence among Engineering professionals, and students in the program will be trained to contribute to our increasingly knowledge-based society, which is a fundamental mission for UNBC. Furthermore, the proposed program aligns directly both with UNBC's Academic Roadmap priority of 'Driving Strategic Enrolment Growth and Impact', by focusing on initiatives that will attract and retain UNBC students, and UNBC's Strategic Plan to 'Empower Northern Communities', by ensuring research and academic activity is reflective of the needs of people in the North.
Briefly summarize how well program areas related to the proposed program performed over the last four years and describe how successful performance was defined and measured.	UNBC's School of Engineering (SoE) has grown considerably in the past four years due to the implementation of the new Civil Engineering and Environmental Engineering BASc programs. We went from 8 faculty members, originally in the Joint UNBC/UBC Environmental Engineering and Master of Engineering in Integrated Wood Design programs to 21 full-time faculty members. Our performance was defined and measured by program implementation, accreditation, and external program quality assurance review success. The undergraduate programs achieved full implementation and were accredited. The MASc was approved and implemented. A PhD proposal received internal approval and was submitted to DQAB. The SoE programs underwent an external quality

	assurance review and received strong praise. Student attraction has increased for the undergraduate programs after a challenging period following the COVID-19 pandemic. Outreach actions are being developed, and significant growth was seen in the 2024-25 intake, and further growth is expected for the next few years. The Master of Engineering in Integrated Wood Design has experienced fluctuations in student intake, reaching its lowest point in the 2024-25 cohort, as most admitted students applied to a deferral due to not obtaining a visa. Additionally, with the inception of our MASc in Engineering, some of the students have opted for the MASc instead of the MEng. Graduates from our BASc programs have had great success in finding jobs. This is observed first-hand with the senior students of our undergraduate programs, where most graduating students have job offers by the start of their senior year. The same holds true for our MEng and MASc graduates, and we expect that graduates from the proposed program will also be successful in finding jobs. Adding more options at the MEng level will strengthen the graduate programs in general by attracting more students to all graduate courses we already offer, providing a richer classroom environment and also helping create a better community of practice associate with each cohort.
If the proposed program builds on existing programs, how will the existing programs be affected?	The proposed Master of Engineering will enhance the existing programs of UNBC's School of Engineering by attracting professionals to our classrooms who can help enhance the discussions with their experience. This new program will offer students completing a BASc in Engineering the option to advance their training in specific areas. It will also strengthen collaborations between UNBC's engineering faculty and local businesses, fostering design projects that benefit both graduate students and the community.
Identify operation resources required to launch and maintain the program (e.g., faculty, staff, student services, capital equipment, classroom/laboratory space, learning resources), and explain how these needs will be met. Provide a budget.	UNBC will use the current staff and faculty complement and leverage existing resources and facilities to implement and operate the program. No additional budget funding is sought or required. MEng students will be able to select existing graduate-level courses to tailor their program according to specific interests. In addition to existing academic support and student community infrastructure UNBC's library offers engineering-specific research guidance,. and through annual contributions from the SoE to the library it is expected that a part-time subject specialized librarian position will further support the program. Furthermore, students have access to well-equipped research and teaching laboratories (e.g. WIDC, NALS) that have been supported by the Canada Foundation for Innovation, BC Knowledge Development Fund, and other funders. External research funding comes from many sources, such as NSERC, CFI, and BC Knowledge Development Fund. The total amount of funding received by Engineering faculty is over $2 Million annually for the last three years, with over 15 applications per year funded.

Provide an enrolment plan for the program over the next four years, identifying projected number of students (full-time and part-time; domestic and international), minimum viable enrolment, and anticipated number of credentials to be awarded each year.	Students will be admitted two times per year, in September and January. Enrollment is estimated at 10 students per year, evenly split between domestic and international, with no set minimum viable enrolment number, since students in the program will take courses that are already offered.

Library Resource Requirements and Consultation Form
(to be submitted with SCAAF New Academic Program Proposal Motion Form)

(Please complete the sections highlighted in blue in the footer of this document)

Completing the Library Resource Requirements and Consultation Form is a critical step in ensuring that the Library can support the program through its resources, teaching, and services. The Library is committed to identifying existing and needed resources that support students in their educational journeys at UNBC.

This form must be submitted to the Library **21 days (3 weeks)** prior to SCAAF New Program Approval deadline.

NEW ACADEMIC PROGRAM PROPOSAL ***(to be completed by Faculty Member/Chair/Dean)***

Name of proposed Program or degree: Master of Engineering

Anticipated start date of program: September 2026

Anticipated enrolment:

Are the SCAAF Program forms attached: x YES _____ NO

Please provide keywords associated with the discipline:
Engineering, Civil, Construction, Environmental, Hydraulic, Hydrotechnical, Geotechnical, Transportation, Pavement, Water Resources, Energy, Water, Wastewater, Waste, Soil, Structural, Building, Timber, Concrete, Steel, Materials

Library Resource Requirements ***(to be completed by Librarians)***

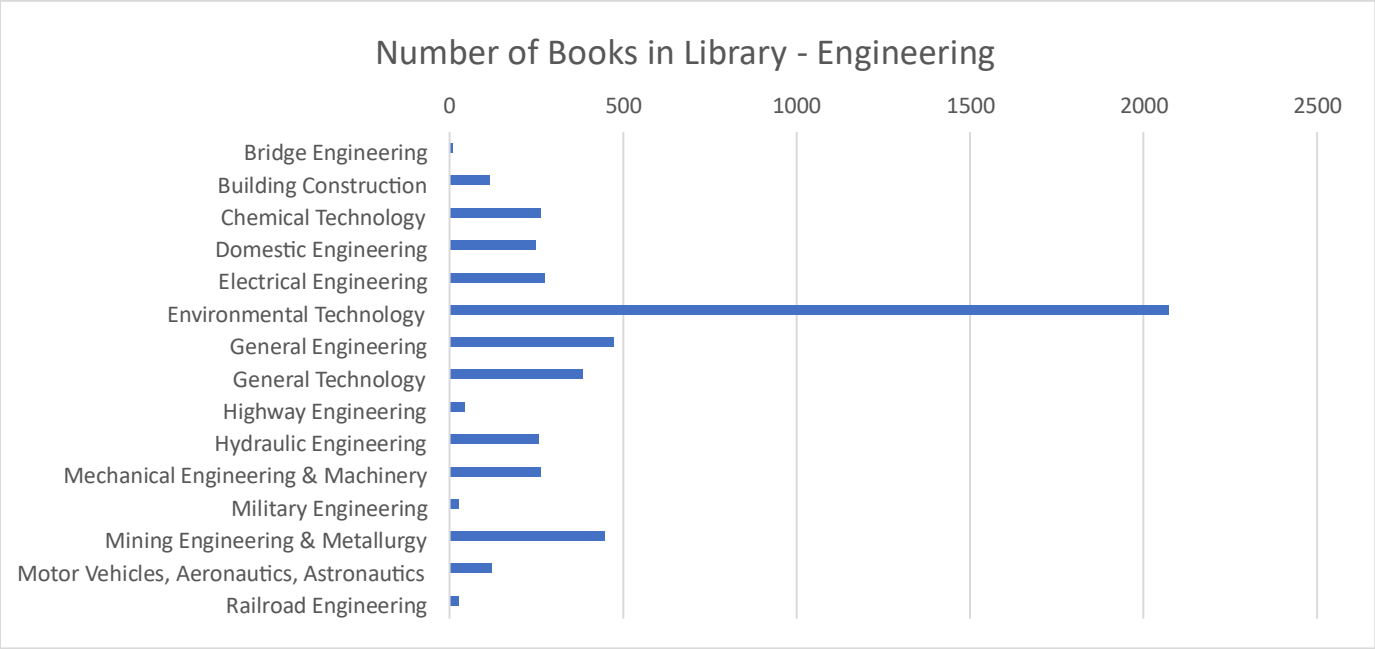
Please describe the impact of the following Library service(s) or resource(s):

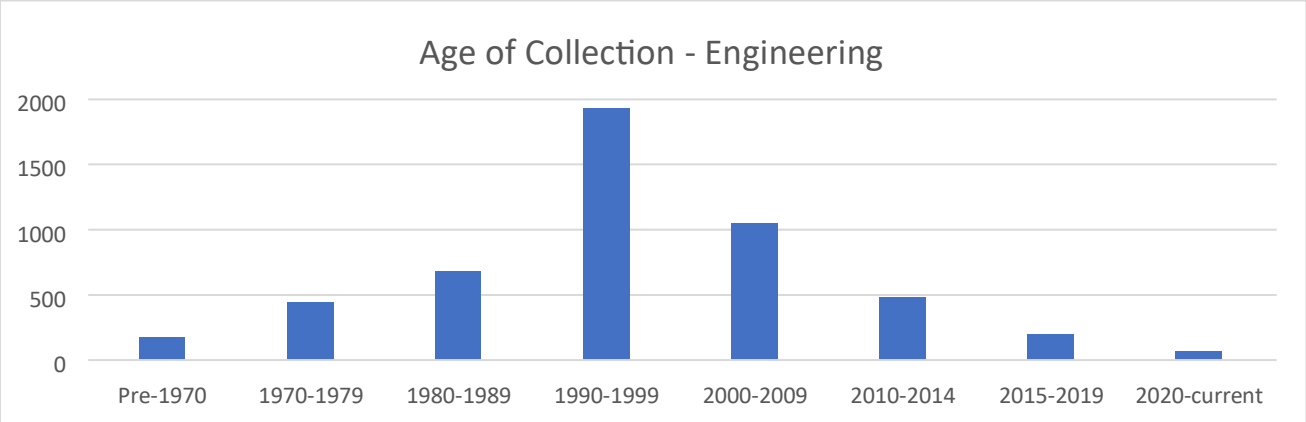
1. Collections:

a) Required and/or recommended readings and course reserves.

b) Depth of the collection in relevant areas.

- Monographs: LCSH





- Electronic resources *(Will the addition of this program impact the electronic resources required and licenses, ex. impact on simultaneous users, contract considerations:*

- Available Databases:

Name	Description	Cost
Academic Search Complete	A large multidisciplinary resource that includes the full text for most of the publications in its index	~$31,000/yr
ASTM Compass	Access to standards published by the American Society for Testing and Materials	~$12,000/yr

CSA Online	Standards developed by the Canadian Standards Association	~$7500/yr
IEEE Xplore	IEEE journals and conference proceedings	~$42,000/yr
Science Direct	Elsevier journals	~$247,000/yr
SpringerLink	Springer journals	~$102,000/yr
Web of Science	Current and retrospective bibliographic information, author abstracts, and cited references	~$23,000/yr
Wiley Online Library	Wiley journals	~$149,000/yr

It is possible that the IEEE Xplore subscription may increase by ~$11,000/yr because of additional engineering usage. Our current subscription includes engineering content at significantly reduced costs due to negotiation related to our small number of students and low usage of that content. If our usage of engineering content increased significantly, IEEE would reach out to upwardly adjust our subscription based on standard costs for engineering content.

- Available online journals available by subject:
    - Engineering - General: 258 online journals
    - Civil Engineering: 396 online journals
    - Environmental Engineering: 226 online journals
    - Mechanical Engineering: 349 online journals
    - Hydraulic Engineering: 30 online journals
    - Transportation Engineering: 81 online journals

- UNBC's journal collection is adequate to support the proposed MENG program in the areas of civil and environmental engineering. According to JCR, UNBC has access to all the most highly cited journals in both civil and environmental engineering, mostly due to our ongoing subscriptions to ScienceDirect and IEEE.

Top highest impact journal in Civil Engineering (from JCR based on 2023 JIF)

Journal Title	UNBC Availability
Construction and Building Materials	1995-present
Journal of Hydrology	1997-present
Engineering Structures	1995-present
Energy and Buildings	1995-present
Building and Environment	1995-present
Ocean Engineering	1995-present

IEEE Transactions on Intelligent Transportation Systems	2000-present
Journal of Building Engineering	2015-present
Automation in Construction	1995-present
Thin-walled Structures	1995-present

Top highest impact journal in Environmental Engineering (from JCR based on 2023 JIF)

Journal Title	UNBC Availability
Chemical Engineering Journal	1997-present
Journal of Cleaner Production	1995-present
Environmental Science and Technology	1967-present
Journal of Hazardous Materials	1995-present
Applied Catalysis B-Environmental	1995-present
Water Research	1995-present
Journal of Environmental Chemical Engineering	2013-present
Building and Environment	1995-present
Waste Management	1995-present
Resources Conservation and Recycling	1995-present

- Are there discipline or subject specific resources (databases, software) required for pedagogical and/or accreditation purposes? Yes ___ No_X_

No additional subject specific resources are required for the proposed MENG program assuming the topics stay within our current resources. However, there are a couple of recommended resources if the Engineering program continues to expand and become more comprehensive.

- If yes, provide name of resource(s) required and total cost:

- Compendex
  - Comprehensive engineering bibliographic index covering journal articles, technical reports, conference papers and proceedings. This is a standard resource in most institutions with comprehensive engineering programs. UNBC has not subscribed to it in the past due to the extreme cost and the fact that the current engineering programs are quite narrow in focus. If the Engineering program expands their offerings to become more comprehensive, this resource is highly recommended.
  - Ongoing annual cost: ~$50,000/yr
  - One-time cost for backfile: ~$33,000

- Techstreet or IHS Standards ○ An information management system for standards to build a collection of selected standards from selected organizations. UNBC has a subscription to CSA Standards, but there are many other international standards bodies (e.g., ISO, ASCE, etc.) Currently the Library has purchased requested standards (other than through CSA) on an as-requested basis. However, these are static (not updated) and usually in print. If the program desired expanded access to standards, a subscription to a standards management system is recommended.
    - Annual cost: unknown as this is dependent on number of publishers and standards

2. Human Resources:

a) Instruction *(i.e. research guide development, online tutorials, embedded instruction, tours, etc)*:

Currently, the instruction support for the Engineering program is minimal with ~2-3 instruction sessions/year and a basic libguide. The MENG program is not expected to add to that as the program is using existing courses.

b) The level of expertise required to support the program *(please provide rationale)*:

__X__ Generalist

__X__ Subject Specialist *(i.e. specific skills and/or knowledge are required to support the program)*

The majority of the existing library support work (ad hoc instruction sessions, purchasing resources as needed, providing Library- or research-related advice, etc.) to support the Engineering program is being done by a Generalist librarian who has competing priorities. The MENG and recent PhD proposal can be minimally accommodated within the current ad hoc support. However, if the Engineering program would like a more comprehensive bibliographic instruction program tied to curricular needs or there is an expectation that PhD students will do in-depth research projects, then additional subject specialist support will be needed. The School of Engineering has provided annual funding to help support the library and it is anticipated that the funding will be put toward a parttime subject specialized librarian position that can further support the program. The library is currently seeking further funding to ensure that this is a full-time position (with additional responsibilities) for recruitment purposes and to meet the growing needs of the library.

c) Reference assistance *(i.e. individual or group support, ongoing support)*
Reference assistance for the Engineering program is currently provided by the main Library reference desk. It is expected that this will continue with the proposed MENG.

3. **Physical space** ***(i.e. sufficient collaborative study space, individual study areas in the library, etc)*****:**

Students in the proposed MENG program will compete with other students for space in the Library. Group study and collaboration space is likely to be the most desirable.

4. **Collaboration with other libraries or institutions** ***(i.e. regional programs, distributed programs, libraries in the community, etc)*****:**

Unknown

5. **Other (i.e. special equipment and/or software):**

Unknown

Library's recommendation ***(check one option)*****:**

_X_ Proposal has an impact on the Library and can be supported within the Library's current budget.

___ Proposal cannot be supported without additional budgetary resources; see details above or appended.

___ Proposal has no impact on the Library.

Heather Espey

University Librarian (or designate) signature

June 3, 2025

Date

Program Overview – University of Northern British Columbia _ MEng in Engineering

a) An overview of the organization's history, mission, and academic goals;

UNBC was envisioned as a University "in the North – for the North" and built to transform the quality of life in Northern B.C., the province, and beyond. The University was founded in 1990 and opened the doors of its Prince George Campus in 1994. It has grown significantly over the past 34 years to be an institution with over 16,000 graduates offering various types of programming on campuses throughout Northern B.C. In the spirit of its Carrier motto - 'En cha huna ' - UNBC celebrates diversity and intends to reflect and foster the rich cultural diversity of Northern B.C. and its peoples. UNBC is committed to serving a vast region by building partnerships and by being innovative, resourceful, and responsive to student and community needs. In 2023 UNBC launched its 5-year Strategic Plan, 'Ready', defining our mission to, 'Ignite, Inspire. Lead Change', and to focus on four themes through which this can be achieved; *Cultivate Curiosity, Act on Truth & Reconciliation, Empower Northern Communities, and Foster Local Solutions for Global Impact*.

The *School of Engineering*'s vision aligns directly with Ready, fostering disciplinary progress while exploring emerging areas of scholarship at interfaces between disciplines, providing unique insights into and solutions for global questions, and engaging in ways that are recognized internationally through contribution to the advancement of knowledge, and its value to rural and remote communities, citizens and industries.

b) Proposed credential to be awarded, including the level and category of the degree and the specific discipline or field of study;

Credential: Master of Engineering / Level: Master's / Discipline: Engineering

c) Location of where the proposed degree program will be offered;

University of Northern British Columbia, Prince George campus.

d) Faculty or school(s) offering the proposed degree program;

School of Engineering, Faculty of Science & Engineering.

e) Anticipated program start date;

September 2026.

f) Anticipated completion time in years and semesters;

1 to 2 years (up to 5 Semesters).

g) Expected number of students at launch and at steady state;

At launch: 10 / Steady state: 40

h) A summary of the proposed program, including:

- Aims, goals, and/or objectives of the proposed program;

The Master of Engineering is a course-based program designed for engineers wishing to upgrade their training. The aim is to expand the options available for advanced studies in engineering at UNBC, leveraging the breadth of knowledge areas recently established at UNBC with the consolidation of its School of Engineering. The goal is to educate and train graduates through relevant and applicable topics, to build careers in engineering companies, government agencies, NGOs, and academic and research organizations, and to build capacity for the advancement of healthy, productive, thriving communities in the North.

- Anticipated contribution of the proposed program to the mandate and strategic plan of the institution;

A generalist Master of Engineering program is not currently offered in northern BC. Introducing this program would align with the province's goal of expanding post-secondary opportunities in all regions. It would give northern BC residents access to graduate-level education in Civil and Environmental Engineering close to home, eliminating the need to relocate. This program would fulfill UNBC's commitment to equitable education, support BC's knowledge-based economy, drive regional development, enable research in engineering relevant to northern BC, and strengthen UNBC's research capacity, contributing to the training of researchers for a knowledge-driven society. Besides expanding access to graduate-level engineering education, the program aligns with UNBC's strategic priorities, helps build community partnerships and enhances faculty recruitment and retention. It would allow UNBC to elevate its community profile, and enhance partnerships with other institutions, industries, and communities.

- Linkages between the learning outcomes and the curriculum design and whether a work- integrated learning experience is required for degree completion;

Standard	**Learning Outcomes**	**Curriculum Design**
Depth and Breadth of Knowledge	Depth of Knowledge 1. Advanced Engineering Expertise Breadth of Knowledge 3. Interdisciplinary Engineering Applications 4. Global and Societal Impact 5. Systems Thinking 6. Engineering Policy and Standards	Depth of knowledge is achieved through advanced coursework on specific engineering topics. Breadth of knowledge is also through a student's being able to select courses in diverse topics and attending interdisciplinary seminars while enrolled in the program.
Knowledge of Methodologies	1. Critical Evaluation of Methodologies 2. Emerging Methodologies	Each advanced course will present different problem-solving methodologies as well as allow the students to become acquainted with the latest trends in engineering design.
Application of Knowledge	1. Problem-Solving Excellence 2. Knowledge Translation and Application	Most courses will be design-based and focus on solving real problems, therefore contributing to achieving these learning outcomes.
Communication Skills	Effectively communicate engineering concepts, methodologies, and design findings to diverse audiences, including technical experts, policymakers, and non-specialist public.	Delivery of seminars, course reports, as well as presentation to diverse audiences, both on and off-campus will be part of a student's activities during the program.
Awareness of Limits of Knowledge	Critical Evaluation of Engineering Knowledge: Critically assess current literature and identify limitations.	Each course will present the limits of current knowledge in the discipline and build awareness of limitations and current research trends to expand the limits of knowledge in the specific topic.
Professional Capacity/ Autonomy	Professional Capacity 1. Leadership in Engineering Practice 2. Application of Engineering Knowledge 3. Professional Collaboration 4. Knowledge Mobilization Autonomy 1. Independent Leadership 2. Ethical Decision-Making 3. Responsibility and Accountability 4. Continual Professional Development	Master of Engineering students will gain professional capacity and autonomy by developing independent solutions to real problems by applying the knowledge gained from each course and using state-of-the art methods and tools.

Work-integrated learning experience is not required for degree completion but may be part of a student's path when a course project includes close collaboration with industry. The program has been structured to allow its graduates to

pursue diverse career pathways: industry, government, and consulting.

- Delivery methods (in-person, online, combination of in-person and online (provide ratio of each delivery method), or other (explain));

A range of in-person delivery methods will be utilized including classroom and laboratory instruction, group seminars, discussion groups, and industry collaboration. The program is essentially 100% in-person.

- Program strengths; and,

A broad selections of advanced engineering courses to choose from. Students will be encouraged to focus on one major area in Civil or Environmental Engineering, and select a few courses in another area to fulfill program requirements and broaden their expertise; Course projects focused on societal and economic issues relevant for Northern communities with solutions that can also be applied globally; Strong experiential learning, as most of our courses involve laboratory and/or field components; Exposure to disciplinary and interdisciplinary environments, as students from different areas will learn about each other's projects in diverse opportunities, such as interdisciplinary seminars and institutional events showcasing their work.

- Classification of Instructional Program (CIP) Code (minimum 4-digit; 6-digit preferred).

14.0101 Engineering, general

i) Name, title, phone number, and e-mail address of the institutional contact person if more information is required.

Dr. Deborah Roberts, Dean, Faculty of Science and Engineering, Deborah.Roberts@unbc.ca, 250 960 5205
Prof. Mauricio Dziedzic, Chair, School of Engineering, Mauricio.Dziedzic@unbc.ca, 250 960 5114

Standard 1 Benefits to Students

The institution must demonstrate that the proposed degree will provide benefits to students.

Criterion Question	Institution Response
Who is the targeted student population?	Direct graduates from Bachelor of Applied Science, especially from Civil and Environmental disciplines, both domestic and international, and also industry professionals looking to advance their education.
What specific need is there for the proposed program and how will it benefit the targeted student population?	Specific need: This program meets the needs of northern BC students, in the provision for the first time of regionally local access to dedicated advanced level engineering training opportunities. This proposed program directly fulfils the need identified at the provincial level for advanced skills in Civil Engineering and Environmental Engineering in Canada, as highlighted in the Government of Canada job outlook, and applicable to BASc, MASc and PhD graduates. The program broadens the scope of graduate instruction available to Advanced Wood Engineering, Cold Regions Engineering, Environmental Engineering, Environmental Remediation, Geotechnical Engineering, Hydrotechnical Engineering, Structural Engineering, Transportation Engineering. At UNBC, the program meets the needs of an expanding School of Engineering faculty, and the specific needs of students currently graduating from UNBC's Bachelor of Applied Sciences programs with little option for continued studies at UNBC. Benefit to students: The students will directly benefit by being able to continue their professional training in Civil Engineering and Environmental Engineering at UNBC, rather than having to seek opportunities far away from the region. Furthermore, a Master's degree is often required for engineers in consulting and research jobs to advance their careers. Students in this program will graduate with the qualities and skills needed for employment requiring the ability to make informed judgements on complex issues in specialist fields, and innovate in tackling and solving problems, in line with degree level standards.
Will the proposed program provide specific benefits to Indigenous students in BC's post-secondary system and/or at your institution? If so, describe.	UNBC's connection to Indigenous communities and focused student supports will help attract Indigenous students to the proposed program, thereby creating more opportunities in advanced studies for Indigenous people. UNBC's First Nations Centre offers a wide variety of programs, services, and activities that help to improve educational outcomes for Indigenous students, create awareness and understanding of Indigenous perspectives and worldviews, and celebrate Indigenous culture. Engineering faculty will continue engaging with Indigenous communities to explore research topics that are relevant and valuable to these communities and may also help attract Indigenous students to the proposed program.

Will the proposed program specifically benefit those traditionally underserved and underrepresented students in BC's post-secondary system and/or at your institution? If so, describe.	UNBC has been striving to promote equity, diversity and inclusion in all its programs. Program students will be asked to consider all impacts of their research, including social, economic, and environmental, when they propose solutions to design problems posed in course work, and in all communications of their results. Awareness of these impacts can lead to designing solutions that promote EDI. UNBC programs have a lower tuition fee for domestic students than other programs in the province, and the students would also avoid the cost of moving away from the region to attend other universities.
What specific opportunities are available to program graduates for further study, and at which institutions? If the expectation is that the degree is terminal, state that is the case. Provide evidence of discussions with other post-secondary institutions with regard to advanced degree opportunities in an appendix.	At UNBC, MEng graduates would be able to do further studies at the Master of Applied Science in Engineering, a thesis-based program, and at the PhD in Engineering currently pending approval for implementation. In other Higher Education Institutions, MEng graduates would also be able to continue their studies at MASc thesis-based and PhD programs, such as those offered at the University of British Columbia, University of Victoria, and Simon Fraser University, in British Columbia. They would also be able to continue their studies at these levels at other universities in Canada and abroad. *Correspondence is included in an appendix for Standard 1*
What is the anticipated tuition fee for the program by year and by credit/unit? Include both proposed domestic and international tuition.	The expected tuition fee should align with that currently practiced for UNBC's Master of Engineering in Integrated Wood Design, i.e., $512.00 and $716.80 per credit hour for domestic and international students, respectively. This corresponds to full costs of $16,896.00 and $23,645.00, respectively.
What are the tuition fees for similar programs at this degree level at other post- secondary institutions in the province? If the tuition fee is higher than fees for similar programs in BC, what is the rationale for the higher rate and what actions will the institution take to mitigate student tuition costs?	Domestic and international students fees: UBC: $20,000- $30,000 / year UVic: $19,485 - $27,060 / year SFU: $8,430 - $27,154 / year

Standard 2 System Coordination and Program Duplication

The institution must establish that the proposed program fills a need within the post-secondary system and that there is no unnecessary duplication with existing programs.

A. System Context

Use the table below to list all similar degree programs at the same level at other private and public post-secondary institutions in BC. (Add as many lines as required.)

Institution offering similar program	Name of degree program	How the proposed program differs
University of British Columbia, Vancouver	Master of Engineering in: Geological Eng, Mining Eng, Biomedical Eng., Civil Eng., Mechatronics	There is some overlap in the coverage of the proposed program with the MEng in Civil Engineering and in Clean Energy. UNBC courses will focus on northern issues and

	Design, Electrical and Computer Eng., Chemical and Biological Eng., Naval Architecture and Marine Eng., Clean Energy	cover specific areas not currently emphasized at UBC, such as river ice hydraulics, pavement engineering, oil spills, and first nations water security.
University of Victoria	Master of Engineering in: Biomedical Engineering, Electrical and Computer Science Engineering, Mechanical Engineering, Industrial Ecology, Applied Data Science, Building Envelopes and Structures	The disciplines covered are different.
Simon Fraser University	Master of Engineering in: Sustainable Energy Engineering, Smart Manufacturing and Systems, Engineering Science	The disciplines covered are different.

B. Consultation with Other BC Post-Secondary Institutions

For each institution in the preceding list that offers a similar program at the same level, summarize the form of consultation that occurred with that institution and materials used, and briefly describe the institution's feedback. (Add as many lines as required.)

Name, position, and institution of person consulted	Method of consultation and materials used	Feedback and applicant's response
Dr. James Olson, Dean of Engineering, University of British Columbia	Contact by email, SCAAf approved motion will be shared.	UBC indicated …
Dr. Mina Hoorfar, Dean, Faculty of Engineering & Computer Science, University of Victoria	Contact by email, SCAAf approved motion will be shared.	UVic indicated …
Dr. Eugene Fiume, Dean, Faculty of Applied Sciences, Simon Fraser University	Contact by email, SCAAf approved motion will be shared.	SFU stated that …

C. Rationale for Duplication

If programs with similar learning objectives are currently available in the region or online within the province, what is the specific rationale for establishing another program?

No similar program is available in northern British Columbia or online within the province.

D. Collaboration

Describe how the institution will collaborate and/or share resources with other institutions offering related programs, including articulation and laddering agreements. Provide resource sharing agreements and articulating and laddering agreements in the appendix.

The current collaborations with UBC, UVic, and SFU establish the goodwill necessary to pursue future collaborations that will evolve organically once interests arise about each other's course offerings to be pursued by students under the Western Deans agreement. These collaborations may then lead to formal agreements.

Standard 3 Social and Economic Benefits

The institution must demonstrate that the proposed program will serve the economic and social needs of British Columbians.

A. Social and Economic Benefits

Criterion Question	Institution Response

What social and economic benefits would the program offer the community, region, or province?	The program will support societal and cultural values of protecting the environment and improving infrastructure through the dissemination of knowledge. The program is expected to improve the understanding and collaboration between communities and institutions to better utilize natural resources and provide essential infrastructure to society. The program will equip graduates with the advanced knowledge and skills needed for related jobs (as identified in BC 2024 Labour Market Outlook: Engineering managers, Civil Engineers, and post-secondary researchers, teachers, and instructors), and practical projects. Businesses and employers in the engineering community will have the opportunity to utilize those skills in their projects through these workers. The province will benefit from higher productivity and better quality of service, as program graduates will be able to implement in industry the skills learned as part of their training. A few examples of specific areas which would benefit are: construction (labour force management and wellbeing, development of new materials and techniques, sustainable buildings), environmental (energy efficiency, remediation, renewable energy, resource recovery from waste, waste management), geotechnical (ground stability), hydrotechnical (dam safety, flood management and prevention), municipal (water and wastewater systems), structural (wood construction, seismic resilience), transportation engineering (pavement resilience in cold regions).
Reference specific government and community initiatives, plans, and priorities that the proposed program supports.	The proposed program is designed to promote the latest knowledge and advanced engineering technology. Consequently, this is expected to fulfill a demand for additional personnel in existing and new businesses to adapt to the new knowledge and technology. Program graduates will help Canada reach the goals established in Canada's Innovation and Skills Plan, as the advanced knowledge and skills gained by the graduates is applied in their professional activities. These skills will help BC meet some of the goals established in the StrongerBC for everyone – Future Ready Action Plan, contributing specifically to develop affordable housing alternatives and improving the resilience of our infrastructure to climate change. At the local government level, the School of Engineering is working with the City of Prince George to develop a digital twin of the city that will support the development and implementation of several improvements to the city's infrastructure. Engineering students at all levels, including the MEng, will participate in this project. Other areas that are strategic to BC are mining and transportation. Engineering faculty and students currently work in projects to solve problems in the mining industry, such as water management, tailings stability, and tailings decommissioning. Transportation projects currently under development by Engineering faculty include enhancing pavement resilience in cold regions, reusing waste for road construction, and traffic management during natural disasters.

What occupations are students most likely to seek or advance in immediately after graduating (limit to 2-3 occupations)? In an appendix, provide written correspondence from a number of potential employers supporting the proposed degree program, stating their organization's total staff numbers and how many of their current staff positions could be filled by program graduates.	*0016 Senior Managers* – Construction, transportation, production, and utilities which includes various senior leadership roles. *0211 Engineering Managers* which includes engineering research and development directors, Engineering department managers and engineering managers. *4012 Post-secondary teaching and research assistants*, which will be available to interested students once they are engaged in the program. *Correspondence with potential employers is included in an appendix for Standard 3*

B. Engagement with Indigenous Peoples

Criterion Question	Institution Response
What is the institution's plan to incorporate Indigenous content in the program?	The program supports UNBC's strategic priority to act on truth and reconciliation, as it will continue embracing existing knowledge when developing solutions for First Nations communities as part of our research projects. Indigenous content is incorporated through research projects that specifically address Indigenous issues, such as water security, and by First Nations consultation in projects that involve their traditional lands. We will continue collaborating with BC's First Nations communities, building on relationships developed during past projects such as: Water security with Lheidli T'enneh First Nation; Wastewater system upgrades for the Stellat'en First Nation community; An agrivoltaics system for the Osoyoos First Nation community.
How did the institution work on this application with local First Nations on whose territory the institution is located, and with other First Nations or Indigenous groups or experts?	The *Lheidli T'enneh* are an Indigenous community of people in and around the city of Prince George, British Columbia. The consultation process involved reaching out by email to their educational coordinator to explain the scope of the proposed program and how it may affect the Lheidli T'enneh community. Additionally, the School of Engineering reached out to the *Stellat'en* and the *Osoyoos* First Nations, previous research project partners, via their respective websites, indicating our intent on submitting the current proposal, seeking their input, and a strengthened collaboration. No responses had been received at the time of submission. *Correspondence is included in an appendix for Standard 3*

C. Engagement with Employers, Community Groups, and Professional Organizations

Criterion Question	Institution Response
Describe the engagement process with relevant employers, community organizations, professional bodies, and program advisory committees. Summarize the materials used and the feedback received from these groups, and state how the proposed program changed in response to feedback. Provide documented evidence of engagement in an	An online survey was conducted and sent to the UNBC School of Engineering Industry Advisory Board members and other local practitioners. ?? responses were obtained from ?? different organizations. *The survey questions and full results are presented in an appendix for Standard 3*.

appendix.	
If the program is primarily relevant to public sector employment, describe the support the program has from government ministries or other public sector employers and explain how the proposed program changed in response to feedback. Provide documented evidence of engagement in an appendix.	Not applicable.
If the program relates to a regulated profession, summarize the feedback provided by the regulatory or licensing bodies and the responsible Ministry. Provide documented evidence of engagement in an appendix or state "Not Applicable".	Not applicable.

Standard 4 Institutional Resources

The institution must show it has access to sufficient resources to implement and sustain the program.

Criterion Question	Institution Response
Explain how the proposed program relates to the overall academic plan of the institution or advances the mandate of the institution.	Offering this program in the North will fulfill a significant promise within UNBC's mandate to offer equitable educational opportunities to the people of northern BC. It will support BC's growing knowledge-based economy and act as an engine for development. Students will have the opportunity to pursue advanced training in areas of engineering relevant to northern BC and beyond. The program supports UNBC's mandate to expand programming aligned with high demand occupations and priority sectors. It will strengthen UNBC's presence among Engineering professionals, and students in the program will be trained to contribute to our increasingly knowledge-based society, which is a fundamental mission for UNBC. Furthermore, the proposed program aligns directly both with UNBC's Academic Roadmap priority of 'Driving Strategic Enrolment Growth and Impact', by focusing on initiatives that will attract and retain UNBC students, and UNBC's Strategic Plan to 'Empower Northern Communities', by ensuring research and academic activity is reflective of the needs of people in the North.
Briefly summarize how well program areas related to the proposed program performed over the last four years and describe how successful performance was defined and measured.	UNBC's School of Engineering (SoE) has grown considerably in the past four years due to the implementation of the new Civil Engineering and Environmental Engineering BASc programs. We went from 8 faculty members, originally in the Joint UNBC/UBC Environmental Engineering and Master of Engineering in Integrated Wood Design programs to 21 full-time faculty members. Our performance was defined and measured by program implementation, accreditation, and external program quality assurance review success. The undergraduate programs achieved full implementation and were accredited. The MASc was approved and implemented. A PhD proposal received internal approval and was submitted to DQAB. The SoE programs underwent an external quality

	assurance review and received strong praise. Student attraction has increased for the undergraduate programs after a challenging period following the COVID-19 pandemic. Outreach actions are being developed, and significant growth was seen in the 2024-25 intake, and further growth is expected for the next few years. The Master of Engineering in Integrated Wood Design has experienced fluctuations in student intake, reaching its lowest point in the 2024-25 cohort, as most admitted students applied to a deferral due to not obtaining a visa. Additionally, with the inception of our MASc in Engineering, some of the students have opted for the MASc instead of the MEng. Graduates from our BASc programs have had great success in finding jobs. This is observed first-hand with the senior students of our undergraduate programs, where most graduating students have job offers by the start of their senior year. The same holds true for our MEng and MASc graduates, and we expect that graduates from the proposed program will also be successful in finding jobs. Adding more options at the MEng level will strengthen the graduate programs in general by attracting more students to all graduate courses we already offer, providing a richer classroom environment and also helping create a better community of practice associate with each cohort.
If the proposed program builds on existing programs, how will the existing programs be affected?	The proposed Master of Engineering will enhance the existing programs of UNBC's School of Engineering by attracting professionals to our classrooms who can help enhance the discussions with their experience. This new program will offer students completing a BASc in Engineering the option to advance their training in specific areas. It will also strengthen collaborations between UNBC's engineering faculty and local businesses, fostering design projects that benefit both graduate students and the community.
Identify operation resources required to launch and maintain the program (e.g., faculty, staff, student services, capital equipment, classroom/laboratory space, learning resources), and explain how these needs will be met. Provide a budget.	UNBC will use the current staff and faculty complement and leverage existing resources and facilities to implement and operate the program. No additional budget funding is sought or required. MEng students will be able to select existing graduate-level courses to tailor their program according to specific interests. In addition to existing academic support and student community infrastructure UNBC's library offers engineering-specific research guidance,. and through annual contributions from the SoE to the library it is expected that a part-time subject specialized librarian position will further support the program. Furthermore, students have access to well-equipped research and teaching laboratories (e.g. WIDC, NALS) that have been supported by the Canada Foundation for Innovation, BC Knowledge Development Fund, and other funders. External research funding comes from many sources, such as NSERC, CFI, and BC Knowledge Development Fund. The total amount of funding received by Engineering faculty is over $2 Million annually for the last three years, with over 15 applications per year funded.

Provide an enrolment plan for the program over the next four years, identifying projected number of students (full-time and part-time; domestic and international), minimum viable enrolment, and anticipated number of credentials to be awarded each year.	Students will be admitted two times per year, in September and January. Enrollment is estimated at 10 students per year, evenly split between domestic and international, with no set minimum viable enrolment number, since students in the program will take courses that are already offered.

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.42**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the changes to the program requirements for all BASc Engineering programs on pages 105 - 109 of the 2024/2025 undergraduate academic calendar, be approved as proposed

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:** To update the program requirements to reflect the change of credit hours for ENGR 217-4

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

Civil Engineering Degree
Program Requirements

The minimum requirement for completion of a Bachelor of Applied Science degree with a major in Civil Engineering is 153 credit hours.

Standards of Professional Conduct

In addition to fulfilling all University and program regulations and expectations, all Civil Engineering students are expected to abide by professional standards as set forth by Engineers and Geoscientists British Columbia. Violation of professional standards may result in suspension or dismissal from the program and/or the University.

Academic Performance

Students must adhere to the policies and regulations as specified in the UNBC calendar. This requirement includes, but is not limited to, matters related to academic offenses and progression through the program. Progression is covered by the guidelines on academic standing and continuance. Offenses are governed by the regulations in the UNBC calendar.

Students must obtain the minimum passing grade for all courses. Failure to do so may result in a requirement to withdraw from the program.

Program Requirements

First Year (Semesters 1 and 2)
CHEM 100-3 General Chemistry I
CHEM 120-1 General Chemistry Lab I
CPSC 110-3 Introduction to Computer Systems and Programming
ENGR 110-3 Technical Writing
ENGR 117-3 Engineering Design I
ENGR 130-4 Engineering Mechanics Statics
ENGR 151-1 Engineering Tools I
ENGR 152-1 Engineering Tools II
ENGR 270-3 Surveying
MATH 100-3 Calculus I
MATH 101-3 Calculus II
MATH 220-3 Linear Algebra
PHYS 110-4 Introductory Physics I: Mechanics
PHYS 111-4 Introductory Physics II: Waves and Electricity

Second Year (Semesters 3 and 4)
CIVE 241-4 Civil Engineering Materials
CIVE 260-4 Soil Mechanics
CIVE 320-3 Structural Analysis I
ENGR 211-3 Engineering Communication
ENGR 217-3 Engineering Design II
ENGR 221-3 Thermodynamics and Heat Transfer
ENGR 240-4 Mechanics of Materials
ENGR 254-4 Fluid Mechanics I
MATH 200-3 Calculus III
MATH 230-3 Ordinary Differential Equations and Boundary Value Problems
STAT 271-3 Statistical Reasoning for Engineers

Environmental Engineering
Degree Program Requirements
(UNBC Program)

The minimum requirement for completion of a Bachelor of Applied Science degree with a major in Environmental Engineering is 151 credit hours.

Standards of Professional Conduct

In addition to fulfilling all University and program regulations and expectations, all Environmental Engineering students are expected to abide by professional standards as set forth by Engineers and Geoscientists British Columbia. Violation of professional standards may result in suspension or dismissal from the program and/or the University.

Academic Performance

Students must adhere to the policies and regulations as specified in the UNBC calendar. This requirement includes, but is not limited to, matters related to academic offenses and progression through the program.
Students must obtain the minimum passing grade for all courses. Failure to do so may result in a requirement to withdraw from the program.

Program Requirements

First Year (Semesters 1 and 2)
CHEM 100-3 General Chemistry I
and CHEM 120-1 General Chemistry Lab I
CHEM 101-3 General Chemistry II
and CHEM 121-1 General Chemistry Lab II
CPSC 110-3 Introduction to Computer Systems and Programming
ENGR 110-3 Technical Writing
ENGR 117-3 Engineering Design I
ENGR 130-4 Engineering Mechanics Statics
ENGR 151-1 Engineering Tools I
ENGR 152-1 Engineering Tools II
ENGR 270-3 Surveying
MATH 100-3 Calculus I
MATH 101-3 Calculus II
MATH 220-3 Linear Algebra
PHYS 110-4 Introductory Physics I: Mechanics

Second Year (Semesters 3 and 4)
ENGR 210-3 Material and Energy Balances
ENGR 211-3 Engineering Communication
ENGR 217-3 Engineering Design II
ENGR 220-3 Engineering Chemistry
ENGR 221-3 Thermodynamics and Heat Transfer
ENGR 254-4 Fluid Mechanics I
ENSC 201-3 Weather and Climate
ENVE 222-3 Engineering Biology
FSTY 205-3 Introduction to Soil Science
or GEOG 210-3 Introduction to Earth Science
MATH 200-3 Calculus III
MATH 230-3 Ordinary Differential Equations and
Boundary Value Problems
STAT 271-3 Statistical Reasoning for Engineer

Program Requirements

UNBC degree requirements: 91 credit hours
UBC degree requirements: 72 credit hours
Total degree requirements: 163 credit hours

Semester 1 and 2 completed at UNBC
CHEM 100-3 General Chemistry I
and CHEM 120-1 General Chemistry Lab I
CHEM 101-3 General Chemistry II
and CHEM 121-1 General Chemistry Lab II
CPSC 110-3 Introduction to Computer Systems and Programming
ENGR 110-3 Technical Writing
ENGR 117-3 Engineering Design I
ENGR 130-4 Engineering Mechanics Statics
ENGR 151-1 Engineering Tools I
ENGR 152-1 Engineering Tools II
ENGR 270-3 Surveying
MATH 100-3 Calculus I

MATH 101-3 Calculus II
MATH 220-3 Linear Algebra
PHYS 110-4 Introductory Physics I: Mechanics

Semester 3 and 4 completed at UNBC
ENGR 210-3 Material and Energy Balances
ENGR 211-3 Engineering Communication
ENGR 217-3 Engineering Design II
ENGR 220-3 Engineering Chemistry
ENGR 221-3 Thermodynamics and Heat Transfer
ENGR 254-4 Fluid Mechanics I
ENSC 201-3 Weather and Climate
ENVE 222-3 Engineering Biology
FSTY 205-3 Introduction to Soil Science
or GEOG 210-3 Introduction to Earth Science
MATH 200-3 Calculus III
MATH 230-3 Ordinary Differential Equations and Boundary Value Problems
STAT 271-3 Statistical Reasoning for Engineers

5. Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":

Civil Engineering Degree
Program Requirements

The minimum requirement for completion of a Bachelor of Applied Science degree with a major in Civil Engineering is ~~153~~ 154 credit hours.

Standards of Professional Conduct

In addition to fulfilling all University and program regulations and expectations, all Civil Engineering students are expected to abide by professional standards as set forth by Engineers and Geoscientists British Columbia. Violation of professional standards may result in suspension or dismissal from the program and/or the University.

Academic Performance

Students must adhere to the policies and regulations as specified in the UNBC calendar. This requirement includes, but is not limited to, matters related to academic offenses and progression through the program. Progression is covered by the guidelines on academic standing and continuance. Offenses are governed by the regulations in the UNBC calendar.

Students must obtain the minimum passing grade for all courses. Failure to do so may result in a requirement to withdraw from the program.

Program Requirements

First Year (Semesters 1 and 2)
CHEM 100-3 General Chemistry I

CHEM 120-1 General Chemistry Lab I
CPSC 110-3 Introduction to Computer Systems and Programming
ENGR 110-3 Technical Writing
ENGR 117-3 Engineering Design I
ENGR 130-4 Engineering Mechanics Statics
ENGR 151-1 Engineering Tools I
ENGR 152-1 Engineering Tools II
ENGR 270-3 Surveying
MATH 100-3 Calculus I
MATH 101-3 Calculus II
MATH 220-3 Linear Algebra
PHYS 110-4 Introductory Physics I: Mechanics
PHYS 111-4 Introductory Physics II: Waves and Electricity

Second Year (Semesters 3 and 4)
CIVE 241-4 Civil Engineering Materials
CIVE 260-4 Soil Mechanics
CIVE 320-3 Structural Analysis I
ENGR 211-3 Engineering Communication
ENGR 217-~~3~~ 4 Engineering Design II
ENGR 221-3 Thermodynamics and Heat Transfer
ENGR 240-4 Mechanics of Materials
ENGR 254-4 Fluid Mechanics I
MATH 200-3 Calculus III
MATH 230-3 Ordinary Differential Equations and Boundary Value Problems
STAT 271-3 Statistical Reasoning for Engineers

Environmental Engineering
Degree Program Requirements
(UNBC Program)

The minimum requirement for completion of a Bachelor of Applied Science degree with a major in Environmental Engineering is ~~151~~ 152 credit hours.

Standards of Professional Conduct

In addition to fulfilling all University and program regulations and expectations, all Environmental Engineering students are expected to abide by professional standards as set forth by Engineers and Geoscientists British Columbia. Violation of professional standards may result in suspension or dismissal from the program and/or the University.

Academic Performance

Students must adhere to the policies and regulations as specified in the UNBC calendar. This requirement includes, but is not limited to, matters related to academic offenses and progression through the program.
Students must obtain the minimum passing grade for all courses. Failure to do so may result in a requirement to withdraw from the program.

Program Requirements

First Year (Semesters 1 and 2)
CHEM 100-3 General Chemistry I
and CHEM 120-1 General Chemistry Lab I
CHEM 101-3 General Chemistry II
and CHEM 121-1 General Chemistry Lab II
CPSC 110-3 Introduction to Computer Systems and Programming
ENGR 110-3 Technical Writing
ENGR 117-3 Engineering Design I
ENGR 130-4 Engineering Mechanics Statics
ENGR 151-1 Engineering Tools I
ENGR 152-1 Engineering Tools II
ENGR 270-3 Surveying
MATH 100-3 Calculus I
MATH 101-3 Calculus II
MATH 220-3 Linear Algebra
PHYS 110-4 Introductory Physics I: Mechanics

Second Year (Semesters 3 and 4)
ENGR 210-3 Material and Energy Balances
ENGR 211-3 Engineering Communication
ENGR 217-~~3~~ 4 Engineering Design II
ENGR 220-3 Engineering Chemistry
ENGR 221-3 Thermodynamics and Heat Transfer
ENGR 254-4 Fluid Mechanics I
ENSC 201-3 Weather and Climate
ENVE 222-3 Engineering Biology
FSTY 205-3 Introduction to Soil Science
or GEOG 210-3 Introduction to Earth Science
MATH 200-3 Calculus III
MATH 230-3 Ordinary Differential Equations and
Boundary Value Problems
STAT 271-3 Statistical Reasoning for Engineer

Program Requirements

UNBC degree requirements: ~~91~~ 92 credit hours
UBC degree requirements: 72 credit hours
Total degree requirements: 163 credit hours

Semester 1 and 2 completed at UNBC
CHEM 100-3 General Chemistry I
and CHEM 120-1 General Chemistry Lab I
CHEM 101-3 General Chemistry II
and CHEM 121-1 General Chemistry Lab II
CPSC 110-3 Introduction to Computer Systems and Programming
ENGR 110-3 Technical Writing
ENGR 117-3 Engineering Design I
ENGR 130-4 Engineering Mechanics Statics
ENGR 151-1 Engineering Tools I
ENGR 152-1 Engineering Tools II
ENGR 270-3 Surveying
MATH 100-3 Calculus I
MATH 101-3 Calculus II
MATH 220-3 Linear Algebra
PHYS 110-4 Introductory Physics I: Mechanics

Semester 3 and 4 completed at UNBC
ENGR 210-3 Material and Energy Balances
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ENGR 217-~~3~~ 4 Engineering Design II
ENGR 220-3 Engineering Chemistry
ENGR 221-3 Thermodynamics and Heat Transfer
ENGR 254-4 Fluid Mechanics I
ENSC 201-3 Weather and Climate
ENVE 222-3 Engineering Biology
FSTY 205-3 Introduction to Soil Science
or GEOG 210-3 Introduction to Earth Science
MATH 200-3 Calculus III
MATH 230-3 Ordinary Differential Equations and Boundary Value Problems
STAT 271-3 Statistical Reasoning for Engineers

6. **Authorization: (Please ignore — Section to be completed by Committee Recording Secretaries)**

Program / Academic / Administrative Unit:

Faculty(ies):

Faculty Council Motion Number(s): FSE FC 2025.05.27.01

Faculty Council Approval Date(s): May 28, 2025

Senate Committee on Indigenous Initiatives Motion Number:

Senate Committee on Indigenous Initiatives Meeting Date:

7. **Other Information**

Attachment Pages: **0** pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF 202506.38

Moved by: Bill Owen **Seconded by:** Elie Korkmaz

Committee Decision: CARRIED

Approved by SCAAF: June 12, 2025 _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.43**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW COURSE APPROVAL MOTION FORM

Motion: That the new course NREM 201-3 Land Policy in British Columbia be approved as follows:

A. Description of the Course

1. Proposed semester of first offering: January 2026

2. Academic Program: BSc Forest Ecology and Management, BSc Wildlife and Fisheries, Dept of Ecosystem Science & Management

3. Course Subject, Number*, and Credit hours (e.g. CHEM 210-3): NREM 201-3

4. Course Title: Land Policy in British Columbia

5. Goal(s) of Course:
The goal of this course is to serve as a fundamental introduction to land use policy frameworks across several academic programs. This is a cross-listed motion to ENPL 201-3 Land Policy in British Columbia

Learning outcomes:

- Broad understanding of the historical development and current land policy in BC.
- General understanding of how policy (e.g., laws, bylaws, regulations, and orders) at all levels of government in BC enables and constrains a wide range of land uses (e.g., human settlements, forestry, mining, agriculture, recreation, hunting, fishing, gathering).
- General understanding of how Canada Law and Indigenous Law are integrated to govern land uses and how the two sets of laws affect Indigenous land rights and title.

The course is intended to address land policy through the lens of land planners across several disciplines. Land-use planning is a core function of community and resource planners, and land policy is both the context for and outcome of land-use planning. As such, this course will serve Bachelor of Planning students in all three majors (First Nations Planning, Natural Resource Planning, Northern and Rural Community Planning), while also serving several other professional, accredited degree programs at UNBC, specifically the BSc Forest Ecology & Management and BSc Wildlife & Fisheries that operate under various land-policy frameworks.

Everything humans do has a direct or indirect effect on land. Land policy aims to anticipate these actions and effects and to guide why, who, and how we use land. In British Columbia, major land uses include human settlements, forestry, mining, agriculture, recreation, hunting, fishing, gathering, and more. All these uses are administered through property rights regimes and must be reconciled with Indigenous rights and title to land. In this course, students are introduced to a wide range of land policies at all levels of government in British Columbia.

6. Calendar Course Description:
Students are introduced to a range of land policies at all levels of government in British Columbia. Land policy guides why, who, and how we use land. Topics include major land uses such as human settlements, agriculture, forestry, mining, and recreation, and how these uses must be reconciled between statutory law and Indigenous rights and title to land.

7. **Credit Hours:** 3 credit hours (Normally, UNBC courses are 3 credit hours and may not be repeated for additional credit. If this course falls outside the norm, please complete sections "a)" and "b)" below).

   a) **Can the course be repeated for credit if the subject matter differs substantially?** No X

   b) **Is variable credit available for this course?** No X

8. **Contact Hours (per week):**

   Lecture 3 Seminar #

   Laboratory # Other (please specify) _____

9. **Prerequisites (taken prior):** None

10. **Prerequisites with concurrency (taken prior or simultaneously):** "none"

11. **Co-requisites (must be taken simultaneously):** "none"

12. **Preclusions:** ENPL 201-3

13. **Course Equivalencies:** none

14. **Grade Mode:** NORMAL (i.e., alpha grade)

15. **Course to be offered:** each semester _____
    each year X
    alternating years _____

16. **Proposed text / readings:**

    Connell, David J. (2023). *Land Use Planning in British Columbia: Cases and Applications.* https://pressbooks.bccampus.ca/landuseplanninginbc/. [This textbook is an open access resource (i.e., free, digital).]

B. Significance Within Academic Program

Any course that concerns activities on and uses of the land base has some relationship with a course on land policy. Related degree programs include, but are not limited to, First Nations Planning, Natural Resource Planning, Northern and Rural Community Planning, Environmental and Sustainability Studies, Forest Ecology and Management, Conservation Science and Practice, Wildlife and Fisheries, Nature-based Tourism Management, First Nations Studies, and Geography.

1. **Anticipated enrolment** 15-20

2. **If there is a proposed enrolment limit, state the limit and explain:** _____

3. **Required for:** Major: B.Sc Forest Ecology & Management Minor: Natural Resources & Operations
   Other:_____

4. **Elective in:** Major: B.Sc. Wildlife and Fisheries Minor:

5. Course required by another major/minor: NREM 201-3 will be cross listed with ENPL 201-3, which will be required in the Bachelor of Planning, majors in First Nations Planning, Natural Resources Planning, and Northern and Rural Community Planning.

6. Course required or recommended by an accrediting agency:
ENPL 201-3/NREM 201-3, will fulfil recommendations associated with the Canadian Forestry Accreditation Board for the nationally accredited Forest Ecology and Management degree, and will fulfil recommendations for the BC College of Applied Biologists for our accreditation of the Wildlife & Fisheries degree.
As ENPL 201-3, will strengthen policy competences associated with the Bachelor of Planning, accredited by the Planning Standards Board.

7. Toward what degrees will the course be accepted for credit? BSc Forest Ecology & Management, BSc Wildlife & Fisheries. This course is also of interest to the BSc Conservation Science & Practice degree, major in Landscape Conservation & Management. That degree is undergoing its initial degree review in 2025 and intends to suggest adding NREM 201 to its curriculum as part of that self-study exercise.

This course will also serve as a required course in the Bachelor of Planning, cross listed as ENPL 201-3.

8. What other courses are being proposed within the Program this year? None

9. What courses are being deleted from the Program this year? NREM 210

C. Relation to Other Program Areas

Any program that concerns activities on and uses of the land base has some relationship with a course on land policy. Within the Faculty of Environment, these programs include First Nations Planning, Natural Resource Planning, Northern and Rural Community Planning, Environmental and Sustainability Studies, Forest Ecology and Management, Conservation Science and Practice, Wildlife and Fisheries, Nature-based Tourism Management, First Nations Studies, and Geography.

1. Identify courses in other UNBC Programs that overlap with this course; describe the overlap and comment on its significance:

Aspects of land policy are covered in many other courses throughout the university, including Geography and First Nations Studies. As noted above, any discussion of human relations with land relates in some way to land policy. Notwithstanding the prevalence of land policy, we are not aware of any non-ENPL courses at UNBC that are dedicated to teaching land policy in the focus of the course.
No courses have more than minor overlap. We feel that this course will be complementary, rather than redundant, with existing courses. It was also proposed to fulfil a missing niche not covered by other courses, but in topic areas required in several degrees.

2. Is a preclusion required? Yes ENPL 201

3. If there is an overlap, and no preclusion is required, please explain why not:

4. Has this overlap been discussed with the Program concerned? No X

5. In offering this course, will UNBC require facilities or staff at other institutions?

No X

If yes, please describe the requirements:

6. Is this course replacing an existing course that is included in one or more transfer agreements with external institutions?

Yes X

This will affect multiple transfer pathway arrangements feeding into the Forest Ecology and Management and Wildlife and Fisheries degrees, which currently have provisions for NREM 210 built into them. We are already working with ESM's Undergraduate Coordinator, Faculty of Environment Advising and the Articulations Offer in the Office of the Registrar in anticipation of making these updates to pathways.

As ENPL 201-3, this course will also affect a transfer pathway arrangement from Selkirk College AESP to UNBC BPlanning. This transfer pathway is currently being revised, working with Articulations and Faculty of Environment Advising.

If "yes," please contact the Articulation Officer in the Office of the Registrar.

D. Resources required

1. **Please describe ADDITIONAL resources required over the next five years to offer this course.**

   i. **Faculty Staffing:** None – will be assigned to existing Faculty

   ii. **Space (classroom, laboratory, storage, etc.):** none

   iii: **Library Holdings:** No additional holdings required - See attached form

   iv. **Computer (time, hardware, software):** none

E. Additional Attached Materials

F. Other Considerations

1. **First Nations Content*:** Yes** X
   **** Whether a new course has First Nations content is to be determined by the relevant Faculty Council(s).***

   ****If "yes,"** refer the motion to the Senate Committee on Indigenous Initiatives **prior to** SCAAF.

2. **Other Information:**

3. **Attachment Pages (in addition to required "Library Holdings" Form):** 0 pages

G. Authorization

SCCC Reviewed: March 18, 2025

Program / Academic / Administrative Unit: Ecosystem Science and Management

1. **Faculty(ies): Faculty of** Environment

2. **Faculty Council Motion Number(s): FEFC 2025:04:10:08**

3. **Faculty Council Approval Date(s): April 10, 2025**

4. **Senate Committee on Indigenous Initiatives Motion Number:** N/A

5. **Senate Committee on Indigenous Initiatives Meeting Date:** N/A

INFORMATION TO BE COMPLETED BY RECORDING SECRETARY AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF

Moved by: **Seconded by:**

Committee Decision:

Approved by SCAAF: _____ _____
Date **Chair's Signature**

For recommendation to ___✓___**, or information of** _____ **Senate.**

Library Holdings Form
(to be submitted with SCAAF New Course Approval Motion Form)

PROPOSED NEW COURSE: NREM 201-3 Land Policy in British Columbia

Library Holdings (to be completed by the appropriate Librarian):

a) Are current library holdings adequate? Yes X No _____

b) If no to a), what monographs / periodicals / E-resources will be needed, and at what estimated cost?

c) If no to a), what is the proposed funding source?

Susan Wilson
University Librarian (or designate) signature

April 9, 2025
Date

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202506.45**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW COURSE APPROVAL MOTION FORM

Motion: That the new course ENPL 201-3 Land Policy in British Columbia be approved as follows:

A. Description of the Course

1. **Proposed semester of first offering:** January 2026

2. **Academic Program: Environmental Planning, School of Planning and Sustainability**

3. **Course Subject, Number*, and Credit hours (e.g. CHEM 210-3):** ENPL 201-3

4. **Course Title:** Land Policy in British Columbia

5. **Goal(s) of Course:**

The goal of this course is to serve as a fundamental introduction to land use policy frameworks across several academic programs. This is a cross-listed motion to NREM 201-3 Land Policy in British Columbia

Learning outcomes:

- Broad understanding of the historical development and current land policy in BC.
- General understanding of how policy (e.g., laws, bylaws, regulations, and orders) at all levels of government in BC enables and constrains a wide range of land uses (e.g., human settlements, forestry, mining, agriculture, recreation, hunting, fishing, gathering).
- General understanding of how Canada Law and Indigenous Law are integrated to govern land uses and how the two sets of laws affect Indigenous land rights and title.

The course is intended to address land policy through the lens of land planners across several disciplines. Land-use planning is a core function of community and resource planners and land policy is both the context for and outcome of land-use planning. As such, this course will serve Bachelor of Planning students in all three majors (First Nations Planning, Natural Resource Planning, Northern and Rural Community Planning), while also serving a number of other professional, accredited degree programs at UNBC, specifically the BSc Forest Ecology & Management and BSc Wildlife & Fisheries that operate under various land-policy frameworks.

Everything humans do has a direct or indirect effect on land. Land policy aims to anticipate these actions and effects and to guide why, who, and how we use land. In British Columbia, major land uses include human settlements, forestry, mining, agriculture, recreation, hunting, fishing, gathering, and more. All these uses are administered through property rights regimes and must be reconciled with Indigenous rights and title to land. In this course, students are introduced to a wide range of land policies at all levels of government in British Columbia.

6. **Calendar Course Description:**

Students are introduced to a range of land policies at all levels of government in British Columbia. Land policy guides why, who, and how we use land. The course covers major land uses, such as human settlements, agriculture, forestry, mining, and recreation, and how these uses must be reconciled between statutory law and Indigenous rights and title to land.

7. **Credit Hours:** 3 credit hours (Normally, UNBC courses are 3 credit hours and may not be repeated for additional credit. If this course falls outside the norm, please complete sections "a)" and "b)" below).

   a) **Can the course be repeated for credit if the subject matter differs substantially?** No

   b) **Is variable credit available for this course?** No

8. **Contact Hours (per week):**

   Lecture 3 Seminar #

   Laboratory # Other (please specify) _____

9. **Prerequisites (taken prior):** None

10. **Prerequisites with concurrency (taken prior or simultaneously):** "none"

11. **Co-requisites (must be taken simultaneously):** "none"

12. **Preclusions:** NREM 201-3

13. **Course Equivalencies:** none

14. **Grade Mode:** NORMAL (i.e., alpha grade)

15. **Course to be offered:** each semester _____
    each year X
    alternating years _____

16. **Proposed text / readings:**

    Connell, David J. (2023). *Land Use Planning in British Columbia: Cases and Applications.* https://pressbooks.bccampus.ca/landuseplanninginbc/. [This textbook is an open access resource (i.e., free, digital).]

B. Significance Within Academic Program

Any course that concerns activities on and uses of the land base has some relationship with a course on land policy. Related degree programs include, but are not limited to, First Nations Planning, Natural Resource Planning, Northern and Rural Community Planning, Environmental and Sustainability Studies, Forest Ecology and Management, Conservation Science and Practice, Wildlife and Fisheries, Nature-based Tourism Management, First Nations Studies, and Geography.

1. **Anticipated enrolment** 15-20

2. **If there is a proposed enrolment limit, state the limit and explain:** _____

3. **Required for:** Major: BSc Forest Ecology & Management Minor: Natural Resources & Operations

4. **Elective in:** Major: BSc. Wildlife and Fisheries Minor:

5. **Course required by another major/minor:** BSc Forest Ecology & Management and BSc Wildlife & Fisheries intend to list this course in place of NREM 210 (Integrated Resource Management) within their degrees. This will make it a required course in the Forest Ecology & Management minor in Natural

Resources Planning & Operations (currently the most popular minor within the FEM degree), as well as being in a required 200 Level pick list for the BSc Wildlife & Fisheries.

6. Course required or recommended by an accrediting agency: will fulfil recommendations associated with the Canadian Forestry Accreditation Board for the nationally accredited Forest Ecology and Management degree, and will fulfil recommendations for the BC College of Applied Biologists for our accreditation of the Wildlife & Fisheries degree.

7. Toward what degrees will the course be accepted for credit? BSc Forest Ecology & Management, BSc Wildlife & Fisheries. This course is also of interest to the BSc Conservation Science & Practice degree, major in Landscape Conservation & Management. That degree is undergoing its first degree review in 2025 and intends to suggest adding ENPL 209 to its curriculum as part of that self-study exercise.

8. What other courses are being proposed within the Program this year?

9. What courses are being deleted from the Program this year? ENPL 319

C. Relation to Other Program Areas

Any course that concerns activities on and uses of the land base has some relationship with a course on land policy. Related degree programs include, but are not limited to, First Nations Planning, Natural Resource Planning, Northern and Rural Community Planning, Environmental and Sustainability Studies, Forest Ecology and Management, Conservation Science and Practice, Wildlife and Fisheries, Nature-based Tourism Management, First Nations Studies, and Geography.

1. Identify courses in other UNBC Programs that overlap with this course; describe the overlap and comment on its significance:

Aspects of land policy are covered in many other courses throughout the university, including Geography and First Nations Studies. As noted above, any discussion of human relations with land relate in some way to land policy. Notwithstanding the prevalence of land policy, we are not aware of any non-ENPL courses at UNBC that are dedicated to teaching land policy in the focus of the course.

No courses have more than minor overlap. We feel that this course will be complementary, rather than redundant, with existing courses. It was also proposed to fulfil a missing niche not covered by other courses, but in topic areas required in several degrees.

2. Is a preclusion required? Yes NREM 201-3

3. If there is an overlap, and no preclusion is required, please explain why not:.

4. Has this overlap been discussed with the Program concerned? Yes X

5. In offering this course, will UNBC require facilities or staff at other institutions?

No X

If yes, please describe requirements:

6. Is this course replacing an existing course that is included in one or more transfer agreements with external institutions?

Yes X

This will affect multiple transfer pathway arrangements feeding into the Forest Ecology and Management and Wildlife and Fisheries degrees, which currently have provisions for NREM 210 built into them. We

are already working with ESM's Undergraduate Coordinator, Faculty of Environment Advising and the Articulations Offer in the Office of the Registrar in anticipation of making these updates to pathways.

As ENPL 201-3, this course will also affect a transfer pathway arrangement from Selkirk College AESP to UNBC BPlanning. This transfer pathway is currently being revised, working with Articulations and Faculty of Environment Advising.

If "yes," please contact the Articulation Officer in the Office of the Registrar.

D. Resources required

1. Please describe ADDITIONAL resources required over the next five years to offer this course.

i. Faculty Staffing: None – will be assigned to existing Faculty

ii. Space (classroom, laboratory, storage, etc.): none

iii: Library Holdings: No additional holdings required - See attached form

iv. Computer (time, hardware, software): none

E. Additional Attached Materials

F. Other Considerations

1. First Nations Content*: Yes** X

**** Whether a new course has First Nations content is to be determined by the relevant Faculty Council(s).***

****If "yes,"** refer the motion to the Senate Committee on Indigenous Initiatives **prior to** SCAAF.

2. Other Information:

Presently, from experience teaching ENPL 410 Land Use Planning since 2011, the course instructor knows first-hand that Planning students do not have sufficient understanding of land policy in BC to engage properly in this fourth-year course. The students' lack of knowledge of land policy in BC is a major gap in Programs that operate under regulatory policy frameworks (Planning, forestry, wildlife management). The second-year course will address this gap for Planning students as well as Forest Ecology & Management and Wildlife & Fisheries students.

3. Attachment Pages (in addition to required "Library Holdings" Form): 0 pages

G. Authorization

SCCC Reviewed: March 18, 2025

Program / Academic / Administrative Unit: Planning

Faculty(ies): Faculty of Environment

Faculty Council Motion Number(s): FEFC 2025:04:10:09

Faculty Council Approval Date(s): April 10,2025

Senate Committee on Indigenous Initiatives Motion Number:

Senate Committee on Indigenous Initiatives Meeting Date:

INFORMATION TO BE COMPLETED BY RECORDING SECRETARY AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF

Moved by: **Seconded by:**

Committee Decision:

Approved by SCAAF: _____ _____

Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

Library Holdings Form
(to be submitted with SCAAF New Course Approval Motion Form)

PROPOSED NEW COURSE: ENPL 201-3 Land Policy in British Columbia

Library Holdings (to be completed by the appropriate Librarian):

a) Are current library holdings adequate? Yes X No _____

b) If no to a), what monographs / periodicals / E-resources will be needed, and at what estimated cost?

c) If no to a), what is the proposed funding source?

Susan Wilson
University Librarian (or designate) signature

April 9, 2025
Date

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.45

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW COURSE APPROVAL MOTION FORM

Motion: That the new course ORTM 415-3 Conservation, Culture, and Society be approved as presented.

A. Description of the Course

1. **Proposed semester of first offering:** September 2025

2. **Academic Program:** Conservation Science and Practice, Ecosystem Science & Management

3. **Course Subject, Number*, and Credit hours (e.g. CHEM 210-3):** ORTM 415-3

4. **Course Title:** Conservation, Culture, and Society

5. **Goal(s) of Course:**
   - Explore key concepts from the social sciences for understanding society and culture as integral to socio-ecological systems
   - Demonstrate through case studies the effects of human social, political, and cultural dynamics on resource management and ecological stewardship
   - Allow students to practice using qualitative methods and an inductive research design to understand the effects of human social structures, values, and belief systems on conservation
   - Describe research frameworks for working cross-culturally, including knowledge co-production and participatory approaches.
   - Give students the tools to identify social and cultural dimensions of biodiversity conservation and integrate an understanding of these into conservation practice
   - This course explores the human dimensions of conservation, with a focus on the importance of social context and realities of cultural diversity in considering the practical implementation of conservation imperatives. It draws upon interdisciplinary scholarship in conservation social science and explores case studies from diverse socio-ecological contexts around the world. Assignments employ social science methodologies to understand the socio-ecological context in which conservation efforts take place.

6. **Calendar Course Description:**

This course explores the applications and implications of conservation social science. The course highlights how diverse systems of power, knowledge, affect, and belief are entangled with ecological stewardship. Students examine case studies from around the globe to understand how methods and theory from the social sciences can be applied to understand the social institutions, cultural values, and knowledge regimes which shape conservation success.

7. **Credit Hours:** 3 credit hours (Normally, UNBC courses are 3 credit hours and may not be repeated for additional credit. If this course falls outside the norm, please complete sections “a)” and “b)” below).

   a) **Can the course be repeated for credit if the subject matter differs substantially?** No X

b) Is variable credit available for this course? No X

8. Contact Hours (per week):

Lecture	0	Seminar	3
Laboratory	0	Other (please specify)	

9. Prerequisites (taken prior): students must have upper level standing (60 credit hours)

10. Prerequisites with concurrency (taken prior or simultaneously): none

11. Co-requisites (must be taken simultaneously): none

12. Preclusions: none

13. Course Equivalencies: none

14. Grade Mode: NORMAL (i.e., alpha grade)

15. Course to be offered:

each semester	
each year	x
alternating years	

16. Proposed text / readings: journal articles and book chapters available online in the UNBC library collections, no textbook required

B. Significance Within Academic Program

This course will replace ORTM 400, currently listed as a required course within both majors of the Conservation Science & Practice BSc, as well as in the Nature-Based Tourism Management BA.

1. Anticipated enrolment 10-15

2. If there is a proposed enrolment limit, state the limit and explain: enrollment cap can increase if required

3. Required for: Major: X Minor: Other:

4. Elective in: Major: Minor: Other:

5. Course required by another major/minor:
This course will also be listed among picklists of 400-level courses required in the BA Nature-based Tourism Management degree and within its Areas of Specialization, as well as the Minor in Outdoor Recreation and Tourism Management. It will also replace the listing for ORTM 400 in the Minor picklist within the Forest Recreation within the BSc Forest Ecology & Management and the Applied Ecology Area of Specialization picklist within the BSc Biology.

6. Course required or recommended by an accrediting agency: no

7. Toward what degrees will the course be accepted for credit? Conservation Science & Practice; Nature-based Tourism Management; Biology; Wildlife & Fisheries, Forest Ecology & Management

8. What other courses are being proposed within the Program this year? None

9. What courses are being deleted from the Program this year? ORTM 400-3 Conservation Area Design and Management

C. Relation to Other Program Areas

1. Identify courses in other UNBC Programs that overlap with this course; describe the overlap and comment on its significance:

The proposed course deals with societal interactions with land and the environment, so would have theoretical connections to a variety of other courses at UNBC:

FNST 451- Traditional Use Studies
FNST 304 - Indigenous Environmental Philosophy
FNST 203 - Intro to Traditional Ecological Knowledge
ANTH 300 - Qualitative Methods
ANTH 413 - Environmental Anthropology
ENVS 210 - Environmental Perspectives
GEOG 206 - Social Geography
GEOG 305 - Political Ecology
GEOG 306 - Critical Development Geography
GEOG 324 - Community-Based Research and
GEOG 401/601 - Resource Geography.

The proposed course, however, has several key differences in approach and content from the above courses, making it unique and complementary, rather than redundant with any of the above.

- The course is focused on conservation social science as interdisciplinary field and draws from multiple social science disciplines.
- The course is focused specifically on conservation, rather than human-environment relationships more generally. It includes the comparison of emerging and competing approaches to conservation, highlighting current debates in conservation practice.
- The course content is global and cross-cultural and does not focus exclusively on Indigenous cultural practices or ways of knowing. It interrogates how value systems and social structures from multiple societies and cultures affect conservation practice.
- The course incorporates concepts from Science, Technology and Society studies to demonstrate how social context has effects on scientific paradigms. It interrogates the “culture” of conservation science and situates scientific practice as a knowledge system operating within dynamic social and cultural processes.
- The course content and assignments have an applied conservation social science orientation, with the goal of arming students with practical tools for working with the realities of social and cultural diversity as conservation practitioners.
- Unlike the above listed courses, which are associated with BA programs, this course is designed for students in ecosystem science and management who have upper level standing but due to the constraints of BSc programs are unable to or unlikely to take foundational courses in the social sciences.
- The proposed course will also be listed as a graduate course in the NRES graduate program and will include graduate coursework that links social theory to methods and research design.

2. Is a preclusion required? No __X__

3. If there is an overlap, and no preclusion is required, please explain why not: We feel this course will be complementary to other courses emphasizing socio-ecology, rather than redundant, as we are emphasizing differences in focus/approaches as outlined above.

4. Has this overlap been discussed with the Program concerned? Yes __X__

5. In offering this course, will UNBC require facilities or staff at other institutions?

Yes _____ No __X____

If yes, please describe requirements:

6. **Is this course replacing an existing course that is included in one or more transfer agreements with external institutions?**

   Yes_____ No __X___

   If "yes," please contact the Articulation Officer in the Office of the Registrar.

D. Resources required

1. **Please describe ADDITIONAL resources required over the next five years to offer this course.**

   i. Faculty Staffing: none – this course will be part of regular teaching assignment for a tenure-track faculty member hired in 2023.

   ii. Space (classroom, laboratory, storage, etc.): NA

   iii: Library Holdings: See attached form

   iv. Computer (time, hardware, software): NA

E. Additional Attached Materials

The course was taught in the 202405 semester as an ORTM 498 (special topics) course. The course outline from that offering was circulated during consultation.

F. Other Considerations

1. **First Nations Content*:** Yes** __X____ No _____
   **** Whether a new course has First Nations content is to be determined by the relevant Faculty Council(s).***

   ****If "yes,"** refer the motion to the Senate Committee on Indigenous Initiatives **prior to** SCAAF.

2. **Other Information:** Course outline is included for consideration

3. **Attachment Pages (in addition to required "Library Holdings" Form):** __0__ pages

G. Authorization

SCCC Reviewed: March 18, 2025

Program / Academic / Administrative Unit: Ecosystem Science and Management

1. **Faculty(ies):** Faculty of Environment

2. **Faculty Council Motion Number(s): FEFC 2025:04:10:18**

3. **Faculty Council Approval Date(s): April 10, 2025**

4. **Senate Committee on Indigenous Initiatives Motion Number:**

5. **Senate Committee on Indigenous Initiatives Meeting Date:**

INFORMATION TO BE COMPLETED BY RECORDING SECRETARY AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF

Moved by: **Seconded by:**

Committee Decision:

Approved by SCAAF: _____ _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

Library Holdings Form
(to be submitted with SCAAF New Course Approval Motion Form)

PROPOSED NEW COURSE: ORTM 415/615 – Conservation, Culture, and Society

Library Holdings (to be completed by the appropriate Librarian):

a) Are current library holdings adequate? Yes __x__ No _____

b) If no to a), what monographs / periodicals / E-resources will be needed, and at what estimated cost?

c) If no to a), what is the proposed funding source?

Susan Wilson
University Librarian (or designate) signature

April 9, 2025
Date

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.46

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW COURSE APPROVAL MOTION FORM

Motion: That the new course ORTM 615 Conservation, Culture, and Society be approved as presented.

A. Description of the Course

1. Proposed semester of first offering: September 2025

2. Academic Program: NRES Graduate Program

3. Course Subject, Number*, and Credit hours (e.g. CHEM 210-3): ORTM 615-3

4. Course Title: Conservation, Culture, and Society

5. Goal(s) of Course:

- Explore key concepts from the social sciences for understanding society and culture as integral to socio-ecological systems
- Demonstrate through case studies the effects of human social, political, and cultural dynamics on resource management and ecological stewardship
- Allow students to practice using qualitative methods and an inductive research design to understand the effects of human social structures, values, and belief systems on conservation
- Describe research frameworks for working cross-culturally, including knowledge co-production and participatory approaches.
- Give students the tools to identify social and cultural dimensions of biodiversity conservation and integrate an understanding of these into conservation practice

This course explores the human dimensions of conservation, with a focus on the importance of social context and realities of cultural diversity in considering the practical implementation of conservation imperatives. It draws upon interdisciplinary scholarship in conservation social science and explores case studies from diverse socio-ecological contexts around the world. Assignments employ social science methodologies to understand the socio-ecological context in which conservation efforts take place.

6. Calendar Course Description:

This advanced course explores the applications and implications of conservation social science. The course highlights how diverse systems of power, knowledge, affect, and belief are entangled with ecological stewardship. Students examine case studies from around the globe to understand how methods and theory from the social sciences can be applied to understand the social institutions, cultural values, and knowledge regimes which shape conservation success.

7. Credit Hours: 3 credit hours (Normally, UNBC courses are 3 credit hours and may not be repeated for additional credit. If this course falls outside the norm, please complete sections “a)” and “b)” below).

a) Can the course be repeated for credit if the subject matter differs substantially? No X

b) Is variable credit available for this course? No X

8. Contact Hours (per week):

Lecture	0	Seminar	3
Laboratory	0	Other (please specify)	

9. Prerequisites (taken prior): none

10. Prerequisites with concurrency (taken prior or simultaneously): none

11. Co-requisites (must be taken simultaneously): none

12. Preclusions: ORTM 415-3

13. Course Equivalencies: none

14. Grade Mode: NORMAL (i.e., alpha grade)

15. Course to be offered: each semester ____
each year x
alternating years ____

16. Proposed text / readings: journal articles and book chapters available online in the UNBC library collections, no textbook required

B. Significance Within Academic Program

This course will replace ORTM 600

1. Anticipated enrolment 5

2. If there is a proposed enrolment limit, state the limit and explain: enrollment cap can increase if required

3. Required for: Major: ____ Minor: ____ Other: ____

4. Elective in: Major: ____ Minor: ____ Other: ____

5. Course required by another major/minor: N/A

6. Course required or recommended by an accrediting agency: no

7. Toward what degrees will the course be accepted for credit? Masters (MA, MNRES and MSc) within NRES Graduate Program.

8. What other courses are being proposed within the Program this year? None

9. What courses are being deleted from the Program this year? ORTM 600-3 Conservation Area Design and Management

C. Relation to Other Program Areas

1. Identify courses in other UNBC Programs that overlap with this course; describe the overlap and comment on its significance:

This is a cross-listed course with the proposed ORTM 415 course, and potential overlap is addressed in that proposal. Overlap may occur if other units list their 400 level courses with 600 level equivalents.

2. **Is a preclusion required?** No __X__

3. **If there is an overlap, and no preclusion is required, please explain why not:** We feel this course will be complementary to other courses emphasizing socio-ecology, rather than redundant, as we are emphasizing differences in focus/approaches as outlined above.

4. **Has this overlap been discussed with the Program concerned?** Yes __X__

5. **In offering this course, will UNBC require facilities or staff at other institutions?**

   Yes _____ No __X__

   If yes, please describe requirements:

6. **Is this course replacing an existing course that is included in one or more transfer agreements with external institutions?**

   Yes_____ No __X__

   If "yes," please contact the Articulation Officer in the Office of the Registrar.

D. Resources required

1. **Please describe ADDITIONAL resources required over the next five years to offer this course.**

   i. **Faculty Staffing:** none – this course will be part of regular teaching assignment for a tenure-track faculty member hired in 2023.

   ii. **Space (classroom, laboratory, storage, etc.):** NA

   iii: **Library Holdings:** See attached form

   iv. **Computer (time, hardware, software):** NA

E. Additional Attached Materials

The course was taught in the 202405 semester as an ORTM 698 (special topics) course. The course outline from that offering was circulated during consultation.

F. Other Considerations

1. **First Nations Content*:** Yes** __X__ No _____
   **** Whether a new course has First Nations content is to be determined by the relevant Faculty Council(s).***

   ****If "yes,"** refer the motion to the Senate Committee on Indigenous Initiatives **prior to** SCAAF.

2. **Other Information:** ORTM 415 outline (cross-listed course) is included for consideration

3. **Attachment Pages (in addition to required "Library Holdings" Form):** __0__ pages

G. Authorization

SCCC Reviewed: March 18, 2025

Program / Academic / Administrative Unit: Ecosystem Science and Management

1. **Faculty(ies):** Faculty of Environment
2. **Faculty Council Motion Number(s): FEFC 2025:04:10:19**
3. **Faculty Council Approval Date(s): April 10, 2025**
4. **Senate Committee on Indigenous Initiatives Motion Number:**
5. **Senate Committee on Indigenous Initiatives Meeting Date:**

INFORMATION TO BE COMPLETED BY RECORDING SECRETARY AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF

Moved by: **Seconded by:**

Committee Decision:

Approved by SCAAF: _____ _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

Library Holdings Form
(to be submitted with SCAAF New Course Approval Motion Form)

PROPOSED NEW COURSE: ORTM 415/615 – Conservation, Culture, and Society

Library Holdings (to be completed by the appropriate Librarian):

a) Are current library holdings adequate? Yes __x__ No _____

b) If no to a), what monographs / periodicals / E-resources will be needed, and at what estimated cost?

c) If no to a), what is the proposed funding source?

Susan Wilson
University Librarian (or designate) signature

April 9, 2025
Date

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.47

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW COURSE APPROVAL MOTION FORM

Motion: That the new course ANTH 231-3, Anthropology and Africa, be approved as follows:

A. Description of the Course

1. **Proposed semester of first offering:** September 2025
2. **Academic Program:** Anthropology Department
3. **Course Subject, Number*, and Credit hours (e.g. CHEM 210-3):** ANTH 231-3
4. **Course Title:** Anthropology and Africa
5. **Goal(s) of Course:** This course is similar to our other lower-level regional survey courses. This course will examine the anthropological and ethnographic literature of Africa, focusing on historical colonial power structures while also exploring the potential for future social changes and more equitable futures. It will discuss theoretical and methodological frameworks of anthropology in Africa. Students will study indigenous communities within the African context and come to understand the role of anthropology in shaping the local and global politics through the lens of Africa.

   This course will prepare students to take more topically focused courses on Africa at the upper-levels.

6. **Calendar Course Description:**

   This course explores the historical connections between anthropology and Africa by introducing ethnographic studies of ritual, kinship, religion, economy, violence, law, and political order. Students examine local/global politics, and African identities through a colonial lens but also consider potential social change and more equitable futures. Key questions are: What does 'Indigenous' or indigeneity mean in African contexts? How do ethnographic studies of African contexts help us understand the broader world?

7. **Credit Hours:** 3

   a) **Can the course be repeated for credit if the subject matter differs substantially?**

   No X

   b) **Is variable credit available for this course** No X

8. **Contact Hours (per week):**

   Lecture 3 Seminar _____

   Laboratory _____ Other (please specify) _____

9. **Prerequisites (taken prior):** None (but Recommendation(s): ANTH 102-3)

10. **Prerequisites with concurrency (taken prior or simultaneously):** None

11. **Co-requisites (must be taken simultaneously):** None

12. **Preclusions:** None

13. **Course Equivalencies:** None

14. **Grade Mode:** NORMAL

15. **Course to be offered:** each semester _____
each year ____
alternating years X _____

16. Proposed text / readings: A course reader will be developed from the following sources:
Fabian, Johannes. 2006. "Forgetting Africa?" In Ntarangwi M., D. Mills, and M. Babiker (eds) *African Anthropologies: History, Critique and Practice*. Pp. 139-153. London: Zed Books.
Gulliver, Phillip H. 1955. "Marriage and Bridewealth." In P. H. Gulliver *The Family Herd: A Study of Two Pastoral Tribes in East Africa; The Jie and Turkana*. Pp. 223-243. London: Routledge.
Evans-Pritchard, E. E. 1940. "The Nuer of Southern Sudan." In Fortes, M. and E. E. Evans-Pritchard (eds). African Political Systems. Pp. 272-296. London: Oxford University Press.
Wilson, Monica. 1949. "Nyakyusa Age-Villages." *Journal of the Royal Anthropological Institute,* 79: 21-25.
Lydall, Jean and Ivo Strecker. 1979. The Hamar of Southern Ethiopia. Arbeiten aus dem Institut für Völkerkunde der Universität zu Göttingen, Vol. 12, Klaus Renner Verlag.
Moore, S.F. 1994. Anthropology and Africa. Changing perspectives on a changing scene. Charlottesville and London: University Press of Virginia.
Ferguson, J. 1999. Expectations of modernity: myths and meanings of urban life on the Zambian copper belt. Berkeley and Los Angeles: University of California Press.
Ntarangwi, M., D. Mills & M. Babiker (eds) 2006. *African anthropologies. History, critique and practice*. London and New York: CODESRIA in association with Zed Books. A. Gordon & D.L. Gordon. London: Lynne Reinner.
Hodgson, Dorothy. 2011. *Being Maasai, Becoming Indigenous: Postcolonial Politics in a Neoliberal World*, Indiana: Indiana University Press.
LaTosky, Shauna. 2013. *Predicaments of Mursi Women in a Rapidly Changing World*. Berlin: Koeppe Verlag.
Suzman, James. 2017. *Affluence Without Abundance: The Disappearing World of the Bushmen,* Bloomsbury.

B. Significance Within Academic Program

1. **Anticipated enrolment** 30

2. **If there is a proposed enrolment limit, state the limit and explain:** no limit

3. **Required for:** Major: No Minor: No Other: No

4. **Elective in:** Major: x Minor: x Other: _____

5. **Course required by another major/minor:** N/A

6. **Course required or recommended by an accrediting agency:** N/A

7. **Toward what degrees will the course be accepted for credit?** All UNBC degrees

8. **What other courses are being proposed within the Program this year?**
ANTH 218-3 Introduction to Folklore and Cultural Heritage

ANTH 431-3 Special Topics: Conflict and Integration

9. **What courses are being deleted from the Program this year?**

ANTH 220-3 Introduction to Primatology
ANTH 420-3 Races, Racism and Human Biology
ANTH 620-3 Races, Racism and Human Biology

C. Relation to Other Program Areas

1. **Identify courses in other UNBC Programs that overlap with this course; describe the overlap and comment on its significance:** N/A

2. **Is a preclusion required?** Yes _____ No __X__

3. **If there is an overlap, and no preclusion is required, please explain why not:** N/A

4. **Has this overlap been discussed with the Program concerned?** N/A

5. **In offering this course, will UNBC require facilities or staff at other institutions?**

   Yes _____ No __X__

   If yes, please describe requirements:

6. **Is this course replacing an existing course that is included in one or more transfer agreements with external institutions?**

   Yes_____ No __X__

   If "yes," please contact the Articulation Officer in the Office of the Registrar.

D. Resources required

1. **Please describe ADDITIONAL resources required over the next five years to offer this course.**

   i. **Faculty Staffing:** None

   ii. **Space (classroom, laboratory, storage, etc.):** Classroom

   iii: **Library Holdings:** See attached form

   iv. **Computer (time, hardware, software):** None

E. Additional Attached Materials: None

F. Other Considerations

1. **First Nations Content*:** Yes** __X__ No _____
   **** Whether a new course has First Nations content is to be determined by the relevant Faculty Council(s).***

   ****If "yes,"** refer the motion to the Senate Committee on Indigenous Initiatives **prior to** SCAAF.

2. **Other Information:** None

3. **Attachment Pages (in addition to required "Library Holdings" Form):** 0 pages

G. Authorization

SCCC Reviewed: April 15, 2025

Program / Academic / Administrative Unit: Anthropology

Faculty(ies): FISSSH

Faculty Council Motion Number: FISSSHFC.2025.04.24.05

Faculty Council Approval Date: April 24, 2025

Senate Committee on Indigenous Initiatives Motion Number:

Senate Committee on Indigenous Initiatives Meeting Date:

INFORMATION TO BE COMPLETED BY RECORDING SECRETARY AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF

Moved by: **Seconded by:**

Committee Decision:

Approved by SCAAF: _____ _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

Library Holdings Form
(to be submitted with SCAAF New Course Approval Motion Form)

PROPOSED NEW COURSE: ANTH 231-3, Anthropology and Africa

A course reader will be developed from the following sources:

Fabian, Johannes. 2006. "Forgetting Africa?" In Ntarangwi M., D. Mills, and M. Babiker (eds) *African Anthropologies: History, Critique and Practice*. Pp. 139-153. London: Zed Books.
Gulliver, Phillip H. 1955. "Marriage and Bridewealth." In P. H. Gulliver *The Family Herd: A Study of Two Pastoral Tribes in East Africa; The Jie and Turkana*. Pp. 223-243. London: Routledge.
Evans-Pritchard, E. E. 1940. "The Nuer of Southern Sudan." In Fortes, M. and E. E. Evans-Pritchard (eds). African Political Systems. Pp. 272-296. London: Oxford University Press.
Wilson, Monica. 1949. "Nyakyusa Age-Villages." *Journal of the Royal Anthropological Institute,* 79: 21-25.
Lydall, Jean and Ivo Strecker. 1979. The Hamar of Southern Ethiopia. Arbeiten aus dem Institut für Völkerkunde der Universität zu Göttingen, Vol. 12, Klaus Renner Verlag.
Moore, S.F. 1994. Anthropology and Africa. Changing perspectives on a changing scene. Charlottesville and London: University Press of Virginia.
Ferguson, J. 1999. Expectations of modernity: myths and meanings of urban life on the Zambian copper belt. Berkeley and Los Angeles: University of California Press.
Ntarangwi, M., D. Mills & M. Babiker (eds) 2006. *African anthropologies. History, critique and practice*. London and New York: CODESRIA in association with Zed Books. A. Gordon & D.L. Gordon. London: Lynne Reinner.
Hodgson, Dorothy. 2011. *Being Maasai, Becoming Indigenous: Postcolonial Politics in a Neoliberal World*, Indiana: Indiana University Press.
LaTosky, Shauna. 2013. *Predicaments of Mursi Women in a Rapidly Changing World*. Berlin: Koeppe Verlag.
Suzman, James. 2017. *Affluence Without Abundance: The Disappearing World of the Bushmen,* Bloomsbury.

Library Holdings (to be completed by the appropriate Librarian):

a) Are current library holdings adequate? Yes _____ No X

b) If no to a), what monographs / periodicals / E-resources will be needed, and at what estimated cost?

Estimated cost for the course reader material above that the library does not currently hold is $600 USD.

c) If no to a), what is the proposed funding source?

Library acquisition fund for ANTH

Geoffrey Boyd — **University Librarian (or designate) signature**

10 April 2025 — **Date**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.48

SENATE COMMITTEE ON ACADEMIC AFFAIRS

NEW COURSE APPROVAL MOTION FORM

Motion: That the new course ANTH 431-3 Special Topics: Conflict and Integration, be approved as follows:

A. Description of the Course:

1. **Proposed semester of first offering:** September 2025

2. **Academic Program:** Anthropology Department

3. **Course Subject, Number, and Credit hours:** ANTH 431-3

4. **Course Title:** Special Topics: Conflict and Integration

5. **Goal(s) of Course:** The aim of this seminar course is to undertake an in-depth study of anthropological dimensions of conflict, reconciliation and integration in different parts of the world and/or with different communities. Focusing on anthropological theories of identity, heritage, and power, students gain an understanding of the complex factors that ignite and sustain conflicts, both locally and globally. At the same time, students learn about reconciliation, collaboration and integration often with the incorporation of local and/or Indigenous knowledge systems, and how applied anthropology may help to contribute to peace-building and development. The topics under study may vary according to the expertise of the instructor.

Another goal of this course is to allow for it to be taught across the sub-disciplines of anthropology, recognizing the shared themes of identity, power, equity and social justice. Thus, with permission of the Chair, this course may be repeated to a maximum of 6 credit hours if the material is substantially different.

6. **Calendar Course Description:**

This course explores the anthropological dimensions of conflict, reconciliation, and integration in different parts of the world. Students analyze how historical, socio-cultural, political, and environmental factors shape and intensify conflicts, as they re/create identity and structures of power. Students also learn how local cultural communities strategize practices of collaboration, integration, and Indigenous means of conflict resolution to contribute to building social justice and peace. With permission of the Chair, this course may be repeated to a maximum of 6 credit hours if the material is substantially different.

7. **Credit Hours:** 3

   a) **Can the course be repeated for credit if the subject matter differs substantially?**

   Yes* X *"This course may be repeated to a maximum of 6 credit hours if the material is substantially different."*

   b) **Is variable credit available for this course?** No X

8. **Contact Hours (per week):**

Lecture		Seminar	3
Laboratory		Other (please specify)	

9. **Prerequisites (taken prior):** Upper-division standing or permission of the instructor

10. **Prerequisites with concurrency (taken prior or simultaneously):** None

11. **Co-requisites (must be taken simultaneously):** None

12. **Preclusions:** None

13. **Course Equivalencies:** None

14. **Grade Mode:** NORMAL

15. **Course to be offered:** each semester ____
each year ____
alternating years x

16. **Proposed text / readings:** To be determined.

B. Significance Within Academic Program

1. **Anticipated enrolment** 20

2. **If there is a proposed enrolment limit, state the limit and explain:** 20
This is a seminar style course, best run if the enrolment is not too large.

3. **Required for:** Major: No Minor: No Other: No

4. **Elective in:** Major: x Minor: x Other: No

5. **Course required by another major/minor:** None

6. **Course required or recommended by an accrediting agency:** No

7. **Toward what degrees will the course be accepted for credit?** All UNBC degrees

8. **What other courses are being proposed within the Program this year?**

ANTH 218-3 Introduction to Folklore and Cultural Heritage
ANTH 231-3 Anthropology and Africa

9. **What courses are being deleted from the Program this year?**

ANTH 220-3 Introduction to Primatology
ANTH 420-3 Races, Racism and Human Biology
ANTH 620-3 Races, Racism and Human Biology

C. Relation to Other Program Areas

1. **Identify courses in other UNBC Programs that overlap with this course; describe the overlap and comment on its significance:** N/A

2. **Is a preclusion required?** Yes _____ No __X__

3. **If there is an overlap, and no preclusion is required, please explain why not:** N/A

4. **Has this overlap been discussed with the Program concerned?** N/A

5. **In offering this course, will UNBC require facilities or staff at other institutions?**

   Yes _____ No __X__

   If yes, please describe requirements:

6. **Is this course replacing an existing course that is included in one or more transfer agreements with external institutions?**

   Yes_____ No __X__

   If "yes," please contact the Articulation Officer in the Office of the Registrar.

D. Resources required

1. **Please describe ADDITIONAL resources required over the next five years to offer this course.**

   i. **Faculty Staffing:** None

   ii. **Space (classroom, laboratory, storage, etc.):** Classroom

   iii: **Library Holdings:** See attached form

   iv. **Computer (time, hardware, software):** None

E. Additional Attached Materials None

F. Other Considerations

1. **First Nations Content*:** Yes** _____ No __X__
   Whether a new course has First Nations content is to be determined by the relevant Faculty Council(s).

   ****If "yes,"** refer the motion to the Senate Committee on Indigenous Initiatives **prior to** SCAAF.

2. **Other Information:** None

3. **Attachment Pages (in addition to required "Library Holdings" Form):** __0__ pages

G. Authorization

SCCC Reviewed: April 15, 2025

Program / Administrative Unit: Anthropology Department

Faculty(ies): FISSSH

Faculty Council Motion Number: FISSSHFC.2025.04.24.06

Faculty Council Approval Date: April 24, 2025

Senate Committee on Indigenous Initiatives Motion Number: N/A

Senate Committee on Indigenous Initiatives Meeting Date: N/A

INFORMATION TO BE COMPLETED BY RECORDING SECRETARY AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF

Moved by: **Seconded by:**

Committee Decision:

Approved by SCAAF: _____ _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

Library Holdings Form
(to be submitted with SCAAF New Course Approval Motion Form)

PROPOSED NEW COURSE: ANTH 431-3-6, Special Topics: Conflict and Integration (3-6)

Library Holdings (to be completed by the appropriate Librarian):

a) Are current library holdings adequate? Yes X No _____

b) If no to a), what monographs / periodicals / E-resources will be needed, and at what estimated cost?

c) If no to a), what is the proposed funding source?

Geoffrey Boyd
University Librarian (or designate) signature

Date 10 April 2025

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.49

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change(s) to the course title and description for ANTH 206-3, Ethnography in Northern British Columbia on page 197 PDF calendar accessible on the UNBC web page of the 2024/2025 undergraduate calendar, be approved as proposed.

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:** The updated language better reflects the Indigenous content of this course. In keeping with the ANTH/FNST Joint Major and to highlight ANTH's commitment to better indigenize our curriculum, we are adding a cross-listing of this course with FNST (a new FNST course).

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

   ANTH 206-3 Ethnography in Northern British Columbia A survey of the ethnographic literature for this region, and an introduction to the methodology and paradigms of ethnographic research.

   Prerequisite(s): None
   Recommendation(s): ANTH 102-3

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   ANTH 206-3 Indigenous Ethnography in Northern British Columbia This course is a survey of the ethnographic literature for northern British Columbia, with a focus on Indigenous communities ~~in for this region~~, and an introduction to the methodology and paradigms of ethnographic research.

   Prerequisite(s): None
   Recommendation(s): ANTH 102-3
   Preclusion(s): FNST 207-3

6. **Authorization:**

   SCCC Reviewed: April 15, 2025

   Program / Academic / Administrative Unit: Anthropology Department

   Faculty(ies): FISSSH

   Faculty Council Motion Number: FISSSHFC.2025.04.24.11

   Faculty Council Approval Date: April 24, 2025

   Senate Committee on Indigenous Initiatives Motion Number:

Senate Committee on Indigenous Initiatives Meeting Date:

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF

Moved by: **Seconded by:**

Committee Decision:

Approved by SCAAF: _____ _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): S-202506.50

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change(s) to the title and course description for ANTH 418-3, Archaeology and First Nations on page 200 PDF calendar accessible on the UNBC web page of the 2024/2025 undergraduate calendar, be approved as proposed.

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:** The changes update the language, and more accurately describes the course content.

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

   ANTH 418-3 Archaeology and First Nations This course introduces students to the value of ethnographic information (including oral history, place names documentation, traditional technology, subsistence, and traditional use activities), the interpretation of archaeological data, and construction of First Nations (pre) history.

   Prerequisite(s): Permission of the instructor

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   ANTH 418-3 Archaeology and ~~First Nations~~ Indigenous Communities This course introduces students to the value of community engagement and ethnographic information (including oral history, place names documentation, traditional technology, subsistence, and traditional use activities), the interpretation of archaeological data, and construction of ~~First Nations (pre) history.~~ Indigenous histories.

   Prerequisite(s): Permission of the instructor

6. **Authorization:**

   SCCC Reviewed: April 15, 2025

   Program / Academic / Administrative Unit: Anthropology Department

   Faculty(ies): FISSSH

   Faculty Council Motion Number: FISSSHFC.2025.04.24.14

   Faculty Council Approval Date: April 24, 2025

   Senate Committee on Indigenous Initiatives Motion Number:

   Senate Committee on Indigenous Initiatives Meeting Date:

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF

Moved by: **Seconded by:**

Committee Decision:

Approved by SCAAF: _____ _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Motion Number (assigned by Steering Committee of Senate): **S-202505.51**

SENATE COMMITTEE ON ACADEMIC AFFAIRS

PROPOSED REVISION OF CALENDAR ENTRY

Motion: That the change(s) to the course description for ANTH 203-3, Archaeology of the Americas on page 197 PDF calendar accessible on the UNBC web page of the 2024/2025 undergraduate calendar, be approved as proposed.

1. **Effective date:** September 2025

2. **Rationale for the proposed revisions:** The changes update the language, and more accurately describes the course content.

3. **Implications of the changes for other programs, etc., if applicable:** None

4. **Reproduction of current Calendar entry for the item to be revised:**

   ANTH 203-3 Archaeology of the Americas A survey of the archaeological record of prehistoric human occupation of North, Central and South America. Issues such as peopling of the New World, paleo-Indian adaptations, origins of agriculture, the expansion and contraction of interaction spheres, and the consequences of contact will be considered from a regional and continental perspective.

   Prerequisite(s): None
   Recommendation(s): ANTH 102-3

5. **Proposed revision with changes underlined and deletions indicated clearly using "~~strikethrough~~":**

   ANTH 203-3 Archaeology of the Americas This course is a survey of the ~~archaeological record of prehistoric human occupation~~ deep and fascinating regional histories of Indigenous peoples of North, Central, and South America. ~~Issues such as peopling of the New World, paleo-Indian~~ Using archaeological evidence, students examine topics such as First Peoples; adaptations to a diverse range of environments; the development of agriculture, trade networks, resource management, permanent villages and cities; ~~origins of agriculture, the expansion and contraction of interaction spheres,~~ and the consequences of European contact. ~~will be considered from a regional and continental perspective.~~

   Prerequisite(s): None
   Recommendation(s): ANTH 102-3

6. **Authorization:**

   SCCC Reviewed: April 15, 2025

   Program / Academic / Administrative Unit: Anthropology Department

   Faculty(ies): FISSSH

   Faculty Council Motion Number: FISSSHFC.2025.04.24.10

   Faculty Council Approval Date: April 24, 2025

Senate Committee on Indigenous Initiatives Motion Number:

Senate Committee on Indigenous Initiatives Meeting Date:

7. Other Information

Attachment Pages: 0 pages

INFORMATION TO BE COMPLETED AFTER SENATE COMMITTEE ON ACADEMIC AFFAIRS MEETING

Brief Summary of Committee Debate:

Motion No.: SCAAF

Moved by: **Seconded by:**

Committee Decision:

Approved by SCAAF: _____ _____
Date **Chair's Signature**

For recommendation to ✓ **, or information of** _____ **Senate.**

Degree program reviews – Update 2nd June 2025

For information

In accordance with the Degree Program Reviews Policy (procedures, art. 1.5) the following list of UNBC degree programs scheduled to initiate review during the 2025/26 academic year is brought forward for information:

- Geography, Earth and Environmental Sciences
- First Nations Studies
- Computer Science
- Environmental Sustainability Studies
- Nursing (MSc)
- School Education
- Environmental Planning

Furthermore, here follows a status update on the degree programs having had a review initiated during the 2023/24/25 academic years:

Program/Unit	**Status**
Anthropology	Complete
School of Engineering	Complete
Political Science	Complete
Psychology	Awaiting Dean's Response
Northern Collaborative Baccalaureate Nursing Program / Post- Diploma Baccalaureate Nursing Program / Rural Nursing Certificate Program (Joint review)	Awaiting Dean's Response
Biology / Wildlife and Fisheries (Joint review)	Site visit June 2025
Forest Ecology and Management	Awaiting Program/Dean's Response
Chemistry	Awaiting Provost's Response
History	Awaiting Provost's Response
Natural Resources and Environmental Studies	Preparation of Self-study underway
Conservation Science and Practice & Nature-Based Tourism and Management (Joint review)	Preparation of Self-study underway
School of Business	Awaiting External Reviewers' Report
Mathematics and Statistics	Preparation of Self-study underway
Women's Studies and Gender Studies	Preparation of Self-study underway
Northern Baccalaureate Nursing Program	Awaiting External Reviewer's Report

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John McNeill, Director, Academic Operations and Quality Assurance, Office of the Provost