

# 2006-2007 Calendar 

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The University of Northern British Columbia is a smoke-free institution. Smoking may be permitted in designated areas only.
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The 2006-2007 University of Northern British Columbia Undergraduate Calendar was prepared by the Office of the Registrar.

## Frequently Called Numbers

Academic Advising ..... (250) 960-6340
Awards, Financial Aid, Student Employment (www.unbc.ca/finaid) ..... (250) 960-6364
Accounts Receivable ..... (250) 960-5576
Athletics and Recreation Centre ..... (250) 960-6368
Bookstore ..... (250) 960-6424
Calendar Requests ..... (250) 960-6306
Campus Visits/Tours Prospective Students and General Public ..... (250) 960-6306
Cashiers For payment by VISA/MasterCard ..... (250) 960-5631
Communications ..... (250) 960-5620
Conference Services ..... (250) 960-5520
Continuing Education ..... (250) 960-5980
Co-operative Education (www.unbc.ca/co-op) ..... (250) 960-6598
Counselling Centre ..... (250) 960-6369
Development Office Donations and Fundraising ..... (250) 960-5750
Disability Services ..................................... (www.unbc.ca/disabilities) ..... (250) 960-5682
Educational Media Services ..... (250) 960-6470
Facilities (www.unbc.ca/facilities) ..... (250) 960-6407
Finance (www.unbc.ca/finance_dept) ..... (250) 960-5510
First Nations Centre ..... (250) 960-5772
Food Services ..... (250) 960-5780
Harassment and Discrimination Advisor ..... (250) 960-6618
Health and Wellness Centre ..... (250) 960-6370
Housing Services (www.unbc.ca/housing) ..... (250) 960-6430
Human Resources ..... (250) 960-5521
International Operations ..... (250) 960-5702
Learning Skills ..... (250) 960-6367
Library (lib.unbc.ca)
Reference Desk ..... (250) 960-6475
Circulation Desk (book renewals) ..... (250) 960-6613
Distance/Regional Services ..... (250) 960-6473
Distance/Regional Services ..... (250) 960-6604
Interlibrary Loans ..... (250) 960-6460
Main Switchboard ..... (250) 960-5555
News Media Inquiries ..... (250) 960-5622
Northern Undergraduate Student Society ..... (www.nugss.com) ..... (250) 960-6427
President's Office ..... (250) 960-5600
Purchasing, Contract and Risk Management ..... (250) 960-5500
Regional Campuses
Northwest - Terrace (local) 615-5578 (long distance) 1-800-697-7388
Peace River-Liard - Fort St. John (local) 787-6220 (long distance) 1-800-935-2270South Central - Quesnel .................... (local) 991-7540(long distance) 1-800-627-9931
Wilp Wilxo'oskwhl Nisga'a (local) 633-2292 (long distance) 1-800-980-8838
Regional Operations (www.unbc.ca/regops) ..... (250) 960-5584
Registrar's Office (www.unbc.ca/registrar)
Admissions, Registration ..... (250) 960-6300
Fax ..... (250) 960-6330
Student Housing (on and off campus) ..... (250) 960-6430
Student Recruitment Prospective Student Information ..... (250) 960-6306
Student Services ..... (250) 960-6364
TTY Service ..... (250) 960-5307
University of Northern British Columbia www.unbc.ca
College of Arts, Social and Health Sciences ..... www.unbc.ca/cashs
College of Science and Management ..... www.unbc.ca/csam
University Calendar
www.unbc.ca ..... www.unbc.ca/calendar

## UNBC's Northern Mandate



## Addresses

## Prince George Campus

3333 University Way
Canada V2N $4 Z 9$
Telephone (250) 960-5555
www.unbc.ca

Northwest Regional Campus
4741 Park Ave
Terrace, BC
Canada V8G 1W2
Telephone (250) 615-5578
Toll Free 1-800-697-7388
Fax (250) 615-5478
www.unbc.ca/regops/nw
Peace River-Liard Regional Campus
c/o Northern Lights College
Box 1000, 9820-120th Ave
Fort St John, BC Canada V1J 6K1
Telephone (250) 787-6220
Toll Free 1-800-935-2270
Fax (250) 785-9665
www.unbc.ca/regops/pr|

South-Central Regional Campus
S100, 100 Campus Way
Quesnel, BC
Canada V2J 7K1
Telephone (250) 991-7540
Toll Free 1-800-627-9931
Fax (250) 991-7528
www.unbc.ca/regops/sc
Wilp Wilxo'oskwhl Nisga'a
Box 237
New Aiyansh, BC
Canada VOJ 1A0
Telephone (250) 633-2292
Toll Free 1-800-980-8838
Fax (250) 633-2463

## President’s Message

## Welcome to UNBC!

The University of Northern British Columbia offers you a unique educational opportunity.

The Prince George campus, located in a magnificent setting atop Cranbrook Hill facing the McGregor Mountains, has been sensitively designed by leading architects to reflect the natural beauty of the BC interior, to support innovative teaching, and to meet the educational, social and recreational needs of students. This beautiful campus has excellent learning facilities and the capacity to accommodate 550 students in residence.

As a small university, UNBC also offers the vitality that comes from a relatively young faculty of accomplished scholars recruited worldwide, innovative academic programming, and a commitment to make
 education a personal, purposeful, and enriching experience for each and every student. The University offers you a wide range of degree programs, and the opportunity in particular programs to combine study and work through Co-operative Education.

UNBC has achieved remarkable success by any measure. Recent surveys of graduates from BC universities put UNBC graduates at the top in terms of both employment success and satisfaction with their undergraduate degree studies. The university is ranked fourth among 21 small, primarily undergraduate Canadian universities by Maclean's Magazine.

UNBC is committed to serving all of northern British Columbia. This means that a significant number of courses and several degree programs are available at regional campuses throughout central and northern $B C$, often in conjunction with the community colleges. In January 2005 UNBC welcomed its first cohort of students in the Northern Medical Program-expanding BC's medical program into central and northern regions. UNBC particularly welcomes adult, part-time learners to its regional courses, as well as to those offered on the Prince George campus. Likewise, UNBC is committed to fostering university education among the First Nations people of central and northern BC.

We invite you to read this calendar to discover the breadth of courses and programs—undergraduate, and professional—that UNBC has to offer. Through the Office of the Registrar we will be pleased to offer you advice and guidance in choosing the program that suits your needs and interests.

As British Columbia's small university alternative, UNBC offers you a special opportunity to get involved. You will get to know your professors, have access to excellent educational and research facilities, be able to join a wide range of student clubs and activities, and have unique opportunities for outdoor recreation.

I welcome you to UNBC and hope to greet you personally as a UNBC student.


Charles Jago
President

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## Mission Statement

## Mission

The University of Northern British Columbia - founded as 'a university in the north, for the north' - holds as its mission to improve the quality of life in its region, the province, and beyond, by attaining the highest standards of undergraduate and graduate teaching, learning, and research. UNBC is committed to serving a vast region by building partnerships and by being innovative, resourceful, and responsive to student and community needs. In the spirit of its Carrier motto - 'En cha huna' - UNBC celebrates diversity and intends to reflect and to foster the rich cultural diversity of northern British Columbia and its peoples. UNBC recognizes that the strength of the University is its people and that the most important measure of its success is the educational enrichment of its students. The University strives to offer all its people - students, staff and faculty - a healthy, safe, open, friendly, supportive, consultative and stimulating environment conducive to individual intellectual growth, personal fulfillment and career progress. UNBC embraces the principles of academic freedom, responsibility, education for its own sake, integrity, inclusion, respect for others, equity, fairness, operational efficiency, and public accountability.

## Institutional Values

Our values are those select points of belief held in the highest regard at UNBC, and are meant to guide the University, and each member of the University community, in their actions and in fulfillment of their ambitions.

## Excellence

UNBC strives for excellence in the fundamental roles of teaching, research and student service. The University recognizes that the educational enrichment of its students is the ultimate measure of excellence. UNBC is also committed to exemplary standards in service quality, operating effectiveness, and public accountability.

## Innovation

UNBC, as a new university, approaches the complexities of its time with responsive and innovative approaches to education. UNBC offers a modern curriculum and utilizes advanced technologies and the most innovative pedagogical methods in teaching. Much of the University's research is at the intellectual frontier, with the ultimate goal of generating tangible returns to society.

## Responsiveness

NBC's program and course offerings are based on the needs and preferences of students, the community and society. In particular, the University is committed to providing regional students with a standard of educational and student services equivalent to that of its central campus. Through its teaching and research, the University will continue to contribute to the social, cultural and economic development of the north, and to an improved environment and health for its people.

## Teaching

Teaching excellence is a critical factor in effective student learning and in the transmission of knowledge to the next generation. The quality of the teaching and learning environment is an essential to
the continuing strength and growth of UNBC. Excellence in teaching requires a university environment that fosters and facilitates teaching and acknowledges and rewards success.

## Learning

Learning is a continuous lifelong process, a necessary part of human development. UNBC is about learning - about providing opportunities to learn and assisting and enabling all those who come to the University in achieving personal enrichment through learning. UNBC champions intellectual freedom, academic inquiry, learning for its own sake, access to information, learning through applied learning initiatives (e.g., Co-operative Education, Internships and Practica) and the development of new knowledge. UNBC supports research initiatives and the integration of research and teaching so that our students can both profit from, and participate in, the development of new knowledge and new discoveries.

## Interdisciplinarity

Scholarship, which spans disciplines and cultures, and programming which cuts across organizational units are to be hallmarks of UNBC. Removal of the barriers to learning, which traditional disciplinary and cultural boundaries often present, is what shapes interdisciplinarity at UNBC. While such areas as Environmental Studies, First Nations Studies, International Studies, Northern Studies, and Women's and Gender Studies underlie the University's commitment to interdisciplinarity, the commitment transcends specific programs and represents the way the University intends to conduct its academic business.

## Research

Knowledge creation is central to the mission and mandate of a university. Excellence in knowledge creation requires a university environment that fosters and facilitates research and scholarship and appropriately acknowledges and rewards success.

## Diversity and Equity

The University is committed to promoting and increasing diversity among its students, staff, and faculty and to eliminating barriers to the free flow of ideas from the diverse cultures, disciplines, and fields of study which make up UNBC. UNBC celebrates diversity - especially so in its relationship with the aboriginal peoples of the northern region. UNBC is also committed to ensuring fairness in matters relating to gender and social equity, particularly with respect to academic opportunity.

## Internationalization

Success increasingly depends on being internationally knowledgeable and inter-culturally competent. UNBC is committed to the development of teaching, learning and research that strengthens an understanding of global interdependencies.

## Leadership

UNBC aspires to intellectual and moral leadership in society. This is a role which the University must earn through the rigorous development of its ideas, through the integrity of its actions, through the trust merited by its officials, through the effectiveness of the services it provides, and through the institutional respect it commands within the community. The University seeks to develop and foster leadership qualities in its students, staff, and faculty.

## Our Story

UNBC has unusual origins. In 1987 a group of business and professional leaders came together and formed the Interior University Society. This Society commissioned the 1988 study Building a Future of Excellence: A University of Northern British Columbia. Support for the creation of a northern university came from every city, town, village and regional district in northern BC. Sixteen thousand individuals each paid at least $\$ 5$ to support a brief to government arguing the case for a new university. After receiving this brief, the provincial government funded a further report which, in December 1989, recommended the creation of a self-governing, degree-granting institution in northern British Columbia. The recommendations were accepted, and in June 1990, The University of Northern British Columbia Act was passed, with all-party support.

Geoffrey Weller, UNBC's Founding President, joined the University in January 1991, and in April 1992 Premier Harcourt led the sod-turning ceremony for the Prince George campus. The first Convocation ceremony was held in May 1992, and UNBC's first students-taking part in the "QuickStart" program-began their studies in September 1992. Six students from this program graduated in May 1994.

The Prince George campus was officially opened on August 17, 1994 by Her Majesty the Queen Elizabeth II, and the first full day of classes took place on September 8, 1994.

In the first full year, there were approximately 1,400 students- 1,300 undergraduates and 100 graduate students-at the University, and nearly 300 full-time faculty and staff. Today, UNBC is home to 3,600 students and more than 450 faculty and staff.

UNBC has a commitment to all aspects of university activities, including service, teaching and research. It has a particular commitment to the service of students. UNBC ensures that its courses have practical benefits for students and their future employment, and students can benefit from relevant work placements. The University offers, through the Co-operative Education Department, a substantial program of Co-operative Education and Internships.

UNBC has a mandate to pay particular attention to the needs of northern British Columbia, and the University's programs and research are designed so that they are of particular relevance to the region.

Through the International Operations, UNBC capitalizes on its northern setting and has established links with other universities in northern regions. Exchange agreements have been arranged with members of the Association of Circumpolar Universities, including universities in northern Scandinavia and Russia.

The University has also taken advantage of its location on the Pacific Rim and of the fact that some of the major exports of northern BC go to Pacific Rim nations. Faculty and student exchanges have been established with a number of universities in this major trading area.

The University's programs and methods of academic organization ensure that an interdisciplinary approach is fostered wherever possible. Key programs that have been developed along interdisciplinary lines are Environmental Studies, First Nations Studies, International Studies, Northern Studies and Women's Studies. First Nations History, for instance, is taught within the History program in the College of Arts, Social and Health Sciences. Students are thus able to take such courses either within the History program, or as part of a multidisciplinary First Nations Studies program.

## University Colours

The University's main colour, which was chosen in 1990 when UNBC was first being planned, is green-eminently suitable to a university located in a major forestry region, with a strong focus on the environment. The second colour, gold, was added in 1991.

## The Coat of Arms

The University's Coat of Arms comprises several elements. The shield, which is divided into UNBC's colours of green and gold, contains three elements. The open book, which is a traditional symbol of learning, is flanked by two ravens, which are hardy, resident birds of the north, symbols of wisdom in some First Nations traditions, and recognized as amongst the most intelligent of birds by ornithologists. Below these elements is a young coniferous tree with roots, which symbolizes growth, and represents both the dominant flora of the north and the backbone of the northern economy.

The crest is created from a wreath surmounted by the maple leaf symbolizing Canada, dogwood flowers symbolizing British Columbia, and snowflake crystals symbolizing the north. The crest is a salmon, which is the symbol on the base of the University's mace/talking stick, and is used there as an indication of all the people of the region. The salmon, like the orca in the compartment, was created by Ron Sebastian of New Hazelton specially for the coat of arms.

To the left of the shield is a Kermodei bear, a rare subspecies of the black bear found only in the northwest region of British Columbia. To the right of the shield is the woodland caribou, a distinctive mammal of the central interior and northeast region. Each carries a wreath comprised of conifer branches with cones-again indicating a definitive element of much of northern British Columbia.

The compartment is the base on which the supporters stand. The Kermodei stands amongst mountains and trees which are distinctive of much of the region. To the right is a wheat field, distinctive of the Peace River region. Beneath the mountains and wheat field is a depiction of the ocean and orca, indicative of the Haida Gwaii (Queen Charlotte Islands) and coastal regions.


## The Motto

The motto, 'En cha huná (pronounced "en chah huhNAH") is a saying of Carrier elders, with a direct translation "he/she also lives." The saying would be used by an elder when reminding somebody, critical of another, that the individual was also a living being, with a voice and a viewpoint. The motto encapsulates much of the spirit of academic
freedom, of respect for others, and the willingness to recognize different perspectives.

## The Mace

The mace/talking stick includes thirteen traditional Indian crests, which represent all the tribes/clans of northern British Columbia. They are, from top to bottom: Wolf, Black Bear, Beaver, Wolverine, Caribou, Mountain Goose, Frog, Raven, Thunderbird, Fireweed, Killer Whale, Owl, and Eagle. In the centre is an additional human face representing all peoples. The mace/talking stick rests in a base of red cedar, carved in the form of a salmon. The mace, ceremonial chairs and the doors to the University Senate were carved by Ron Sebastian.

## The Ceremonial Chairs

The chairs include, at top and bottom, a human mask and sun, representing mankind but particularly students and
 counsellors, while the other symbols again represent the various First Nations peoples in the University's region.

The Chancellor's Chair (left) includes representations of the thunderbird, representations of the thunderbird,
frog, beaver, grouse, fireweed, owl, eagle, and killer whale, with arm rests carved in the shape of a wolf.

The President's Chair (right) includes representations of the grizzly bear, wolf, caribou, black bear, crow, frog, moose, and mountain goose, with arm rests carved in the shape of a raven.

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## CASHS Academic Structure



## College of Arts, Social and Health Sciences

The College of Arts, Social and Health Sciences (CASHS) includes the following Programs: Anthropology, Community Health Science, Disability Management, Economics, Education, English, First Nations Studies, Gender Studies, Health Sciences, History, International Studies, Northern Studies, Nursing, Political Science, Psychology, Social Work, and Women's Studies. Through its teaching, research and service, the College actively promotes an understanding and appreciation of humanity, and the development of human resources in northern British Columbia. The College links northern BC to the world, and the world to northern BC . It is concerned with people, health, culture and values, and is committed to enhancing opportunities for individuals, building stronger, healthier communities, and improving quality of life.

## CSAM Academic Structure



## College of Science and Management

The College of Science and Management (CSAM) delivers 32 majors. Listed by degree they are: BA degree with majors in: Geography, Environmental Studies, and Resource-Based Tourism; BASc degree with a major in: Environmental Engineering; BComm degree with majors in: Accounting, Finance, General Business, International Business, and Marketing; BPI degree with three planning themes: First Nations Planning, Natural Resources Planning, and Northern and Rural Community Planning; BSc (General); BSc degree with majors in: Anthropology/Geography, Biology, Biochemistry and Molecular Biology, Chemistry, Chemistry and Computer Science, Chemistry and Mathematics, Chemistry and Physics, Computer Science, Computer Science and Mathematics, Computer Science and Physics, Economics and Mathematics, Environmental Science, Geography, Mathematics, Mathematics and Physics, Natural Resource Management (Forestry), Natural Resource Management (Resource Recreation), Natural Resource Management (Wildlife and Fisheries), and Physics.

Through research, teaching and outreach, the College aims to integrate the sciences, business administration, and management of natural resources and environments in ways that are recognized internationally for their roots in traditional and basic knowledge, their value to rural and remote communities, citizens and industries, and their global pertinence.

## Faculty

Aasen, Wendy, Adjunct Professor, First Nations Studies— BA Hons (British Columbia) MA (Alberta)
Ackerman, Josef, Adjunct Professor, Environmental Science and Engineering- BSc (Toronto) MA (New York State) PhD (Cornell)

Ainley, Marianne, Adjunct Professor, History—BA (Sir George Williams) MSc (Montreal) PhD (McGill)

Alstrom-Rapaport, Cecilia, Assistant Professor, Ecosystem Science and Management—BSc (Uppsala) MSc (Wisconsin) PhD (Uppsala)
Altar, Ted, Adjunct Professor, Psychology—BA (British Columbia) MA (Regina) PhD (Simon Fraser)
Anderson, Margaret, Professor, First Nations—BA MA PhD (Michigan)
Anonson, June, Adjunct Professor, Nursing—RN (Saskatchewan) BScN (Alberta) MEd (Alberta) PhD (Alberta)
Applegate, Mary, Adjunct Professor, Nursing-BScN (Western) MN (Alberta) RN
Aravind, Alex, Assistant Professor, Computer Science-BSc MSc (India) MTech (Indian Institute of Technology) PhD (Indian Institute of Science)
Arocena, Joselito, Professor, and Canada Research Chair, Soil and Environmental Sciences—BSc MSc (Philippines, Los Banos) PhD (Alberta)
Bai, Ping, Senior Lab Instructor, GIS—BSc (Beijing) MSc (Windsor)
Baker, Douglas, Adjunct Professor, Environmental Planning-BA MA (Simon Fraser) PhD (Waterloo) MCIP
Barrett, Penelope, Associate Professor, Nursing-BEd (New England) PhD (Southern Cross) RN
Barton, Sylvia, Assistant Professor, Nursing—BSN (British Columbia) MSN (Portland) RN
Beattie, Greg, Adjunct Professor, Social Work—BSW (Victoria) MSW (Dalhousie)
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Beeler, Stan, Associate Professor, English—BA Hons MA (Dalhousie) PhD (Alberta)
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Bergeron, Yves, Adjunct Professor, Ecosystem Science and Management—BSc MSc PhD (Montreal)
Beveridge, Erin, Senior Lab Instructor, Disability Management—BSC (Northern British Columbia)
Bidgood, Bruce, Associate Professor, Social Work—BA (Brock) MA PhD (Wilfred Laurier)
Binnema, Theodore, Associate Professor, History—BA (Calvin College) MA PhD (Alberta)

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Blouw, Max, Professor, Ecosystem Science and Management—BSc MSc (Manitoba) PhD (New Brunswick)
Blue, Ian, Professor, Nursing—BEd (South Australia) RN RM Dip Ed (N/Ed.) MEd Admin (Deakin) PhD (Adelaide)
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Boon, Sarah, Assistant Professor, Geography—BSc (Victoria) PhD (Alberta)
Booth, Annie, Associate Professor, Ecosystem Science and Management (Forestry)—BA (Victoria) MES (York) PhD (Wisconsin) MCIP
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Heath, Daniel, Adjunct Professor, Ecosystem Science and Management—BSc MSc (McGill) PhD (British Columbia)
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Hutchings, Kevin, Associate Professor, English, and Canada Research Chair, Romantic Studies: Environment, Culture, and Representation—BA (Guelph) MA (McMaster) PhD (Hamilton)
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Jago, Charles, Professor, History— CM, BA (Western) PhD (Cambridge)
Jensen, Erik, Associate Professor, Physics—BSc Hons (Victoria) PhD (Cambridge)
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Johnson, Susan, Assistant Professor, Nursing-BSc (Lincolnshire) PhD (Nottingham)

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Keen, Kevin, Associate Professor, Mathematics—BSc Hons (Simon Fraser) MSc (Montreal) PhD (Toronto)
Keener, Lee, Professor, Mathematics-BA (Amherst College) MSc (Rensselaer Polytechnic) MSc (Oregon) PhD (Rensselaer Polytechnic)
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Koehler, Albert, Adjunct Professor, Environmental Engineering-BSc MEng PhD (Aachen)
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Kranz, Allan, Senior Lab Instructor, Computer Science—BSc (Northern British Columbia)
Kumar, Pranesh, Associate Professor, Mathematics—MSc PhD (Indian Agricultural Research Institute)
Kuo, Kuo-Hsing, Assistant Professor, Northern Medical Program,—MD (National Taiwan) MSc PhD (British Columbia)
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Lapadat, Judith, Professor, Education-BA Hons MSc (British Columbia) PhD (Simon Fraser)
Lavallee, Lorraine, Assistant Professor, Psychology—BA MA PhD (British Columbia)
Lazenby, Richard, Associate Professor, Anthropology—BA/MA (Simon Fraser) PhD (McMaster)
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Leischner, Christine, Assistant Professor, Social Work—BSW (Victoria) MSW (Northern British Columbia)
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Lewis, Kathy, Associate Professor, Ecosystem Science and Management-BSF (British Columbia) MS (Virginia Polytech and State) PhD (Oregon State)
Li, Han, Associate Professor, Psychology-BEd Hons (Hua-Zhong NU) MPH (North Carolina) MA PhD (Victoria)
Li, Jianbing, Assistant Professor, Environmental Engineering—BASc MSc (Wuhan) PhD (Regina)
Lindgren, Bo Staffan, Professor, Ecosystem Science and Management-MPM PhD (Simon Fraser)
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Lu, Zhongyou, Adjunct Professor, Geography—BSc (Nanjing) MSc PhD (Alberta)
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MacPhail, Fiona, Associate Professor, Economics-BA Hons MA (Guelph) MA (Sussex) PhD (Dalhousie)
Madak, Paul, Professor, Education—BA (St. Bonaventure) MA PhD (Manitoba)
Maher, Patrick, Assistant Professor, Resource Recreation and Tourism—BA Honours (Lakehead)
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Mann, Patrick, Adjunct Professor, Physics—BSc (Western) MSc (Lakehead) DPhil (Oxford)
Marsh, Janet, Adjunct Professor, Ecosystem Science and Management-BA (Laurentian) MSc PhD (Arizona)
Martel, Gordon, Professor, History—BA Hons (Simon Fraser) MA (Tufts and Harvard) PhD (Toronto)
Massicotte, Hugues, Associate Professor, Ecosystem Science and Management—BScA (Laval) MSc PhD (Guelph)
Matsuba, Kyle, Assistant Professor, Psychology—BSc (Toronto) BA MA PhD (British Columbia)
McDonald, Jim, Associate Professor, Anthropology—BA Hons (Manitoba) MA (Alberta) PhD (British Columbia)
McGill, William, Professor, Ecosystem Science and Management—BSA Hons MSc (Manitoba) PhD (Saskatchewan)
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McKiernan, Joelle, Assistant Professor, Social Work—BA MSW (Wilfred Laurier)
McLennan, Christina, Assistant Professor, Social Work—BSW (Victoria) MSW (Northern British Columbia)
Menounos, Brian, Assistant Professor, Geography—BA MA(Colorado) PhD (British Columbia)
Michalos, Alex, Professor Emeritus, Political Science-BA (Western Reserve) MA BD PhD (Chicago)
Michel, Paul, Adjunct Professor, First Nations Studies—MEd (Simon Fraser)
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Mills, Antonia, Associate Professor, First Nations-BA Hons PhD (Harvard)
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Morrison, William, Professor, History—BA Hons MA (McMaster) PhD (Western)
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Nolin, Catherine, Assistant Professor, Geography—BA (Calgary) MA PhD (Queen's)
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Ward, Arlene, Adjunct Professor, Disability Management—BSc (British Columbia) MSc (Calgary)
Watanabe, Mamoru, Adjunct Professor, Community Health—MD (McGill) PhD (McGill) FRcPc
Wheate, Roger, Associate Professor, Geography/GIS Coordinator-BSc Hons (St Andrews) MA (Queen's) PhD (St Andrews)
Whitcombe, Todd, Associate Professor, Chemistry—BSc Hons PhD (Victoria)
Wilkening, Ken, Assistant Professor, International Studies—BA MS PhD (U Wisconsin Madison)
Wilkerson, Orland, Assistant Professor, Environmental Science and Planning—BA (Abilene) BSc PhD (Victoria)
Williams, Lynda, Senior Lab Instructor, Centre for Teaching and Learning-BA (Victoria) MLS (Toronto) MSc (McMaster)
Wilson, Gary, Assistant Professor, Political Science-BA (Carleton) MA PhD (Toronto)

Wint, Eleanor, Assistant Professor, Social Work—BSc (West Indies) MSW (Boston College) PhD (West Indies)
Wong, William, Assistant Professor, Psychology—BA MA PhD (Victoria)
Wood, Hiroe, Lecturer, International Studies
Wright, Pamela, Associate Professor, Resource Recreation and Tourism—BSc (Lakehead) MSc (Ohio State) PhD (Ohio State)
Yeulet, Kathleen, Adjunct Professor, Nursing—BSN (Victoria) MEd (Simon Fraser)
Young, Jane, Assistant Professor, Biology—BSc (York) MSc (Guelph) PhD (Toronto)
Young, John, Assistant Professor, Political Science—BA Hons (Alberta) MA (Carleton) PhD (Toronto)
Zahir, Saif, Associate Professor, Computer Science-ME (Wisconsin) PhD (Pittsburgh)
Zarate, Jose, Adjunct Professor, Anthropology—BA Hons (UNAM), MA (Guelph), EdD (OISE)
Zimmer, Lela, Assistant Professor, Community Health and NursingDipl Nursing (BCIT) BScN (Northern British Columbia)

## Officers of the University

## UNBC Board of Governors

| Dr. Charles Jago, CM President |  |
| :--- | :--- |
| Dr. Peter Bentley | Chancellor |
| Dr. Kevin Hall | Faculty Representative, Elected by <br>  <br>  <br>  <br>  <br> Management) |
| Dr. Donald Rix | Chair, Member at Large, Appointed by <br> Government |
| Vacant | Representative of the Northwest Community <br> College Region, Appointed by Government |
| Mr. Doug Carter | Staff Representative, Elected by Staff |
| Mr. Claude Hurtubise | Graduate Student Representative, Elected by <br> Graduate Students |
| Ms. Linda Chipesia | Representative of the Aboriginal <br> Communities, Appointed by Government |


| Dr. Martha MacLeod | Faculty Representative, Elected by Faculty <br> Association (College of Arts, Social \& Health <br> Sciences) |
| :---: | :--- |
| Ms. Jennifer Young | Undergraduate Student Representative, <br>  <br> Elected by NUGSS |
| Ms. Noreen Rustad | Vice-Chair, Alumni Representative, Appointed <br> by Government (Alumni) |
| Mr. Gary Townsend | Representative of the College of New <br> Caledonia Region, Appointed by Government |
| Mr. Jim Shepherd | Member at Large, Appointed by Government |
| Mr. Colin Griffith | Representative of the Northern Lights College <br> Region, Appointed by Government |
| Mr. William Lynch | Representative of the Cariboo Regional District <br>  Region, Appointed by Government |

## Senate

| Dr. Peter Bentley | Chancellor |
| :--- | :--- |
| Dr. Charles Jago | President and Vice-Chancellor and Chair <br> of Senate |
| Dr. Howard Brunt | Vice-President Academic and Provost and <br>  <br> Vice-Chair of Senate |
| Dr. Max Blouw | Vice-President Research |
| Dr. James Randall | Dean, College of Arts, Social, and Health <br> Sciences |
| Dr. William McGill | Dean, College of Science and <br>  <br> Management |
| Dr. Robert Tait | Dean, Graduate Studies |
| Dr. Sharon Cochran | Acting Director Continuing Education <br> Ms. Alison Nussbaumer <br> Mr. John DeGrace |
|  | University Librarian <br> (non-voting) |
| Ms. Kathleen Kielly | Administrative Registrar (non-voting) |

## College of Arts, Social and Health Sciences Faculty Members

Dr. Karin Beeler
Ms. Dawn Hemingway
Dr. Jacqueline Holler
Dr. Kevin Hutchings
Dr. Han Li
Dr. Jalil Safaei Boroojenay
Dr. Angele Smith
Dr. Shannon Wagner

## College of Science and Management Faculty Members

Dr. David Casperson
Dr. Robert Ellis
Dr. Jennifer Hyndman
Dr. Erik Jensen
Dr. Jianbing Li
Dr. Margot Mandy
Dr. Christopher Opio
Dr. Eric Rapaport

## Faculty Members at Large

Ms. Eleanor Annis
Dr. Aileen Espiritu
Students - Undergraduate
Brianne Burkinshaw
Holly Heath
Eva Prkachin
Lindsay Sahaydak
Mark Stephens
Students - Graduate
Claude Hurtubise
Dana 0'Bryan
Scott Scholefield
Mahrusa Sherstobitoff

## Alumni

Helen Domshy
Erin Kinghorn
Mike Reed
Matt Thomson

## WW'N Representative

Deanna Nyce

## Lay Senators (Regional Representatives)

| Vacant | (Aboriginal Representative) |
| :--- | :--- |
| Rocque Berthiaume | (NWCC Region) |
| Vacant | (CNC Region) |
| Bruce Simard | (NLC Region) |

## Administrative Officers

President and Vice Chancellor—Charles Jago, CM, BA (Western) PhD (Cambridge)
Vice President Academic and Provost-Howard Brunt, BA (Florida), Associate Degree Nursing (Vermont) MA Nursing (Yale) PhD (Calgary)
Vice President Administration and Finance—Sharon Cochran, BA (Washington) MA (Oregon) EdD (British Columbia)

Vice President Research—Max Blouw, BSc MSc (Manitoba) PhD (New Brunswick)

Associate Vice-President UNBC/Associate Dean NMP, UBC—David Snadden, MAST PHDL (Dundee)
Dean of the College of Arts, Social and Health Sciences—James Randall, BA Hons (York) MA PhD (Washington)
Dean of the College of Science and Management-William McGill, BSA Hons MSc (Manitoba) PhD (Saskatchewan)
Dean of Enrolment Management (Acting) — Paul Madak, BA (St. Bonaventure, MA, PhD (Manitoba)
Dean of Graduate Studies—Robert W. Tait, BA MA (Queen's) PhD (lowa)

Administrative Registrar—Kathleen Kielly, BA (Alberta)
University Secretary and Registrar—John R. DeGrace, BSc(Eng) (Queen's) MSc (Memorial)

## University Administrative Officers

## Administrative Computing Services

Director—Lynda Pattie, BComm (Northern British Columbia)

## Bookstore

Manager—Mardeana Berg

## Computing and Telecommunications Services

Director—Patrick Mann, BSc (Western Ontario) MSc (Lakehead) DPhil (Oxon)

## Continuing Education

Acting Director—Sharon Cochran, BA (Washington) MA (Oregon) EdD (British Columbia)

## Office of Communications

Director of Media and Public Relations-Rob van Adrichem, BA (Northern British Columbia)

## Office of Co-operative Education

Director—Peter R. Rans, BA Hons (University of East Anglia), MA (Sheffield University), PhD (Dalhousie University), MPA (Dalhousie University)
Co-op Co-ordinator—David Woodward, BA (Victoria)
Co-op Co-ordinator-Charlene Milburn, BBA (University College of the Cariboo)
Co-op Co-ordinator—Teri Muhle, BA (Northern British Columbia))

## Office of Development

Director—Thomas Berekoff, BA (Lethbridge) CFRE (Association of Fundraising Professionals) MA (Saint Mary's University of Minnesota)
Development Officer, Research—Jennifer Meade, BA Hons (Dalhousie) MA (London)
Development Officer, Individual and Community Giving-Davida Stafford, BC (Northern British Columbia) CA (on leave)
Development Officer, Individual and Community Giving-Kyle Aben, BBA (University College of the Cariboo)

## Enrolment Management

Dean of Enrolment Management (Acting) — Paul Madak, BA (St. Bonaventure, MA, PhD (Manitoba)

## Facilities

Director—Godfrey Medhurst
Assistant Director—Shelley Rennick, BComm MNRES (Northern British Columbia)
Finance
Director, Finance and Budgets-Colleen Smith, BComm Hons (Co-op) (Memorial) CA
Financial Services and Systems Manager—Leanne Murphy, CMA
Treasury Services Manager—William Chew, BA, Lic. Acct. (British Columbia), CIM

## Office of First Nations Centre

Director—Paul Michel, MEd (Simon Fraser)

## Health and Safety Office

Health and Safety Manager_Peter Hickey, BGS (Simon Fraser)

## Housing and Conference Services

Housing and Conference Services Manager
Randall Brazzoni, BPE (Calgary)

## Human Resources

Director—Mike Knudson, MBA (Simon Fraser), MIR (Toronto), BA Hon (Carleton)

## International Operations

Director—Carolyn Russell, BA (Northern British Columbia)

## Purchasing, Contract and Risk Management

Director—Sheila Keith

## Office of Regional Operations

Director—Dennis Macknak, BA Hons MA (Saskatchewan)
Regional Chair, Northwest—Judith Lapadat, BA Hons MSc (British Columbia) PhD (Simon Fraser)
Regional Chair, Peace River-Liard—Orland Wilkerson, BA (Abilene Christian) BSc PhD (Victoria)
Regional Chair, South Central—Blanca Schorcht, BA MA PhD (British Columbia)

## Office of the Registrar <br> Administrative Registrar-Kathleen Kielly, BA (Alberta)

## Senate Secretariat

University Secretary and Registrar—John DeGrace, BSc (Eng) (Queen's) MSc (Memorial)

## Student Services

Director—Susan McIntyre, MPA (Dalhousie)
Athletic and Recreation Co-ordinator—Len McNamara, BPE (British Columbia)
Awards, Financial Aid and Student Employment Co-ordinator— Linda Roa
Counselling Co-ordinator—Greg Beattie, BSW (Victoria) MSW (Dalhousie)
Health Centre Co-ordinator—Robin Johnson, BScN CTN (Alberta) RN
Learning Skills Centre Co-ordinator-Lyn Benn, BA (Avensland University of Technology) MEd (Queensland)
Disabilities Advisor—Maureen Hewlett, BA Hons (Lakehead), MSc (Northern British Columbia)

## University Library

University Librarian—Alison Nussbaumer, BA MLS (Alberta)
Instructor/Data Librarian—Gail Curry, BSc Hons (McGill) MLS (British Columbia)
Distance and Document Delivery Librarian—Nancy E. Black, BA (Waterloo) MLS (Dalhousie)
Acquisitions Librarian—Joanne Matthews, BA BLS (Alberta)
Catalogue Librarian—Eleanor Annis, BA (Lethbridge) MLIS (Western Ontario) MA (Leicester)
Electronic Services Librarian-Michael Purcell, BA (Saskatchewan) MLIS (Dalhousie)
Head, Archives and Special Collections-Ramona Rose, BA (Memorial) MMSt (Toronto) MA (British Columbia)
Circulation/Reference Librarian—Jo Ann Murphy, BA (Lethbridge) MLIS (Alberta)
Education Librarian—Heather Empey, BA (Augustana University College) MLIS (Alberta)
Northern Health Sciences Librarian—Trina Fyfe, BA (Waterloo) MISt (Toronto)

## Degrees

## Undergraduate Programs

## Bachelor of Arts

BA (General)*

## Majors offered:

Anthropology*/**
Anthropology/Geography Joint Major
Economics*
Economics/Political Science Joint Major*
English*
English/History Joint Major*
English/Political Science Joint Major*
English/Women's Studies Joint Major*
Environmental Studies*
First Nations Studies*
First Nations Studies/Women's Studies Joint Major*
Geography*
History*/**
History/Political Science Joint Major*
History/Women's Studies Joint Major*
International Studies*/**
International Studies/Political Science Joint Major*
Northern Studies*
Political Science*
Resource-Based Tourism*
Women’s Studies*

## Bachelor of Applied Science

Environmental Engineering*

## Bachelor of Commerce

Majors offered:
Accounting*
Finance*
General Business*
International Business*
Marketing*

## Bachelor of Health Sciences

Majors offered:
Biomedical Studies
Community and Population Health - Aboriginal and Rural Health
Community and Population Health - Environmental Health

## Bachelor of Education

Elementary (K-7)
Secondary (8-12)

## Bachelor of Planning ${ }^{\star}$

Energy Specialization (Fort St. John only)
Natural Resources Planning Theme
Northern and Rural Community Planning Theme
First Nations Planning Theme

## Bachelor of Science

BSc (General)*

## Majors offered:

Biology*
Biochemistry and Molecular Biology*
Chemistry*
Chemistry/Computer Science Joint Major*
Chemistry/Mathematics Joint Major*
Chemistry/Physics Joint Major*
Computer Science*
Computer Science/Mathematics Joint Major*
Computer Science/Physics Joint Major*
Economics/Mathematics Joint Major*
Environmental Science*
Geography*
Mathematics*
Mathematics/Physics Joint Major*
Natural Resources Management - Forestry*/**
Natural Resources Management - Resource Recreation* Natural Resources Management - Wildlife and Fisheries*
Physics*
Psychology*/**

## Bachelor of Science in Nursing

## Programs:

Northern Collaborative Baccalaureate Nursing Program
Post-Diploma Baccalaureate Nursing Program

## Bachelor of Social Work

## Programs:

Child Welfare Specialization
First Nations Specialization

[^0]** Honours Programs

## Minor Programs

Anthropology<br>Applied Mathematics<br>Biochemistry<br>Biology<br>Chemistry<br>Economics<br>English<br>Environmental Science<br>Environmental Studies<br>Environmental Planning<br>First Nations<br>Geographic Information Systems (GIS)<br>Geomorphology<br>History<br>Human Geography<br>International Studies<br>Mathematics<br>Northern Studies<br>Philosophy<br>Physical Geography<br>Physics<br>Political Science<br>Psychology<br>Resource-Based Tourism and Recreation<br>Russian Studies<br>Women's Studies

## Diploma Programs

Aboriginal Health Sciences
First Nations Language

## Certificate Programs

Aboriginal Community Resource Planning Aboriginal Health Sciences<br>First Nations Language<br>First Nations Public Administration<br>General First Nations Studies<br>Métis Studies<br>Nisga'a Studies<br>Public Administration<br>Rural and Northern Nursing<br>Traditional Environmental Knowledge

## Graduate Programs

Business Administration (Dip. BA, and MBA)
Community Health Science (MSc)
Disability Management (MA)
Education (MEd)

- Counselling
- Multidisciplinary Leadership

English (MA)
First Nations Studies (MA)
Gender Studies (MA)
History (MA)
Interdisciplinary Studies (MA) (MSc)
International Studies (MA)

- Global Environmental Policy
- International Development
- Regional Relations

Mathematical, Computer, and Physical Sciences (MSc)

- Chemistry
- Computer Science
- Mathematics
- Physics

Natural Resources and Environmental Studies (MA)

- Geography
- Environmental Studies
- Tourism

Natural Resources and Environmental Studies (MNRES)
Natural Resources and Environmental Studies (MSc)

- Biology
- Environmental Science
- Forestry
- Geography
- Recreational Resource Management

Natural Resources and Environmental Studies (PhD)
Nursing (MScN, MScN:FNP)
Political Science (MA)
Psychology (MSc, PhD)
Social Work (MSW)

## Permission for Undergraduates to Take Graduate Course Work

Students in their final year of a Bachelor's degree program at the University of Northern British Columbia who have a grade point average of at least $3.33(\mathrm{~B}+)$ in the last 30 credit hours of course work attempted may be permitted to register in a maximum of six credit hours of graduate courses on the recommendation of the program concerned and with the consent of the Dean of Graduate Studies. If a student is subsequently admitted to a Graduate program, graduate courses used for credit toward the undergraduate program cannot be used for credit toward the graduate program.

This policy gives academically strong undergraduate students the opportunity to experience graduate level instruction without commitments being made by either the student or the University about admission into graduate programs, or academic credit being awarded
for the courses if a student is subsequently admitted to a graduate program. Please note that preclusions stated in the Graduate Academic Calendar will apply. Students are responsible for being aware of preclusions in the Graduate Academic Calendar for crosslisted undergraduate/graduate courses.

Please see the Graduate Studies Officer for further information.
Simultaneous enrolment in a graduate program and an undergraduate program, a diploma or certicate program is not permitted.

## Research at UNBC

The University of Northern British Columbia prides itself on being a small institution with a large research mandate and presence. Our faculty members have demonstrated themselves to be highly competitive in securing support for their research, and we are very proud of the achievements of the graduate students who have registered and graduated in our very short history. The principal research values of UNBC are: excellence, innovation, social and economic relevance, and interdisciplinarity. The goals of research at UNBC are to contribute to the advancement of knowledge, and to stimulate economic growth and diversification in ways that are sustainable and that have widespread social support. The research of faculty members and their students, both undergraduate and graduate, give expression to these values and goals, and we are gratified at the impact that their work has already had in the international community as well as in the local and regional communities that are the constituency of the University.

Graduate students have opportunities to engage in research which is at the leading edge of the disciplines, which is relevant to the communities of the north and to the environment, and which is very well supported by granting agencies at the national and the provincial levels. The research programs of students and faculty often occur in partnership with community groups, industry, government agencies, and other interested parties. This is particularly true of the disciplines which engage heavily in research on issues that are of direct relevance to the rural and remote communities, their supporting industries and social structures, and the boreal and northern regions. The graduate students who join UNBC have unique opportunities to engage in research with leaders in their disciplines and in research which has a large and positive societal impact.

## Admission to Graduate Studies

Please contact the Graduate Studies Officer at the Office of the Registrar for more information on admission to Graduate Studies. Also refer to the UNBC Graduate Calendar or visit the Graduate Studies website online at: www.unbc.ca/graduatestudies/.

## Admissions

## Enrolment Management at UNBC

The University of Northern British Columbia is committed to providing the best possible educational experience to its students. While some areas of academic study are available to new students without restriction, to ensure the highest quality learning environment others must be limited in enrolment by the availability of suitable space and instruction. Except for first-entry professional programs, first-year first-entry students are admitted to UNBC by their degree outcome of interest, and must indicate at least their first choice of Degree Group (for example Bachelor of Arts or Bachelor of Science) on their application form. Until such time as students declare a major, they will be assigned either of the two College Deans based upon their declared degree group. Once admitted, if the Major selected would require a transfer between Degree Groups, the approval of the College Dean for the Academic Program including the desired major is required. Transfer from a first-entry professional program to one of the Degree Groups is permitted only by approval of the College Dean for the Academic Program including the desired major.

Transfer students are considered for admission only in the context of a Declaration of Major, and will be admitted, on the basis of space availability and eligibility, by established criteria in the Major of choice.

## How to Apply

To apply for admission to UNBC, please submit a completed application form, including all required documentation and fees, to the Office of the Registrar.

The online application is available by internet at www.unbc.ca/apply/.

To receive an application form, contact the Office of the Registrar by mail, by fax at (250) 960-6330 or by phone (250) 960-6300.

## Application Deadlines

## Canadian Students

General Undergraduate (see Semester Dates and program regulations for professional programs).

May Semester<br>September Semester<br>01 March 2007<br>01 March 2007

Please note: While the Canadian Student application deadline for admission is March 1st for September entry, students are encouraged to apply earlier. Applications received after March 1st will be considered on the basis of space availability and eligibility, by established criteria in the Degree Group/Major of choice.

January Semester 01 November 2006

## International Students

| September Semester | 01 March 2007 |
| :--- | :--- |
| January Semester | 31 May 2007 |
| May Semester* |  |

*Applications are not encouraged for this semester, unless applicants are transferring from a Canadian post-secondary institution.

Please note: Applications received after these dates will be processed on the basis of space availability once on-time applications have been allocated.

## Professional Programs

(see Program Regulations for Professional Program Admissions)

| Social Work | 31 January 2007 |
| :--- | :--- |
| Environmental Engineering | 01 March 2007 |
| Health Sciences | 01 March 2007 |
| Education | 15 March 2007 |
| Nursing | 30 March 2007 |

## Degree Groups

## Arts

(leading to the Bachelor of Arts)
BA (General)
Anthropology
Anthropology/Geography
Economics
English
English/History
English/Political Science
English/Women's Studies
Environmental Studies
First Nations Studies
First Nations Studies/Women's Studies
Geography (BA)
History
History/Political Science
History/Women's Studies
International Studies
International Studies/Political Science
Northern Studies
Political Science
Political Science/Women's Studies
Resource-Based Tourism
Women's Studies

## Science

(leading to the Bachelor of Science or Bachelor of Planning)
BSc (General)
Biology
Biochemistry \& Molecular Biology
Chemistry
Chemistry/Computer Science
Chemistry/Mathematics
Chemistry/Physics
Computer Science
Computer Science/Mathematics
Computer Science/Physics
Economics/Mathematics
Environmental Science
Geography (BSc)
Mathematics
Mathematics/Physics
Natural Resources Management
Forestry
Resource Recreation
Wildlife and Fisheries
Physics
Planning (BPI)
Energy Specialization (Ft. St. John)
Planning Themes:

- Natural Resources
- Northern and Rural Community
- First Nations

Psychology

## Business Administration

(leading to the Bachelor of Commerce)

Accounting
Finance
General Business
International Business
Marketing

## First Entry Professional Programs

Northern Collaborative Baccalaureate Nursing Program Environmental Engineering
Health Sciences
Biomedical
Community and Population Health

- Aboriginal and Rural Health

Community and Population Health

- Environmental Health

Note: Table excludes second entry professional programs
(Education, Social Work)

## Admission Requirements by Degree Groups

| Bachelor of Arts | Bachelor of Commerce | Bachelor of Planning \& Bachelor of Science | Nursing <br> see program regulations | Environmental Engineering see program regulations | Bachelor of Health Sciences see program regulations |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English 12 | English 12 | English 12 | English 12 | English 12 | English 12 |
|  |  |  | Principles of Mathematics 11 | Principles of Mathematics 12 | Principles of Mathematics 11 |
| Three Approved Grade 12 Courses* | Three Approved Grade 12 Courses* | Three Approved Grade 12 Courses* | Biology 12 (65\% minimum) Chemistry 11 or equivalent (65\% minimum) One other approved* Grade 12 course | Two provincially examinable <br> Science 12 courses: <br> Biology 12 <br> Chemistry 12 <br> Physics 12 <br> (recommended) | Three Approved Grade 12 Courses* |
|  |  |  |  | Chemistry 11 and Biology 11 see program regulations | *** Biomedical Studies see program regulations |
| A fifth Grade 12 course** | A fifth Grade 12 course** | A fifth Grade 12 course** | A fifth Grade 12 course** | A fifth Grade 12 course** | A fifth Grade 12 course** |
| Minimum admission average 65\% | Minimum admission average $65 \%$ | Minimum admission average 65\% | Minimum admission average 65\% | Minimum admission average $75 \%$ | Minimum admission average 65\% |

* Approved Grade 12 Courses: Applications of Mathematics, BC First Nations Studies, Biology, Calculus, Chemistry, Comparative Civilizations, English Literature, French, German, Geography, Geology, History, Japanese, Latin, Law, Mandarin, Physics, Principles of Mathematics, Punjabi, Spanish, Technical and Professional Communications, Writing. Approved Advanced Placement courses: AP History of Art; AP General Biology; AP Calculus AB or BC; AP Chemistry; AP Computer Science A or AB; AP Microeconomics/Macroeconomics; AP English; AP Environmental Science; AP French; AP German; AP United States History; AP European History; AP Human Geography; AP Latin; AP Music Theory; AP Physics B and/or Physics C; AP Psychology; AP Spanish Language; AP Spanish Literature; AP Statistics; AP US Government and Politics; AP World History. Approved International Baccalaureate Courses: IB Biology; IB Chemistry; IB Computer Science; IB Economics; IB English Language A; IB Environmental Systems; IB French Language A and/or French Language B; IB Geography; IB German; IB History; IB History-Asian; IB History-European; IB Mathematics; IB Further Mathematics; IB Music; IB Philosophy; IB Physics; IB Psychology; IB Social and Cultural Anthropology; IB Spanish A and/or Spanish B.
** A fifth Grade 12 Course: Any other of the approved Grade 12 courses, and also any Grade 12 course taught in the secondary school including locally-developed courses (e.g. First Nations Languages), career preparation courses (Construction 12, etc.), or others (Art 12, Band 12, Information Technology 12, Communications 12, CAPP 12, etc.), or any Advanced Placement or International Baccalaureate courses.
*** Students interested in pursuing the BHSc Biomedical Studies Major are strongly encouraged to take Principles of Math 12, Chemistry 12 and Biology 12 before entering the Program.

Note: Table excludes second-entry professional programs (Education, Social Work).

## Admission Requirements for Applicants from BC and Yukon High Schools

Successful completion of an approved provincially examinable grade 12 program leading to graduation with an acceptable BC/Yukon high school average calculated on the basis of the five best grade 12 courses from the above list, for the Degree Group or First Entry Professional Program of your choice (see also "Special Entry").

## Special Early Provisional Admission

Students registered in grade 12 at a BC high school, planning to attend UNBC in the September immediately following graduation are encouraged to apply for Special Early Admission no later than the end of February. A decision will be made based on the student's self declared Grade 11 and 12 grades and, no later than the end of February, a provisional offer of admission will normally be made to all applicants who meet or exceed the minimum grade point average and course requirements. The conditions associated with special early provisional admission are that the applicant's academic average remain at or above the minimum, that all required courses are successfully completed and that graduation requirements are satisfied. These conditions will be checked in August upon receipt of the final marks from the Ministry of Education.

The University reserves the right to withdraw a provisional offer of admission if the above conditions are not met.

## Early Provisional Admission from a BC High School

Students registered in grade 12 at a BC high school, planning to attend UNBC in the September immediately following graduation, are advised to apply for Early Admission (currently before the end of February). All applicants who do this and notify their school counsellor of their application to UNBC will automatically have their interim grade 12 marks submitted to UNBC by the Ministry of Education. A provisional decision will be made based on these grades and a provisional offer of admission will be made to applicants who are considered exceptional. The conditions associated with early provisional admission are that the applicant's academic average remain at or above the minimum, that all required courses are successfully completed and that graduation requirements are satisfied. These conditions will be checked in August upon receipt of the final marks from the Ministry of Education. Where a student does not satisfy the three conditions, the University reserves the right to withdraw the provisional offer of admission.

## BC High School Transcripts

Applicants who are required to submit official BC High School transcripts, should contact the BC Ministry of Education:

Ministry of Education - Transcripts<br>PO Box 9886 Stn Prov Govt<br>Victoria, BC V8W $9 T 6$<br>General Information Phone: (250) 356-2432<br>Or visit the Ministry of Education website:<br>http://www.gov.bc.ca/bced

## Headstart Entry from a BC High School

Outstanding students who have completed BC grade 11 , can demonstrate an exceptional academic record, and can provide evidence of above average maturity may apply for admission to UNBC. In many cases this may mean concurrently registering in one or two first year introductory UNBC courses while completing grade 12. However, in exceptional cases, these applicants may be admitted to study as a full-time first year student at UNBC.

To apply for Headstart entry, the application must be accompanied by an autobiographical letter indicating the applicant's areas of interest and reasons for wishing to attend UNBC, along with letters of recommendation from the high school principal and at least one teacher or counsellor from the school, and a complete high school transcript. Questions and correspondence should be directed to the Office of the Registrar.

## International Baccalaureate

Students who are awarded an International Baccalaureate Diploma may be awarded up to 30 credit hours of transfer credit upon receipt of the official transcript from the International Baccalaureate headquarters. Students who are awarded the diploma must have an overall standing of four, with no course below a three. Diploma students are required to present three Higher level subjects and three Subsidiary level subjects in order to be eligible for transfer credits. Students who are awarded the International Baccalaureate Certificate must have a grade of four in each Higher level subject to be eligible for individual course transfer credit. Subsidiary level subjects are not eligible for transfer credit on a certificate program.

A list of acceptable IB courses is available in the BC Transfer Guide (available online at www.bccat.bc.ca).

## Advanced Placement

Students who take the College Board Advanced Placement courses in high school may be awarded transfer credit upon receipt of the official exam results from the College Board. Courses completed with a grade of four or above will be awarded transfer credit. Students who have completed AP courses with a grade of three may be considered for Advanced Standing in a first year course. A listing of acceptable AP courses for transfer credit is available in the BC Transfer Guide (available online at www.bccat.bc.ca).

## British Columbia Adult Graduation Diploma

Applicants must be at least 19 years of age, have successfully completed the BC Adult Graduation Diploma, the appropriate entrance requirements for Degree Group at the provincial or Grade 12 level with an overall average of $65 \%$ or better: Applicants in this category are not required to complete a fifth grade 12 course as noted in the Admissions Requirement by Degree Group Table.

## Admission from Secondary Schools and CEGEP in Other Canadian Provinces

## Alberta and the Northwest Territories

Successful completion of an academic grade 12 program that leads to graduation and includes at least five courses with an overall $65 \%$ average selected from:

- English 30
- at least three additional courses selected from the following:
Biology 30, Chemistry 30, Language 30, Math 30, Math 31, Physics 30, Science 30, Social Studies 30, World Geography 30, World History 30
- additional level 30 or level 31 courses necessary for the successful completion of grade 12


## Saskatchewan

Successful completion of an academic level three (grade 12) program that leads to graduation and includes at least seven academic courses with an overall $65 \%$ average (five of which are at the 30 level) selected from:

- English A30 and B30
- Math A30, or B30, or C30
- at least three additional courses numbered 30 or 30 H selected from the following subjects: Biology, Calculus, Chemistry, Computer Science, Français A or B, French, Geography, History, other languages, Mathematics, Physics
- additional acceptable courses necessary to graduate


## Manitoba

Successful completion of an academic Sr 4 level (grade 12) program that leads to graduation and includes at least five courses with an overall average of $65 \%$ selected from:

- English 40 S
- three or more of the additional courses should be selected from the following: Biology 40S, Chemistry 40S, Computer Science 40S, Français 40S, Geography 40S, History 40S, Language 40S, Law 40S, Mathematics 40S, Native Canadian Languages 40S, Physics 40S, Pre Calculus 40S, Social Science 40S/World Issues 40S, Western Civilization 40S
- one additional course from above or another area at the 40A (advanced), 40G (general), or 40S (specialized) level and any further work necessary to graduate


## Ontario

Successful completion of the OSSD (or OSSHGD) including six OAC's and/or grade 13 courses with an overall $65 \%$ average selected from:

- OAC English (Language and Literature recommended)
- three or more OAC's selected from: Classical Civilization, Classical Studies, English, Français, French, other languages, Algebra and Geometry, Calculus, Finite Mathematics, Biology, Chemistry, Computing Science, Physics, Geography, History, Economics, Law, Politics, and not more than one of Sociology, Drama, Music or Visual Art
- additional OAC courses necessary to complete the OSSD

Note: UNBC does not award transfer credit or advanced standing/ course waivers or exemptions on the basis of OAC courses.

## Ontario - New Secondary School Curriculum

Successful completion of the Ontario Secondary School Diploma (OSSD), or equivalent, including five grade 12 U or $\mathrm{U} / \mathrm{C}$ courses with an overall $65 \%$ average including:

- Grade 12 U English
- four additional Grade 12 U or $\mathrm{U} / \mathrm{C}$ courses

All high school courses applied as prerequisites for UNBC courses must be drawn from the "University" designation. Not more than one course proposed for admission may be drawn from the "Arts" category.

## Quebec

Successful completion of at least 12 acceptable university preparatory CEGEP courses with a minimum overall average of $70 \%$, selected from:

- at least two pre-university English courses
- 10 additional pre-university courses deemed appropriate for entry into the academic program of choice Students who complete more than 12 pre-university CEGEP courses with a minimum grade of $70 \%$ in each course may receive up to 30 credit hours of transfer credit.


## Quebec Grade 12

Applicants who successfully complete a Quebec grade 12 program with an overall $65 \%$ average must present:

- English
- at least three additional university preparatory courses selected from Mathematics, Sciences, Languages, Literature, Social Sciences, History, Geography
- additional academic subjects required for graduation


## New Brunswick

Successful completion of an academic (college preparatory) program that leads to graduation with an overall $65 \%$ average and including at least six courses from:

- English 121 or 122
- at least three additional grade 12 academic courses selected from Advanced Mathematics, Biology, Canadian Literature, Chemistry, Computer Science, English, Environmental Science, Français, French, Geography, History, Mathematics, Physics
- additional academic course(s) necessary to graduate


## Prince Edward Island

Successful completion of an academic or advanced academic program that leads to graduation with an overall $65 \%$ average and including:

- English 621
- at least three additional courses numbered 621 selected from Biology, Chemistry, Français, French, Geography, History, Mathematics, other languages, Physics
- additional academic course(s) necessary to graduate


## Nova Scotia

Successful completion of an academic program (university preparatory) that leads to graduation with an overall $65 \%$ average and including at least five subjects from:

- English 12, or English Enriched 12
- at least two courses numbered 12 selected from Biology, Canadian Literature, Chemistry, French, History, Math, other languages, Physics
- additional 12 courses from above or from Comparative Religion, Computer Studies, Economics, Geography, Home Economics, Law, Modern World Problems, Music, Physical and Health Education, Political Science, Sociology or Statistics


## Newfoundland and Labrador

Successful completion of an academic program that leads to graduation with an overall $65 \%$ average, and including at least 13 credits selected from:

- Language 3101 and either Thematic Literature 3201 or Literary Heritage 3202
- Mathematics 3200, 3201 or 3203
- at least one of Biology 3201, Chemistry 3202, Geology 3203, Physics 3204, Earth Systems 3209
- at least one of Advanced Writing 3103, Global Issues 3205 or Geography, History or languages at the 3000 level
- at least two additional credits at the 3000 level
- additional academic course(s) necessary to graduate


## Post Secondary Admissions

## Statement on Transfer

To apply for admission as a transfer student, a minimum of 15 credit hours of acceptable transfer course work must be presented and a proposed Major must be declared.

Following review and approval of relevant transfer credit by the Office of the Registrar and the Program Chair of the student's selected major, students completing a four year degree program at UNBC may be eligible to receive up to 90 credit hours of transfer credit from a recognized sending institution.

## Note:

1. Applicability of transfer credit will vary with the number of electives and/or lower and upper division requirements for a particular degree.
2. For admission purposes, a minimum transfer grade point average of 2.0 or $\mathrm{C}(65 \%)$, calculated based on all previous post-secondary institutions attended, is required.
3. Any applicant who has been required to withdraw or has been placed on academic probation by the transferring institution:

- must wait for three full semesters before being admissible to UNBC, and
- must outline any work completed or experience gained which would better qualify them to successfully complete work at UNBC

4. No transfer credit will be awarded for any course with a grade of less than 0.67 or D- (50-52.9\%).
5. Failure to declare attendance at any post secondary institution could result in severe disciplinary action by the University and transfer credit will not be considered for transcripts provided in this manner. Information on falsifications may be shared with the Member Institutions of the Association of Registrars of Universities and Colleges of Canada.

## Time Limit for Transfer Credit

Transfer credit normally will not be awarded for courses completed in excess of 10 academic years prior to the date of first UNBC registration. Students who wish to have such credit recognized should apply in writing through the Office of the Registrar to the appropriate Program Chair(s). Programs may specify a shorter time period at their discretion.

Please note: UNBC students wishing to complete courses at another university to transfer back to a degree or certificate at UNBC must obtain a Letter of Permission before taking these courses. For more information see Academic Regulation \#18 in this Calendar.

## Admission from a BC Community College, University College, and Yukon College

## University Transfer Programs Including Associate in Arts or Science Degrees

To meet admission requirements, the cumulative grade point average (CGPA) on all transferable courses attempted must be at least 2.0 or C (65\%). While all courses attempted are included in the calculation of a student's admission GPA, no transfer credit will be awarded for any course with a grade of less than 0.67 or D- (50-52.9\%).

Transfer credit is awarded according to agreements articulated in the BC Transfer Guide (available online at www.bccat.bc.ca). Note: UNBC guarantees priority admission and full transfer credit (minimum of 60 credit hours) to students transferring with an Associate in Arts or Science degree.

## Diploma Programs

To meet admission requirements, applicants must present a minimum CGPA of 2.0 or C (65\%).

Transfer credit for articulated courses is awarded at the point of admission. Upon declaration of a major in a related degree program, or direct admission into Nursing or Social Work degrees, students who hold specific Business Administration, Natural Resource Management or Environmental Studies or Nursing or Social Work Diplomas may be eligible for additional block credit.

Please note: To receive transfer credit in certain program areas, a higher minimum grade is required.

## Admission from College Outside BC and Quebec

The CGPA on all transferable courses attempted must be at least 2.0 or $\mathrm{C}(65 \%)$. No transfer credit will be awarded for any course with a grade of less than 0.67 or $\mathrm{D}-(50-52.9 \%)$.

Individual transfer credit is awarded for course work deemed to be university transferable in the home province on an individual basis. Holders of two year diploma programs may be eligible for block credit, to a maximum of 30 credits.

## Admission from Institutes of Technology

To meet admission requirements, the CGPA on all transferable courses attempted must be at least 2.0 or C .

Transfer credit is awarded towards a relevant UNBC degree program on an individual basis, to a maximum of 30 credits.

## Admission from a College of Applied Arts and Technology (Ontario)

All students admitted from a College of Applied Arts and Technology (CAAT) are strongly encouraged to seek academic advising prior to registering for courses and/or declaring a degree program.

Students completing less than two full semesters at a CAAT will not be considered for admission under this category. Students in this situation should consult the section dealing with admission from high school.

Students who wish to transfer to UNBC after completing at least two full semesters of a diploma program at a CAAT may be considered for admission to first year at UNBC. Students must have a minimum grade point average of $70 \%$ on their course work from the CAAT. Transfer credit will not be awarded to CAAT students who do not have a diploma.

Students who have been awarded a diploma from a College of Applied Arts and Technology may be eligible for admission and for block transfer credit (see below).

Students must have achieved an overall minimum grade point average of $70 \%$ on their diploma to be considered for admission, and to be eligible for block credit. Normally, students who meet the grade requirements may be awarded up to 30 credit hours of block transfer on a two year diploma if the diploma is relevant to the degree program sought at UNBC.

Exchange programs between the University of Northern British Columbia and other institutions are defined by the terms of formal exchange agreements.

Students participating in exchange programs generally pay their tuition fees to UNBC, but select their courses at the university they will be visiting (this policy may vary with each exchange agreement). Grades are recorded at the receiving institution and forwarded to UNBC at the end of the semester or academic year. In the case of a formal exchange, grades will be reported by UNBC using a pass/fail grading system and will not be counted towards a student's cumulative grade point average.

Students are permitted to spend a maximum of one academic year on a formal exchange. To participate in an international exchange, students must be nominated by UNBC and then wait for written approval from the receiving university. Students are required to register and pay their fees to UNBC before leaving on exchange. For more information on exchange opportunities and application procedures, contact International Operations.

Study abroad where a formal agreement does not exist must be conducted by means of a letter of permission. In such cases tuition fees are paid to the receiving institution.

## Other Admission Categories

## Admission from a Canadian University

The following minimum conditions will apply to all applicants under this category of admission:

- applicants must be in good academic standing at a Canadian university
- the cumulative grade point average must be at least 2.0 (C)
- no credit will be awarded for any course with a grade of less than . 67 (D-)


## Mature Student Entry

Each mature student application will be reviewed on its own merits. Mature applicants must be:

- permanent residents of British Columbia
- out of school for at least three years
- 21 years of age on or before the first day of classes

Students must submit transcripts of any post-secondary work that they have completed for the purpose of prerequisite checks, and a résumé of both academic and other activities (employment, service, etc.) for the past three years.

Normally, mature students will enroll on a part-time basis for at least one semester.

## Special Entry

Where applicants do not meet the requirements under any specific category of admission, or where there are extenuating circumstances application may be made under the category of Special Entry. In these instances, applicants will be assessed on an individual basis and may be asked to provide:

- any and all academic transcripts
- a résumé of both academic and other activities (employment, service, etc.) for the past three years

In addition, applicants under this category may be asked to present themselves for an interview.

Normally, special entry students will enrol on a part-time basis for at least one semester.

Any admissions conditions involving the achievement of a specific grade point average will be reviewed after the first semester. The normal requirement to continue studies would be a C average in a course load not to exceed six credit hours. Failure to achieve the required grade point average will result in further registration being denied. Once admission requirements are cleared, the student will proceed as a regular UNBC student.

## Interest Only

Students who do not intend to pursue a degree or certifcate program at UNBC, but want to take courses for credit, may do so under the category of Interest Only, provided they have not previously been refused admission to UNBC under any other category. This category of admission permits easy access to UNBC studies as minimal documentation at the point of entry is required.

Interest Only students must:

- Enrol on a part-time basis at UNBC (less than 9 credit hours)
- Re-apply every semester
- Obtain a minimum semester grade point average of 2.00 in order to remain eligible for re-entry under this category.

Note:

1. Interest Only students who later decide to pursue a degree or certificate program at UNBC, must re-apply and meet general admission requirements as stated in the calendar.
2. Applicants whose first language is not English should refer to the section English Language Requirements.
3. Applicants previously or currently on academic probation or required to withdraw are not eligible for admission or re-entry under this category.

## Audit Only

Students wishing to participate in university courses, but not for credit, may apply for audit status. Audit students must submit an application for admission and pay the application fee. Audit students are not required to meet the admission requirements.

Students wishing to audit a course must obtain approval from the instructor. Forms for audit approval are available from the Office of the Registrar. Approval from the instructor in no way guarantees that an audit student will be able to register in the course. Priority for registration will be given to students taking the course for credit. Audit courses do not meet prerequisites or course/program requirements.

Students wishing to change from audit to credit status must obtain approval from the instructor. Changes in status must take place prior to the last day to add courses in the given semester (prior to the third week of classes).

The degree of participation in a course for an audit student is at the discretion of the instructor. Audit students are not entitled to write the final exam or be granted credit for the course.

## Note:

Students may reregister in an audit course for credit. Full-time UNBC students are not charged for audit courses. All other audit students are required to pay one-half of the regular tuition fee for the audit course. All other related fees must be paid in full by all audit students.

## Studying at UNBC as a Visiting Student (on a Letter of Permission)

Students who are enrolled and in good standing at another college or university may attend UNBC on a Letter of Permission from their home institution. It is the student's responsibility to ensure that they meet any course prerequisites. Individuals planning to attend UNBC on a Letter of Permission should complete an application for admission, pay the application fee, and arrange to have the Letter of Permission sent, along with a copy of their most recent transcript, directly to the Office of the Registrar. Facsimile versions of this information will be acceptable on a provisional basis subject to receipt of the original.

## Admission to a Second Undergraduate Degree

Students having a recognized first undergraduate degree may be eligible to take a second degree at the Bachelor's level. Students can expect to complete a minimum of 60 credits plus any unmet first and second year requirements. UNBC reserves the right to deny admission under this category where the program completed and the program sought are too similar.

## International Admissions

The University of Northern British Columbia welcomes applications for admission from qualified students from other countries. Completed, appropriate secondary qualifications from other countries will be considered for High School admission, and study at recognized universities and colleges will be considered for Transfer admission. International Students are welcome to consider a Co-operative Education option of their program (see Programs-Co-operative Education).

International applicants must be in good academic standing and be able to demonstrate an acceptable level of proficiency in English. Applicants whose first language is not English should refer to the section English Language Requirements.

Each international application will be reviewed on its own merits. Please refer to page 24 for information on admission deadlines.

## Admission with a General Certificate of Education (or Equivalent)

Students applying for admission from a GCE system (or equivalent) must present a minimum of two Advanced (A) level subjects and three Ordinary (0) level subjects, and have an overall grade point average of C in order to be considered for admission. All A level subjects presented for admission must have a grade of at least C. Students may substitute two Advanced-Subsidiary (AS) level subjects for one A level.

Students who present A level subjects with grades of at least $C$ may receive up to six credit hours of transfer credit for each course. Students who have completed a General Certificate of Education at the Ordinary Level ( 0 level) are not considered eligible for admission to first year at the University of Northern British Columbia.

## English Language Requirements

English is the primary language of instruction and communication at UNBC. Consequently, it is expected that an applicant should be able to demonstrate an acceptable level of proficiency in the use of English to receive and participate in classroom instruction and discussion as well as complete written assignments.

Applicants whose first language is not English, regardless of citizenship or country of origin, must submit evidence of English language proficiency prior to admission.

Acceptable evidence of English language proficiency may be any one of the following:

- TOEFL (Test of English as a Foreign Language) score of at least 570 in the paper-based test and at least 230 in the computer based test. UNBC's institutional TOEFL code is 0320.
- Note: Applicants taking the new TOEFL exam (September 2005 and beyond) must score at least 89.
- IELTS (International English Language Testing System) score of at least 6.5 in the Academic Reading and Writing Module.
- LPI (Language Proficiency Index) score of at least 5.
- CAEL (Canadian Academic English Language) Assessment score of at least 70 .
- A final grade of $75 \%$ (B) or better in English 12 from the British Columbia secondary system.

In order to be considered valid, these scores must be sent directly from the testing agency/institution to the Office of the Registrar.

## International Exchange Program

## Selection Criteria for International Exchange Participants

The Exchange Student Selection Committee have developed the following criteria to select UNBC students to participate in formal international exchanges. Criteria are outlined in descending order of importance.

## Grade Point Average

- a minimum cumulative GPA of 2.67 is required.
- in exceptional circumstances, a minimum of 2.67 over the last 30 credit hours may be considered.
- in some cases a higher CGPA is required by the receiving institution.


## Statement of Interest

- students are asked to submit a one to two-page essay outlining the potential impact of participation in the exchange on their academic program and the expected contribution to their career plans.
- the quality of writing used in the statement of interest will also be considered.


## Academic Plan/Proposal

- the proposal should demonstrate that exchange participation will contribute to a student's degree program and/or elective requirements.
- students will complete a proposal for both their first and second choice of destinations, but they will only be required to obtain advisor/faculty signatures for their first choice at the initial state of the application process.

Letters of Academic Reference (3)

- Applicants are asked to present two academic references and one personal reference.
- Academic referees are asked to comment on the student's ability to succeed academically in an exchange.
- letters of reference should be from UNBC faculty members or the applicant must provide an explanation as to why another academic reference is valid.


## Curriculum Vitae/Résumé

- the Committee will look for community and or campus participation.
- a résumé may also include information on cross-cultural interest and experience.
- relevant experience in the workforce or as a volunteer will also be taken into consideration.


## Academic Year

- senior students will have had more time to develop academic maturity, and less opportunity to participate in exchanges in proceeding years, and thus may be given priority over more junior students.
- students must complete at least two semesters of full-time study at UNBC before participating in an international exchange.


## Special Criteria

- students should meet specific criteria for particular exchanges.
- applicants must meet language requirements for some exchanges.


## Other UNBC Exchanges

- students may participate in a maximum of two semesters of exchange.
- all other things being equal, the committee will give priority to students who have not previously participated in a UNBC exchange program.


## Additional Considerations

- only complete applications will be considered.
- an interview may be required for final selection.
- recent UNBC alumni may be considered as exchange participants if there are no qualified applicants among current UNBC students.


## Northern Medical Program

The Northern Medical Program is part of UBC's Faculty of Medicine distributed medical program and is a partnership involving three universities: the University of British Columbia (UBC), the University of Northern British Columbia (UNBC), and the University of Victoria (UVic). All students are fully registered at UBC and upon graduation will receive UBC medical degrees. The distributed program was designed to ease the provincial doctor shortage by almost doubling the number of student spaces in BC by 2010, and will enable students at the two distributed sites to study closer to the areas of greatest health need in the province.

In 2004, an additional 24 students were admitted to each of the three programs: the Island Medical Program (IMP) at UVic, the Northern Medical Program (NMP) at UNBC, and the Vancouver-Fraser Medical Program (VFMP) at UBC, with a further 24 students being admitted to VFMP in 2005. Further increases across all sites are being planned during the next 5 years. All students spend the first four months of their medical training in Vancouver, and NMP students spend the remainder of their first two years at UNBC. During the more clinical third and fourth years of the program, students undertake their core clinical education in hospital and community-based settings in northern British Columbia, and have opportunities after this to experience clinical education throughout BC and elsewhere. After successfully completing the four-year MD program, graduates enter residency training across Canada in one of over 50 specialty areas, including Family Medicine. Post-graduate training ranges from two to six years. The UBC Faculty of Medicine also offers a combined MD/PhD program for students who want to pursue a career as a physician scientist.

## UNBC

The University of Northern British Columbia is nestled atop a hill overlooking the city of Prince George and features dramatic awardwinning architecture.

Prince George is located in the heart of BC and is rich with many attractions and activities to enjoy year round. The citizens of Prince George are known for their warmth and friendliness. For those who wish to get involved in various activities/events, there are many choices available. The city is rich in history and offers many attractions which, combined with the beauty of its natural surroundings, makes Prince George an ideal location to visit or call home.

## Student Services at UNBC

The University offers an impressive array of student services designed to foster student success. While academic registrations for all medical students are at UBC, Northern Medical Program students are registered as "affiliate students" at UNBC, enabling them to take advantage of all that UNBC has to offer. Student Services include: Athletics and Recreation Centre; Awards, Financial Aid and Student Employment Centre; Campus Chaplaincy; Counseling and Career Centre; Disability Services; Health and Wellness Centre; Learning Skills Centre; and orientation programs.

## Faculty of Medicine Regulations

The Northern Medical Program is framed by the same set of academic regulations as the UBC Faculty of Medicine generally, which can be located at the following internet address: www.students.ubc. $\mathrm{ca} /$ calendar/. While students are on campus at UNBC they will, in addition, be bound by the disciplinary regulation of UNBC.

## Required Academic Standards

Applications for admission are considered from candidates who are citizens or permanent residents of Canada and who 1) complete a minimum of 90 credits including the prerequisite courses, 2) have achieved a minimum academic standing of $70 \%$, and 3) have completed all other application requirements as outlined on the UBC Faculty of Medicine Admissions Web site: http://www.admissions. med.ubc.ca/.

## How to Apply

Admission to the Northern Medical Program is done through the UBC Faculty of Medicine Admissions Office. The application deadline date for September 2007 entry is October 1, 2006. All hardcopy application documents must be received at the UBC Faculty of Medicine Admissions Office by 4:30 pm PST. To apply for admission to the Faculty of Medicine, visit the following internet address: http://www.admissions.med.ubc.ca/.

## Office of the Northern Medical Program

The Office of the Northern Medical Program is responsible for the delivery of the curriculum in northern BC. This includes coordination of teaching and research staff, student well-being, and the maintenance of close links with UBC and UVic. Visit the following website for further information: www.unbc.ca/nmp.

## Services and Facilities

## Introduction

UNBC is a student-centred university committed to providing students with high quality services. On the Prince George campus, student service operations (Office of the Registrar $\backslash$-Advising), Student Services, International Operations, Learning Skills, and First Nations Programs) are located on Telus Student Services Street, a high profile area in the Agora. Most university services are available to students at a distance through our Regional Campuses. Many on-site services are provided through co-operative arrangements with the three northern colleges. In this way, UNBC students are provided with the convenience of one-stop shopping for a variety of student services.

UNBC provides a wide variety of services to support the intellectual, personal, physical, cultural, spiritual and professional development of students at the University. Students will find a welcoming, supportive environment, based on mutual respect and a shared commitment to the ideals of the University of Northern British Columbia.

## Administrative Computing Services

The Administrative Computing Services department at UNBC is responsible for implementing, supporting and maintaining core administrative systems. These include systems for Finance, Human Resources, Purchasing, Payroll, Registration, Admissions, Records, Recruitment, Facilities, Housing and Conference Services, Copy Services, campus Smart Card, Bookstore, Development, Co-operative Education and Financial Aid. Administrative Computing Services provides support and maintenance for desktop machines in various administrative areas.

## Alumni Association

The Alumni Association of UNBC is composed of graduates of the University of Northern British Columbia. All UNBC graduates automatically become members of the Association upon their graduation.

The Alumni Association not only serves to promote and coordinate the efforts of its members on a social basis, but also acts as a liaison between the graduates and the University.

For more information, please contact the Alumni Association at http:// www.unbc.ca/alumni or toll free at 1-877-WE-R-UNBC or (250) 960-5620.

## Bookstore

The bookstore's primary role is to stock all required and optional course materials for classes taught at each UNBC campus. You will also find a variety of school supplies and computer accessories. Academic pricing is available on many software packages. A full complement of reference books and study aides are in stock for each semester. Any title not in stock can be ordered. The bookstore
is your UNBC logo headquarters. A great selection of UNBC clothing, giftware and novelty items are always available. As well as being the official Timberwolves outlet, the bookstore carries a full line of Alumni products. Visit our web site www.bookstore.unbc.ca.

## Centres

## Centre for Teaching and Learning

The Centre for Teaching and Learning collaborates with faculty to promote quality teaching as an institutional goal, support pedagogical innovation and encourage faculty to learn from each other and their own past experience in an iterative cycle of personal development. Support for the adoption of elearning methods, digital content production, mentoring in the use of software by instructors, guest instruction in the use of applied computing technology are provided by a project leader and a team of student assistants. Partnership in development grants, research and graduate projects with a significant applied computing component, are also supported, when feasible. The Centre for Teaching and Learning has an Advisory Committee, chaired by the Director of Regional Operations and the Learning has an Advisory Committee, chaired by the Director of Regional Operations and the Dean of Graduate Studies. Products and services include an annual teaching conference, a UNBC teaching manual, management of the dynamic content model for course development, the online newsletters, "Thinking Outloud" and "Tech Tips", personal consultation and/or collaboration on teaching challenges, access to specialized software for instructional projects, presentations, workshops and web course development.

## Women North Network/Northern FIRE

The Northern FIRE, located at UNBC, is the Centre for Women's Health Research. Northern FIRE is a research centre created by feminist researchers, health care providers, community groups and policy makers dedicated to improving women's health. The mandate is to facilitate research on the social determinants of health for marginalized women. Therefore, the focus is on research and policy development which will improve the health of women who face disadvantages due to socio-economic status, race, culture, age, sexual orientation, geography, disability and/or addiction.

## Childcare Society

UNBC Childcare Society provides care for children ages 18 months to five years, serving students, faculty, staff and community users. The childcare complex houses three centres: Porcupine Pals (three to five daycare centre), Cub's Corner (toddler daycare centre), and Raven's Nest (preschool and part-time daycare). The daycare manager can be contacted at (250) 960-5720 or email daycare@unbc.ca. For more information please visit the Society website at www.unbc.ca/daycare/.

## Communications

The Office of Communications is concerned with various aspects of public affairs. This involves work such as media relations, various major and minor publications, broadcast materials, promotional world wide web pages, internal and external newsletters, photography, VIP and other visits, special events, support to the marketing and development programs, visual identity, community relations, speaker panels, issues management, and alumni relations.

## Computing and Telecommunications Services

The role of Computing and Telecommunications Services (CTS) at UNBC is to provide support to faculty, students and staff in areas of computing as they apply to teaching and research. CTS maintains microcomputer (PC and Mac) labs for student use. These labs are used both for classroom teaching as well as for drop-in usage by students. CTS maintains and administers the campus fibre optic backbone network and provides network services such as e-mail, world wide web and internet access. Every student is provided with a computer account. CTS is responsible for supporting the high performance computing facility for faculty research. CTS is also responsible for campus phones as part of telecommunications services. CTS looks after the computing needs of regional students as well. Please direct inquiries to Help Desk located in Room 5-123, phone 960-5680 or email support@unbc.ca

## Conference and Events Services

Conference and Events Services offers the facilities and professional staff to make a conference or meeting a huge success. Accommodations, catering, meeting space, audiovisual, and conference management can be handled quickly and efficiently.

For large scale conferences, a full conference management package unique to each event can be provided. Packages include preconference services such as web page design, receipt of registration and payments and data management. The mailout of confirmation letters and creation and distribution of conference material for delegates can be managed. During the event staff will be on hand to help with any last minute requirements.

UNBC provides a beautiful setting to create the perfect atmosphere for a variety of events. The campus has an abundance of natural light provided by large atriums and skylights. Built in a park-like setting, the campus offers easy access to many trails and provides fine views of the Rocky Mountains.

## Co-operative Education Office

UNBC's Co-operative Education Office is dedicated to helping students find term employment related to their studies. The office offers year-round assistance to Co-op students accepted into the program, including the following services:

- career and job placement counselling
- labour market information
- job search assistance
- business profiles
- assistance with résumés, cover letters and interviews
- access to job search reference library
- access to Co-op facilities and equipment (faxing, mailing, interview rooms, etc.) as part of the job placement process
- job placement assistance
- Co-op course registration assistance
- work site visits
- work term evaluations by employers and Co-op staff
- work term report evaluations
- post employment debriefing


## Copy Services

Copy Services is located in the Agora between Food Services and the Bookstore. High volume copying, colour photocopying or document binding services are available to all students.

Coin and Debit Card Photocopiers are conveniently located in the Northwood Winter Garden, Main Floor of the Library, Upper Floor of the Library, and outside Copy Services.

Contact Copy Services at local 6464 or 6466 if any copiers require servicing.

## Cornerstore

The Cornerstore is the convenience store on campus, and it is open evenings and weekends. You will find also UNBC logo items, general reading material, stamps, bus passes, and giftware.

## Development Office

The Office of University Development is responsible for developing and maintaining long-term relationships with alumni, friends, corporations, small businesses, associations, foundations, and government agencies. The Development Office supports the University's priority funding needs and works to ensure a broad base of support for the future through various fund raising initiatives.

The Development Office oversees the annual giving, major gifts and planned giving programs, and plans and coordinates special events to recognize the University's donors.

The generous financial and in-kind support and investment UNBC receives from donors helps students support the costs of their education and rewards student achievement. Support from donors also improves the university's educational and recreational facilities, enhances UNBC's teaching and research capacities, supports student success by providing enhanced services, and meets the challenge of improving access to university for the First Nations of northern BC.

Donors interested in establishing new awards are encouraged to contact the Office of University Development at 1-866-960-5750 or devoff@unbc.ca.

## Educational Media Services

Educational Media Services (EMS) is located on the 3rd floor of the Library Building. EMS provides faculty, students, and staff with a wide range of audiovisual equipment and services. Our services include the following: scanning stations, video editing stations, video conferencing, audio conferencing, LCD projector loans, digital still and digital video camera loans, and much more.

EMS provides multimedia services on both PC and Macintosh platforms. EMS can also assist you with your presentation questions to help you pack the most punch during presentation time.

EMS provides repair and consultation services to the UNBC community. EMS also produces the Convocation video for your graduation memories.

Please be advised that fees may apply for equipment rental and repair.

For a complete list of available equipment and the fee schedule, please drop by EMS or visit www.unbc.ca/ems.

## Facilities and Security

Facilities is responsible for all aspects of operation and maintenance of buildings, grounds, and mechanical equipment. This includes waste removal, snow removal, landscaping, and janitorial services.

Additional responsibilities include internal room booking and parking. Facilities is also responsible for security on campus. Security provides a highly visible 24-hour security service, which includes escorting students, staff and faculty to and from the parking lots and residences, and emergency first-aid.

## Finance Office

The Finance Office is responsible for all administrative activities of a financial nature at UNBC. Those responsibilities with a direct impact on student life include student fee assessment and collection, administration of the campus Smart Card system, disbursement of all cheques including scholarship and bursary cheques, payroll for teaching assistantships and all student jobs, and administration of research grants and fellowship income for all faculty and students. For further information, visit our web site at www.unbc.ca/finance_dept/.

## First Nations Centre

UNBC is located in the territories of 16 Tribal Councils and over 78 bands, and is proud to work in partnership with these groups. The University offers a rich program of courses, degree programs, opportunities for research and community service with First Nations throughout the north, drawing scholars from around the world to learn with us. There will be a variety of opportunities available to those who wish to learn from and about the First Nations of the north, including the First Nations Studies program courses in languages, cultures, and contemporary issues, internships with First Nations organizations, and community-based research projects. UNBC has established partnerships with several First Nations where these opportunities
are available, and is developing exchange relationships with other Canadian institutions that offer First Nations programs as well as with international universities with opportunities in the area of world indigenous peoples. Programs are available at both the undergraduate and graduate levels.

The First Nations Centre specializes in services to First Nations students. This centre provides a culturally supportive environment where leadership, spiritual growth and academic excellence are fostered. The First Nations Centre is available for gatherings, events and activities that are related to the interests of First Nations students. The array of services include: an aboriginal student association, visiting Elders, personal counselling, admissions advocacy, aboriginal peer counselling, helping circle, and a lively program of speakers and cultural activities.

## Food Services

The University has four food outlets: the Food Court, the Northwood Winter Garden Deli, the Starbucks Kiosk, and the Tim Hortons Kiosk.

The Food Court features a wide range of food for all tastes: hot entrées, salads, sandwiches, pizza and pastas, burgers, muffins and pastries, stir fry, gourmet ice cream, plus coffee, tea, pops and juices.

The Northwood Winter Garden Deli, a licensed facility, features sandwiches, pizza, subs, nachos, hot dogs, beef dip, cappuccino, specialty scones, chili, pop and juice.

The Starbucks Kiosk offers a variety of specialty coffee, juices, frappuccino, biscotti, scones, and cookies.

The Tim Hortons Kiosk offers Tim Hortons desserts, specialty coffees, soup and sandwiches.

Both on- and off-campus students can purchase meal and debit plans, accepted at all food outlets on campus.

The catering service offers a range of services including breakfast, lunches, dinners, and receptions.

Food service at UNBC is provided by Chartwells, a member of Compass Group Canada.

## Vending Services

Snack and pop vending machines are located throughout campus. Some machines are equipped to accept the University's Smart Card.

## Geoffrey R. Weller Library

The Geoffrey R. Weller Library collects and provides access to information resources in support of the University's academic programs. The library is located on three floors of the Library Building. The library is open seven days a week during the Fall and Winter Semesters and is closed on all holidays observed by the University. Reference Desk staff offer support to assist students in optimizing their use of library resources. The library's online public access catalogue can be accessed through its web site at http://lib.unbc.ca.

The library's collection consists of approximately 185,000 books, 1,300 print journal subscriptions, 5,000 electronic journal subscriptions, 3,500 audiovisuals, and over 400,000 microforms. Noteworthy resources include an extensive collection of electronic bibliographical and full-text databases, numeric data files, and electronic reference materials; a selection of important microform collections, including regional newspapers, retrospective journals, Statistics Canada and other government publications, ERIC (Educational Resources Information Center) documents, and primary documents available through the Canadian Institute of Historical Micro-Reproductions pre-1920 Monographs and Early Canadiana Online collections and the Gerritsen collection.

UNBC students have timely access to items in other library collections through the library's interlibrary loan service. Instructions for placing interlibrary loan requests are available on the library's web site.

The library offers an intensive instruction program aimed at developing students' research skills. This instruction is accomplished through help pages, which are accessible through the library's home page; individual assistance at the Reference Desk; and class sessions booked by faculty.

For more information about library resources and services, please visit the library's web site at http://lib.unbc.ca. Contact the Reference Desk (960-6475) for research assistance or the Circulation Desk (9606613) for questions related to borrowing materials. Regional students should familiarize themselves with the Distance Library Services pages at http://lib.unbc.ca/pages/services/regional/.

The Northern British Columbia Archives and Special Collections is an administrative unit of the Geoffrey R. Weller Library and is located on the 4th floor of the Library Building. The Northern B.C. Archives houses materials related to the institutional history of UNBC and the history and culture of Northern British Columbia. The Archives also houses rare book collections and maintains the University's artwork and artifact collections. Contact the Archives at 960-6603 or archives@unbc.ca.

## Human Resources Department

Located at 1022 in the Administration Building, the Human Resources department is staffed by six full-time employees and is responsible for the planning, implementation and management of employee relations, non-faculty recruitment and employment processing, orientation, staff benefits, training and development, equity, diversity, records management, classification and compensation.

The HR department can assist faculty and students with completing hiring forms, and provide information or advice on employment contracts, recruiting processes, and employment standards.

## Institutes

## Institute for Social Research and Evaluation

The Institute for Social Research and Evaluation (ISRE) is a research institute located at the University of Northern British Columbia but operating in partnership with a number of local government and non-government agencies including the City of Prince George and the Northern Interior Regional Health Board. ISRE undertakes broadbased public opinion polling (with in-person or telephone interviews or mailout surveys), special targeted surveys (e.g., related to health, employment, crime, family issues, etc.), focus groups, and the evaluation of public and private programs. For more information, see the Institute's home page at http://web.unbc.ca/isre/.

## Natural Resources and Environmental Studies Institute

The Natural Resources and Environmental Studies Institute (NRES Institute) is a formal association of UNBC faculty and affiliates that promotes integrative research to address natural resource systems and human uses of the environment, including issues pertinent to northern regions. Founded on and governed by the strengths of its members, the NRES Institute creates collaborative opportunities for researchers to work on complex problems and disseminate results. The NRES Institute serves to extend associations among researchers, resource managers, representatives of governments and industry, communities, and First Nations. These alliances are necessary to integrate research into management, and to keep research relevant and applicable to problems that require innovative solutions. For more information see the Institute's web page at http://www.unbc.ca/nres/institute_overview.html.

## Northern Land Use Institute

The Northern Land Use Institute works toward improving land use, resource, and environmental decision-making in northern communities. Initially supported by an endowment fund from the BC Real Estate Foundation and by additional partnership with the Muskwa-Kechika Trust Fund, the Institute promotes collaborative, inter-disciplinary research in partnership with northern communities, First Nations, public agencies, and the private sector. For more information, please see the Institute's web site at http://www.unbc.ca/nlui/.

## Rural and Remote Health Research Institute

People living in rural and remote communities have life experiences that are distinct from people living in urban communities. The research needs and approaches required to study and understand rural health are equally distinct. In order to address the unique requirements of rural and remote health research, the Rural and Remote Health Research Institute has been approved in principle.

The Rural and Remote Health Research Institute is expected to:

- undertake and facilitate health research activities for the benefit of people in the rural, remote, and northern communities
- foster the development of innovative and interdisciplinary research in rural and remote health research
- advance the level and breadth of health research undertaken at UNBC
- offer additional venues for research opportunities and activities across a number of UNBC programs
- $\quad$ serve as a dedicated vehicle for the promotion of basic and applied research


## International Centre

The University of Northern British Columbia considers itself to be an active participant in the global community. Its commitment to international education is reflected in the teaching, research and service missions of the institution. UNBC will endeavour to assist students and faculty in broadening their exposure to other countries and societies. Toward this end, the University has established a series of academic exchange programs with a number of partner institutions around the world. These academic exchange programs allow students and faculty the opportunity to study or conduct research in other countries for a specified period of time. Full details regarding the opportunities to participate in these exchange programs can be obtained from International Operations.

## International Students

The University of Northern British Columbia welcomes applications from qualified students from other countries. International students can make an important contribution to UNBC's global outlook by sharing their perspectives in classes and participating in campus activities.

The International Centre provides services to international students and assists them with their integration into campus and community life. Orientation services, international student handbooks, information on immigration regulations and opportunities for social and cultural involvement are available through this Centre located on Student Services Street.

## Northern British Columbia Graduate Students' Society

The Northern British Columbia Graduate Students' Society (NBCGSS) exists to serve the interests of the graduate student population of UNBC. The main office of the society is in the administration building on the Prince George campus. It is staffed by a part-time office manager. Operated mainly by volunteers, the society represents the concerns of graduate students in a number of ways. NBCGSS representatives facilitate communication between graduate students and the administration and faculty, monitor changes in university policy that affect graduate students, act as advocates for those with university-centred problems, distribute graduate-relevant information, and provide basic amenities to our on-campus members, such as graduate-only computer labs, office space, and a lounge area for
socializing. Representatives also organize social and sporting events both on and off campus. For more information on the NBCGSS and its activities and resources, please call (250) 960-5671, e-mail gssoffice@unbc.ca or consult the website at web.unbc.ca/grads.

## Northern Undergraduate Student Society

The Northern Undergraduate Student Society (NUGSS) works to facilitate an awareness of the rights and views of its members by acting in a fair and democratic manner through the promotion, education and representation of Undergraduate students at the University of Northern British Columbia. NUGSS encourages healthy conduct between students, a relationship between the student body, the university, and the community. As a not-for-profit organization, NUGSS is a collective voice for the student body. It is a facilitator of events, elections, programs, student aid packages, and a health and dental plan. It also works to accommodate the needs of students through clubs and groups, and offers services such as faxing and lockers. NUGSS is governed by a Board of Directors which is studentbased and student-elected. The NUGSS office is located along the main hallway next to the Bookstore. The hours of operation are 9:00 am to 4:00 pm, Monday to Friday. Students can call the NUGSS office at (250) 960-6427, or visit the NUGSS website at www.nugss.com. Please call 1-866-358-4431 for any inquiries regarding the NUGSS Health and Dental Plan.

## Office of Graduate Studies

The Office of Graduate Studies is responsible for the administration of the educational requirements of graduate students. The Office helps graduate students with the following: interpretation of policies in the UNBC Graduate Calendar; scheduling and administering theses/project defences; assisting graduate students in applying for exchange status pertaining to the Western Deans Agreement; providing forms relating to Graduate Studies (excluding admission and registration forms); administration of the Graduate Student Conference Travel Grant Competitions; administration of fellowship and scholarship programs such as NSERC, SSHRC and GREAT awards.

## Parking

There are three main lots available for parking on campus. Parallel parking is also permitted on Ring Road and EFL Road (between appropriate signage and appropriate times). All vehicles must be parked in one of the designated parking lots. Parking spaces that provide close and easy access to campus entrances have been designated for persons with disabilities.

Annual, by semester, or visitor permits are available.
A valid parking permit or ticket stub must be clearly displayed. Vehicles not clearly displaying a valid parking permit or ticket stub will be subject to a parking citation and/or vehicle immobilization or towing without warning at the owner's expense and risk.

The University assumes no liability for damage to or theft from vehicles parked on campus. However, you can help Campus Security
and yourself by locking valuables in the trunk and ensuring your car is locked. Report any damage or theft from your vehicle to Campus Security.

Help lines, connecting the caller to Security, are installed in several locations. Campus Security provides an escort service to and from the parking lots for students, staff and faculty.

## Regional Operations

UNBC is mandated to serve all of British Columbia with a special commitment to northern BC.

The Office of Regional Operations is responsible for the development and delivery of degree programs, courses and services to students throughout the UNBC region.

A network of regional service is growing and will continue to develop over the life of the University. At present the University maintains three regional campuses to serve the Northwest, Peace River-Liard, and the South-Central regions. These offices provide program development, support to faculty, liaison with the local colleges, and assistance to students.

Full degree completion in a limited number of program areas, including graduate degrees, is available at all UNBC regional campuses. The programs vary from region to region and are offered through a combination of face to face instruction and distance delivery. The University maintains an affiliation agreement with the Wilp Wilxo'oskwhl Nisga'a. The WWN offers course work, centred in the Nass Valley, leading to a Bachelor of Arts and/or Certificates in Nisga'a Studies.

Students who plan to study at one of the regional campuses, or who plan to relocate in order to study at any UNBC Regional campus, should contact the appropriate Regional Office for information and assistance. See inside back cover for contact information.

The University maintains cooperative program and service arrangements with the three northern colleges: College of New Caledonia, Northern Lights College, and Northwest Community College, as well as with the Thompson Rivers University. There are different services and opportunities at each of the campuses. Food services, parking, student activities, and many of the other services available to Prince George students are processed differently dependent upon location and the college partner. Full information can be obtained through UNBC Regional Campuses.

## Northwest Regional Campus

In the Northwest, courses are offered in many communities in the region, including Campus Northwest in Terrace. In the summer, Courses on the Coast are mounted in an intensive format in Prince Rupert and Skidegate. These courses focus on contemporary issues in the region and the art and science of place. In the region, the University offers undergraduate, graduate, and professional programs in First Nations Studies, Social Work, Education and Community Health. Other courses are offered by distance in a variety of formats.

The University offers courses in language and culture throughout the region. The University has productive partnerships with Wilp Wilxo'oskwhl Nisga'a, the Nisga'a House of Wisdom, and Northwest Community College, and with community groups.

## Peace River-Liard Regional Campus

UNBC's Peace River-Liard Regional Campus is located within Northern Lights College's Fort St. John Campus. UNBC has developed a strong partnership with Northern Lights College and School District \#60 and is a member of the Alaska Highway Consortium on Teacher Education (AHCOTE). Most courses are taught face-to-face in Fort St. John and Dawson Creek, and many are teleconferenced to students throughout the region, as well as to the Northwest and South-Central Regions. UNBC also offers Spring/Summer courses every other year in Tumbler Ridge.

In the Peace River-Liard Region, students have the opportunity to pursue course work leading to degrees in Arts, Sciences, Natural Resource Management, Social Work, Education, Environmental Studies, and Environmental Planning. UNBC provides third and fourthyear courses for students in the AHCOTE program, primarily in English, History and Geography. Students also have access to a number of Web and teleconferenced courses delivered from Prince George and other UNBC regions.

## South-Central Regional Campus

The South-Central Region includes the following major communities: 100 Mile House, Burns Lake, Fort St. James, Fraser Lake, McBride, Quesnel, Valemount, Vanderhoof and Williams Lake. UNBC offers courses in cooperation with the Williams Lake campus of the Thompson Rivers University, the College of New Caledonia, and other local educational agencies.

In the Region we offer a wide variety of UNBC courses to assist students in achieving their goals of obtaining a degree, enhancing knowledge of their career or pursuing general interests. Offerings to date have included Anthropology, Commerce, English, First Nations Studies, Geography, History, Nursing, Psychology, Social Work, Women's Studies and others. Delivery is face-to-face or via a range of distance delivery modes including audioconference and Web. Degrees may be completed in Social Work, Nursing, English, Education and History in Quesnel, and in First Nations Studies in Williams Lake.

## UNBC Distance Delivery

Audio-conferencing between locations and web courses accessible from any receptive platform are the mainstays of UNBC's distance delivery. Students can find out what courses are available for a given term via http://www.unbc.ca/courses Web courses are listed under the location World Wide Web regardless of whether they originate in Prince George or are taught by regional faculty. Web courses may also be taken by students outside UNBC's region, provided the students are registered with UNBC.

Regional campuses are the best source of assistance for students in regional centres. For general assistance, contact Regional Operations at UNBC, (250) 960-5584. All regional delivery is supported by
intercampus mail delivery and a toll free number available to students via their regional campuses.

Students may need to attend a linked classroom at a regional centre to participate in audio-conferencing. To access a web course, students will need a suitable web browser with a working internet connection. Technical trouble shooting is offered by the Centre for Teaching and Learning at (250) 960-5613. A preliminary trial may be recommended to confirm the student is comfortable with the WebCT program in which web courses are developed. Using WebCT, students are able to submit work, access lectures and hold discussions.

Regionally offered courses are also delivered by traditional methods at regional campuses by visiting faculty, in time-compressed and intensive formats, or via mixed methods with some direct contact.

## Office of the Registrar

The Office of the Registrar is responsible for many aspects of a student's life. The Office handles academic advisement, letters of permission and qualification for graduation; undergraduate and graduate admissions, including assessment of transfer credit; registration; records management, including student records, student appeals, and transcripts; and scheduling, including courses and exams. The Office of the Registrar prepares for production many University publications including the University Calendars.

## University Secretariat

The University Secretariat is responsible for coordinating the affairs of the University Board of Governors and Senate, and of their committees; publishing meeting minutes, as applicable; and conducting Senate elections, as necessary. The Secretariat coordinates the maintenance of the University Policy Manual, and coordinates major academic ceremonies such as the annual Convocation. Finally, the Secretariat administers the University's compliance to the requirements of the Freedom of Information and Protection of Privacy Act.

## University Housing/Residence

Housing Services, located in the lower level of Residence Neyoh, is responsible for the on-campus residences and for maintaining an offcampus housing registry.

## On-Campus Housing

UNBC residences offer reasonably priced apartment style accommodations that are clean, comfortable, safe and convenient for single university students. As an integral part of the educational program and academic support services, University Housing provides a comprehensive Residence Life program which further promotes and enhances the overall educational experience and academic success of students.

Each residence building contains two and four bedroom suites, all fully self-contained. The kitchen contains a full size range and refrigerator; the large common area contains a dining table with four chairs, a sofa and a coffee table.

Each bedroom is fully furnished with a large, single bed (with drawers located beneath), bookshelf, desk and chair. A computer outlet is located in each bedroom. This allows students to connect to the University's computer network, for those with appropriate hardware and software.

Demand for on-campus housing is high, so it is important to apply early. Applications will be accepted starting February 1 for next Fall Semester. Every student entering directly from highschool, and who also has been accepted by the university is guaranteed residence accommodation provided that all applications are completed and submitted by March 15. Students can make application by mail or through the Internet. For more information visit our web site at http:// www.unbc.ca/housing/.

## Off-Campus Housing

Housing services is available on the web at http://www.och101. com/unbc/. The cost to place a listing on the web is $\$ 10.00$ per four month term.

## Risk Management and Safety

The Risk Management and Safety Office is located in 1085 of the Administration Building and provides key support and training for Student Services, Research, Teaching and Administrative Services. For more information please contact the Risk Management and Safety Office at (250) 960-5020 or e-mail safety@unbc.ca.

## Student Services

The primary goal of Student Services is to ensure that the needs of students are given top priority within the institution and that the University provides the necessary services to foster student success. Student Services includes Personal and Career Counselling Centre, Learning Skills Centre, Awards, Financial Aid and Student Employment Centre, Athletics and Recreation Centre, Health and Wellness Centre, Disability Services, Orientation Programs, and Campus Chaplaincy.

## Athletics and Recreation

## Athletics

UNBC is a member of the British Columbia College Athletic Association. Both men's and women's Varsity basketball teams compete within this provincial league which leads to a national championship.

The athletic program also includes Junior Varsity teams consisting of hockey, soccer, and nordic skiing. These teams compete in local leagues as well as travel to tournaments and competitions throughout the province.

All new and returning students are encouraged to take an active role in UNBC athletics, whether it's through participating on a team or providing cheering support.

Further information concerning contact names, schedules or other information on the UNBC athletic program is available at (250) 9606358 , or by visiting the web site at www.unbc.ca/athletics.

## Awards, Financial Aid, and Student Employment

UNBC's Awards, Financial Aid, and Student Employment office is committed to making students aware of the financial assistance available to them to help fund their post-secondary education. The Centre provides information concerning scholarships and bursaries, government student loans, Canada Study Grants, employment opportunities, and other forms of financial assistance. Pro-active, skill-enhancing workshops such as résumé writing, job interview preparedness, and budgeting are also offered throughout the academic year. The office is located on Student Services Street in the Agora of the Prince George campus. Service is also available through Regional Offices.

For more information on financial assistance, visit the web site at www.unbc.ca/finaid.

## Career Development Services

UNBC encourages students to explore their career options and prepare for the job market. Visit Career Services, located on Student Services Street. Information sessions and counselling are available for individuals who are uncertain about their career directions. Résuméwriting and interviewing workshops are also offered as a part of a UNBC education, and an annual Career Fair is held every March.

## Counselling Centre

The UNBC Counselling Centre provides confidential personal and career counselling to UNBC students. Service is provided individually and through groups and we link students to community resources. We also operate the Career Centre to assist students in career research and planning. Students in the Regional Campuses can contact the Counselling Centre by obtaining the Distance Education toll free number from their regional office.

In addition to counselling, we also provide consultation, workshops, training, and events to the UNBC community. Our office is located on Student Services Street in the Agora of the Prince George campus. Check out our web site at www.unbc.ca/counsel.

## Disability Services

The University of Northern British Columbia encourages academically qualified persons with disabilities to apply for admission to its programs. A variety of services is available to meet the needs of students with documented disabilities. These services enable students with disabilities to access the University facilities and to take part in the available programs.

Students with disabilities are encouraged to contact Disability Services as early as possible to discuss academic accommodations. There are four general steps required for processing accommodation requests:
3. needs assessment; and
4. decision and implementation

As these steps should be completed before classes commence, the University encourages students seeking accommodation to contact Disability Services at least one month before the term commences. If special transportation needs or extensive physical modifications are anticipated, the student should meet with the Disabilities Advisor several months in advance of the semester of registration to permit reasonable planning time. If accommodation requires the acquisition of special or additional resources not regularly available within the University, it is recommended that six months advance notice be given in order for the University to assess the accommodation request. Disability Services will provide information on the academic accommodation resources that are currently available on campus. Information on UNBC's disability-related policy, procedures, and services is available on the Disability Services web site at www.unbc. ca/disabilities.

The University buildings were designed to meet the needs of those with mobility problems, and wheelchair access and special parking facilities are available.

## Fitness Centre

Be Active! Relieve stress, take a break from your studies and get in shape; check out the on-campus Fitness Centre. The heart of fitness and health activities includes three squash courts, one racquetball court, full weight, cardio and circuit rooms, a studio room, and a variety of aerobic and recreation classes, to cater to all abilities and fitness levels. Dry saunas are available for after work-out relaxation. Beach volleyball courts are available in the summer and are used as an ice rink in the winter.

## Health and Wellness Centre

The Health and Wellness Centre provides confidential services to students in an on-campus location. The goals of the Centre are: to help students manage short term illnesses, and to cope with other health problems while pursuing educational studies, to promote wellness, and to encourage healthy lifestyles. Services and programs are developed and delivered in partnership with students, staff, faculty, student groups on campus, and various community resources. Students are encouraged to volunteer in various Health and Wellness Centre activities, and participate on the Health Council.

All UNBC students are strongly advised to carry health care insurance through their home province, British Columbia, or privately. Insurance is not required for most Centre services.

Specific Centre services for students include:

1. information on health and wellness topics
2. campus-wide health education and wellness promotion events
3. nurse clinics
4. physician services
5. referrals to other health and wellness resources
6. request for accommodation
7. documentation

For further information on programs and services, contact 960-6370 or visit the Centre in Room 5-106.

## Interfaith Campus Chaplaincy

The Interfaith Campus Chaplaincy is a team of chaplains representing a variety of faith groups. Its purpose is to provide spiritual resource services to students, faculty and staff. The Chaplain's role is to assist in providing spiritual support, education and care. As a resource to the University, the Chaplaincy acts as a bridge for all faith groups seeking to be active on campus. The Chapel is located in the Agora.

## Learning Skills Centre

The Learning Skills Centre is committed to promoting student achievement and retention, to developing independent, effective lifelong learners through supporting innovation in learning and teaching. We do this through the provision of one-to-one tutoring in writing, study skills, Math/Stats, Physics, and technology; generic and tailored workshops; web information; print and audio-visual resources; faculty consultations; and the Supplemental Instruction program. For more information visit our web site at www.unbc.ca/lsc.

## UNBC Smart Card

Every student, faculty or staff member at the University of Northern British Columbia will receive an official identification card known as Smart Card. The card will show the name, identification number and photograph of the card holder and grant borrowing privileges at the library and access to the fitness centre. Smart Card uses both microchip and magnetic stripe technology that allow it to operate as an electronic purse. There are four different plans available: Smart Card Debit Plan, Book Plan, Chart Plan, and Meal Plan.

## Smart Card Debit Plan

Monies can be placed on the Smart Card at the Cashier's Office or at the self serve cash-to-card machines located on the Prince George Campus. Once money has been added to the card, it can be used in most vending machines, to pay for laser printing and photocopying, in the laundry machines in residence, in the bookstore and in all food service locations.

Please note funds deposited onto the Smart Card Debit Plan should be treated the same as cash in a wallet. If the card is lost or stolen, the funds on the card are also lost and the University assumes no responsibility. To minimize the risk of loss, a maximum of $\$ 100.00$ can be loaded on the card at any one time.

## Smart Card Book Plan

The Book Plan was established to allow students and/or parents to allocate money to pay for all bookstore purchases. Money may be added to the Book Plan at the Cashier's Office during regular working hours and may be used only in the bookstore. The Book Plan may continue to be used until the balance reaches zero.

Students may request a refund of any balance remaining on the Book Plan from the Cashier's Office. The student can move the balance to
their student account, transfer it to the Smart Card Plan or elect to receive a refund cheque (two to three weeks is required to process a cheque).

The Book Plan is an online system and uses the magnetic stripe on the card. As the card itself carries no funds, there is no risk of loss to the user if the card is lost or stolen.

## Smart Card Meal Plan

The Meal Plan is a convenient way for students to pay for food services on campus. Meal Plan purchases of $\$ 800.00$ or greater per semester are exempt from GST and receive discounted prices. On average, a Meal Plan of $\$ 800.00$ will provide approximately 10 meals per week, a Meal Plan of $\$ 1,200.00$ will provide approximately 15 meals per week and a Meal Plan of $\$ 1,600.00$ will provide approximately 20 meals per week. Meal Plan can be used at all food service outlets on campus, but may not be used to purchase alcoholic beverages. Meal Plans expire at the end of each semester and the balance is returned to the student account (less GST where applicable).

Refunds may be requested from a Meal Plan at any time from the Cashier's Office. Please be advised that UNBC has a statutory requirement to collect the GST for meals purchased on a Meal Plan if, as a result of a refund request, the Meal Plan amount falls below the $\$ 800.00$ per semester limit for GST exemption. Please allow two to three weeks for a refund cheque.

The Meal Plan is an online system and uses the magnetic stripe on the card. As the card itself carries no funds, there is no risk of loss to the user if the card is lost or stolen.

## Smart Card Chart Plan

The Chart Plan is for students who will not be eating all of their meals on campus but would still like the convenience of prepaying their food service purchases. The student may purchase a Chart Plan for as little as $\$ 100.00$. While all the purchases made with a Chart Plan are subject to GST they also receive discounted prices.

The Chart Plan can be used at all food service outlets on campus, but may not be used to purchase alcoholic beverages. Chart Plans are non-refundable as the student controls how much they wish to purchase. Chart Plans have no expiry date.

The Chart Plan is an online system and uses the magnetic stripe on the card. As the card itself carries no funds, there is no risk of loss to the user if the card is lost or stolen.

## Hours of Operation

The following hours of operation are for offices only. Classes are offered Monday to Saturday. Course schedules will be available prior to the commencement of each semester.

Some units, such as the Library, may be open beyond the hours listed below. Extended hours will be posted in advance. All times are Pacific, except where specified.

## Holidays

The University is closed on the following holidays. Specific dates of closure are noted in the Semester dates on pages 51-52 in this calendar).

New Year's Day January
Good Friday
April
Easter Monday April
Victoria Day May
Canada Day July
BC Day August
Labour Day
Thanksgiving Day
Remembrance Day
Christmas Day
Boxing Day

## Emergency closures

In the event of severe weather or other unforeseen emergencies, the University may be closed. Please tune in your local radio station for up-to-the-minute details concerning closures or visit www.unbc.ca.

The hours of operation for the following services are Fall and Winter hours. Contact these services to inquire about Summer hours of operation.

## Bookstore

Monday to Thursday $\quad 9 \mathrm{am}-5 \mathrm{pm}$
Friday 9:30 am-5 pm

## Cashier's Office

Monday to Friday 9 am-4 pm

## Co-operative Education Office

Monday to Friday
(off hours by appointment)
Corner Store
Monday to Thursday
Friday
Saturday
Sunday
Disability Services
Monday to Friday
8:30 am-4:30 pm

## Educational Media Services

Monday to Thursday
8:30 am-8:30 pm
Friday
Saturday
12 pm-4 pm

Finance
Monday to Friday $\quad 8: 30 \mathrm{am}-12 \mathrm{pm} ; 1 \mathrm{pm}-4: 30 \mathrm{pm}$

## First Nations Centre

Monday to Friday 8:30 am-4:30 pm
Fitness Centre
Monday to Friday 6:30 am-10 pm
Saturday
$8 \mathrm{am}-10 \mathrm{pm}$
Sunday
$10 \mathrm{am}-10 \mathrm{pm}$
Food Court and Tim Hortons
Monday to Thursday
Friday
7:30 am-7 pm

International Centre
Monday to Friday 9 am-4 pm

Northern Undergraduate Student Society
Monday to Friday 9:30 am-4 pm
Northwood Winter Garden Deli
Monday to Thursday $1 \mathrm{pm}-9: 30 \mathrm{pm}$
Friday $\quad 1 \mathrm{pm}-10 \mathrm{pm}$
Saturday $9 \mathrm{am}-7 \mathrm{pm}$

Sunday 11:30 am-7 pm
Registrar's Office - Service Counter and Advising
Monday to Friday $9-12 \mathrm{pm} ; 1 \mathrm{pm}-4 \mathrm{pm}$

## Starbucks

Monday to Friday 8 am-4 pm

## Student Recruitment

Monday to Friday 9 am-4 pm

## Student Services - Service Counter

Monday to Friday
$9 \mathrm{am}-12 \mathrm{pm} ; 1 \mathrm{pm}-4 \mathrm{pm}$

## Regional Campuses

All regional campuses close one hour for lunch - some from $12 \mathrm{pm}-1 \mathrm{pm}$ and others from 12:30 pm -1:30 pm.

## Northwest - Terrace

Monday to Friday $\quad 8: 30 \mathrm{am}-4: 30 \mathrm{pm}$
Peace River-Liard - Fort St. John
Monday to Friday $\quad$ 8:30 am-4:30 pm (Mountain Standard Time)
South-Central - Quesnel
Monday to Friday
8:30 am-4:30 pm

## Prince George Campus Buildings



## Prince George Campus Overview

## More Than the Prince George Campus

UNBC is a regional university, and is much more than the Prince George campus. In addition to the three regional campuses in Fort St. John, Terrace and Quesnel, UNBC offers courses throughout northern BC in towns such as Dawson Creek, Chetwynd, Fort Nelson,

New Aiyansh, Prince Rupert, and Williams Lake. Courses are taught at these campuses through face to face instruction, audio conferencing, and the use of innovative full motion interactive video conferencingyour classmates can be hundreds of kilometres away!


## Fees

Note: Fees are subject to change. At the time of publication, a University decision with respect to fees was pending. The fees listed below are for 2005-2006. The fees for 2006-2007 have not been set.

## Undergraduate

| Tuition | \$137.01 per credit hour |
| :---: | :---: |
| Bachelor of Education tuition | \$2,300.10 per semester |
| Student services fee | $\$ 4.50$ per credit hour (to a maximum of $\$ 67.50$ ) |
| NUGSS Student society fee | \$32.00 per semester <br> (\$22.00 per semester in regions) |
| NUGSS Health and Dental Plan | \$207.00 per policy year |
| NUGSS Building fee | $\$ 15.00$ per semester (Prince George students only) |
| Smart Card fee | $\$ 11.00$ per semester (full-time students) $\$ 5.00$ per semester (part-time students) $\$ 7.50$ per semester (regional full-time students) $\$ 3.50$ per semester (regional part-time students) |
| Intramural Recreation \& Fitness fee | $\$ 45.00$ per semester (Prince George students only) |
| PGPIRG fee | $\$ 4.00$ per semester (full-time students) $\$ 2.00$ per semester (part-time students) |
| Athletics Intervarsity \& Junior Varsity Program fee | $\$ 25.00$ per semester (Prince George students only) |
| CFUR student radio | $\$ 5.00$ per semester (Prince George students only) |
| WUSC fee | \$1.00 per semester |
| Over the Edge | \$5.00 per semester |
| Newspaper Society | (Fall and Winter only; Prince George students only) |
| Audit course | part-time students-\$68.51 per credit hour; full-time students-free |
| Course Challenge Fee | $\$ 68.51$ per credit hour ( $50 \%$ of regular tuition fee) |

## International Students

Tuition - undergrad

Medical Insurance

Co-op Education Students
Fee

## Other Fees

\(\left.$$
\begin{array}{ll}\text { Application fee } & \begin{array}{l}\text { \$25.00 domestic } \\
\text { \$75.00 international } \\
\text { to accompany each application for } \\
\text { admission (non-refundable) }\end{array} \\
\text { Document evaluation fee } & \begin{array}{l}\text { \$40.00 (for out of province or out of } \\
\text { country post secondary documents, } \\
\text { non-refundable). }\end{array} \\
\text { Registration deposit } & \begin{array}{l}\text { \$100.00 per semester } \\
\text { (non-refundable) }\end{array} \\
\text { Graduation processing fee } & \begin{array}{l}\text { \$40.00 fee per application for all } \\
\text { graduating students }\end{array}
$$ <br>

(non-refundable)\end{array}\right\}\)| \$15.00 per lost or damaged card |
| :--- |
| Cmart Card replacement |
| Course fees |
| Intain courses carry additional fees |
| to cover the costs of field trips, lab |
| supplies or readings. |
| \$25.00 per application |
| (undergraduate and graduate, |
| non-refundable) |
| application fee |
| Study abroad application fee | | \$70.00 USD per application to |
| :--- |
| National Student Exchange Program |
| (undergraduate and graduate, |
| non-refundable) |
| \$3.00 (not applicable to new |
| applicants if sent with registration |
| package) |
| \$15.00 (on returned cheques) |

## Parking Fees

| Daily | $\$ 1.00$ to a maximum of $\$ 2.00$ which is valid through until 6 am the following morning. |
| :---: | :---: |
| Semester Permit | \$128.40 including GST |
| Annual permit | \$385.20 including GST |
| Reserved permit (staff/faculty) | $\$ 642.00$ including GST (subject to availability) |
| Carpool permit | \$22.47 per month including GST (for details see Parking Services) |
| Residence Fees |  |
| Application fee | \$25.00 (non-refundable) |
| Security deposit | \$200.00 (this deposit is refundable subject to conditions and timelines as outlined in the UNBC Residence License Agreement) |
| Residence life fees | \$20.00 per semester |
| Two bedroom units | \$2,195.97 per semester per occupant |
| Four bedroom units | \$1,930.70 per semester per occupant |
| Residence parking | $\$ 173.00$ per semester, including GST |

Housing fees include: telephone services with voicemail, high-speed internet connection and cable vision services

## Additional Information on Fees

## BC Residents 65 Years or Older

BC residents who are 65 years of age or older and who are eligible for admission, may register for courses and receive a waiver for the payment of tuition fees. Please note that in those areas where there is a limited number of spaces available, students under this category of registration may not receive priority.

## Student Services Fee

The student services fees are collected from full-time and part-time students registered for courses to augment services to students.

## NUGSS Health \& Dental Plan

All full-time undergraduate students who are registered on the Prince George campus and are members of the Northern Undergraduate Student Society (NUGSS) are automatically enrolled in the NUGSS Health and Dental Plan.

Your student Plan provides you with health and dental coverage for twelve (12) months, from September 1 to August 31 of the following year. If you are already covered by an equivalent extended health and dental plan, you may opt out online during the Change-of-Coverage Period (typically within the first three (3) weeks of classes--for exact deadlines, visit www.studentcare.net). Your Plan also gives you the option to enrol your family (spouse and/or dependents) by paying an additional fee. Most members that are not automatically covered, but wish to have coverage, are able to enrol themselves for an additional fee. Students starting in January may enrol at a pro-rated rate for eight (8) months of coverage (January 1 to August 31). For more information, contact studentcare.net/works at 1-866-358-4431 or visit www.studentcare.net.

## PGPIRG Fee

The PGPIRG fee is collected by UNBC on behalf of the Prince George Public Interest Research Group. The mandate of this group is to organize its members around topics of public interest such as social justice and environmental issues. Please contact the group at (250) 960-7474 for further information.

## Registration Deposit

The registration deposit is required prior to any registration activity. This deposit will be fully credited to your account at the commencement of the semester. The deposit is non-refundable.

## Payment Due Date

All student accounts are payable in full by the first day of the semester and refunds (less the non-refundable registration deposit) will only be available until the end of the second week of classes. After this time the refunds will be discounted as outlined in the fee reduction schedule. A service charge of $2 \%$ per month (annualized rate of $26.82 \%$ ) will be applied to any outstanding balance when the account reaches 30 days past due and every 30 days subsequent until the account is paid in full.

## Financial Hold

Students who fail to pay the outstanding balance of their current account will be placed on financial hold. While on financial hold, no subsequent registration activity will be allowed, no official transcripts of the academic record will be issued, and a student can be denied graduation. The financial hold will be removed when the outstanding balance, including all service charges, is paid in full.

## Failure to Notify

Any student failing to provide written notification to the Office of the Registrar of their complete withdrawal from a course or slate of courses will be assessed full tuition fees for those registered courses and receive grades of "F" on their transcript.

## Payments

Payments can be made by cash, debit card, cheque, American Express, Mastercard, Visa, or money order. Please ensure that the correct student number is written on the face of all cheques and money orders submitted to the University. Fees may be paid by the following methods:

- by mail: cheques should be made payable to the University of Northern British Columbia and must reach UNBC by the due date. The University is not responsible for payments lost in the mail.
- in person: at the Cashier's Office located next to Student Services during regular business hours. Tuition payments are also accepted at UNBC's regional offices in Terrace, Fort St. John and Quesnel.
- in the Payment Drop Box: located by the Security Office. All payments must be enclosed in an envelope. Do NOT drop cash into the box.
- by American Express, Mastercard, Visa, or Debit Card: will be accepted in person by the Cashier.
- by internet: Mastercard and Visa payments will be accepted using the UNBC web site for students.

Any questions regarding making payments may be directed to the Cashier's Office by telephone at (250) 960-5631or by fax at (250) 960-5251, or to Accounts Receivable by telephone at (250) 960-5576.

Payment inquiries may be addressed to cashier@unbc.ca. Do NOT e-mail credit card or banking information.

## Refund Policy

Refunds can be applied for at the cashier's counter after the add/drop period. Allow two to three weeks for processing. If there is a credit on a student's account and no refund is requested, the credit will be applied to the next semester.

## Fee Reduction Schedule*

## September Semester

| September 18, 2006 | Last Day to Add/Drop without <br> Financial Penalty |
| :--- | :--- |
| October 18, 2006 | Last Day to Withdraw without <br>  <br>  <br>  <br>  <br> Academic Penalty, <br> $50 \%$ tuition refund. |

## January Semester

January 16, 2007

February 13, 2007
Last Day to Withdraw without Academic Penalty, 50\% tuition refund.
*For condensed courses, the last day to revise registration is indicated in the course-specific documentation.

## Medical Insurance Fee for International Students

The University of Northern British Columbia has a compulsory medical insurance policy for international students. International students must provide proof of valid medical coverage for each semester that they register at UNBC. A hold will be placed on a student's file if proof of valid medical coverage is not supplied.

A medical insurance fee of $\$ 148$ will be assessed further automatically each semester. If students have valid BC Medical Insurance or comparable private insurance, the fee can be waived. Students without medical insurance will be asked to enrol in a university-sponsored plan which costs $\$ 148$ for three months of coverage.

Students must contact the International Centre to enrol in the private insurance plan or to receive a waiver of the medical insurance fee. Please note that simply paying the $\$ 148.00$ fee does not fulfil the policy. The policy requires that international students have valid medical insurance while at UNBC, and that they demonstrate proof of such coverage.

## Note: Standards for accounts receivable billing and collection of student accounts receivable are subject to UNBC Policy on Student Accounts. See UNBC Policy and Procedures Manual on the web at www.unbc.ca/policy under FINANCE.

For further information on Student Accounts Receivable, please see the Finance web site at http://www.unbc.ca/finance_dept/.

## Sessions

## Academic Year

The academic year extends from September 1 to August 31. Most of the University course offerings are available during the day, and courses are available in the evening during the September and January Semesters. In each 12-month academic year beginning in September:

- September Semester - September to December
- January Semester - January to April
- May Semester - May to August.


## 2006 - 2007 Semester Dates

2006 September Semester

| September |  |
| :---: | :---: |
| 4 Monday | Labour Day, University closed. |
| 5 Tuesday | First day of classes, September Semester All September Semester fees due. |
| 18 Monday | Last day to add/drop September Semester courses without financial penalty. Last day to change September Semester courses from audit to credit and credit to audit. |
| October |  |
| 9 Monday | Thanksgiving Day, University closed. |
| 18 Wednesday | Last day to withdraw from September Semester courses without academic penalty, 50\% tuition refund. |
| 31 Tuesday | Deadline for application to graduate in 2007. |
| November |  |
| 1 Wednesday | Application deadline for undergraduate studies for January Semester. |
| 10 Friday | Holiday in lieu of Remembrance Day on November 11, University closed. |
| 11 Saturday | Remembrance Day, University closed. |
| December |  |
| 4 Monday | Last day of classes. |
| 6 Wednesday | First day of exam period. |
| 18 Monday | Last day of exam period. |
| 24-31 Sun.-Sun. | University closed. |
| 27 Saturday | University closed (maintenance shutdown). |

## 2007 January Semester

## January

1 Monday New Year's Day, University closed.
3 Wednesday First day of classes. All January Semester fees due.
16 Tuesday Last day to add/drop January Semester courses without financial penalty. Last day to change January Semester courses from audit to credit and credit to audit.
31 Wednesday Application deadline for admission to the Bachelor of Social Work program for the September Semester 2007.

## February

13 Tuesday

19 Monday

## March

1 Thursday

15 Thursday

30 Friday

## April

5 Thursday Last day of classes.
6 Friday Good Friday, University closed.
9 Monday Easter Monday, University closed.
10 Tuesday First day of exam period.
21 Saturday Last day of exam period.

## 2007 May Semester



*For condensed courses, the last day to withdraw (50\% tuition refund) is indicated in the course specific documentation.

## 2006 - 2007 Senate Dates

September 13, 2006
October 11, 2006
November 8, 2006
*December 13, 2006

January 10, 2007
February 14, 2007
March 14, 2007
*April 18, 2007

May 9, 2007
June 13, 2007
July 11, 2007
August 8, 2007
*Senate meetings are usually held on the 2nd Wednesday of each month except during exam weeks, when the meetings are moved to the next available Wednesday

# Undergraduate Regulations and Policies 

## I. Notification of Disclosure of Personal Information to Statistics Canada

Statistics Canada is the national statistical agency. As such, Statistics Canada carries out hundreds of surveys each year on a wide range of matters, including education.

It is essential to be able to follow students across time and institutions to understand, for example, the factors affecting enrolment demand at post-secondary institutions. The increased emphasis on accountability for public investment means that it is also important to understand 'outcomes.' In order to carry out such studies, Statistics Canada asks all colleges and universities to provide data on students and graduates. Institutions collect and provide to Statistics Canada student identification information (student's name, student ID number, Social Insurance Number), student contact information (address and telephone number), student demographic characteristics, enrolment information, previous education, and labour force activity.

The Federal Statistics Act provides the legal authority for Statistics Canada to obtain access to personal information held by educational institutions. The information may be used only for statistical purposes, and the confidentiality provisions of the Statistics Act prevent the information from being released in any way that would identify a student.

Students who do not wish to have their information used are able to ask Statistics Canada to remove their identification and contact information from the national database.

Further information on the use of this information can be obtained from Statistics Canada's website: http:// www.statcan.ca or by writing to the Postsecondary Section, Centre for Education Statistics, 17th Floor, R.H. Coats Building, Tunney's Pasture, Ottawa, K1A OT6.

## II. BC Freedom of Information and Protection of Privacy Act

The University of Northern British Columbia gathers and maintains information used for the purposes of admission, registration and other fundamental activities related to being a member of the UNBC community and attending a public postsecondary institution in the Province of British Columbia. Information provided to the University by students, and any other information placed into the student record, will be protected and used in compliance with the BC Freedom of Information and Protection of Privacy Act (1992).

## III. Student Conduct

## 1. Purpose and Definition

The University community includes members of the student body, faculty, staff, administration, Board of Governors, and Senate. The purpose of this policy is:
a) to define the basic Code of Conduct for students as members of the University community;
b) to establish policies and procedures that will determine actions to be taken in the event of unacceptable, disruptive, threatening or violent behaviour to ensure support of an environment that is conducive to personal and intellectual development and individual safety.

The University of Northern British Columbia acknowledges that students have the right to work, learn and socialize in a supportive, safe and healthy environment.

The University of Northern British Columbia is committed to developing a sense of community that is dedicated to creating a working and learning environment of the highest quality - one which is characterized by mutual respect, consideration, social and moral development of its members; and which is free from harassment, discrimination and any form of disruptive behaviour or violence.

The University of Northern British Columbia understands and recognizes that students have responsibility for:
a) taking full advantage of education, training and services offered;
b) informing themselves about University policies and procedures;
c) their conduct, either individually or in a group;
d) conducting their activities in a manner compatible with the University's commitment to creating a safe and supportive working and learning environment;
e) respecting and treating members of the University community without discrimination, harassment, intimidation, or physical or psychological abuse;
f) respecting University property and the property of members of the University community;
g) respecting University regulations and the exercise of legitimate authority;
h) respecting due process, including the avenues of redress and appeals as stated by the University;
i) participating in the governance of the University.

## 2. Harassment, Discrimination, and Diversity Initiatives

The University of Northern British Columbia is committed to providing a working and learning environment in which all students, staff and faculty are treated with respect and dignity. The University of Northern British Columbia acknowledges the right of all individuals in the University Community to work or learn without discrimination or harassment because of race, colour, ancestry, place of origin, religion, family status, marital status, physical disability, mental disability, sex, age, sexual orientation, political beliefs or criminal or summary conviction offense unrelated to their employment. An approved policy applies to all members of the UNBC community and is administered by the Harassment and Discrimination Advisor. For further information or assistance please contact the Harrassment and Discrimination Advisor 960-6618; or the Diversity Project Coordinator, Human Resources 960-5604.

## 3. Student Misconduct

Students are expected to behave responsibly and to abide by the policies and regulations of the University of Northern British Columbia. Disruption of instructional activities, if serious, may be reported by the instructor to the Program Chair and subsequently to the Dean of the College in which the disruption occurred. The President has the power to deal in matters of student discipline and has the power under the University Act of British Columbia to suspend or expel a student. Any offenses committed under the Criminal Code of Canada and other laws of the Province of British Columbia and Canada, including, but not limited to damage to property or unlawful harm to others shall be dealt with through the courts of law.

## 4. Scope

Prohibited conduct includes, but is not limited to:
a) intentionally or recklessly creating situations which endanger or threaten the health, safety or well-being of another individual;
b) involvement in disruptive actions (e.g. disorderly conduct, which includes physical or verbal abuse of another person; abusive, indecent, profane or vulgar language; obscene actions; disrespect for the rights and privileges of others; and/or uttering threats);
c) harming, injuring or threatening any person on campus or in attendance at University classes, activities or functions;
d) harassment or discrimination of any person at the University (please refer to the University Harassment and Discrimination Policy);
e) committing unlawful acts during activities organized or sponsored by the University and the University community;
f) impeding or disrupting teaching, research, administration, disciplinary proceedings, public service functions and other authorized University functions;
g) possessing and/or selling illegal drugs or narcotics on campus;
h) misappropriating, converting, destroying, permanently defacing or otherwise damaging University property, resources or the property of others;
i) possessing University property or property of other University Community members without proper consent and authorization;
j) forging, falsifying, misusing or altering any University document or record in paper and electronic form;
k) obtaining any University equipment, material or service by fraudulent means;
I) possessing or using intoxicating beverages in areas other than those given specific authorization by the University's Liquor Policy;
m) possessing or using firearms, knives, fireworks or other dangerous weapons on campus (please refer to the University policy on firearms and dangerous weapons);
n) entering or remaining in any University building, facility, room or office without proper authority;
0) allowing others to enter and remain in areas designated for faculty, staff or students without proper authorization;
p) failing to comply with reasonable directions of University officials or security officers acting in performance of their duties on campus or affecting conduct on campus;
q) aiding, abetting or acting as an accomplice in the enactment of any of the foregoing activities;
r) any other conduct which is not in keeping with reasonable University standards.
"Prohibited conduct" is not to be interpreted to preclude peaceful gatherings, peaceful demonstrations or free speech.

## 5. Procedures for Evaluating Complaints of Misconduct

a) In the event that the conduct or behaviour of a student is believed to be of immediate danger to a member of the University community, security is to be called immediately. Any member of the University community may initiate a complaint about a student's misconduct or of a misconduct that has been witnessed such as listed in this code of student conduct. Student misconduct or discipline concerns should first be addressed by the instructor, Chair and Dean if the incident occurs in a teaching situation.
b) A complaint of a misconduct by a student shall be made in writing to the Director, Student Services. Complaints shall be submitted in a timely fashion after the incident. Complaints that overlap with other specific policies and procedures will be addressed under the specific policy and then may be forwarded to the persons responsible for addressing complaints. For example, specific policies governing harassment, liquor, firearms and dangerous weapons, security, and conduct in residence a written complaint should include, but is not limited to: the name of the student or a description of the student; the specific nature of the infraction, (e.g. exact language used, clear details of behaviour exhibited; the time; date(s) and location of the incident(s)).
c) Except where the complaint should more appropriately be addressed under another specific policy, the complaint will be investigated by the Director, Student Services or designate.
d) The investigation will first determine if the complaint has merit and/or can be settled by mutual consent of the parties involved.
e) Whenever possible an appropriate resolution will be sought. If an informal resolution is reached, the resolution will be final and there shall be no further proceedings.
f) If the complaint cannot be resolved informally or if the Director, Student Services deems that it is not appropriate for the complaint to be so resolved, an in-depth investigation involving the complainant, respondent (if any) and witnesses will be conducted.
g) Upon completion of the investigation, the Director, Student Services or designate, will recommend to the President action to be taken and inform all appropriate parties.
h) Discipline may include, but is not limited to:
i) written warning to be placed in student's file,
ii) probation,
iii) payment for damages to University property,
iv) fines,
v) discretionary penalties, work assignment, service to the University,
vi) suspension,
vii) expulsion,
viii) any other action deemed appropriate in the circumstances.
i) Any discipline taken by the President may be appealed to the Senate Committee on Student Discipline Appeals
j) A written notice of appeal, stating the reasons for the appeal, must be received by the Secretary of Senate within 15 working days of the decision being appealed. The Secretary of Senate will inform the respondent and the Chair of the notice of appeal in writing and schedule a meeting with the Senate Committee on Student Discipline Appeals.

## IV. General Academic Regulations

## 1. Purpose of Academic Regulations

UNBC is committed to high academic standards as well as to assisting students to achieve their educational goals.

The Academic Regulations provide the framework within which academic programs are completed, and offer academic guidance along the program path.

## The University reserves the right to add to, alter, or amend these regulations at any time.

## 2. General Requirements for a Degree

First-entry undergraduate degree programs require a minimum 120 credit hours with (except for the BA and BSc General Degrees) a major subject. Special regulations apply to individual degree programs and to honours degrees, the requirements for which should be consulted as well.

## 3. Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure that they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Breadth requirements can only be waived by the College Deans appropriate to each quadrant.

Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## 4. Continuing/Returning Students

A continuing student is one who has registered in one of the last three semesters. Unless such a student has been required to withdraw, or is suspended or expelled, the continuing student can return to the University without reapplying. A returning student is one who has not registered in any of the last three semesters. The student must reapply to the University and, if readmitted, will be governed by the general and program regulations in effect at the time of readmission.

## 5. Course Load

A full course load for a student is considered to be five courses (15 credit hours) in any one semester. Not more than 20 credit hours may be attempted in a semester except by permission of the Dean of the relevant College.

## 6. Full-Time Studies

In any given semester, a full-time student is one who is registered in nine credit hours or more in that semester.

## 7. Part-Time Studies

Any student who registers in fewer than 9 credit hours per semester is considered a part-time UNBC student in that semester. Students applying to UNBC to study part-time are subject to the regular admission requirements.

## 8. Classification of Students

For purposes of classification and reporting, all undergraduate students in first-entry programs will be designated as First Year, Second Year, Third Year, or Fourth Year students.

To be considered a Second Year student, one must have obtained a minimum of 30 semester hours of credit towards a degree, or at least 21 semester hours of credit and be registered for sufficient additional semester hours of credit in the current or next semester to total 30.

To be considered a Third Year student, one must have obtained a minimum of 60 semester hours of credit towards a degree, or at least 51 semester hours of credit and be registered for sufficient additional semester hours of credit in the current or next semester to total 60 .

To be considered a Fourth Year student, one must have obtained a minimum of 90 semester hours of credit towards a degree, or at least 81 semester hours of credit and be registered for sufficient semester hours of credit in the current or next semester to total 90.

## 9. Auditing Courses

To audit a course is to attend lectures without being responsible for doing assignments or writing examinations. No credit is given for a course taken in this manner, but courses audited will be recorded on a student's transcript. To audit a course, a student needs the permission of the instructor, and in some cases must pay an auditing fee. Except by the express permission of the instructor, an auditing student does not participate in class discussion.

## 10. Class Attendance

Students are expected to attend classes on a regular basis. Instructors may establish attendance requirements for each class. These expectations must be defined in the course syllabus.

## 11. Challenge for Credit by Examination

Under the conditions set out below, students may challenge for credit in a course by writing an examination during an examination period or at a time designated by the course instructor. To be eligible to challenge for credit, a student must be currently registered at UNBC, or have been admitted to study at UNBC other than on a Letter of Permission. Each Dean, on the advice of the Program Chair, will decide which courses are eligible for challenge exams. Students who have earned credit for the course at UNBC or for the equivalent course at another institution, or who have audited the course at UNBC or another institution, or who are currently registered in the course at UNBC, are not eligible to challenge for credit in the course.

Students may not challenge a prerequisite course after successfully completing the advanced course. Students may not challenge a course which they have previously failed. Grades for course challenges are recorded on the transcript and the grade is included in the calculation of the grade point average.

Application for Course Challenge forms are available at the Office of the Registrar. Students must submit the completed and approved form and payment for the course challenge to the Office of the Registrar not later than the last day of classes in the applicable semester. The fee for course challenge is one-half the regular tuition fee for the course and is non-refundable.

Arrangements for a challenge examination may be cancelled up until the last day of classes in the applicable semester. A student who pays for a challenge exam and does not cancel the arrangement by the deadline or does not write the exam will receive a grade of $F$.

## 12. Advanced Standing

In cases in which course challenge is not possible or appropriate transfer credit is unable to be granted, the Dean or Program Chair, upon review of the student's background, may grant a student permission to undertake advanced course work without the normal prerequisites. Such advanced standing will not reduce the number of credits that the student must accumulate to obtain a UNBC degree.

## 13. Lower Division and Upper Division Courses

All 100 and 200 level course work is designated as "lower division". Course work done at the 300,400 , and 500 levels is designated as "upper division".

## 14. Residency Requirement for Graduation

Students must complete a minimum of 30 credit hours of upper division UNBC course work to receive a UNBC degree.

## 15. Official and Unofficial Transcripts

Official transcripts are confidential and are only released on written request from the student. Transcripts issued to an institution, company, or agency are mailed directly to their address in confidential envelopes marked 'Official Transcript’. In extenuating circumstances, transcripts may be issued to a student. Third-party requests must be accompanied by a signed authorization from the student.

Each transcript will include the student's complete record at the University. Since credit earned is determined on the results of final examinations, a transcript will not include results of midterm examinations.

Transcripts will not be released if there is an outstanding financial obligation.

Requests for transcripts can be made online at www.unbc.ca/registar/ transcripts or by completing a Transcript Request Form available in the Office of the Registrar. There is a 10-day turnaround for transcript request.

Unofficial transcripts are available to students directly through student online services at www.unbc.ca, Web for Students.

## 16. Evaluation of Transcripts

The evaluation of transcripts is the responsibility of the Office of the Registrar. Questions relating to transfer credit should be dealt with at the beginning of a student's program. Except for courses taken during that semester on a Letter of Permission, under no circumstances will consideration be given to transfer credits requested during the final semester ( 15 credit hours) of a student's program.

## 17. Time Limit for Transfer Credit

Transfer credit normally will not be awarded for courses completed in excess of ten academic years prior to the date of first UNBC registration.

## 18. Letters of Permission

A Letter of Permission ensures that courses successfully completed at another institution will be transferred to UNBC for consideration as credit toward the student's degree program. Before taking courses from other post-secondary institutions for credit on a Letter of Permission towards a UNBC credential, a student must:
a) have completed at least nine semester credit hours of study at UNBC
b) not be on academic probation or in arrears on account with the University

Course work taken on a Letter of Permission is considered to be transfer credit, and therefore subject to all policies and practices related to transfer credit.

Students who complete courses without having first obtained a Letter of Permission risk not having those courses accepted for transfer credit.

## 19. Criminal Records Search

Under the requirements of the Criminal Records Review Act (1996) UNBC requires, as part of the application process, criminal records searches for applicants to program areas that involve working with children or other vulnerable persons. The cost of this search is the responsibility of the student. Criminal Records Search forms are available in the Office of the Registrar. Results which identify relevant criminal convictions may disqualify an applicant from admission into a program. Submission of a Criminal Records Search at the point of admission does not preclude either the program or provincial certification bodies from requesting a subsequent Criminal Records Search prior to field placement or professional registration. Criminal Records Searches are requirements for the following programs:

```
Bachelor of Education (BEd)
Bachelor of Science in Nursing (BScN)
Bachelor of Social Work (BSW)
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## 20. Student Access to Official University Record

Students have the right to inspect their Official University Record, including the student file, as maintained by the Office of the Registrar. Students have the right to have access to their financial assistance file, as maintained by the Financial Aid and Awards Office under the supervision of a staff member. Assessment reports and letters of reference submitted by third parties in support of students applying to professional programs will not be available for inspection. Students may inspect their Official University Record during normal office hours,
and upon advance request in writing. When students inspect their original records, examination will be permitted only under conditions that will prevent alteration or mutilation. In the event of a dispute as to the accuracy of the information maintained in their Official University Record, a student may appeal to the Administrative Registrar.

## 21. Declaring a Major

All undergraduate students are required to declare a program of study (Major) before the end of the semester in which they will complete 30 credit hours. A student who transfers into the University with 30 or more credit hours must declare a program during the first semester in which he/she registers. Declaration of Major forms are available from the Office of the Registrar.

Students must contact a program advisor in their area of study to declare or to change a program of study.

## 22. Double Majors

Graduation with a double major from either the College of Arts, Social and Health Sciences or the College of Science and Management requires completion of the requirements for each major. Any courses that are included in the requirements for both majors may be counted for both. Note: If double majors fall between two degrees, students must select one degree or the other, i.e., BA or BSc. They do not qualify for both. Students are not permitted to include more than two majors in the same degree program.

## 23. Minors

A minor requires a minimum of 18 credit hours, at least 12 of which must be upper division. In most cases, the upper limit requirement for a minor is 27 credit hours, at least 12 of which must be upper division. Normally, a maximum of two courses (six credit hours) used to fulfill requirements for a major (or another minor) may also be used to fulfill requirements for a minor. Students are not permitted to include more than two minors in the same degree program.

## 24. Co-operative Education

Except by permission of the Director of Co-operative Education:
a) no student may be registered in more than one course in addition to a "Co-op Work Semester" during a work term.
b) Co-operative Education students must finish their academic programs on an academic term, not a work term.
c) no student may drop or withdraw from a "Co-op Work Semester" once registered in it.

## 25. Time to Complete an Undergraduate Degree

Students admitted to UNBC normally are expected to complete their undergraduate degree program within 15 years of their first semester of registration.

## 26. Second Undergraduate Degrees

Students who have earned a Bachelor's level degree at UNBC or at any other accredited University may obtain a second Bachelor's degree (or the same Bachelor's degree in the case of the BA or BSc) from UNBC under the following conditions:
a) Not more than sixty (60) of the credit hours counted towards the second degree may be taken from the first degree.
b) The major subject in the second degree must be clearly distinct from the major subject in the first degree. Where there is any doubt on this point, the decision of the relevant Dean will be final. Students contemplating second degrees are encouraged to consult the relevant Dean in advance.

## 27. Application of Certain Professional Courses to Earn an Undergraduate Degree

With the approval of both the Program Chair and College Dean, certain credits in the Northern Medical Program at UNBC/UBC and in accredited programs in the health professions at other Universities may be accepted towards the Bachelor of Science Degree. Applications for degrees under this regulation will be considered on a case-by-case basis, and in no case subsequent to the conferral of the professional degree in question. Not more than thirty (30) semester hours of professional credits may be counted.

## 28. Registration after the Published Add/Drop Date

No student is permitted to register for any course after the last date to add courses as published in the Calendar except on the express written permission of the instructor and of the Program Chair under whose authority the course is offered.

## 29. Change of Grade after Submission of Final Grades

Except for grade changes resulting from formal Academic Appeal, any changes in final grade after the initial grade submission must be transmitted to the Office of the Registrar through the appropriate Dean.

## 30. Repeating Courses

Students normally are allowed to repeat a course only once. Both grades are recorded on the transcript, and the higher (passing) grade of either attempt may be used for credit towards the degree and only that grade will be calculated into the GPA. In the case of more than one failed attempt, the result of the later attempt will be calculated into the Grade Point Average. In cases where the repeated course is a required course for a specific degree, two failed attempts may result in the student being required to withdraw from that degree program. Note: Repeating a course to achieve a higher passing grade may have implications for student loan purposes. See Financial Aid Officer.

## 31. Exemptions

At the direction of a Student's Academic Program Chair, specific course exemptions from course requirements may be granted. Nevertheless, the total number of credit hours for the degree still must be earned.

## 32. Graduation Constraints

a) Normally, the Program regulations that apply to a student's graduation are those that applied in the Academic Year in which the student was most recently admitted for continuous registration.
b) Students must apply to graduate. Application for graduation must be received by the Office of the Registrar no later than October 31st of the calendar year prior to the year in which graduation is contemplated, accompanied by the appropriate (non-refundable) graduation fee.
c) Effective June 2004, students are not permitted to graduate while on Academic Probation (i.e., CGPA less than 2.00) or while any Academic Appeals are pending.
d) Effective June 2004, students are not permitted to graduate with deferred grades (DEF) remaining on their transcript.
e) Students who have any outstanding obligation to the University are not permitted to graduate. Outstanding obligations include, but are not limited to, the following:
tuition fees owing library or other fines outstanding library loans outstanding equipment or other loans

## Calculation of Grade Point Average

The following is an example of how a student's GPA is calculated at the end of a semester:

| 1. | ENGL 201-3 | B | 3.0 | 3 credit hours $\times 3.0$ | $=$ | 9.00 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2. | ENGL 212-3 | B- | 2.67 | 3 credit hours $\times 2.67$ | $=$ | 8.01 |
| 3. | BIOL 101-4 | C+ | 2.33 | 4 credit hours $\times 2.33$ | $=$ | 9.32 |
| 4. | HIST 302-3 | A+ | 4.33 | 3 credit hours $\times 4.33$ | $=$ | 12.99 |
| 5. | PSYC 301-3 | W | - | 13 credit hours |  | - |
|  |  | Total |  |  | 39.32 |  |

Semester GPA: 39.32/13 $=3.02$

Undergraduate Grading System


## 33. Grounds for Withholding Official Transcripts and Degree Parchments

In instances of non-payment of any portion of tuition, prescribed fees or University library fines and/or bills, or of delinquency in the return or replacement of University property on loan, or non-repayment of cash advances or loans, or violation of residence license agreement, the University shall not permit a student to register for further courses, and shall not issue an official transcript or a degree parchment. The above prohibitions shall be in force until such time as indebtedness to the University has been cleared to the satisfaction of the University.

## 34. Grading

Each course taken for academic credit is assigned a final grade at the end of the semester. The final grade for each course will be indicated by a letter grade and a grade point on the student's transcript.

Grade Point Average: Grade Point Average (GPA) is a method of expressing a student's academic performance as a numerical value. Each letter grade is assigned a numerical equivalent, which is then multiplied by the credit hour value assigned to the course to produce the grade point.

Semester Grade Point Average: Semester Grade Point Average (SGPA) is computed by dividing the total number of grade points earned by the total number of credit hours taken in a semester. See Academic Regulation 30 (Repeating Courses) for the treatment of repeated courses in GPA calculations.

Cumulative Grade Point Average: The UNBC Cumulative Grade Point Average (CGPA) expresses performance as a numerical average for all UNBC courses for all semesters completed. The CGPA is calculated by dividing the total number of grade points earned to date by the total number of credit hours undertaken to date. (Letter grades of P or W are not assigned a numerical value and are not used
in calculating the grade point average.) See Academic Regulation 30 (Repeating Courses) for the treatment of repeated courses in GPA calculations. The CGPA provides the numerical value used to determine good academic standing or academic probation.

## 35. International Exchange

In order to be eligible to participate in an international exchange program, UNBC students must have either a UNBC cumulative GPA higher than 2.67, or a GPA in the previous two semesters on at least 18 credit hours higher than 3.0.

## 36. International Exchange Grading

In the case of a formal exchange, the grades from an exchange university are reported using a Pass/Fail grading system and are not counted towards a student's UNBC CGPA.

## 37. Honours and Distinction

Candidates for undergraduate degrees whose CPGA at graduation is 3.00 or better will graduate:
$\geq 4.00 \quad$ With Distinction
$\geq 3.67$ to $<4.00 \quad$ First Class Honours
$\geq 3.50$ to $<3.67 \quad$ Upper Second Class
$\geq 3.00$ to $<3.50 \quad$ Second Class Honours

## 38. Examinations

a) No final examinations may count for more than $50 \%$ (fifty per cent) of the total course marks.
b) Tests worth more than $10 \%$ of the final grade must not be administered during the final week of classes. Major papers or projects must not be assigned during the last two weeks of
classes. Courses with laboratory, clinical, or practica-based final examinations may schedule such assessments or examinations during the final week of classes.
c) Program Chairs may make exceptions to parts a) or b) of this policy in extraordinary cases. Such exception must be made before the first day of scheduled classes and have the approval of the Dean.
d) Students are required to write no more than two final exams in any one 24 hour period. When a course has a final examination, it must be administered during the scheduled examination period.
e) Final exams are no longer than three hours in duration. Exceptions must be approved by the program chair.

## 39. Conduct in Examinations

Students must be prepared to present appropriate identification upon entering the examination room. Appropriate identification is defined as a UNBC student card and/or some other form of photo identification acceptable to the proctor. The following regulations apply to the conduct of examinations:
a) Books, papers, or other materials or devices must not be in possession of the student during an exam except by the express permission of the examiner. Specifically, without such permission no laptop computers, mobile phone sets, handheld electronic devices or the like may be in possession of the student in the examination room (see Regulation 44 (b)).
b) No candidate is permitted to enter the examination room more than 30 minutes after the beginning of the examination, or permitted to leave within 30 minutes after the examination has started.
c) Candidates must not communicate in any way with other candidates in the examination room.
d) Candidates must not leave their seats, except when granted permission by the proctor.
e) Candidates must turn in all materials, including rough work, upon leaving the examination room.
f) Food and beverages other than water are not permitted in the examination room.

## 40. Student Access to Final Examinations

The instructor will, on request by a student, informally review the final examination with the student after the semester grade has been released.

Final examinations will be retained by the instructor for a period of sixty days after the examination period, after which time they may be shredded or destroyed by other acceptable means.

## 41. Religious Holidays/Examination Schedule

In some instances, students may find themselves, for religious reasons, unable to write a final examination on a scheduled day. If the final examination cannot be rescheduled to avoid the conflict, the
student concerned shall be evaluated by other means, which may include another examination scheduled at a different time. Students must complete the appropriate form and notify their instructors of a conflict at least two weeks prior to the examination period.

## 42. Final Examinations Missed

Satisfactory explanation, with supporting documentation as appropriate, for any final examination missed must be made by the student or designate to the Office of the Registrar within 48 hours from the time the examination was written.

Within 48 hours of receiving a submission, the Administrative Registrar or designate may direct the Program under which the course is offered to arrange the writing of a special examination in the case of an examination which was missed.

Normally, for explanations of sickness, a doctor's certification is required.

## 43. Deferred Examinations and Grades

a) Students may apply for a deferred examination or deferred status to complete required term work if medical or compassionate reasons prevent attendance at an examination or completion of assignments. Written application for a deferment, along with supporting documentation and written approval from the instructor and Program Chair, should be received by the Office of the Registrar without exception before the date of the final examination. After that date, Academic Regulation 42 (Final Examinations Missed) applies.

Forms for deferred status are available to Faculty from the Office of the Registrar. If a student is granted a deferral, the exam must be written or the assignment(s) completed and graded before the last day of classes in the following semester, unless prior arrangements have been made with the instructor and notification has been submitted to the Office of the Registrar.

If a student is granted a deferral but does not complete the required work, or does not appear for the examination, a grade of $F$ will be assigned. If a student's request for deferred status is refused, the instructor will submit a final grade.
b) Effective September 2004, students are not permitted to graduate with deferred grades (DEF) remaining on their transcript (See Academic Regulation 32 (Graduation Constraints).

## 44. Academic Offenses

Any conduct that violates the ethical or legal standards of the University, particularly those related to academic honesty, is a serious offense. Informal means to resolve complaints of academic dishonesty may be used. If such means are unsuccessful or inappropriate, the formal processes set out in these Regulations are to be followed. An impartial committee, the Senate Committee on Academic Appeals, provides for complete examination of the complaint or allegations. The minimum sanction for an academic offense includes reprimands and
reduction of grades; the maximum sanction is suspension from the University (see Academic Regulation 46 (Academic Sanctions)). Such offenses include, but are not limited to the following:
a) Plagiarism: Plagiarism occurs when a student submits or presents work of another person in such a manner as to lead the reader to believe that it is the student's original work; selfplagiarism is the submission of work previously submitted for academic credit without prior approval of the current course instructor. This offense includes using citations which have been designed in order to mislead the reader as to the nature or authenticity of the source.
b) Cheating: Cheating takes numerous forms and includes, but is not limited to the following: copying from another student's work or allowing another student to copy from one's own work; obtaining a copy of an examination before it is officially available; misrepresenting or falsifying references, citations, or sources of information; knowingly recording or reporting false empirical or statistical data; and possession of notes, books, diagrams or other aids during examinations that are not authorized by the examiner (See Regulation 39(a)).
c) Submitting False Records: Submitting false medical or criminal records, transcripts, or other such certificates or information, under false pretences.
d) Withholding Records: Non-disclosure of previous attendance at a post-secondary institution, and of the transcript of record pertaining thereto, or of other documentation required by the University.
e) Misrepresenting One's Own Identity: Impersonation or the imitation of a student in class, in a test or examination or class assignment is a breach of academic honesty. Both the impersonator and the individual impersonated may be charged.
f) Falsification of Results: The falsification of laboratory and research results.
g) Submission of False Information: The submission of false or misrepresented information on any form used by the University or an agent thereof.
h) Submitting Academic Work Twice for Credit: Unless prior written and signed permission is obtained, submitting for credit any academic work for which credit has previously been obtained or may be sought in another course or program of study in the University or elsewhere. This includes, for example, materials such as library research papers posted on the World Wide Web.
i) Aiding or Abetting any of the above academic offences.

## 45. Procedure on Suspicion of an Academic Offence

a) An instructor who suspects plagiarism, cheating, or any other academic offence and has evidence to support the accusation, will contact the student to inform the student fully of the offence and present the evidence for it. The instructor will review the contents of the student's file in the Office of the Registrar to determine whether the record indicates a prior academic offense. The student may request that a third party (for example another faculty member, a teaching assistant, a staff member
or the ombudsperson) be present at this or any subsequent meetings.
b) If the issue can be resolved at this level, the faculty member will fill in Part A of the UNBC Report Form for Academic Misconduct and forward it to the Office of the Registrar to be placed in the student's file.
c) If the matter is not resolved between the student and faculty member, or if it is a serious case (which may involve probation, or suspension), it will be discussed by the student, faculty member, and the Chair of the program involved. Discussions with the Chair or Dean may be held at the request of either the faculty member or the student, and the Dean may also be brought in at any stage if requested by either party. After these discussions, the Dean will complete Part B of the Report Form for Academic Misconduct. If a penalty is imposed, a copy of the Report Form will be placed in the student's file.
d) All forms, whatever the outcome, will be filed in the Office of the Registrar. The student may appeal any decisions of the Dean or President to the level of the Committee on Academic Appeals (see Academic Regulations 49, 50).

## 46. Academic Sanctions

Registration at the University of Northern British Columbia and the right to access the library, specialized equipment or all other academic facilities implies a commitment on the part of a student to use such facilities in accordance with established rules. A student not fulfilling these obligations will have academic sanctions imposed upon him/her. If a student has been found guilty of an academic offense, the student will be subjected to a penalty or penalties appropriate to the offense. Normally, academic offenses will be dealt with in the first instance by the instructor. A range of penalties is described below:
a) Reprimand: This is a written warning to a student from the Instructor, Program Chair or the Dean of the College that the student's behaviour is considered unacceptable to the University.
b) Reduction of Grade: A reduction of grade may be applied to an examination, test, or assignment to which an offense is relevant and will be decided upon by the instructor, in consultation as may be appropriate with the Chair or Dean. Policies with respect to regrading and review of assignments or exams are under the direction and purview of the Program Chair.
c) Probation: In addition to any other penalty which may be applied, the Dean of a student's College may place a student on probation, or may prohibit the student from taking a course or courses, or may recommend suspension, either for a specified period or indefinitely, to the President.
d) Suspension: A student's Dean may recommend suspension, either for a specified period or indefinitely, to the President. On the recommendation of the Dean, the President may suspend a student from the University, either for a specified period or indefinitely. Prior to the President's decision becoming final, the student will be informed in writing of the recommendation. The student will be given 15 working days following such notification to lodge an appeal before the President's final decision becomes effective. Any such appeal must be made in writing to the Administrative Registrar and will be reviewed by the Senate Committee on Academic Appeals (SCAA).

## 47. Academic Standing - Definition

Students are expected to meet the necessary minimum standards for performance while attending UNBC. Those who fail to meet the minimum standard will be placed on academic probation. The minimum standard is defined as an academic average on nine or more credit hours of UNBC course work that produces a cumulative grade point average (CGPA) of at least 2.0.

## 48. Conditions of Academic Standing

a) Academic Probation: "Academic Probation" constitutes a warning to a student that the student's academic performance has been at a level which, if continued, could disqualify the student from graduation; and further that continued performance below the required standard could lead to requirement to withdraw from the University on academic grounds.

Students may be placed on Academic Probation under the following conditions:
i) Admission to the University on the basis of an unproven or unsuccessful previous university record
ii) A UNBC cumulative GPA of less than 2.0 after attempting nine credits of course work
iii) Imposition of a sanction following determination of academic dishonesty

Letters of permission will not be given to students on academic probation.

Students who have been placed on Academic Probation who achieve a Semester GPA (SGPA) of 2.0 or greater in subsequent semesters will be allowed to continue their studies at UNBC while on Academic Probation. Students are considered to have returned to good academic standing once their Cumulative GPA (CGPA) is 2.0 or greater. Students are not permitted to graduate while on Academic Probation (see Academic Regulation 32 (Graduation Constraints)).
b) Requirement to Withdraw: The following circumstances may result in a requirement to withdraw from UNBC. These are:
i) Discovery that required documentation for admission was withheld, by the student, from the University;
ii) Failure to pay for tuition or university services;
iii) Failure to achieve a Semester GPA (SGPA) of 2.0 or higher after the completion of 18 credits while on Academic Probation. Normally, in this case, a requirement to withdraw from the University is for three semesters (one full calendar year);
iv) A decision by the President of the University that the suspension of a student, for reasons of unsatisfactory conduct, unsatisfactory academic performance, or other reasons clearly indicates that withdrawal from UNBC is in the best interest of the University.

In order to apply for re-admission to the University, students must submit an Application for Admission/Re-admission to the Office of the Registrar. Students must provide a letter to the Administrative Registrar, stating their rationale for wishing to return to studies at UNBC and documenting any work completed or experience gained which would better qualify them to complete, successfully, work at UNBC.

Students who are permitted to return to studies at UNBC, return on academic probation, and are subject to the University's policy on academic standing and continuance found in the current calendar.
c) Second Requirement to Withdraw: Students Required to Withdraw from the University a second time normally will not be considered for readmission for at least two full calendar years following the Requirement to Withdraw. Re-admission will only be on presentation of compelling evidence that the student is both able and prepared to succeed in University studies.

## 49. Appeals Process

All students have the natural and reasonable right to appeal grades given during the term, the final grade of a course and other academic policies and decisions of the University. The Senate Committee on Academic Appeals (SCAA) is the final adjudicator on such matters. All formal appeals must be made through the Administrative Registrar, in writing and with necessary documentation, within 15 working days of the receipt of the decision in question. In this regard, it is incumbent upon the student to advise the University, via the Office of the Registrar, of their current mailing address. All written appeals to the Senate Committee on Academic Appeals (SCAA) should indicate whether an in-person hearing is being requested. Otherwise, cases are adjudicated on the basis of a detailed written submission.

## 50. Senate Committee on Academic Appeals: Procedures

The Senate Committee on Academic Appeals (SCAA) follows principles of natural justice. As an internal administrative committee, it is free to develop procedures and practices to conduct appeals and is not constrained by strict rules of procedure and evidence.

A quorum consists of a majority of voting members, including at least one student member and two faculty members. No faculty or student committee member with previous involvement in the case may hear the appeal. The appellant has the right to challenge the neutrality of any member of the Committee scheduled to hear his/her appeal. The Chair, with the advice of the Committee, will rule on the validity of the challenge.

If the appellant requests an in-person hearing, the respondent (e.g., the course Instructor, Chair and/or Dean) will be notified and may also appear at the appeal, when available. Appeals shall be based on the appellant's written submission (all relevant evidence and documentation related to the matter which is under appeal, and all relevant information contained in the student record). New evidence cannot be presented at the hearing.

If the appellant asks to be present at the hearing yet fails to appear before the Committee on the appointed day and time, the Committee may, without further notice, proceed to hear the appeal based on the written submission. If there are compassionate or medical grounds for nonappearance, the Chair or the Secretary to the Committee must be notified immediately. The Chair will determine the acceptability of these grounds and whether the appeal should be tabled.

Natural justice applies to both student and faculty alike. All forms of adjudication are held in the strictest confidence and are normally attended by members of the Committee and the parties to the particular appeal.

Upon written notification to the Senate Committee on Academic Appeals (SCAA), appellants may seek third-party representation to attend in support of their appeal, although their participation is normally limited to providing moral support only.

In extraordinary cases, the appellant or other parties may wish to retain legal counsel. Any person(s) retaining legal counsel for purposes of representation are obliged to inform the Senate Committee on Academic Appeals (SCAA) in writing 15 working days prior to the scheduled meeting.

The Secretary to Senate, in consultation with the Committee Chair as appropriate, will review each request to hear an appeal before any hearing or adjudication. This review is intended to ensure that the nature of the appeal is consistent with University policy and procedures and to ensure that the appeal is both valid and cannot be resolved by other means. In some instances the review may lead to a reversal of the decision before review, while in other instances it may indicate there are insufficient grounds for an appeal or that further documentation is required. In all cases, however, any decision not to hear an appeal rests with the Committee.

## 51. Appeal of Term Grades While Course is in Progress

Students who have reason to believe their term grade (while a course is in progress) is inaccurate should meet with their course instructor immediately. If both the instructor and the student agree on the basis of an informal review, the matter is thereby concluded and a change of grade is submitted if necessary.

Students who wish to appeal grades other than final grades, formally, should:
a) obtain an Appeals Form from the Office of the Registrar and forward it to the Program Chair.
b) if no resolution is reached within seven working days, proceed to the next step: student submits the form to the Dean.
c) if not resolved within seven days, proceed to the next step: Dean submits form to the Administrative Registrar for advancement to the Senate Committee on Academic Appeals.

## 52. Appeal of Final Grade

Students who have reason to believe their final grade in a course is inaccurate should meet with their course instructor immediately, if possible. If instructor and student agree on the basis of an informal review, the Office of the Registrar is advised of a grade change and the matter is thereby concluded.
Students who wish to appeal their grade, formally, should obtain an Appeals Form from the Office of the Registrar, and take it to the instructor.
a) The instructor (where available) must review the assigned grade with the student after the final grade has been released by the Office of the Registrar.
b) Instructors must provide students with supervised access to their final examination.
c) If not resolved within 15 working days, proceed to the next step on the Appeals Form: student submits the form to the Program Chair.
d) If not resolved within 7 further working days, proceed to the next step: student submits the form to the Dean.
e) If not resolved within 7 further working days, go to the next step: Dean submits the form to the Administrative Registrar for advancement to the Senate Committee on Academic Appeals (SCAA).

An appeal may result in a higher, equal or lower grade. The final recourse for all appeals is the SCAA.

## 53. Appeal Procedure on Requirement to Withdraw

"Requirement to Withdraw" is an academic decision under the purview of the student's College Dean. Therefore, a student's first recourse by way of appeal is the Dean. If the Dean agrees to rescind the requirement, the Dean informs the Office of the Registrar and no further action by the student is necessary.
Otherwise, any academic appeal on a requirement to withdraw must be made in writing to the Administrative Registrar and will be reviewed by the Senate Committee on Academic Appeals (SCAA).

## 54. University Closure/Weather

On rare occasions, the President (or designate) may elect to close the University due to inclement weather or other human or natural circumstance. In such circumstances, classes and examinations will be formally cancelled and will be rescheduled. Assignments due on the date of the closure must be submitted on the next day that the University is open.

An appeal may result in a higher, equal or lower grade. The final recourse for all appeals is the Senate Committee on Academic Appeals.

## Programs

## Breadth Requirements

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science and Physical Science quadrants. Students need to ensure they have a course from each of the quadrants as part of their program requirements or as part of their elective requirements and that they have the total number of credits required for their degree.


#### Abstract

Breadth requirements can only be waived by the College Dean appropriate to each quadrant. Courses that meet the spirit of the breadth requirement, by introducing students to a broad body of knowledge in a given discipline or area, will also be considered as substitutes for the courses listed below by the appropriate Dean. For Arts and Humanities and Social Sciences, please see the Dean of the College of Arts, Social and Health Sciences. For Natural Science and Physical Science, please see the Dean of the College of Science and Management. Students admitted with 45 or more transfer credits are exempt from this requirement.


## Breadth Requirements

## Arts and Humanities

CORE 101-3 Humanities
EDUC 101-3 Introduction to Education
ENGL 100-3 Introduction to Literary Structures
ENGL 102-3 Introduction to Poetry
ENGL 103-3 Introduction to Fiction
ENGL 104-3 Introduction to Drama and/or Film
HIST 190-3 The West and the World to 1660
HIST 191-3 The West and the World since 1660
POLS 270-3 Political Philosophy: Plato to Locke
PHIL 200-3 Critical Thinking
WMST 100-3 Introduction to Women's Studies

## Social Science

CORE 103-3 Social Sciences
ANTH 101-3 Peoples and Cultures
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 Human Geography
INTS 101-3 Canada and the World
POLS 100-3 Contemporary Political Issues
PSYC 102-3 Psychology and Human Problems

## Natural Science

CORE 104-3 Life Sciences
ANTH 100-3 Archaeological and Biological Approaches
BIOL 101-4 Introductory Biology I
BIOL 102-4 Introductory Biology II
BIOL 110-3 Introductory Ecology
GEOG 100-3 Environments and People
NREM 210-4 Integrated Resource Management
PSYC 101-3 Psychology as a Science

## Physical Science

CORE 102-3 Physical Sciences
CHEM 100-3 General Chemistry I
CHEM 110-3 Chemistry of Everyday Life
CPSC 100-4 Computer Programming I
CPSC 110-3 Introduction to Computer Systems and Programming
MATH 100-3 Calculus I
MATH 105-3 Enriched Calculus
MATH 150-3 Finite Mathematics for Business and Economics
MATH 152-3 Calculus for Non-Majors
PHYS 100-4 Introduction to Physics I
PHYS 110-4 Introductory Physics I: Mechanics
PHYS 120-3 Introduction to Astronomy I: The Solar System
PHYS 121-3 Introduction to Astronomy II: The Universe

Note: Students should refer to individual course descriptions for specific information regarding course preclusions.

## Co-operative Education

The Co-operative Education program is based on the principle of integrating a student's academic program with practical work experiences. This principle normally is achieved through an alternating sequence of four month work and study semesters. Recent introductions of parallel and internship co-op models have broadened student and employer opportunities with the possibility of longer work term experiences. This 'hands-on' approach to education extends the learning process beyond the limits of the classroom and into the working world.

The Co-op Education program holds many advantages for students, employers and the University. For example, Co-op students are likely to attain higher levels of satisfaction regarding their education, and have a much higher probability of securing relevant, permanent employment immediately after graduation. Employers benefit from hiring bright, capable, highly motivated students who can fill temporary job openings, complete projects, free permanent staff for other tasks, ease the load during a busy season, and potentially fill permanent positions after graduation.

Necessary arrangements for integrating work semesters, securing potential employers, arranging interviews, and generally managing the employment process are the responsibility of the Co-operative Education Office. The number of jobs available for Co-op students will vary from semester to semester. Because of this, students cannot be guaranteed Co-op positions.

## Admission to the Program

Intake into the Co-operative Education program occurs in the Fall Semester. Students planning to enter the Co-op program should attend information sessions held during the first month of classes and contact the UNBC Co-op office as early as possible. To qualify and continue in the Co-operative Education option of their degree, a student must:

- participate in an entry interview
- normally be enrolled full time (9 credit hours)
- participate in Co-operative Education Pre-employment Workshops
- have a minimum cumulative grade point average of 2.75 with normally no grade lower than " D ".
- have completed 30 credit hours before beginning the first Co-op Education work term semester.

Students who are required to withdraw from Co-op due to their academic standing may re-apply for admission to the Co-op program based upon re-qualification.

Transfer students should complete a study semester before going out on a work term semester however, they are encouraged to apply to the program in that semester. Students are normally required to successfully complete four work term semesters. Those students transferring from an approved Co-op program elsewhere and who have successfully completed a work term semester, may be exempt from their first and second work term semesters at UNBC, (refer to

Co-operative Education Transferable Work Terms below). Students who complete the required work term semesters will receive a Co-op designation on their degree.

Students may experience their work term semesters in either the September, January or May semesters. Not all work semesters may be done in the Summer Semester with normally at least one in the September Semester and one in the January Semester.

## Co-operative Education Transferable Work Terms

Co-operative Education Work Terms successfully completed at a British Columbia post-secondary institution will be eligible for transfer credit, on an individual basis, if they meet the following requirements:

1. The student must be accepted into the UNBC Co-op Education program and apply, in writing, to receive transfer of work terms.
2. The program in which the work term(s) was undertaken is provincially approved under the criteria of the Accountability Council of Co-operative Education of BC , or is nationally approved under the criteria of the Canadian Association for Cooperative Education.
3. The work term(s) is officially recognized, i.e., noted on the transcript, by the institution where the work term originated.
4. The credit for the work term(s) was granted for work experience typical of the same discipline into which the student is transferring.

## Co-operative Education Work Term Credit Challenge

UNBC Co-op Education allows students to challenge a Work Term on the basis of prior, relevant and satisfactory work experience. Students should discuss any potential challenge with the appropriate Co-op Co-ordinator for their major. Work Term Challenges are subject to the following:

1. To begin a Work Term Challenge, an Application for Course Challenge form must be initiated with the student's Co-op Coordinator by December 1 in the September term that the student applies to the Co-operative Education option of their program.
2. The UNBC Course Challenge fee will be assessed with the initiation of the Work Term Challenge forms. Current course challenge fees are listed in the UNBC calendar.
3. The Co-op Co-ordinator will assess the Work Term Challenge application and provide recommendations to the Director.
4. Applicants will be advised of the decision within two weeks of the submission.
5. Work Term credit by challenge is limited to the first two Work Term courses within the major.
6. Assessment of the Work Term Challenge will be carried out by the Co-op Department based on the following:

- An aggregate of 560 hours (minimum) relevant paid work experience not previously counted toward Work Term credit, practicum, internship and similar options.
- Verification of employment and evaluation of performance from the employer(s) is required.
- Job descriptions outlining prior work experience, providing evidence that the student has acquired professional and personal knowledge and skills appropriate to the discipline or interdisciplinary field.
- A work report appropriate to the discipline or interdisciplinary field which meets UNBC Co-op Education Work Term guidelines.

7. Once the challenge is approved, the result will be entered on the student's academic record on a pass or fail basis.

## The Co-op Process

Once a student is accepted to the Co-op program, he or she has the opportunity of applying for positions with employers. Students are able to choose appropriate employers from posted job descriptions. The interview system is designed to provide maximum freedom for both employers and students.

Student's résumés and transcripts are sent to employers who choose a number of student applicants to interview. After the interviews are completed, employers prepare a list, in order of preference, of students who are acceptable for the job. Co-op students are expected to be flexible and responsive to appropriate work opportunities throughout BC and elsewhere.

UNBC has incorporated Co-operative Education into the following academic programs:

- Anthropology
- Biochemistry \& Molecular Biology
- Biology
- Business Administration
- Accounting
- Finance
- General Business
- International Business
- Marketing
- Chemistry
- Computer Science
- Economics
- English
- Environmental Engineering
- Environmental Science
- Environmental Studies
- First Nations Studies
- Geography
- History
- International Studies
- Mathematics
- Natural Resources Management
- Forestry
- Resource Recreation
- Wildlife and Fisheries
- Northern Studies
- Physics
- Planning
- Political Science
- Psychology
- Resource-Based Tourism
- Women's Studies

Course descriptions for the Co-op option can be found at the beginning of the course descriptions section of this Calendar.

## Internship Courses

Internship courses are for those students who wish to have a more limited practical work experience and are unable to pursue the requirements of the Co-op program.

These courses differ from the Co-op program in that they are for one semester only. Specifically, the Internship courses will be one semester in length (four months) and will be for course credit rather than a paid employment experience. The employer, student and faculty supervisor will together agree on a term assignment. The student will be responsible for completing this assignment and defending it at the end of the term to the employer and faculty member.

Please note: the Internship courses are completely separate from the practica found in such programs as Nursing, Social Work and Education.

## Northern Advancement Program

## Introduction

The First Nations Centre, in keeping with its mandate to serve the native student population, offers a transition year of study in September of each year to students who would like to attend the University of Northern British Columbia. The program of study is important and relevant to students from both smaller rural communities and/or First Nations communities.

The University is situated in the territories of 78 Bands and 16 Tribal Councils as well as many urban First Nations organizations. The population of the region is about 300,000 of which First Nations people comprise approximately 10 percent.

The First Nations Centre does not limit its services to First Nations students. All programs and studies offered through the First Nations Centre are open to all UNBC students-native and non-native alike.

Students from smaller rural communities and First Nations students traditionally have had the most difficulty in adjusting to university in a larger centre because of cultural and sociological differences. The program is aimed at providing these students with assistance in making the transition to university. It will allow students to take full advantage of the educational opportunities offered, and prepare them for subsequent employment. The program will also ensure that a higher percentage of students will successfully complete their degrees as a result of their adjustment to, and enjoyment of, university life in a larger centre.

## Program Description

The Northern Advancement program has been developed utilizing existing UNBC programs in the First Nations Centre in addition to the courses, Arts 101-3 (Learning Strategies) and Arts 102-3 (Research Writing). These new courses will provide a foundation for further study in a variety of fields at UNBC. The cornerstone of the Northern Advancement program is Arts 101 and 102. The First Nations Centre programs have an emphasis on support services for students from smaller rural and First Nations communities.

Arts 101 and 102 will provide an effective bridge for students entering UNBC. The transition and study skills component will begin two weeks prior to the start of classes and students will be required to attend a detailed orientation to the University that will include an off-campus two-day retreat. The courses will continue throughout the critical first year with students receiving instruction in developing skills in the following areas:

- library skills
- research skills
- text reading skills
- writing skills
- study skills
- public speaking
- group development
- stress management
- note taking skills
- assertiveness training
- career planning and
- test taking skills

In addition, since First Nations philosophy is one that is based on holistic learning, emphasis will be placed on developing support networks for personal growth as well as helping students in the program deal with personal issues that impede their academic success.

The delivery of Arts 101 and 102 will be supported by the First Nations Centre. These include the assistance of First Nations community elders for cultural programming and personal guidance. In addition to elders, existing UNBC staff and faculty will be utilized to deliver specific components and courses of the program. A program co-ordinator from the First Nations Centre will coordinate the Northern Advancement Program, teach skill level sessions, and assist in community liaison and student recruitment.

## Program Objectives

The program will provide a foundation for further study in a variety of fields at the University of Northern British Columbia. The cornerstone of the program is the emphasis on support services for First Nations students and students from smaller rural communities.

The objectives of this program are:

- to provide an orientation to university facilities and admission procedures
- to provide a supportive learning environment that facilitates the transition into university life
- to provide cultural activities which build self-esteem and respect for First Nations traditions and cultural values


## Admission Requirements

Students will be required to complete a regular UNBC Admission Application form and indicate the Northern Advancement program as their academic intention.

Applicants must meet regular UNBC admission standards. Each mature student application will be reviewed on its own merits. Mature applicants must:

- be permanent residents of British Columbia
- have been out of secondary school for at least three years and
- be at least 21 years of age on or before the first day of classes


## Application Process

Students are encouraged to begin admission inquiries as soon as possible in the new calendar year.

The deadline for submission of applications, complete with all required documentation, for September registration is June 1. Complete files will be given first preference for acceptance into the program. As spaces available in the program are limited, not all students who are eligible will be admitted.

To be considered for the Northern Advancement program, students must also submit the following with their application form:

- one official transcript from high school and all postsecondary institutions (photocopies or facsimiles are not accepted as official)
- a letter of intent outlining their career goals and the importance of the Northern Advancement program in achieving those goals
- a letter of support from a high school teacher and/or band administrator, education coordinator or sponsoring organization


## Programs: Northern Advancement, Student Success Initiative

Where applicable, a statement regarding funding arrangements is also required and must be forwarded to the Coordinator of the Northern Advancement program.

Once admitted to UNBC:

- students should contact the First Nations Centre to arrange a pre-admission interview to review their academic history and the appropriateness of the Northern Advancement program in achieving their educational goals. A transcript or progress report will be required at this point.
- students are required to attend a two-week orientation session prior to the first day of classes which includes an off-campus two-day retreat with staff. Course timetables will be provided during orientation week.


## Course Requirements

Normally this is a maximum five year UNBC credit program (some students may choose to complete the degree in four years). The program is designed to facilitate 25 students per year. Students will have the following options in their first year as determined by the degree program in the prospective Faculties the student chooses. Northern Advancement program students are advised to complete nine to twelve credit hours in each of their first and second semesters as follows:

## Semester One

| ARTS 101-3 | Learning Strategies |
| :--- | :--- |
| FNST 100-3 | The Aboriginal Peoples of Canada |
| Elective | (three credit hours) |

## Semester Two

ARTS 102-3 Research Writing
Electives (six to nine credit hours)

## Student Success Initiative

University 101-3 (Introduction to Higher Education) is a three-credit, multidisciplinary elective that is an appropriate foundation course for most university degree programs. It offers an introduction to the university and its many services, an explanation of the methods of academic inquiry employed in the various disciplines, and an opportunity to learn and practise the study skills and learning strategies that are required for academic success. Students are given opportunities to use the information from this course to improve their academic performance in the other courses they are studying.

University 101-3 is most appropriate for students who are in their first year of study at a university, including those who have transferred from regional colleges. It is also appropriate for mature students who have been away from academic study for a period of time.
For additional information, see the description of the course that is located in the course description section of the Calendar under the title, UNIV 101-3.

## Undergraduate Programs

## BA (General)

The Bachelor of Arts (General) degree provides a broad education in the arts. Students are required to complete 120 credit hours including a minimum of 60 credit hours of upper division course work. Ninety credit hours (including 30 credit hours at the upper level) must consist of Humanities and Social Science courses.

The minimum requirement for completion of the Bachelor of Arts (General) is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of this Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree.

Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

Students must complete 54 credit hours of lower division (100 and 200 level) course work.

## Upper Division Requirement

Students must complete a minimum of 60 credit hours of upper division ( 300 and 400 level) course work.

## Minor Recommendation

Students are strongly urged to include in their degree a completed minor or a minimum of 18 credit hours from any of those programs within Arts or Social Sciences which offers a BA, or from the Philosophy or Russian Studies minor; i.e.: from the following list:

- Anthropology (BA program)
- Economics (BA program)
- English (BA program)
- Environmental Studies (BA program)
- First Nations Studies (BA program)
- History (BA program)
- Geography (BA program)
- International Studies (BA program)
- Northern Studies (BA program)
- Philosophy (Minor program)
- Political Science (BA program)
- Resource-Based Tourism (BA program)
- Russian Studies (Minor program)
- Women's Studies (BA program)


## BSc (General)

The Bachelor of Science (General) degree provides a broad education in science, with the requirement for specialization in at least two of the following areas:

- Environmental and Earth Sciences
- Life Sciences
- Mathematics and Computer Science
- Physical Sciences

This program may be useful to students planning to pursue studies in various post-baccalaureate professional areas. Students should consult with the appropriate professional school(s) to ensure they include all the appropriate required courses in their studies at UNBC to be eligible for entry into programs in their desired professional area. This program may not be suitable for students intending to continue in some areas of graduate studies in science.

Students enrolled in this degree program are required to successfully complete a total of 120 credits hours including a minimum of 60 credits hours from upper division level courses. Specialization and elective course requirements must also be met. Students must ensure that they complete course prerequisites before registering in any course.

The minimum requirement for completion of the Bachelor of Science (General) is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

BIOL 101-4 Introductory Biology I
BIOL 102-4 Introductory Biology II
BIOL 201-3 Ecology
CHEM 100-3 General Chemistry I
CPSC 100-4 Computer Programming I
ENSC 201-3 Introduction to Atmospheric Science
GEOG 210-3 Geomorphology
MATH 100-3 Calculus I
PHYS 100-4 Introduction to Physics I

Students must select additional 100 and 200 level courses to ensure proper prerequisites are in place for Specialization and Elective courses taken at the upper division (see course listings for specific areas of specialization).

Note 1: students interested in Mathematics and Computer Science as an area of specialization are strongly advised to include the following prerequisite 100 level courses in their studies:

CPSC 101-4 Computer Programming II
MATH 101-3 Calculus II
PHYS 110-4 Introductory Physics I: Mechanics (replaces PHYS 100-4)
PHYS 111-4 Introductory Physics II: Waves and Electricity
Note 2: students interested in Physical Sciences as an area of specialization are strongly advised to include the following prerequisite 100 level courses in their studies:

CHEM 101-3 General Chemistry II
CHEM 120-1 General Chemistry Lab I
CHEM 121-1 General Chemistry Lab II
CPSC 101-4 Computer Programming II
MATH 101-3 Calculus II
PHYS 110-4 Introductory Physics I: Mechanics (replaces PHYS 100-4)
PHYS 111-4 Introductory Physics II: Waves and Electricity

## Upper Division Requirement

Students must complete a minimum of 60 credit hours of 300 and 400 level course work chosen to ensure fulfilment of the specialization and general science requirements.

## Specialization Requirement

Students must complete a combination of sixteen courses from two areas of specialization listed below. Eight of these courses must be at the 400 level; a minimum of six courses is required in each of the two areas of specialization chosen.

## General Science Requirement

Two 300 or 400 level courses chosen from among the courses listed in the four areas of specialization listed below.

## Environmental and Earth Sciences Courses

ENPL 305-3 Environmental Impact Assessment
ENSC 312-3 Boundary-layer Meteorology
ENSC 406-3 Environmental Modelling
ENSC 408-3 Storms
ENVS 311-3 Northern Perspectives
ENVS 414-3 Environmental and Professional Ethics
FSTY 205-3 Introduction to Soil Science
GEOG 205-3 Cartography and Geomatics
GEOG 300-3 Geographic Information Systems
GEOG 310-3 Hydrology
GEOG 311-3 Concepts in Geomorphology
GEOG 405-3 Fluvial Geomorphology
GEOG 411-3 Advanced Elements in Geomorphology

GEOG 412-3 Geomorphology of Cold Regions
GEOG 413-3 Advanced GIS
NREM 410-3 Watershed Management
NREM 411-3 Environmental and Professional Ethics

## Life Sciences Courses

BIOL 110-3 Introductory Ecology
BIOL 202-3 Invertebrate Zoology
BIOL 203-3 Microbiology
BIOL 210-3 Genetics
BIOL 301-3 Systematic Botany
BIOL 302-3 Limnology
BIOL 303-3 Plant Physiology
BIOL 305-3 Plant Morphology and Anatomy
BIOL 307-3 Ichthyology and Herpetology
BIOL 308-3 Ornithology and Mammalogy
BIOL 311-3 Cell and Molecular Biology
BIOL 315-3 Animal Diseases and Parasites
BIOL 321-3 Animal Physiology
BIOL 323-3 Evolutionary Biology
BIOL 401-3 Plant - Microbial Interactions
BIOL 402-3 Aquatic Plants
BIOL 404-3 Plant Ecology
BIOL 406-3 Fish Ecology
BIOL 410-3 Population and Community Ecology
BIOL 411-3 Conservation Biology
BIOL 412-3 Wildlife Ecology
BIOL 420-3 Animal Behaviour
ENVS 306-3 Human Ecology
ENSC 308-3 Northern Contaminated Environments
ENSC 406-3 Environmental Modelling
FSTY 201-4 Plant Systems
FSTY 206-3 Forest Biology
FSTY 305-3 Silviculture I
FSTY 307-4 Forest Health
FSTY 309-3 Fire Ecology and Management
FSTY 405-3 Silviculture II
NREM 203-3 Resource Inventories and Measurements
NREM 210-4 Integrated Resource Management
NREM 410-3 Watershed Management

## Mathematics and Computer Science Courses

CPSC 141-3 Discrete Computational Mathematics
CPSC 142-3 Discrete Computational Mathematics II
CPSC 200-3 Algorithm Analysis and Development
CPSC 230-4 Introduction to Logic Design
CPSC 231-4 Computer Organization and Architecture
CPSC 270-3 Human Interface Design
CPSC 281-3 Data Structures I
CPSC 290-3 Systems Analysis and Design
CPSC 300-3 Software Engineering I
CPSC 301-3 Software Engineering II
CPSC 320-3 Programming Languages
CPSC 321-3 Operating Systems
CPSC 325-3 Introduction to Compiler Design

| CPSC 340-3 | Theory of Computation |
| :---: | :---: |
| CPSC 370-3 | Functional and Logic Programming |
| CPSC 371-3 | Artificial Intelligence |
| CPSC 421-3 | Advanced Compilation Techniques |
| CPSC 422-3 | Database Systems |
| CPSC 434-3 | Hardware Architecture |
| CPSC 440-3 | Computer Networks |
| CPSC 441-3 | Distributed Systems |
| CPSC 442-3 | Parallel Computing |
| CPSC 472-3 | Knowledge Based Systems |
| CPSC 474-3 | Natural Language Processing |
| CPSC 482-3 | Data Structures II |
| MATH 200-3 | Calculus III |
| MATH 201-3 | Introduction to Complex Analysis |
| MATH 220-3 | Linear Algebra |
| MATH 221-3 | Operations Research |
| MATH 224-3 | Foundations of Modern Mathematics |
| MATH 226-3 | Advanced Linear Algebra |
| MATH 230-3 | Linear Differential Equations and Boundary Value Problems |
| MATH 302-3 | Theory of Metric Spaces |
| MATH 320-3 | Survey of Algebra |
| MATH 321-3 | Topology |
| MATH 333-3 | Partial Differential Equations |
| MATH 334-3 | Ordinary Differential Equations |
| MATH 335-3 | Numerical Analysis I |
| MATH 340-3 | Introduction to Probability |
| MATH 341-3 | Introduction to Statistics |
| MATH 370-3 | Geometry I |
| MATH 402-3 | Topological and Normed Linear Spaces |
| MATH 403-3 | Measure Theory and Integration |
| MATH 420-3 | Structures of Groups and Rings |
| MATH 421-3 | Field Theory |
| MATH 425-3 | Mathematical Logic |
| MATH 433-3 | Topics in Partial Differential Equations |
| MATH 434-3 | Topics in Applied Mathematics |
| MATH 435-3 | Numerical Analysis II |
| MATH 440-3 | Advanced Probability and Statistics |
| MATH 450-3 | Combinatorics |
| MATH 455-3 | Graphs and Algorithms |
| MATH 480-3 | Number Theory |
| Physical Science Courses |  |
| CHEM 200-3 | Physical Chemistry I |
| CHEM 201-3 | Organic Chemistry I |
| CHEM 202-3 | Inorganic Chemistry I |
| CHEM 203-3 | Organic Chemistry II |
| CHEM 204-3 | Introductory Biochemistry |
| CHEM 210-3 | Analytical Chemistry I |
| CHEM 220-3 | Organic and Biochemistry |
| CHEM 221-1 | Organic and Biochemistry Lab |
| CHEM 250-1 | Organic Chemistry Lab I |
| CHEM 251-1 | Organic Chemistry Lab II |
| CHEM 300-3 | Physical Chemistry II |
| CHEM 301-3 | Advanced Organic Chemistry I |
| CHEM 302-4 | Environmental Chemistry I |
| CHEM 303-3 | Quantum Chemistry |
| CHEM 304-3 | Advanced Organic Chemistry II |

CPSC 340-3 Theory of Computation
CPSC 370-3 Functional and Logic Programming
Artificial Intelligence

CPSC 422-3 Database Systems
CPSC 434-3 Hardware Architecture
CPSC 440-3 Computer Networks
CPSC 441-3 Distributed Systems
Parallel Computing
CPSC 472 Knowledge Based Systoms
CPSC 482-3 Data Structures II
MATH 200-3 Calculus III
MATH 201-3 Introduction to Complex Analysis
Linear Algebra
Operations Research

MATH 226-3 Advanced Linear Algebra
MATH 230-3 Linear Differential Equations and Boundary Value Problems
MATH 302-3 Theory of Metric Spaces
Survey of Algebra
MATH 333-3 Partial Differential Equations
MATH 334-3 Ordinary Differential Equations
MATH 335-3 Numerical Analysis I
Introduction to Probability
MATH 341-3 Introduction to Statistics
Geometry

MATH 403-3 Measure Theory and Integration
MATH 420-3 Structures of Groups and Rings
MATH 421-3 Field Theory
Mathematical Logic
Topics in Partia Differential Equations

MATH 435-3 Numerical Analysis II
MATH 440-3 Advanced Probability and Statistics
MATH 450-3 Combinatorics
MATH 455-3 Graphs and Algorithms
MATH 480-3 Number Theory

## Physical Science Courses

CHEM 200-3 Physical Chemistry I
CHEM 201-3 Organic Chemistry I
CHEM 202-3 Inorganic Chemistry I
CHEM 203-3 Organic Chemistry II
CHEM 204-3 Introductory Biochemistry
CHEM210-3
220-3

CHEM 250-1 Organic Chemistry Lab I
CHEM 251-1 Organic Chemistry Lab II
CHEM 300-3 Physical Chemistry II
CHEM 301-3 Advanced Organic Chemistry I
Environmentar Chemistryl

CHEM 304-3 Advanced Organic Chemistry II

CHEM 305-3 Physical Chemistry III
CHEM 306-3 Intermediary Metabolism
CHEM 307-3 Proteins
CHEM 308-3 Biochemistry Lab II
CHEM 310-3 Analytical Chemistry II
CHEM 311-3 Analytical Chemistry III
CHEM 312-3 Organic Chemistry Lab III
CHEM 315-3 Physical Chemistry Lab
CHEM 320-3 Inorganic Chemistry II
CHEM 321-3 Inorganic Chemistry III
CHEM 322-3 Inorganic Chemistry Lab
CHEM 400-3 Topics in Environmental Chemistry
CHEM 401-3 Chemistry Seminar
CHEM 402-3 Topics in Organic Chemistry
CHEM 403-3 Topics in Inorganic Chemistry
CHEM 404-3 Topics in Physical Chemistry
CHEM 405-3 Topics in Biochemistry
PHYS 200-3 Thermal Physics
PHYS 202-4 Electromagnetism and Optics
PHYS 205-3 Modern Physics I
PHYS 206-4 Modern Physics II
PHYS 300-3 Classical Mechanics
PHYS 302-3 Quantum Mechanics I
PHYS 304-3 Biophysics
PHYS 305-4 Electronics
PHYS 307-3 Selected Topics in Environmental Physics
PHYS 310-3 Classical Electromagnetism I
PHYS 351-3 Optics and Photonics I
PHYS 390-3 Advanced Physics Laboratory
PHYS 400-3 Quantum Mechanics II
PHYS 404-3 Solid State Physics
PHYS 406-3 Subatomic Physics
PHYS 407-3 Statistical Mechanics
PHYS 408-4 Experimental Methods in Physics
PHYS 409-3 Mathematical Methods in Physics
PHYS 410-3 Classical Electromagnetism II

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 120 credit hours, however: (a) electives must be chosen to ensure upper and lower division requirements are met; (b) at least two of these electives must be in Humanities or Social Sciences (in addition to breadth requirements).

## Anthropology (BA Program)

Karin Beeler, Associate Professor, and Program Chair
Michel Bouchard, Associate Professor
Ellen Facey, Associate Professor
Richard Lazenby, Associate Professor
Jim McDonald, Associate Professor
Caroline Butler, Assistant Professor
Angèle Smith, Assistant Professor
Farid Rahemtulla, Lecturer
Mike Evans, Adjunct Professor
Philip Hobler, Adjunct Professor
Laurie Ann Nock, Adjunct Professor
Alan Segal, Adjunct Professor
Jose Zarate, Adjunct Professor
Anthropology is the integrated biological and sociocultural investigation of humankind, from the time of our pre-human ancestors to the present, including the study of both small and large scale societies. The program includes courses in archaeological, biological, linguistic and sociocultural anthropology. While a small number of mandatory courses will ensure that all students in the program share basic understanding of the range of anthropological approaches, students will be able to select courses within the program and from other parts of the curriculum to focus on specific interests. The following suggestions illustrate the range of possibilities: a student with an interest in language could have options within the programs in First Nations Studies, International Studies, English and Psychology; a student intending to enter a graduate program in archaeology might select courses from First Nations Studies, Geology, Geography, History and Environmental Studies programs; a student planning to work in the subfield of sociocultural anthropology could select courses from First Nations Studies, International Studies, Northern Studies, Women's Studies and Social Work; a student interested in biological (or medical) anthropology would include courses in Biology, Environmental Studies and Statistics; and a career in museology or cultural property management might benefit from a background in Resource Recreation and Tourism or administration as well as First Nations Studies, International Studies, History and Northern Studies.

Anthropology prepares students for entrance to a number of graduate programs (Archaeology, Biological and Sociocultural Anthropology, Museology), several types of professional programs (Law, Library and Information Science, Communicative Disorders, Social Work, Education, etc.) or employment in government or the private sector. Students aiming towards specific career goals should discuss their interests with advisors in the program at an early stage.

## Major in Anthropology

Students may declare a major after a first year including ANTH 100-3 (Archaeological and Biological Approaches) and ANTH 101-3 (Peoples and Cultures). The major requires students to take 54 credit hours in Anthropology courses ( 18 courses). At least 24 credit hours must be upper division Anthropology courses. Students may not take more than 60 credit hours of Anthropology without written permission of the Program Chair.

The minimum requirement for completion of a Bachelor of Arts with a major in Anthropology is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

100 Level
ANTH 100-3 Archaeological and Biological Approaches
ANTH 101-3 Peoples and Cultures

## 200 Level

ANTH 200-3 Biological Anthropology
ANTH 205-3 Introduction to Archaeology
ANTH 210-3 Understanding Theory
Six additional credit hours from the 200 level from two of the following subfields: Social Anthropology, Biological Anthropology, and Archaeology

## Upper Division Requirement

## 300/400 Level

ANTH 300-3 Methods in Social Anthropology
or ANTH 301-3 Archaeological Lab Methods
ANTH 310-3 Applied Anthropology
Eighteen additional credits from 300 and 400 level Anthropology courses

## Subject Requirement

Nine credit hours of electives at any level in Anthropology to ensure completion of a minimum of 54 credit hours for the major.

## Elective Requirement

Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours.

## BA Honours - Anthropology

The BA Honours - Anthropology provides a higher level of training and specialization for students planning to proceed to academic and professional postgraduate study. Acceptance into the Anthropology Honours Program is by written application to the Program Chair, in which the student identifies the subdiscipline of interest, provides a statement of career objectives, and attaches an unofficial copy of their current transcript. The Honours Program is open to all students majoring in Anthropology who:

1. have completed 60 credit hours of course work
2. have completed all lower level requirements for the major in Anthropology
3. possess a cumulative GPA of 3.33 .

In addition to the requirements for the Major in Anthropology, the Honours student will complete 12 additional credit hours, for a minimum total of 132 credit hours to graduate. These 12 credit hours derive from three courses, in a directed sequence of study.

## ANTH 500-3 Method and Theory Seminar <br> ANTH 501-3 Research Prospectus <br> ANTH 502-6 Honours Thesis

## Joint Anthropology and Geography (BA)

The minimum requirement for completion of a Bachelor of Arts with a Joint Major in Anthropology and Geography is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Courses that meet the spirit of the breadth requirement, by introducing students to a broad body of knowledge in a given discipline or area, will also be considered as substitutes for the courses listed below by the appropriate Dean. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree.

Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Requirements

## Lower Division Requirement

ANTH 100-3 Archaeological and Biological Approaches
ANTH 101-3 Peoples and Cultures

One of:
ECON 100-3 Microeconomics
ECON 101-3 Macroeconomics
GEOG 100-3 Environments and People
GEOG 101-3 Human Geography
POLS 100-3 Contemporary Political Issues
One of:
FNST 100-3 Aboriginal Peoples of Canada
HIST 110-3 Indigena
HIST 210-3 Canada Before Confederation
HIST 211-3 Canada Since Confederation
ANTH 200-3 Biological Anthropology
ANTH 205-3 Introduction to Anthropology
ANTH 210-3 Understanding Theory
One of:
ANTH 201-3 Medical Anthropology
ANTH 206-3 Ethnography in Northern British Columbia
ANTH 207-3 Popular Culture
ANTH 209-3 Pacific Ethnography
ANTH 211-3 Anthropology through Film
ANTH 214-3 Anthropology of Europe
ANTH 215-3 Anthropology of Canada
ECON 205-3 Statistics for Social and Management Sciences
GEOG 202-3 Economic Geography
GEOG 204-3 Introduction to GIS for the Social Sciences
GEOG 206-3 Social Geography

## Upper Division Requirement

ANTH 300-3 Methods in Social Anthropology
ANTH 310-3 Applied Anthropology
One of:
COMM 332-3 Business and Professional Ethics
ENVS 414-3 Environmental and Professional Ethics
POLS 317-3 Ethics
One of:
ANTH 451-3 Traditional Use Studies
ENPL 419-3 Social Research Methods
GEOG 301-3 Cultural Geography
GEOG 305-3 Political Geography
GEOG 309-3 Geographies of Migration and Settlement
GEOG 403-3 Aboriginal Geography
Two of:
ANTH 400-3 Topics in Anthropological Theory
ANTH 401-3 Anthropological Perspectives on Inequality
ANTH 404-3 Comparative Study of Indigenous Peoples of the World
ANTH 405-3 Topics in Landscapes and Place
ANTH 406-3 Feminist Perspectives in Anthropology
ANTH 407-3 Topics in British Columbia Ethnography
ANTH 410-3 Theory of Nation and State
ANTH 413-3 Topics in Environmental Anthropology
ANTH 414-3 Religion, Ideology, and Belief Systems
ANTH 415-3 Economic Anthropology

ANTH 419-3 Political and Legal Anthropology
Two of:
GEOG 308-3 Introduction to Medical Geography
GEOG 401-3 Resource Geography
GEOG 422-3 Geography of the World Economy
GEOG 424-3 Social Geography of Northern Communities
GEOG 426-3 Culture, Rights \& Power
GEOG 428-3 Advanced Medical Geography

## Elective Requirement

Elective course hours as necessary to ensure completion of a minimum of 120 credit hours, of which at least 21 credit hours must be at the 300 and 400 level.

## Minor in Anthropology: Archaeological Stream

The minor in Anthropology Archaeological Stream requires completion of a total of 21 credit hours (seven courses), consisting of four lower division courses ( 12 credit hours) and three upper division courses (nine credit hours). A maximum of two courses (six credit hours) used to fulfill program requirements for a major (or another minor) may also be used to fulfill requirements for a minor in Anthropology Archaeological Stream.

## Requirements

ANTH 100-3 Archaeological and Biological Approaches
ANTH 203-3 Archaeology of the Americas
ANTH 205-3 Introduction to Archaeology
ANTH 212-3 Archaeology of the Old World
Select nine credit hours from:
ANTH 301-3 Archaeological Lab Methods
ANTH 325-3 Archaeological Theory
ANTH 335-3 Archaeological Heritage Management
ANTH 380-3 Special Topics in Archaeology
ANTH 409-3 Topics in British Columbia Archaeology
ANTH 425-3 Introduction to Zooarchaeology
ANTH 430-3 Stone Tools in Archaeology
ANTH 440-(3-6) Internship
ANTH 498-(3-6) Special Topics in Anthropology
ANTH 499-(3-6) Independent Study

## Minor in Anthropology: Biological Stream

The minor requires completion of a total of 18 credit hours (six courses), consisting of two lower division courses (six credit hours) and four upper division courses ( 12 credit hours). With approval of the Chair, a maximum of one course (three credit hours) used to fulfill requirements for a non-Anthropology major (or another minor) may also be used to fulfill program requirements for the minor in Anthropology Biological Stream.

## Requirements

ANTH 100-3 Archaeological and Biological Approaches
ANTH 200-3 Biological Anthropology
ANTH 312-3 Human Adaptability
Select nine credit hours from:

| ANTH 311-3 | Nutritional Anthropology |
| :--- | :--- |
| ANTH 320-3 | Biology of Circumpolar Peoples |
| ANTH 411-3 | Topics in Biological Anthropology |
| ANTH 420-3 | Races, Racism, and Human Biology |
| ANTH 499-(3-6) | Independent Study |

## Minor in Anthropology: General Stream

The minor requires completion of a total of 18 credit hours (six courses), consisting of two lower division courses (six credit hours) and four upper division Anthropology courses (12 credit hours) no more than two of which would be chosen from any single existing Anthropology Minor stream.

## Requirements

## Lower Division Requirement

ANTH 100-3 Archaeological and Biological Approaches
or
ANTH 101-3 Peoples and Cultures
and
ANTH 210-3 Understanding Theory

## Upper Division Requirement

Four upper division courses, no more than two of which would be chosen from any single existing minor streams.

## Minor in Anthropology: Sociocultural Stream

The minor requires completion of a total of 18 credit hours (six courses), consisting of two lower division courses (six credit hours) and four upper division courses (12 credit hours).

## Requirements

Select six credit hours from:
ANTH 101-3 Peoples and Cultures or
ANTH 211-3 Anthropology Through Film and
ANTH 210-3 Understanding Theory
Select 12 credit hours from:

| ANTH 300-3 | Methods in Social Anthropology |
| :--- | :--- |
| ANTH 303-3 | Archives/Texts/Museums |
| ANTH 304-3 | Kinship and Social Organization |
| ANTH 305-3 | Circumpolar Ethnography |
| ANTH 306-3 | Culture and Communication |
| ANTH 310-3 | Applied Anthropology |

ANTH 303-3 Archives/Texts/Museums
ANTH 304-3 Kinship and Social Organization
Circumpolar Ethnography
ANTH 310-3 Applied Anthropology

## Undergraduate Programs: Anthropology, Biochemistry \& Molecular Biology

ANTH 400-3
ANTH 404-3
ANTH 405-3
ANTH 406-3
ANTH 407-3
ANTH 409-3
ANTH 410-3
ANTH 413-3 Environmental Anthropology
ANTH 414-3 Religion, Ideology, and Belief Systems
ANTH 415-3 Economic Anthropology
ANTH 419-3 Political and Legal Anthropology
ANTH 421-3 Ethnographic Field Methods
ANTH 422-3 Ethnographic Research Project
ANTH 423-3 Urban Anthropology

# Biochemistry \& Molecular Biology (BSc Program) 

Keith Egger, Professor, and Program Co-Chair<br>Ron Thring, Professor, and Program Co-Chair<br>Chow Lee, Associate Professor<br>Kerry Reimer, Associate Professor<br>Mark Shrimpton, Associate Professor<br>Andrea Gorrell, Assistant Professor<br>Brent Murray, Assistant Professor<br>Stephen Rader, Assistant Professor<br>Daniel Erasmus, Senior Lab Instructor

Biochemistry and Molecular Biology are the disciplines upon which Biotechnology is based. The Biochemistry and Molecular Biology program provides students with a thorough understanding of all aspects of the life sciences, including practical and theoretical studies along with an understanding of ethical issues. The course of study is truly an amalgam of both disciplines. It also includes a grounding in organic chemistry and the physical sciences as these are the disciplines from which modern Biochemistry and Molecular Biology were born. The degree is designed with sufficient flexibility to allow students to follow their interests and they can expand the degree to include minors or course work in any number of complementary disciplines from computer science to mathematics to business to environmental studies.

## Major in Biochemistry and Molecular Biology

The major in Biochemistry and Molecular Biology requires students to take at least 85 credit hours of Biology and Chemistry courses, of which 42 credit hours must be upper division (i.e. 300 or 400 level). The minimum requirement for completion of a Bachelor of Science with a major in Biochemistry and Molecular Biology is 129 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Undergraduate Programs: Biochemistry \& Molecular Biology

## Program Requirements

## Lower Division Requirement

100 Level
BIOL 101-4 Introductory Biology I
BIOL 102-4 Introductory Biology II
CHEM 100-3 General Chemistry I
CHEM 101-3 General Chemistry II
CHEM 120-1 General Chemistry Lab I
CHEM 121-1 General Chemistry Lab II
PHYS 100-4 Introduction to Physics I
or PHYS 110-4 Introductory Physics I: Mechanics
PHYS 101-4 Introduction to Physics II or PHYS 111-4 Introductory Physics II: Waves \& Electricity

One of the following two options:
MATH 100-3 Calculus I
or MATH 105-3 Enriched Calculus
and MATH 101-3 Calculus II
or MATH 152-3 Calculus for Non-Majors and Elective Credit-3
Students are strongly encouraged to take MATH 100-3 or MATH 105-3 and MATH 101-3, for the first year Mathematics requirement.

## 200 Level

BIOL 201-3
BIOL 203-3 Microbiology
BIOL 210-3 Genetics
CHEM 201-3 Organic Chemistry I
CHEM 203-3 Organic Chemistry II
CHEM 204-3 Introductory Biochemistry
CHEM 250-1 Organic Chemistry Lab I
CHEM 251-1 Organic Chemistry Lab II
CHEM 255-1 Biochemistry Lab I

## Upper Division Requirement

## 300 Level

BIOL 311-3 Cell and Molecular Biology
BIOL 323-3 Evolutionary Biology
CHEM 306-3 Intermediary Metabolism
CHEM 307-3 Proteins
CHEM 308-3 Biochemistry Lab II
CHEM 330-3 Nucleic Acids
CHEM 340-3 Physical Biochemistry

## 400 Level

BIOL 423-3 Molecular Evolution and Ecology
BIOL 424-3 Molecular Cell Physiology
BIOL 425-3 Applied Genetics and Biotechnology
CHEM 405-3 Topics in Biochemistry
CHEM 409-3 Enzymology

## Subject Requirements

Twelve additional credit hours of Biology and/or Chemistry at the 200 level or above, of which at least 6 credit hours must be at the 300 or 400 level to ensure completion of 42 upper division Biology and/or Chemistry credits. Note that NRES 430-6 can count toward this requirement with permission of the Biology Program Chair.

## Elective Requirements

Elective credit hours as necessary to ensure completion of 129 credit hours.

## Minor in Biochemistry

The minor in Biochemistry is designed to provide students with a core of study in the field of Biochemistry. The program of study includes a grounding in organic chemistry and biology since these are the traditional disciplines from which modern Biochemistry was born. Thus, in addition to the required courses in Biochemistry, students will be required to complete six credit hours of organic chemistry at the 200 level and at least two courses in Biology.

The minimum requirement for completion of the minor in Biochemistry is 27 credit hours.

## 200 Level

BIOL 210-3 Genetics
CHEM 201-3* Organic Chemistry I
CHEM 203-3* Organic Chemistry II
CHEM 204-3* Introductory Biochemistry
*Note: Students required to take CHEM 220-3 (Organic and Biochemistry) and CHEM 221-1 (Organic and Biochemistry Lab) for their majors program should substitute CHEM 201-3 (Organic Chemistry I), CHEM 203-3 (Organic Chemistry II) and CHEM 204-3 (Introductory Biochemistry).

300 Level
BIOL 311-3 Cell and Molecular Biology
CHEM 306-3 Intermediary Metabolism
CHEM 307-3 Proteins
One of :
BIOL 303-3 Plant Physiology
BIOL 321-3 Animal Physiology
CHEM 308-3 Biochemistry Lab II
400 Level
CHEM 405-3 Topics in Biochemistry

## Biology (BSc Program)

Keith Egger, Professor, and Program Chair<br>Max Blouw, Professor<br>Wiliam McGill, Professor<br>Darwyn Coxson, Professor<br>Staffan Lindgren, Professor<br>Russell Dawson, Associate Professor, and Canada Research Chair, Avian Ecology<br>Michael Gillingham, Associate Professor<br>Alex Hawley, Associate Professor<br>Kathy Lewis, Associate Professor<br>Hugues Massicotte, Associate Professor<br>Katherine Parker, Associate Professor and lan McTaggart Cowan<br>Muskwa Kechika Research Chair<br>Ken Otter, Associate Professor<br>Mark Shrimpton, Associate Professor<br>Cecilia Alstrom-Rapaport, Assistant Professor<br>Scott Green, Assistant Professor<br>Dezene Huber, Assistant Professor, and Canada Research Chair, Forest<br>Entomology and Chemical Ecology<br>Chris Johnson, Assistant Professor<br>Lisa Poirier, Assistant Professor<br>Brent Murray, Assistant Professor<br>Jane Young, Assistant Professor<br>Yves Bergeron, Adjunct Professor<br>Alan Carroll, Adjunct Professor<br>Daniel Heath, Adjunct Professor<br>Janet Marsh, Adjunct Professor<br>Susan Stevenson, Adjunct Professor<br>Jenia Blair, Senior Lab Instructor<br>Saphida Migabo, Senior Lab Instructor<br>Roy Rea, Senior Lab Instructor<br>The Bachelor of Science in Biology is a broadly based undergraduate program in biology that is designed to present the major concepts of contemporary biology at the molecular, cellular, organismic, population and community levels. The degree is designed to have sufficient flexibility for the student to follow interests ranging from microbial to plant to fish or wildlife biology. Capitalizing on the northern setting of the University, there is an emphasis on northern flora and fauna, morphological, biochemical, physiological and behavioural modifications to temperate and arctic conditions and the dynamics of microbial, plant and animal populations in northern ecosystems.

## Major in Biology

The major in Biology requires students to take at least 62 credit hours of biology-oriented courses, of which 42 credit hours must be upper division (i.e., 300 or 400 level). Note that NRES 430-6 can count as up to six credit hours toward this requirement (with permission of the Biology Program Chair).

The minimum requirement for the completion of a Bachelor of Science with a major in Biology is 126 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree.

Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

100 Level
BIOL 101-4 Introductory Biology I
BIOL 102-4 Introductory Biology II
CHEM 100-3 General Chemistry I
CHEM 101-3 General Chemistry II
CHEM 120-1 General Chemistry Lab I
CHEM 121-1 General Chemistry Lab II
NRES 100-3 Communications in Natural Resources and Environmental Studies
or ENGL 170-3 Writing and Communication Skills
MATH 152-3 Calculus for Non-majors
PHYS 100-4 Introduction to Physics I
PHYS 101-4 Introduction to Physics II

## 200 Level

BIOL 201-3 Ecology
BIOL 210-3 Genetics
CHEM 201-3 Organic Chemistry I
CHEM 203-3 Organic Chemistry II
CHEM 204-3 Introductory Biochemistry
Two of:
BIOL 202-3 Invertebrate Zoology
BIOL 203-3 Microbiology
BIOL 204-3 Plant Biology
Two of:
ENSC 201-3 Introduction to Atmospheric Science
ENSC 202-3 Introduction to Aquatic Systems
FSTY 205-3 Introduction to Soil Science
GEOG 210-3 Geomorphology

## Upper Division Requirement

## 300 Level

BIOL 311-3 Cell and Molecular Biology
BIOL 323-3 Evolutionary Biology
BIOL 325-3 Ecological Analyses
MATH 342-3 Biostatistics

One of:

| BIOL 303-3 | Plant Physiology |
| :--- | :--- |
| BIOL 321-3 | Animal Physiology |

Two of:

| BIOL 301-3 | Systematic Botany |
| :--- | :--- |
| BIOL 305-3 | Plant Morphology and Anatomy |
| BIOL 307-3 | Ichthyology and Herpetology |
| BIOL 308-3 | Ornithology and Mammalogy |

400 Level
BIOL 410-3 Population and Community Ecology
BIOL 411-3 Conservation Biology
One of:
BIOL 404-3 Plant Ecology
BIOL 406-3 Fish Ecology
BIOL 412-3 Wildlife Ecology

## Subject Requirements

Fifteen additional credit hours chosen from the following, of which at least six credit hours must be at the 400 level:

Any 300 or 400 level BIOL courses
ENSC 406-3 Environmental Modelling
FSTY 309-3 Fire Ecology and Management

## Elective Requirements

Elective credit hours as necessary to ensure completion of a minimum of 126 credit hours.

## Minor in Biology

The minor in Biology offers students in other disciplines the opportunity to gain a solid foundation in the diversity of life and biological processes.

The minor in Biology requires the completion of 26 credit hours, of which 12 credit hours must be at the upper division (i.e., 300 or 400 level).

A maximum of four courses (consisting of 100 level courses plus two courses at the 200 level or beyond to a maximum of 14 credit hours) which are used to fulfill requirements for a major or another minor may also be used to fulfill program requirements for a minor in Biology.

## Requirements

BIOL 101-4 Introductory Biology I

BIOL 102-4 Introductory Biology II
One of:

| BIOL 201-3 | Ecology |
| :--- | :--- |
| BIOL 210-3 | Genetics |

One of:
BIOL 202-3 Invertebrate Zoology
BIOL 203-3 Microbiology
BIOL 204-3 Plant Biology
One of:
BIOL 301-3 Systematic Botany
BIOL 305-3 Plant Morphology and Anatomy
BIOL 307-3 Ichthyology and Herpetology
BIOL 308-3 Ornithology and Mammalogy
One of:
BIOL 303-3 Plant Physiology
BIOL 311-3 Cell and Molecular Biology
BIOL 321-3 Animal Physiology
Six additional credit hours in Biology at the 400 level.

## School of Business (BComm Program)

Robert Ellis, Professor, and Program Chair
Charles Schell, MBA Program Director
Han Donker, Associate Professor
Lloyd Spurrell, Associate Professor
Jing Chen, Assistant Professor
Sungchul Choi, Assistant Professor
Elizabeth Croft, Assistant Professor
Balbinder Deo, Assistant Professor
Tony Fang, Assistant Professor
Rick Tallman, Assistant Professor
Ian Birch, Lecturer
Wendy Fellers, Lecturer
Xin Ge, Lecturer
Myron Gordon, Lecturer
Alex Karlen-Ng, Lecturer
S. James Sherritt, Lecturer

Theo van der Pol, Lecturer
The School of Business offers a program leading to the degree of Bachelor of Commerce. This program provides education in business as well as exposure to the liberal arts, social sciences, and natural sciences. The program offers students the ability to major in the areas of Accounting, Finance, General Business, International Business or Marketing. Although all students must follow the program of study of at least one of the specified majors, the Bachelor of Commerce degree program has been designed to provide students with an exposure to all aspects of the contemporary business world. The objective of the program is to adequately prepare students to deal with the increasingly complex and dynamic environment in which business and labour must operate. While the program focuses on a wide range of business activities and types of organizations, special emphasis is placed on industries and firms of relevance to the region of northern British Columbia including small business/entrepreneurship, tourism and forestry. Exposure to these industries will occur within individual courses as part of course content, as well as through the use of
relevant case studies and practica. In addition, individual courses relating to the industries emphasized are available either within the Commerce program, or through other relevant programs.
The minimum requirement for completion of a Bachelor of Commerce is 120 credit hours.

Students not having the appropriate prerequisites for any courses must consult with the Business Advisor.

## Common Requirements for all Business Students

Note: Students enrolling in any course required for a major in the Bachelor of Commerce degree must have completed all prerequisite courses with a minimum of C- or better. In exceptional circumstances the Program Chair may waive this requirement on a case by case basis.

## Lower Division Requirement

100 Level
COMM 100-3* Introduction to Canadian Business
ECON 100-3 Microeconomics
ECON 101-3 Macroeconomics
MATH 150-3** Finite Mathematics for Business and Economics
or MATH 220-3 Linear Algebra
MATH 152-3** Calculus for Non-majors
or MATH 100-3 Calculus I
*Students transferring with 30 or more credit hours of courses required for the Commerce degree are exempt from this requirement.
**Students wishing to pursue additional Math courses as electives are advised to choose MATH 100-3 (Calculus I) and MATH 220-3 (Linear Algebra).

## 200 Level

COMM 210-3 Financial Accounting
COMM 211-3 Managerial Accounting
COMM 220-3 Financial Management I
COMM 230-3 Organizational Behaviour
COMM 240-3 Introduction to Marketing
COMM 251-3 Introduction to Management Science
CPSC 250-3 Applied Business Computing
ECON 205-3 Statistics for the Social and Management Sciences
or MATH 242-3 Statistics for Social and Health Sciences

## Upper Division Requirement

## 300 and 400 Level

COMM 300-3 Introduction to Business Law
COMM 320-3 Financial Management II
COMM 330-3 Human Resource Management
COMM 350-3 Production and Operations Management
COMM 351-3 Management Information Systems
COMM 400-3 Business Policy I
ECON 310-3 Intermediate Microeconomic Theory
ECON 311-3 Intermediate Macroeconomic Theory

## Major in Accounting

Every organization needs to keep track of its financial operations and financial position. Accounting is concerned with the measurement, provision, interpretation and application of financial and economic information for the efficiency and evaluation of an organization's operations. The information provided by the accounting function is employed for effective planning, control and decision making by management, and to report on the organization's financial operations to shareholders, debtholders, government and other stakeholders of the firm. Graduates with an Accounting major are in demand by all sectors of the economy, including government, business, and public accounting firms. An Accounting major is recommended for students who wish to become Chartered Accountants (CAs), Certified General Accountants (CGAs), or Certified Management Accountants (CMAs). The minimum requirement for a Bachelor of Commerce with a major in Accounting is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

Note: Students enrolling in any course required for a major in the Bachelor of Commerce degree must have completed all prerequisite courses with a minimum of C - or better. In exceptional circumstances the Program Chair may waive this requirement on a case by case basis.

## Lower Division Requirement

## 100 Level

COMM 100-3* Introduction to Canadian Business
ECON 100-3 Microeconomics
ECON 101-3 Macroeconomics
MATH 150-3** Finite Mathematics for Business and Economics or MATH 220-3 Linear Algebra
MATH 152-3** Calculus for Non-majors
or MATH 100-3 Calculus I
*Students transferring with 30 or more credit hours of courses required for the Commerce degree are exempt from this requirement.

[^1]Students not having the appropriate prerequisites for any courses must consult with the Business Advisor.

## 200 Level

COMM 210-3 Financial Accounting
COMM 211-3 Managerial Accounting
COMM 220-3 Financial Management I
COMM 230-3 Organizational Behaviour
COMM 240-3 Introduction to Marketing
COMM 251-3 Introduction to Management Science
CPSC 250-3 Applied Business Computing
ECON 205-3 Statistics for the Social and Management Sciences or MATH 242-3 Statistics for Social and Health Sciences

## Upper Division Requirement

## 300 and 400 Level

COMM 300-3 Introduction to Business Law
COMM 310-3 Intermediate Financial Accounting I
COMM 311-3 Intermediate Financial Accounting II
COMM 312-3 Intermediate Managerial Accounting
COMM 320-3 Financial Management II
COMM 330-3 Human Resource Management
COMM 350-3 Production and Operations Management
COMM 351-3 Management Information Systems
COMM 400-3 Business Policy I
COMM 411-3 Advanced Management Accounting
ECON 310-3 Intermediate Microeconomic Theory
ECON 311-3 Intermediate Macroeconomic Theory
One of:
COMM 410-3 Accounting Theory
COMM 414-3 Advanced Financial Accounting
Two of:
COMM 313-3 Personal Taxation
COMM 314-3 Corporate Taxation
COMM 315-3 International Accounting
COMM 412-3 Auditing
COMM 413-3 Accounting: Advanced Topics

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 120 credit hours.

## Major in Finance

Finance involves evaluating profitability and valuing real investments such as capital projects, as well as financial securities such as stocks, bonds, options and futures. In addition to the study of sources of capital and financing decisions of the firm and individual investors, the Finance major also studies the management of financial institutions such as banks and trust companies. The tools of Finance are used by small and large firms, government and individual investors. Instruction in Finance provides valuable information regarding financing and evaluating investment opportunities to students planning to enter into business for themselves. Government and firms employ Finance
majors as financial analysts as well as in general management positions. In addition, the financial services industry is one of the fastest growing industries in Canada. Individuals interested in positions in the financial sector, or pursuing either the Chartered Financial Planner (CFP) or Chartered Financial Analyst (CFA) designations, or completing the Canadian Securities Course (CSC), should consider majoring in Finance.

The minimum requirement for a Bachelor of Commerce with a major in Finance is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

Note: Students enrolling in any course required for a major in the Bachelor of Commerce degree must have completed all prerequisite courses with a minimum of C - or better. In exceptional circumstances the Program Chair may waive this requirement on a case by case basis.

## Lower Division Requirement

## 100 Level

COMM 100-3* Introduction to Canadian Business
MATH 150-3** Finite Mathematics for Business and Economics or MATH 220-3 Linear Algebra
MATH 152-3** Calculus for Non-majors or MATH 100-3 Calculus I
ECON 100-3 Microeconomics
ECON 101-3 Macroeconomics
*Students transferring with 30 or more credit hours of courses required for the Commerce degree are exempt from this requirement.
**Students wishing to pursue additional Math courses as electives are advised to choose MATH 100-3 (Calculus I) and MATH 220-3 (Linear Algebra).

Students not having the appropriate prerequisites for any courses must consult with the Business Advisor.

## 200 Level

COMM 210-3 Financial Accounting
COMM 211-3 Managerial Accounting
COMM 220-3 Financial Management I
COMM 230-3 Organizational Behaviour
COMM 240-3 Introduction to Marketing
COMM 251-3 Introduction to Management Science
CPSC 250-3 Applied Business Computing
ECON 205-3 Statistics for the Social and Management Sciences or MATH 242-3 Statistics for Social and Health Sciences

## Upper Division Requirement

## 300 and 400 Level

COMM 300-3 Introduction to Business Law
COMM 320-3 Financial Management II
COMM 321-3 Investments and Security Analysis
COMM 330-3 Human Resource Management
COMM 350-3 Production and Operations Management
COMM 351-3 Management Information Systems
COMM 400-3 Business Policy I
COMM 420-3 Advanced Financial Management
COMM 422-3 Management of Financial Institutions
ECON 310-3 Intermediate Microeconomic Theory
ECON 311-3 Intermediate Macroeconomic Theory
Two of:
COMM 322-3 International Financial Management
COMM 323-3 Risk, Insurance, and Financial Planning
COMM 421-3 Portfolio Theory and Management
COMM 423-3 Financial Engineering
COMM 429-3 Finance: Advanced Topics

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 120 credit hours.

## Major in General Business

The General Business major allows students to obtain a reasonable depth of knowledge in all the functional areas of business while maintaining a broad-based education in business management. This combination provides the integrative management skills to operate both within and across functional responsibility areas, an ability valued highly by employers. Therefore, General Business majors are in demand by many firms and government organizations. Students intending to start their own business endeavours would also be wellserved by the General Business major.

The minimum requirement for a Bachelor of Commerce with a major in General Business is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

Note: Students enrolling in any course required for a major in the Bachelor of Commerce degree must have completed all prerequisite courses with a minimum of C - or better. In exceptional circumstances the Program Chair may waive this requirement on a case by case basis.

## Lower Division Requirement

## 100 Level

COMM 100-3* Introduction to Canadian Business
ECON 100-3 Microeconomics
ECON 101-3 Macroeconomics
MATH 150-3** Finite Mathematics for Business and Economics
or MATH 220-3 Linear Algebra
MATH 152-3** Calculus for Non-majors
or MATH 100-3 Calculus I
*Students transferring with 30 or more credit hours of courses required for the Commerce degree are exempt from this requirement.
**Students wishing to pursue additional Math courses as electives are advised to choose MATH 100-3 (Calculus I) and MATH 220-3 (Linear Algebra).

Students not having the appropriate prerequisites for any courses must consult with the Business Advisor.

## 200 Level

COMM 210-3 Financial Accounting
COMM 211-3 Managerial Accounting
COMM 220-3 Financial Management I
COMM 230-3 Organizational Behaviour
COMM 240-3 Introduction to Marketing
COMM 251-3 Introduction to Management Science
CPSC 250-3 Applied Business Computing
ECON 205-3 Statistics for the Social and Management Sciences or MATH 242-3 Statistics for Social and Health Sciences

## Upper Division Requirement

## 300 and 400 Level

COMM 300-3 Introduction to Business Law
COMM 302-3 Entrepreneurship
COMM 320-3 Financial Management II
COMM 330-3 Human Resource Management
COMM 350-3 Production and Operations Management
COMM 351-3 Management Information Systems
COMM 400-3 Business Policy I
ECON 310-3 Intermediate Microeconomic Theory
ECON 311-3 Intermediate Macroeconomic Theory

Twelve credit hours selected from any of the other four majors or from the following (with no more than six credit hours in any one major area):

| COMM 331-3 | Organizational Theory |
| :--- | :--- |
| COMM 332-3 | Business and Professional Ethics |
| COMM 333-3 | Women in Organizations |
| COMM 401-3 | Business Policy II |
| COMM 430-3 | Organization Studies: Selected Topics |
| COMM 431-3 | Industrial Relations |
| COMM 432-3 | Cross-cultural Workplace Practices |
| COMM 439-3 | HRM: Selected Topics |
| COMM 450-3 | Total Quality Management |
| COMM 498-(3-6) | Special Topics in Business Administration |

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 120 credit hours.

## Major in International Business

In recent years the importance of an international perspective for students of business has increased as a result of the increasing globalization of the economy. The International Business major exposes students to the impact of the international environment on the functional areas of business management. In conjunction with courses in the International Studies program, the major in International Business allows students to focus on a country or region of the world, providing education in language, culture and business practice. Graduates are suited to work in firms or government agencies involved in international operations.

The minimum requirement for a Bachelor of Commerce with a major in International Business is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and
that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

Note: Students enrolling in any course required for a major in the Bachelor of Commerce degree must have completed all prerequisite courses with a minimum of C- or better. In exceptional circumstances the Program Chair may waive this requirement on a case by case basis.

## Lower Division Requirement

100 Level
COMM 100-3* Introduction to Canadian Business
ECON 100-3 Microeconomics
ECON 101-3 Macroeconomics
INTS 101-3 Canada and the World
or INTS 205-3 Introduction to International Studies
MATH 150-3** Finite Mathematics for Business and Economics
or MATH 220-3 Linear Algebra
MATH 152-3** Calculus for Non-majors
or MATH 100-3 Calculus I
*Students transferring with 30 or more credit hours of courses required for the Commerce degree are exempt from this requirement.
**Students wishing to pursue additional Math courses as electives are advised to choose MATH 100-3 (Calculus I) and MATH 220-3 (Linear Algebra).

Students not having the appropriate prerequisites for any courses must consult with the Business Advisor.

200 Level
COMM 210-3 Financial Accounting
COMM 211-3 Managerial Accounting
COMM 220-3 Financial Management I
COMM 230-3 Organizational Behaviour
COMM 240-3 Introduction to Marketing
COMM 251-3 Introduction to Management Science
CPSC 250-3 Applied Business Computing
ECON 205-3 Statistics for the Social and Management Sciences
or MATH 242-3 Statistics for Social and Health Sciences

## Upper Division Requirement

## 300 and 400 Level

COMM 300-3 Introduction to Business Law
COMM 303-3 Introduction to International Business
COMM 320-3 Financial Management II
COMM 330-3 Human Resource Management
COMM 350-3 Production and Operations Management
COMM 351-3 Management Information Systems
COMM 400-3 Business Policy I
ECON 310-3 Intermediate Microeconomic Theory
ECON 311-3 Intermediate Macroeconomic Theory

Three of:

$$
\begin{array}{ll}
\text { COMM 315-3 } & \text { International Accounting } \\
\text { COMM 322-3 } & \text { International Financial Management } \\
\text { COMM 432-3 } & \text { Cross-cultural Workplace Practices } \\
\text { COMM 441-3 } & \text { International Marketing }
\end{array}
$$

## International Studies Requirement

Six credit hours of International Studies courses at any level.

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 120 credit hours.

## Major in Marketing

Marketing refers to the set of activities needed to find, build, and serve markets for products and services. Students of marketing will acquire analytical tools from economics, mathematics, statistics and the social and behavioural sciences. A major in Marketing is useful for such positions as account representatives, brand managers, advertising executives and market researchers. Marketing majors may find employment in the private sector, in non-profit organizations, and in government. Marketing concepts and principles are of particular importance to small businesses and new business ventures.

The minimum requirement for a Bachelor of Commerce with a major in Marketing is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

Note: Students enrolling in any course required for a major in the Bachelor of Commerce degree must have completed all prerequisite courses with a minimum of C - or better. In exceptional circumstances the Program Chair may waive this requirement on a case by case basis.

## Lower Division Requirement

```
100 Level
COMM 100-3* Introduction to Canadian Business
ECON 100-3 Microeconomics
ECON 101-3 Macroeconomics
MATH 150-3** Finite Mathematics for Business and Economics
    or MATH 220-3 Linear Algebra
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MATH 152-3** Calculus for Non-majors
or MATH 100-3 Calculus I
*Students transferring with 30 or more credit hours of courses required for the Commerce degree are exempt from this requirement.
**Students wishing to pursue additional Math courses as electives are advised to choose MATH 100-3 (Calculus I) and MATH 220-3 (Linear Algebra).

Students not having the appropriate prerequisites for any courses must consult with the Business Advisor.

## 200 Level

COMM 210-3 Financial Accounting
COMM 211-3 Managerial Accounting
COMM 220-3 Financial Management I
COMM 230-3 Organizational Behaviour
COMM 240-3 Introduction to Marketing
COMM 251-3 Introduction to Management Science
CPSC 250-3 Applied Business Computing
ECON 205-3 Statistics for the Social and Management Sciences or MATH 242-3 Statistics for Social and Health Sciences

## Upper Division Requirement

## 300 and 400 Level

COMM 300-3 Introduction to Business Law
COMM 320-3 Financial Management II
COMM 330-3 Human Resource Management
COMM 343-3 Consumer Behaviour
COMM 350-3 Production and Operations Management
COMM 351-3 Management Information Systems
COMM 400-3 Business Policy I
COMM 442-3 Marketing Strategy
COMM 443-3 Marketing Research
ECON 310-3 Intermediate Microeconomic Theory
ECON 311-3 Intermediate Macroeconomic Theory
Two of:
COMM 340-3 Marketing Communications
COMM 341-3 Sales Management
COMM 342-3 Services Marketing
COMM 344-3 Marketing Channels
COMM 345-3 Retail Management
COMM 441-3 International Marketing
COMM 449-3 Advanced Topics in Marketing

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 120 credit hours.

## Chemistry (BSc Program)

Ron Thring, Professor, and Program Chair
Chow H. Lee, Associate Professor, and National Cancer Institute of Canada Research Scientist
Guy Plourde, Associate Professor
Margot Mandy, Associate Professor
Kerry Reimer, Associate Professor
Todd Whitcombe, Associate Professor
Andrea Gorrell, Assistant Professor
Stephen Rader, Assistant Professor
David Dick, Adjunct Professor
Martha Stark, Adjunct Professor
Alida Hall, Senior Lab Instructor
Umesh Parshotam, Senior Lab Instructor
Chemistry is the fundamental science that deals with the nature of substances and the changes occurring in them. Chemical reactions are the basis of all life. Everything we are or do depends in one way or another on chemistry. A major or minor in chemistry or minor in biochemistry prepares you for a variety of careers in industry, education, ecology, and public service, or for graduate study and research in chemistry and many related fields.

## Major in Chemistry

The major in Chemistry requires students to take at least 64 credit hours of Chemistry, 36 credit hours of which must be upper division (i.e., 300 or 400 level).

The minimum requirement for completion of a Bachelor of Science with a major in Chemistry is 128 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

100 Level
BIOL 101-4 Introductory Biology I
BIOL 102-4 Introductory Biology II
CHEM 100-3 General Chemistry I
CHEM 101-3 General Chemistry II
CHEM 120-1 General Chemistry Lab I
CHEM 121-1 General Chemistry Lab II
CPSC 100-4 Computer Programming I
or CPSC 110-3 Introduction to Computer Systems and Programming
MATH 100-3 Calculus I
or MATH 105-3 Enriched Calculus
MATH 101-3 Calculus II
PHYS 100-4 Introduction to Physics I
or PHYS 110-4 Introductory Physics I: Mechanics
and PHYS 101-4 Introduction to Physics II or PHYS 111-4 Introductory to Physics II: Waves and Electricity

PHYS 110-4 and PHYS 111-4 are strongly recommended.

## 200 Level

CHEM 200-3 Physical Chemistry I
CHEM 201-3 Organic Chemistry I
CHEM 202-3 Inorganic Chemistry I
CHEM 203-3 Organic Chemistry II
CHEM 204-3 Introductory Biochemistry
CHEM 210-3 Analytical Chemistry I
CHEM 250-1 Organic Chemistry Lab I
CHEM 251-1 Organic Chemistry Lab II
MATH 220-3 Linear Algebra
One of :

| MATH 200-3 | Calculus III |
| :--- | :--- |
| MATH 340-3 | Introduction to Probability |
| MATH 342-3 | Biostatistics |

## Upper Division Requirement

## 300 Level

CHEM 300-3 Physical Chemistry II or CHEM 305-3 Physical Chemistry III
CHEM 310-3 Analytical Chemistry II or CHEM 311-3 Analytical Chemistry III
CHEM 315-3 Physical Chemistry Lab
CHEM 320-3 Inorganic Chemistry II
or CHEM 321-3 Inorganic Chemistry III
CHEM 322-3 Inorganic Chemistry Lab

## 400 Level

CHEM 401-3 Chemistry Seminar
CHEM 406-3 Advanced Laboratory I
CHEM 407-3 Advanced Laboratory II
*Nine credit hours of 300 or 400 level Chemistry.
*Three credit hours of 400 level Chemistry.
*A minimum of four courses must be completed.

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 128 credit hours. A total of 54 credit hours of upper division study (300 and 400 level courses) must be successfully completed to meet degree requirements.

## Course Selection

Students interested in the Chemistry program of study should select courses in their first four semesters according to the schedule below. For availability of courses at the 300 and 400 level, students should consult with the Academic Advisor in the Chemistry program.

## Semester One (September)

CHEM 100-3 General Chemistry I
CHEM 120-1 General Chemistry Lab I
BIOL 101-4 Introductory Biology I
CPSC 100-4 Computer Programming I or CPSC 110-3 Introduction to Computer Systems and Programming
MATH 100-3 Calculus I
PHYS 110-4 Introductory Physics I: Mechanics

## Semester Two (January)

CHEM 101-3 General Chemistry II
CHEM 121-1 General Chemistry Lab II
MATH 101-3 Calculus II
PHYS 111-4 Introductory Physics II: Waves and Electricity
BIOL 102-4 Introductory Biology II
Humanities, Social Sciences, or other course from appropriate quadrants

## Semester Three (September)

CHEM 200-3 Physical Chemistry I
CHEM 201-3 Organic Chemistry I
CHEM 210-3 Analytical Chemistry I
CHEM 250-1 Organic Chemistry Lab I
Humanities, Social Sciences, or other course from appropriate quadrants
Three (3) Math or elective credits

## Semester Four (Winter)

CHEM 202-3 Inorganic Chemistry I
CHEM 203-3 Organic Chemistry II
CHEM 204-3 Introductory Biochemistry
CHEM 251-1 Organic Chemistry Lab II
MATH 220-3 Linear Algebra
Three (3) Math or elective credits

## Joint Major in Chemistry/Computer Science

The minimum requirement for completion of a Bachelor of Science with a Joint Major in Chemistry and Computer Science is 126 credit hours.

MATH 342-3 (Biostatistics) may not be used for credit towards any Mathematics or Computer Science major, minor, or joint major.

MATH 150-3 (Finite Mathematics for Business and Economics) may not be used for credit towards any Mathematics or Computer Science major or joint major.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

CHEM 100-3 General Chemistry I
CHEM 101-3 General Chemistry II
CHEM 120-1 General Chemistry Lab I
CHEM 121-1 General Chemistry Lab II
CHEM 200-3 Physical Chemistry I
CHEM 201-3 Organic Chemistry I
CHEM 202-3 Inorganic Chemistry I
CHEM 203-3 Organic Chemistry II
CHEM 210-3 Analytical Chemistry I
CPSC 100-4 Computer Programming I
CPSC 101-4 Computer Programming II
CPSC 141-3 Discrete Computational Mathematics
CPSC 142-3 Discrete Computational Mathematics II
CPSC 200-3 Algorithm Analysis and Development
CPSC 230-4 Introduction to Logic Design
CPSC 231-4 Computer Organization and Architecture
CPSC 281-3 Data Structures I
MATH 100-3 Calculus I
or MATH 105-3 Enriched Calculus
MATH 101-3 Calculus II
MATH 220-3 Linear Algebra

Upper Division Requirement
CHEM 300-3 Physical Chemistry II
or CHEM 305-3 Physical Chemistry III
CHEM 310-3 Analytical Chemistry II or CHEM 311-3 Analytical Chemistry III
CHEM 320-3 Inorganic Chemistry II or CHEM 321-3 Inorganic Chemistry III
*Fifteen credit hours of 300 or 400 level Chemistry.
CPSC 320-3 Programming Languages
CPSC 321-3 Operating Systems
CPSC 370-3 Functional and Logic Programming
*Six credit hours of 300 or 400 level Computer Science.
Six credit hours of 400 level Computer Science (excluding the seminar, project, and special topics courses).
*Nine of these 21 credit hours must be at the 400 level so that a minimum of 15 credit hours of 400 level Chemistry and Computer Science are completed.

One of:
MATH 335-3 Numerical Analysis I
MATH 340-3 Introduction to Probability

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 126 credit hours.

## Joint Major in Chemistry/Mathematics

The minimum requirement for completion of a Bachelor of Science with a Joint Major in Chemistry and Mathematics is 125 credit hours.

MATH 342-3 (Biostatistics) may not be used for credit towards any Mathematics major, minor, or joint major.

MATH 150-3 (Finite Mathematics for Business and Economics) may not be used for credit towards any Mathematics major or joint major.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

CHEM 100-3 General Chemistry I
CHEM 101-3 General Chemistry II
CHEM 120-1 General Chemistry Lab I
CHEM 121-1 General Chemistry Lab II
CHEM 200-3 Physical Chemistry I
CHEM 201-3 Organic Chemistry I
CHEM 202-3 Inorganic Chemistry I
CHEM 203-3 Organic Chemistry II
CHEM 210-3 Analytical Chemistry I
CPSC 100-4 Computer Programming I
MATH 100-3 Calculus I or MATH 105-3 Enriched Calculus
MATH 101-3 Calculus II
MATH 200-3 Calculus III
MATH 201-3 Introduction to Complex Analysis
MATH 220-3 Linear Algebra
MATH 221-3 Operations Research
or MATH 226-3 Advanced Linear Algebra
MATH 230-3 Linear Differential Equations and Boundary Value Problems
PHYS 110-4 Introductory Physics I: Mechanics
PHYS 111-4 Introductory Physics II: Waves and Electricity

## Upper Division Requirement

CHEM 300-3 Physical Chemistry II or CHEM 305-3 Physical Chemistry III
CHEM 310-3 Analytical Chemistry II
or CHEM 311-3 Analytical Chemistry III
CHEM 320-3 Inorganic Chemistry II
or CHEM 321-3 Inorganic Chemistry III
*Nine credit hours of 300 or 400 level Chemistry
Six credit hours of 400 level Chemistry
MATH 320-3 Survey of Algebra
MATH 335-3 Numerical Analysis I
MATH 340-3 Introduction to Probability
*Nine credit hours of 300 or 400 level Mathematics
Six credit hours of 400 level Mathematics
*Three of these 18 credit hours must be at the 400 level so that a minimum of 15 credit hours of 400 level Chemistry and Mathematics are completed.

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 125 credit hours.

## Undergraduate Programs: Chemistry

## Joint Major in Chemistry/Physics

The minimum requirement for completion of a Bachelor of Science with a Joint Major in Chemistry and Physics is 126 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

CHEM 100-3 General Chemistry I
CHEM 101-3 General Chemistry II
CHEM 120-1 General Chemistry Lab I
CHEM 121-1 General Chemistry Lab II
CHEM 200-3 Physical Chemistry I
CHEM 201-3 Organic Chemistry I
CHEM 202-3 Inorganic Chemistry I
CHEM 203-3 Organic Chemistry II
CHEM 210-3 Analytical Chemistry I
CPSC 100-4 Computer Programming I
MATH 100-3 Calculus I or MATH 105-3 Enriched Calculus
MATH 101-3 Calculus II
MATH 200-3 Calculus III
MATH 220-3 Linear Algebra
MATH 230-3 Linear Differential Equations and Boundary Value Problems
PHYS 110-4 Introductory Physics I: Mechanics
PHYS 111-4 Introductory Physics II: Waves and Electricity
PHYS 200-3 Thermal Physics
PHYS 202-4 Electromagnetism and Optics
PHYS 205-3 Modern Physics I

## Upper Division Requirement

CHEM 300-3 Physical Chemistry II or CHEM 305-3 Physical Chemistry III
CHEM 310-3 Analytical Chemistry II or CHEM 311-3 Analytical Chemistry III
CHEM 320-3 Inorganic Chemistry II or CHEM 321-3 Inorganic Chemistry III
CHEM 315-3 Physical Chemistry Lab
Six credit hours of 300 or 400 level Chemistry
Six credit hours of 400 level Chemistry

One of:
MATH 333-3 Partial Differential Equations
MATH 334-3 Ordinary Differential Equations
PHYS 300-3 Classical Mechanics
PHYS 302-3 Quantum Mechanics I
PHYS 390-3 Advanced Physics Laboratory
PHYS 404-3 Solid State Physics
Three credit hours of 300 or 400 level Physics
Six credit hours of 400 level Physics

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 126 credit hours.

## Minor in Chemistry

The minor in Chemistry is designed to provide students with a solid grounding and a core of study in one or more of the subdisciplines of Chemistry. Thus, some flexibility is permitted in satisfying the requirements for a minor. Students have the option to study a range of subdisciplines at the 300 level while counting the 200 level prerequisites toward the minor or to focus on particular subdisciplines through to the 400 level. A maximum of six courses ( 14 credit hours) of the 100 and 200 level courses used to fulfill requirements for a major (or another minor) may also be used toward a minor in Chemistry.

The minimum requirement for completion of the minor in Chemistry is 29 credit hours.

## 100 Level

CHEM 100-3 General Chemistry I
CHEM 101-3 General Chemistry II
CHEM 120-1 General Chemistry Lab I
CHEM 121-1 General Chemistry Lab II

## 200 Level

At least nine credit hours from:
CHEM 200-3 Physical Chemistry I
CHEM 201-3* Organic Chemistry I
CHEM 202-3 Inorganic Chemistry I
CHEM 203-3* Organic Chemistry II
CHEM 204-3* Introductory Biochemistry
CHEM 210-3 Analytical Chemistry I
CHEM 250-1 Organic Chemistry Lab I
CHEM 251-1 Organic Chemistry Lab II
*Note: selections made should incorporate prerequisites for intended upper division courses.

## 300 and 400 Level

At least 12 credit hours from:
CHEM 300-3 Physical Chemistry II
CHEM 301-3 Advanced Organic Chemistry I
CHEM 302-4 Environmental Chemistry I
CHEM 303-3 Quantum Chemistry
CHEM 304-3 Advanced Organic Chemistry II
CHEM 305-3 Physical Chemistry III
CHEM 306-3 Intermediary Metabolism
CHEM 307-3 Proteins
CHEM 308-3 Biochemistry Lab II
CHEM 310-3 Analytical Chemistry II
CHEM 311-3 Analytical Chemistry III
CHEM 312-3 Organic Chemistry Lab III
CHEM 315-3 Physical Chemistry Lab
CHEM 320-3 Inorganic Chemistry II
CHEM 321-3 Inorganic Chemistry III
CHEM 322-3 Inorganic Chemistry Lab
CHEM 400-3 Topics in Environmental Chemistry
CHEM 402-3 Topics in Organic Chemistry
CHEM 403-3 Topics in Inorganic Chemistry
CHEM 404-3 Topics in Physical Chemistry
CHEM 405-3 Topics in Biochemistry
CHEM 408-3 Environmental Chemistry II

## Computer Science (BSc Program)

Liang Chen, Associate Professor, and Program Chair<br>Behcet Sarikaya, Professor<br>Charles Brown, Associate Professor<br>Waqar Haque, Associate Professor<br>Jernej Polajnar, Associate Professor<br>Siamak Rezaei, Associate Professor<br>Saif Zahir, Associate Professor<br>Alex Aravind, Assistant Professor<br>David Casperson, Assistant Professor<br>Desanka Polajnar, Assistant Professor<br>Allan Kranz, Senior Lab Instructor<br>The Computer Science program gives students a thorough exposure to basic areas like computer architecture, programming languages and methodology, algorithms and data structures, systems programming, operating systems and networking, knowledge-based and database systems, software engineering, and theory. The student will develop the advanced practical computing and problem-solving skills required for professional work in modern industry, based on a strong conceptual foundation and on insights into the nature of this rapidly changing field. Each student will use advanced development tools, and will be encouraged to approach problem-solving from a multidisciplinary point of view. The program emphasizes direct cooperation with industry.

## Major in Computer Science

A major in Computer Science requires at least 21 Computer Science courses and at least 67 credit hours in Computer Science, at least 27 hours of which must be upper division courses, and of those upper division credits, at least 12 must be taken at the 400 level.

The following courses may not be used for credit towards a Computer Science major or joint major:

MATH 150-3 Finite Mathematics for Business and Economics
MATH 342-3 Biostatistics
The minimum requirement for completion of a Bachelor of Science with a major in Computer Science is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

*Note: Students enrolling in any Computer Science or Mathematics course with prerequisites are required to have completed all prerequisite courses for that course with a $C$ - or better, or have permission to enrol from the Program Chair.

## Lower Division Requirement

## 100 Level

CPSC 100-4 Computer Programming I
CPSC 101-4 Computer Programming II
CPSC 126-3 Introduction to Computer Systems
CPSC 141-3 Discrete Computational Mathematics
CPSC 142-3 Discrete Computational Mathematics II
MATH 100-3 Calculus I
or MATH 105-3 Enriched Calculus
MATH 101-3 Calculus II

## 200 Level

CPSC 200-3 Algorithm Analysis and Development
CPSC 230-4 Introduction to Logic Design
CPSC 231-4 Computer Organization and Architecture
CPSC 281-3 Data Structures I
CPSC 290-3 Systems Analysis and Design
MATH 220-3 Linear Algebra

## General Science Requirement

PHYS 110-4 Introductory Physics I: Mechanics PHYS 111-4 Introductory Physics II: Waves and Electricity
*Note: In some special cases other science courses approved by the Chair of Computer Science may be used to satisfy this requirement.

## Upper Division Requirement

300 Level
CPSC 320-3 Programming Languages
CPSC 321-3 Operating Systems
CPSC 325-3 Introduction to Compiler Design
CPSC 340-3 Theory of Computation
CPSC 370-3 Functional and Logic Programming
MATH 340-3 Introduction to Probability
*While not required for the major, students are urged to include CPSC 300-3 (Software Engineering I) and CPSC 301-3 (Software Engineering II) in their program.

## 400 Level

At least 12 credit hours of Computer Science courses must be taken at the 400 level, and at least nine of these credit hours must be outside the seminar, project course, research course, or special topics course category.

Alternate courses may be substituted for the above with the written permission of the Program Chair and Dean of the College.

## Subject Requirement

Six additional credit hours of computer science at any level. MATH 335-3 (Numerical Analysis I) may be counted as a computer science course by computer science majors.

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 120 credit hours.

## Joint Major in Chemistry/Computer Science

See Calendar entry under Chemistry.

## Joint Major in Computer Science/ Mathematics

The minimum requirement for completion of a Bachelor of Science with a Joint Major in Computer Science and Mathematics is 124 credit hours.

MATH 342-3 (Biostatistics) may not be used for credit towards any Mathematics or Computer Science major, minor, or joint major.

MATH 150-3 (Finite Mathematics for Business and Economics) may not be used for credit towards any Mathematics or Computer Science major or joint major.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Literacy Requirement

One of:
ENGL 170-3 Writing and Communication Skills
ENGL 270-3 Expository Writing

## Lower Division Requirement

CPSC 100-4 Computer Programming I
CPSC 101-4 Computer Programming II
CPSC 141-3 Discrete Computational Mathematics
CPSC 142-3 Discrete Computational Mathematics II
CPSC 200-3 Algorithm Analysis and Development
CPSC 230-4 Introduction to Logic Design
CPSC 231-4 Computer Organization and Architecture
CPSC 281-3 Data Structures I
MATH 100-3 Calculus I
or MATH 105-3 Enriched Calculus
MATH 101-3 Calculus II
MATH 200-3 Calculus III
MATH 201-3 Introduction to Complex Analysis
MATH 220-3 Linear Algebra
MATH 221-3 Operations Research or MATH 226-3 Advanced Linear Algebra
MATH 224-3 Foundations of Modern Mathematics
MATH 230-3 Linear Differential Equations and Boundary alue Problems

## General Science Requirement

Two of:
BIOL 101-4 Introductory Biology I
BIOL 102-4 Introductory Biology II
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
PHYS 100-4 Introduction to Physics I
or PHYS 110-4* Introductory Physics I: Mechanics
PHYS 111-4* Introductory Physics II: Waves and Electricity
*Note: PHYS 110-4 (Introductory Physics I: Mechanics) and PHYS 111-4 (Introductory Physics II: Waves and Electricity) are strongly recommended for all majors.

## Upper Division Requirement

CPSC 320-3 Programming Languages
CPSC 321-3 Operating Systems
CPSC 370-3 Functional and Logic Programming
*Six credit hours of 300 or 400 level Computer Science.
Six credit hours of 400 level Computer Science (excluding seminar, project, and special topics courses).

## MATH 320-3 Survey of Algebra

MATH 335-3 Numerical Analysis I
MATH 340-3 Introduction to Probability
*Six credit hours of 300 or 400 level Mathematics.
Six credit hours of 400 level Mathematics.
*Three of these 12 credit hours must be at the 400 level so that the total number of Computer Science and Mathematics credit hours at the 400 level is at least 15.

MATH 435-3 (Numerical Analysis II) and CPSC 340-3 (Theory of Computation) are recommended.

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 124 credit hours.

## Joint Major in Computer Science/Physics

The minimum requirement for completion of a Bachelor of Science with a Joint Major in Computer Science and Physics is 127 credit hours.

MATH 342-3 (Biostatistics) may not be used for credit towards any Mathematics or Computer Science major, minor, or joint major.

MATH 150-3 (Finite Mathematics for Business and Economics) may not be used for credit towards any Mathematics or Computer Science major or joint major.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

| CPSC 100-4 | Computer Programming I |
| :--- | :--- |
| CPSC 101-4 | Computer Programming II |
| CPSC 141-3 | Discrete Computational Mathematics |
| CPSC 142-3 | Discrete Computational Mathematics II |
| CPSC 200-3 | Algorithm Analysis and Development |
| CPSC 231-4 | Computer Organization and Architecture |
| CPSC 281-3 | Data Structures I |
| MATH 100-3 | Calculus I |
| or MATH | 105-3 Enriched Calculus |
| MATH 101-3 | Calculus II |
| MATH 200-3 | Calculus III |
| MATH 220-3 | Linear Algebra |
| MATH 230-3 | Linear Differential Equations and Boundary |
|  | Value Problems |
| PHYS 110-4 | Introductory Physics I: Mechanics |
| PHYS 111-4 | Introductory Physics II: Waves and Electricity |
| PHYS 200-3 | Thermal Physics |
| PHYS 202-4 | Electromagnetism and Optics |
| PHYS 205-3 | Modern Physics I |

CPSC 101-4 Computer Programming II
CPSC 141-3 Discrete Computational Mathematics
CPSC 142-3 Discrete Computational Mathematics II
CPSC 200-3 Algorithm Analysis and Development
CPSC 231-4 Computer Organization and Architecture
CPSC 281-3 Data Structures I
MATH 100-3 Calculus I
or MATH 105-3 Enriched Calculus
MATH 101-3 Calculus II
MATH 200-3 Calculus III
MATH 220-3 Linear Algebra
MATH 230-3 Linear Differential Equations and Boundary Value Problems
PHYS 110-4 Introductory Physics I: Mechanics
PHYS 111-4 Introductory Physics II: Waves and Electricity
Thermal Physics
PHYS 205-3 Modern Physics I

## Undergraduate Programs: Computer Science, Economics

## Upper Division Requirement

CPSC 320-3 Programming Languages
CPSC 321-3 Operating Systems
CPSC 370-3 Functional and Logic Programming
*Six credit hours of 300 or 400 level Computer Science. Six credit hours of 400 level Computer Science (excluding seminar, project, and special topics courses).

MATH 333-3 Partial Differential Equations or MATH 334-3 Ordinary Differential Equations
MATH 335-3 Numerical Analysis I
MATH 340-3 Introduction to Probability
PHYS 300-3 Classical Mechanics
PHYS 302-3 Quantum Mechanics I
PHYS 305-4 Electronics [which must be taken before CPSC 231-4
(Computer Organization and Architecture)]
PHYS 390-3 Advanced Physics Laboratory
*Three credit hours of 300 or 400 level Physics.
Six credit hours of 400 level Physics (excluding seminar, project, and special topics courses).
*Three of these nine credit hours must be at the 400 level so that a minimum of 15 credit hours of 400 level Computer Science and Physics are completed.

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 127 credit hours.

## Economics (BA and BSc Programs)

Baotai Wang, Assistant Professor, and Program Chair<br>Paul Bowles, Professor<br>Fiona MacPhail, Associate Professor<br>Ajit Dayanandan, Assistant Professor<br>Karima Fredj, Assistant Professor<br>Jalil Safaei Boroojeny, Assistant Professor<br>Ingo Schmidt, Assistant Professor<br>Bryan Bogdanski, Adjunct Professor

Economics as a discipline is constructed around the need to identify agents in the economy and analyze their interactions. As such it is based upon deriving generalizations by identifying behavioural rules and examining causal relationships between economic variables. The emphasis on examining causal relationships is a distinguishing feature of economics and forms an important part of its claim to be a social science. As well as addressing these central concerns, the Economics program recognizes the interaction between the economy and other broader social, political, cultural and technological forces. The program therefore places special emphasis on courses which analyze institutions, facilitate comparative studies, encourage a historical approach, and recognize the pervasiveness of technological change.

## Major in Economics

Undergraduate students are required to take 17 Economics courses ( 51 credit hours). Of these, 12 courses ( 36 credit hours) are at the upper division level.

The minimum requirement for completion of a Bachelor of Arts with a major in Economics is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

## 100 Level

ECON 100-3 Microeconomics
ECON 101-3 Macroeconomics
COMM 100-3 Introduction to Canadian Business or POLS 100-3 Contemporary Political Issues or INTS 101-3 Canada and the World
MATH 150-3 Finite Mathematics for Business and Economics or MATH 220-3 Linear Algebra
MATH 100-3 Calculus I
or MATH 152-3 Calculus for Non-majors

## 200 Level

ECON 202-3 History of Economic Thought
ECON 203-3 Canadian Economic History
ECON 205-3 Statistics for the Social and Management Sciences

## Upper Division Requirements

300 and 400 Level
ECON 310-3 Intermediate Microeconomic Theory
ECON 311-3 Intermediate Macroeconomic Theory
ECON 312-3 Introduction to Econometrics

Twenty-seven credit hours of 300 or 400 level Economics.
*Students wishing to pursue graduate studies in Economics are strongly advised to take ECON 320-3 (Introduction to Mathematical Economics) and ECON 451-3 (Advanced Microeconomic Theory) and/or ECON 452-3 (Advanced Macroeconomic Theory).

## Elective Requirement

Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours.

## Joint Major in Economics/Political Science

The minimum requirement for completion of a Bachelor of Arts with a Joint Major in Economics and Political Science is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

ECON 100-3 Microeconomics
ECON 101-3 Macroeconomics
ECON 202-3 History of Economic Thought
ECON 203-3 Canadian Economic History
ECON 205-3 Statistics for Social and Management Science
POLS 100-3 Contemporary Political Issues
POLS 200-3 Canadian Government and Politics
POLS 202-3 Comparative Government and Politics
POLS 270-3 Political Philosophy: Plato to Locke

## Upper Division Requirement

ECON 310-3 Intermediate Microeconomic Theory
ECON 311-3 Intermediate Macroeconomic Theory
POLS 303-3 Democracy and Dictatorship
POLS 320-3 Canadian Politics and Policy
POLS 370-3 Political Philosophy: Locke to Marx
Twelve credit hours in Political Science at the 300 or 400 level.
Eighteen credit hours in Economics at the 300 or 400 level.

## Minor in Economics

The minor in Economics requires the completion of 24 credit hours. Students must complete:

## ECON 100-3 Microeconomics <br> ECON 101-3 Macroeconomics

Two of:

$$
\begin{array}{ll}
\text { ECON 202-3 } & \text { History of Economic Thought } \\
\text { ECON 203-3 } & \text { Canadian Economic History } \\
\text { ECON 205-3 } & \text { Statistics for the Social and Management } \\
& \text { Sciences }
\end{array}
$$

Twelve credit hours of 300 or 400 level Economics courses.
A maximum of 4 courses ( 12 credit hours) used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in Economics.

Alternative courses may be substituted for the above with written permission of the Program Chair and Dean.

## Undergraduate Programs: Economics

## BSc (Joint Major in Economics/Mathematics)

The minimum requirement for completion of a Bachelor of Science with a Joint Major in Economics and Mathematics is 121 credit hours.

MATH 342-3 (Biostatistics) may not be used for credit towards any Mathematics major, minor or joint major.

MATH 150-3 (Finite Mathematics for Business and Economics) may not be used for credit towards any Mathematics major or joint major.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree.

Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

Note: Students enrolling in any Mathematics courses with prerequisites are required to have completed all prerequisite courses for that course with a C- or better, or have permission to enrol from the Program Chair.

## Program Requirements

## Literacy Requirement

One of:
ENGL 170-3 Writing and Communication Skills
ENGL 270-3 Expository Writing

## Economic Requirements

ECON 100-3 Microeconomics
ECON 101-3 Macroeconomics
ECON 202-3 History of Economic Thought
ECON 203-3 Canadian Economic History
ECON 205-3 Statistics for Social and Management Science
ECON 310-3 Intermediate Microeconomic Theory
ECON 311-3 Intermediate Macroeconomic Theory
ECON 312-3 Introduction to Econometrics
ECON 320-3 Introduction to Mathematical Economics
One of the following three courses:
ECON 451-3 Advanced Microeconomic Theory
ECON 452-3 Advanced Macroeconomic Theory
ECON 453-3 Advanced Econometrics
Twelve additional credit hours of 300 or 400 level Economics.

## Mathematics Requirements

MATH 100-3 Calculus I
or MATH 105-3 Enriched Calculus
MATH 101-3 Calculus II
MATH 200-3 Calculus III
MATH 201-3 Introduction to Complex Analysis
MATH 220-3 Linear Algebra
MATH 221-3 Operations Research
MATH 224-3 Foundations of Modern Mathematics
MATH 230-3 Linear Differential Equations and Boundary
Value Problems
MATH 320-3 Survey of Algebra
or MATH 302-3 Theory of Metric Spaces
MATH 340-3 Introduction to Probability
Six additional credit hours of 300 or 400 level Mathematics (MATH
$341-3$ is strongly recommended).
Six additional credit hours of 400 level Mathematics.

## Program Requirements

CPSC 100-4 Computer Programming I

## Elective Requirements

Elective credit hours as necessary to ensure completion of a minimum of 121 credit hours.

## Education (BEd Program)

Dennis Procter, Assistant Professor, and Program Chair Bryan Hartman, Professor
Judith Lapadat, Professor \& Regional Chair, Northwest Region
Paul Madak, Professor
Peter MacMillan, Associate Professor
Colin Chasteauneuf, Assistant Professor
Yvon Cloutier, Assistant Professor
Margo Greenwood, Assistant Professor, and Academic Leader, National
Collaborating Centre for Aboriginal Health
Corinne Koehn, Assistant Professor
Greg Nixon, Assistant Professor
Lantana Usman, Assistant Professor
Willow Brown, Lecturer
Montgomery (Monty) Palmantier, Lecturer
Cathy McGregor, Lecturer
Trudy Mothus, Lecturer
UNBC's BEd program is a two-year after-degree program that offers Elementary (grade K-7), and Secondary (grades 8-12) Streams. It is designed for university students who have already completed a first degree and who wish to continue their education in order to become teachers. UNBC's BEd program will provide students with the course work and classroom experience to prepare them to be qualified first year teachers. The BEd degree consists of 73 credit hours in Education and 20 weeks of classroom experience. Upon successful completion of the program, graduates are recommended to the British Columbia College of Teachers (BCCT) for certification. Certification by the BCCT is required for employment in the British Columbia public school system. All courses within the Elementary and Secondary Streams are required; there are no elective courses offered.

The programs begin in September of each year and the application deadline is March 15. Students needing advice about the application process or about any of the Education courses are encouraged to contact either the Office of the Registrar or the School Experience Office in the Education Program.

## Elementary (Grade K-7)

The Elementary Stream prepares teacher candidates to work with the unique learning needs of children who are beginning their school years. This model reflects current thinking about optimizing the match between educational theory and children's levels of cognitive and social development. The Elementary Stream is designed to educate teachers to combine pedagogical excellence across disciplinary areas with a learner-centered approach to practice. Philosophically, the program is designed around constructivist principles, and it emphasizes approaches to practice such as inquiry-based learning, strategies for instruction, integration of language across the curriculum, inclusion of diverse learners and perspectives, the development of caring and respectful communities of learners, and reflective practice. Successful applicants to the Elementary Stream will be assigned to a cohort group of approximately 35 students and will take all of their courses with that cohort group.

## Admission Requirements

Applicants to the Elementary Stream must have completed a fouryear bachelor's degree with a minimum of ninety (90) credits in Arts, Science, or in other teachable fields relevant to the BC School system. The remaining credits may come from any discipline. In addition to an acceptable four-year bachelor's degree, applicants must include the following within their program:

1. Six (6) credits of acceptable English literature and composition at any level (three (3) credits of literature and three (3) credits of composition). Courses in linguistics, language study, grammar, technical or business writing, communication, or English as a second language are not acceptable to meet the English requirement.
2. Three (3) credits in mathematics (not including Statistics).
3. Three (3) credits in a laboratory science. Laboratory science credits are normally selected from Biology, Chemistry, Environmental Science, Geography, Health and Human Sciences, or Physics.
4. Six (6) credits of approved Canadian Studies, at any level, applicable to teaching in the British Columbia school curriculum. Credits will normally be selected from Anthropology, First Nations Studies, Geography, History, Northern Studies, or Political Science courses that contain significant Canadian content (upon review, credits from other disciplines may be recognized as meeting the Canadian content requirement).
5. Competence in basic computer applications.

In addition to the requirements specified above, applicants must also have the following:
6. Minimum grade point average of " $\mathrm{C}+$ " on the most recent 60 credit hours of university credits completed.
7. Successful completion with a " $\mathrm{C}+$ " average in the 6 credits/ semester hours or equivalent in the undergraduate English composition and literature courses.
8. Submission of the completed application forms that include the Experience with Children and Youth Form, three letters of reference, and the Personal Statement Form.

Undergraduate Programs: Education

## Secondary (Grades 8-12)

The Secondary program is a two-year after-degree program that prepares individuals to teach in grades 8 through 12 in specialty areas. This model reflects current thinking about optimizing the match between educational theory and children's levels of cognitive and social development. The Secondary Stream is designed to educate teachers to combine pedagogical excellence across disciplinary areas with a learner-centered approach to practice. Philosophically, the program is designed around constructivist principles, and it emphasizes approaches to practice such as inquiry-based learning, strategies for instruction, integration of language across the curriculum, inclusion of diverse learners and perspectives, the development of caring and respectful communities of learners, and reflective practice. Successful applicants to the Secondary Stream will be assigned to a cohort group of approximately 35 students and will take all of their courses with that cohort group.

## Admission Requirements

Applicants to the Secondary Stream must have completed a four-year Bachelor of Arts, Bachelor of Science, or Bachelor of Commerce degree with a minimum of ninety (90) credits in Arts, Science, or Business Administration or in other teachable fields relevant to teaching in the BC School system. The remaining credits may come from any discipline. We will also give preference to applicants with a double major, major/minor, or major plus concentration(s). In addition to a four-year bachelor's degree, applicants must include the following within their program:

1. Six (6) credits of acceptable English literature and composition at any level. Courses in linguistics, language study, grammar, technical or business writing, communication, or English as a second language are not acceptable to meet the English requirement.
2. Three (3) credits of mathematics.
3. Competence in basic computer applications.
4. One of the following:
a. One teachable major and one teachable minor, or
b. Two (2) teachable minors, or
c. One teachable major

In addition to the requirements specified above, applicants must also have the following:
5. Minimum grade point average of " $\mathrm{C}+$ " on the most recent 60 credit hours of university credits completed.
6. Successful completion with a " $\mathrm{C}+$ " average in the 6 credits/ semester hours or equivalent in the undergraduate English composition and literature courses.
7. Submission of the completed application forms that include the Experience with Children and Youth Form, three letters of reference, and the Personal Statement Form.

## Secondary Teachable Major and Minor Requirements

The following is a list of teachable majors and minors that have been approved by the British Columbia College of Teachers, are widely taught in British Columbia secondary schools, and that can be completed at the University of Northern British Columbia (graduates of equivalent programs at other recognized universities are also eligible for consideration to the program). In order for applicants to be eligible for the Secondary Stream Bachelor of Education program, they must meet the requirements for one teachable major, a teachable major and minor, or two teachable minors from the following list:

| Subject area | Major | Minor |
| :--- | :---: | :---: |
| Biology | $X$ | $X$ |
| Business Education | $X$ | $X$ |
| Chemistry | $X$ | $X$ |
| Computer Science | $X$ | $X$ |
| English | $X$ | $X$ |
| First Nations Studies |  | $X$ |
| General Science | $X$ | $X$ |
| Geography | $X$ | $X$ |
| History | $X$ | $X$ |
| Mathematics | $X$ | $X$ |
| Physics | $X$ | $X$ |
| Social Studies | $X$ | $X$ |

Applicants to the Bachelor of Education program should recognize that the credit levels for the following teachable majors and minors meet the British Columbia College of Teachers accreditation requirements, and may not be equivalent to the formal requirements for a UNBC major or minor. Applicants should refer to the appropriate section of the UNBC Calendar in order to ensure that they are meeting all of the course work required to successfully complete UNBC degree requirements.

A teachable minor normally consists of eighteen (18) credit hours of upper division courses (numbered 300 or 400 and taken in the third and fourth year of study), in addition to required lower division courses. A teachable major normally consists of thirty (30) credit hours of upper division courses (numbered 300 or 400 and taken in the third and fourth year of study), in addition to required lower division courses.

## Biology Major and Minor

Bachelor of Education applicants to the Secondary Stream planning to meet the Biology teachable minor requirement must have completed a minimum of six (6) credit hours of introductory ( 100 level) course work in each of biology, chemistry (at least one course with a lab component), mathematics (at lease one course, but preferably two courses, in calculus), and physics (at least one course with a lab component). Applicants must also complete an additional six (6) to twelve (12) credit hours of study in biology at the lower division, and eighteen (18) credits of upper division course work in biology. The course work must demonstrate both lecture and laboratory studies. Applicants planning to meet the Biology teachable major requirement must complete an additional twelve (12) credit hours of upper division course work in biology.

## Business Education Major and Minor

Bachelor of Education applicants to the Secondary Stream planning to meet the Business Education teachable minor requirement must complete a minimum of eighteen (18) upper division credit hours of specialized courses in accounting, marketing, commercial law, and management information systems in addition to introductory (100 level) courses in computer science, economics, and mathematics. Applicants planning to meet the Business Education teachable major requirement must complete an additional twelve (12) credit hours of upper division course work in accounting, finance, marketing, and management information systems.

## Chemistry Major and Minor

Bachelor of Education applicants to the Secondary Stream planning to meet the Chemistry teachable minor requirement must have completed a minimum of six (6) credit hours of introductory ( 100 level) course work in each of biology, chemistry (at least one course with a lab component), mathematics (at least one course, but preferably two courses, in calculus), and physics (at least one course with a lab component). Applicants must also complete an additional six (6) to twelve (12) credit hours of study in chemistry at the lower division, and eighteen (18) credits of upper division course work in chemistry. The course work must demonstrate both lecture and laboratory studies. Applicants planning to meet the Chemistry teachable major requirement must complete an additional twelve (12) credit hours of upper division course work in chemistry.

## Computer Science Major and Minor

Bachelor of Education applicants to the Secondary Stream planning to meet the Computer Science teachable minor requirement must complete a basic lower division course load in computer programming, computer structures, and mathematics in addition to eighteen (18) credits of upper division Computer Science course work covering advanced programming, systems design, programming languages, and the impact of computers on society.

Applicants planning to meet the Computer Science teachable major requirement must complete an additional twelve (12) credit hours of study in upper division Computer Science course work.

## English Major and Minor

Bachelor of Education applicants to the Secondary Years Stream planning to meet the English teachable minor requirement must complete a basic lower division course load that focuses on English literature and composition in addition to twenty-four (24) credit hours of upper division English courses including six (6) credits from each of the following: English literature, English composition or creative writing, pre-twentieth century literature, and contemporary literature. Applicants are also strongly encouraged to complete courses both in Canadian literature and Shakespeare.

[^2]Applicants planning to meet the English teachable major requirement must complete an additional twelve (12) credit hours of upper division course work in English.

## First Nations Minor

Bachelor of Education applicants to the Secondary Stream planning to meet the First Nations teachable minor requirement must complete a basic lower division course load that focuses on general First Nations studies, First Nations language, and First Nations culture courses in addition to eighteen (18) credit hours of upper division First Nations Studies or related approved courses (related course work may come from Anthropology or History).

## General Science Majors and Minors

Teachable areas that can be included within the General Sciences Major and Minor include Biology, Chemistry, Environmental Sciences, and Physics.

Bachelor of Education applicants to the Secondary Stream planning to meet the General Sciences teachable minor requirement must complete six (6) credit hours of study in introductory ( 100 level) course work in each of biology, chemistry (at least one course with a lab component), mathematics (at least one course, but preferably two courses, in calculus), and physics (at least one course with a lab component). Applicants must also complete a minimum of six (6) credit hours of upper division study in three of the four teachable areas: Biology, Chemistry, Environmental Sciences, and Physics. Applicants planning to meet the teachable major requirement in General Sciences must complete an additional twelve (12) upper division credit hours or course work from the four teachable areas: Biology, Chemistry, Environmental Sciences, and Physics.

## Geography Major and Minor

Applicants to the Geography Major or Minor programs must include courses from both cultural and physical geography within their program, as well as course work in regional and environmental studies.

Bachelor of Education applicants to the Secondary Stream planning to meet the Geography teachable minor requirement must complete a minimum of six (6) credit hours of introductory ( 100 level) or survey courses in each of geography, history, and a social science.

Applicants must also complete a minimum of an additional six (6) credit hours lower division geography course work and eighteen (18) credit hours of upper division geography. A minimum of six (6) credits of the upper* division course work must have a significant Canadian content.

Applicants planning to meet the Geography teachable major requirement must complete an additional twelve (12) credit hours of upper division course work in geography.

## History Major and Minor

Applicants to the History Major or Minor programs must include both Canadian and European history course work within their program, as well as the history of any region other than Canada or Europe.

Bachelor of Education applicants to the Secondary Stream planning to meet the History teachable minor requirement must complete a minimum of six (6) credit hours of introductory ( 100 level) or survey courses in each of geography, history, and a social science.

Applicants must also complete a minimum of an additional six (6) credit hours of lower division history course work and eighteen (18) credit hours of upper division history. A minimum of six (6) credits of upper* division course work must have a significant Canadian content.

Applicants planning to meet the History teachable major requirement must complete an additional twelve (12) credit hours of upper division work in history.

## Mathematics Major and Minor

Bachelor of Education applicants to the Secondary Stream planning to meet the Mathematics teachable minor requirement must complete a minimum of thirty (30) credit hours of study of which at least eighteen (18) credit hours must be at the upper division level. The upper division credits must include at least one course in three of the following areas: algebra, calculus, probability and statistics, geometry, and number theory.

Applicants planning to meet the Mathematics teachable major requirement must complete an additional twelve (12) credit hours of upper division Mathematics course work in the above listed disciplines.

## Physics Major and Minor

Bachelor of Education applicants to the Secondary Stream planning to meet the Physics teachable minor requirement must have completed a minimum of six (6) credit hours of introductory ( 100 level) course work in each of biology, chemistry (at least one course with a lab component), mathematics (at least one course, but preferably two courses, in calculus), and physics (at least one course with a lab component). Applicants must also complete an additional six (6) to twelve (12) credit hours of study in physics at the lower division, and 18 credits of upper division course work in physics. The course work must demonstrate both lecture and laboratory studies.

Applicants planning to meet the Physics teachable major requirement must complete an additional twelve (12) credit hours of upper division course work in physics.

[^3]
## Social Studies Majors and Minors

Teachable areas that can be included within the Social Studies Major and Minor include Geography, History and acceptable Social Sciences (Anthropology, Economics, Environmental Studies, First Nations Studies, Northern Studies, Political Science, and Women's Studies).

Bachelor of Education applicants to the Secondary Stream planning to meet the Social Studies teachable minor requirement must have completed a minimum of twenty-one (21) upper division credit hours in a social science teaching area (including: Anthropology, Economics, Environmental Studies, First Nations Studies, International Studies, Northern Studies, Political Science, Sociology, and Women's Studies) acceptable in British Columbia secondary schools.

In addition, applicants must meet the minimum requirements for Geography (nine (9) credit hours of which three (3) credit hours must be at the upper division level, three (3) credit hours must be Canadian Geography, and three (3) credit hours can be at any level), and History (eighteen (18) credit hours of which six (6) credit hours must be at the upper division level, three (3) credit hours must be in Canadian history, three (3) credit hours must be in European history, three (3) credit hours must be in a region other than Canada or Europe, and three (3) credit hours can be at any level).

Applicants planning to meet the Social Studies teachable major requirements must complete an additional fifteen (15) credit hours at the upper division level course work (three (3) credit hours must be in geography, three (3) credit hours must be in history, and six (6) credit hours must be in the social sciences, and three (3) credit hours can be in history, geography, or the social sciences).

## Access Initiative

The Education Program at UNBC has initiated a program designed to give access to individuals who are members of groups in our society, which have historically been under-represented, in the teaching profession in British Columbia. In order to achieve this objective, we encourage applicants who have confronted identifiable barriers to post-secondary education to apply under the Access Initiative. All applicants for UNBC's teacher education program must submit a Personal Statement. Applicants who wish to apply under the Access Initiative may identify themselves in their Personal Statement Form to be considered under the Access Initiative.

## Criminal Records Search

In addition to the admission application requirements outlined above, applications are required to undergo a criminal record search and provide evidence of this prior to being considered for admission. Refer to Undergraduate Regulations and Policies (Academic Regulation \#19) in this Calendar.

## Admission Decisions

Applications for admission can be obtained from either the Office of the Registrar, or from the School Experience Office. For further information concerning the application process, please contact either the School Experience Office or the Office of the Registrar.
Admissions rankings are determined by a combination of GPA, experience with children, and personal statement scores.

## Notes on Certification

Applicants who are otherwise eligible for British Columbia College of Teachers Certification, but who are not Canadian citizens, are required to provide evidence of landed immigrant status or hold a valid work authorization to teach in Canada before they may be issued a British Columbia teaching credential.

## Program Requirements

## Elementary (Grade K-7)

## Year 1: First Semester

EDUC 313-1 Interpersonal Communication
EDUC 333-2 Learning Development \& Motivation
EDUC 340-2 Curriculum Development Models
EDUC 346-2 Introduction to Aboriginal Education
EDUC 380-3 Foundations of Education
EDUC 395-1 Professional Issues: Legal \& Ethical
EDUC 356-2 Language \& Literacy: Development (EY)
EDUC 376-2 Numeracy: Math Concepts (EY)
EDUC 390-3 Classroom Practice \& Seminar I

## Year 1: Second Semester

EDUC 342-2 Social Dynamics of Classrooms
EDUC 341-2 Principles of Instruction
EDUC 351-2 Curriculum \& Instruction: Second Language
EDUC 357-3 Language \& Literacy: Reading \& Writing (EY)
EDUC 377-2 Numeracy: Instructional Strategies (EY)
EDUC 366-2 Curriculum \& Instruction: Social Studies (EY)
EDUC 387-2 Curriculum \& Instruction: Science (EY)
EDUC 391-3 Classroom Practice \& Seminar II

## Year 2: First Semester

EDUC 421-3 Classroom Assessment Practices
EDUC 431-3 Educational Technology
EDUC 435-2 Learning \& Diversity: Inclusive Classrooms
EDUC 446-2 Aboriginal Education: Epistemology
EDUC 456-2 Language \& Literacy Across the Curriculum (EY)
EDUC 406-3 Curriculum \& Instruction: Fine Arts (EY)
EDUC 490-4 Classroom Practice \& Seminar III

## Year 2: Second Semester

EDUC 413-1 Counselling Skills (EY)
EDUC 436-2 Learning \& Diversity: Learning Disabilities
EDUC 495-1 Professional Issues: Portfolios
EDUC 457-2 Language \& Literacy: Oral \& Written Genres (EY)
EDUC 489-2 Curriculum \& Instruction: Physical Education (EY)
EDUC 491-10 Classroom Practice \& Seminar IV

## Secondary (Grade 8-12)

## Year 1: First Semester

EDUC 313-1 Interpersonal Communication
EDUC 333-2 Learning Development and Motivation
EDUC 340-2 Curriculum Development Models
EDUC 346-2 Introduction to Aboriginal Education
EDUC 380-3 Foundations of Education
EDUC 395-1 Professional Issues: Legal \& Ethical
EDUC 360-4 Curriculum \& Instruction: Introduction (SY)
EDUC 390-3 Classroom Practice \& Seminar I

## Year 1: Second Semester

EDUC 342-2 Social Dynamics of Classrooms
EDUC 341-2 Principles of Instruction
EDUC 345-4 Language \& Literacy Across the Curriculum
EDUC 370-3 Numeracy Across the Curriculum
EDUC 361-4 Curriculum \& Instruction II: Humanities \& Social Sciences
or EDUC 372-4 Curriculum \& Instruction II: Math, Computer \& Sciences
or EDUC 315-4 Curriculum \& Instruction II: Business \& Career Education
EDUC 391-3 Classroom Practice \& Seminar II

## Year 2: First Semester

EDUC 421-3 Classroom Assessment Practices
EDUC 431-3 Educational Technology
EDUC 435-2 Language \& Diversity: Inclusive Classrooms
EDUC 446-2 Aboriginal Education: Epistemology II
EDUC 460-5 Curriculum \& Instruction III: Humanities \& Social Sciences
or EDUC 471-5 Curriculum \& Instruction III: Math, Computer \& Sciences
or EDUC 414-5 Curriculum \& Instruction III: Business \& Career Education
EDUC 490-4 Classroom Practice \& Seminar III

## Year 2: Second Semester

EDUC 434-3 Counselling Skills
EDUC 436-2 Learning \& Diversity: Learning Disabilities
EDUC 495-1 Professional Issues: Legal \& Ethical
EDUC 461-3 Curriculum \& Instruction IV: Humanities \& Social Sciences
or EDUC 472-3 Curriculum \& Instruction IV: Math, Computer \& Sciences
or EDUC 415-3 Curriculum \& Instruction IV: Business \& Career Education
EDUC 491-10 Classroom Practice \& Seminar IV

## Education Diploma in a First Nations Language and Culture (Elementary Years)

The Education Diploma in a First Nations Language and Culture is a 92 credit hour teacher education program that prepares individuals to teach an approved First Nations language and culture at the Elementary Years level.

This program of study has been developed in partnership with the Language Authority for each First Nation. This model reflects the current thinking about building on the rich linguistic and cultural heritage of students to optimize the match among educational theory, children's level of cognitive and social development, and the particular First Nations language and culture. Successful completion of this program of study will lead to a recommendation to the British Columbia College of Teachers that a Developmental Standard Term Certificate in the specific First Nations Language and Culture be granted. The Education Diploma in a First Nations Language and Culture is designed to educate teachers to combine pedagogical excellence across disciplinary areas with a learner-centered approach to practice. Philosophically, the program is designed around constructivist principles, emphasizes approaches to practice such as inquiry-based learning, strategies for instruction, integration of language and culture across the curriculum, inclusion of diverse learners and perspectives, and the development of caring and respectful practice.

Programs of study leading to recommendation for this teaching credential are available for Gitksan Language and Culture and for Nisga'a Language and Culture. The Education Diploma in a First Nations Language and Culture (Gitksan) has been developed in partnership with the Siwiixo'osxwim Wilnatahl Gitksanimx Society. The Education Diploma in a First Nations Language and Culture (Nisga'a) has been developed in partnership with the Nisga'a Language Authority of Wilp Wilxo'oskwhl Nisga'a (WWN), and is offered at the WWN campus.

## Admission Requirements

Students selected for this program of study will be admitted according to the "Undergraduate Admissions" categories, criteria, and processes established by UNBC and specified in the early sections of this Undergraduate Calendar. In addition to the specified entrance requirements, applicants are encouraged to identify their fluency in the specific language (Gitksanimx or Nisga'a language) and their knowledge of Gitksan culture and history or Nisga'a culture and history. Advanced placement in language courses may be considered for speakers who are able to demonstrate their fluency in the language.

There are two points of entry to this program of study: following the completion of the Diploma in First Nations Language, or concurrently while completing the required First Nations Studies and general academic coursework. Students must be admitted to this program of study prior to beginning their professional education courses. The Certificate in First Nations Language, and the Diploma in First Nations Language are described in the First Nations Studies section of the calendar.

## Criminal Records Search

In addition to the admission application requirements outlined for admission to UNBC, applicants are required to undergo a criminal record search and provide evidence of this prior to being considered for admission to the Education Diploma in a First Nations Language and Culture (Elementary Years). Refer to Undergraduate Regulations and Policies (Academic Regulation \#19) in this Calendar.

## Program Requirements

## First Nations Studies Credits

The required First Nations Studies credits can be met by completing a Diploma in First Nations Language. Students will need to include the following First Nations Studies language, linguistics and culture courses in their program of study:

## Language (33 credits):

- A First Nations Language: Levels 1-4 in Gitksanimx or Nisga'a (FNST 131-3, 132-3, 231-3, 232-3; or Gitksanimx FNST 143-3, 144-3, 243-3, 244-3; or Nisga'a: FNST 139-3, 140-3, 239-3, 240-3)
- FNST 223-3, 321-3, 322-3, 324-3, 325-3, 421-3, 422-3 (Gitksanimx or Nisga'a)


## Linguistics ( 9 credits):

- FNST 220-3, 320-3, 420-3

Culture ( 9 credits):

- FNST 161-3 (or Gitksan: FNST 173-3 or Nisga'a: FNST 169-3)
- FNST 162-3 (or Gitskan: FNST 174-3 or Nisga'a: FNST 170-3)
- FNST 216-3


## BCCT Required General Academic Coursework

( 18 credits. Some of these credits may be completed as part of the Diploma in First Nations Language):

- 3 credits English Composition-Suggested: ENGL 170-3 or equivalent
- 3 credits English Literature-Suggested: ENGL 103-3, ENGL 210-3, ENGL 260-3 or equivalent
- 3 credits Mathematics-Suggested: MATH 152-3 or equivalent
- 3 credits Lab Sciences-Suggested: BIOL 101-4 or equivalent
- 6 credits of Canadian Studies (3 credits History and 3 credits Geography recommended)-Suggested: FNST 100-3, FNST 250-3, GEOG 203-3, HIST 210-3, HIST 302-3 or equivalent


## Professional Education Coursework

EDUC 380-3 Foundations of Education
EDUC 333-2 Learning, Development and Motivation
EDUC 341-2 Principles of Instruction
EDUC 342-2 Social Dynamics of Classrooms
EDUC 351-2 Curriculum and Instruction: Second Language
EDUC 356-2 Language and Literacy Development
EDUC 446-2 Aboriginal Education: Epistemology
EDUC 435-2 Learning and Diversity: Inclusive Classrooms
EDUC 390-3 Classroom Practice and Seminar 1
EDUC 391-3 Classroom Practice and Seminar 2

## Diploma and BEd Academic Regulations

For the purpose of determining eligibility for recommending a teacher candidate for certification by the BCCT, the minimum requirements include successful completion of the education program with a "C+" on each education course taken while enrolled in the Program. Courses for which a grade of "C" was received must be repeated.

The Education Program reserves the right at any time to require any teacher candidate to withdraw from UNBC if it believes on consideration of academic, professional fitness or professional conduct that the student is unsuitable for the teaching profession. Unsatisfactory performance in any aspect of the program may be considered reason to require a teacher candidate to withdraw from the program.

Regular attendance is expected of all teacher candidates in all courses. An instructor can initiate procedures to debar a teacher candidate from attending classes and from final examinations where unexcused absences exceed three hours of scheduled classes in one term.

If re-admission is approved following required or voluntary withdrawal from a practicum and/or program, the teacher candidate will normally be re-admitted on probationary status.

Appeals should first be submitted to the BEd Admissions and Standards Committee. If a teacher candidate is not satisfied with the outcome of that process, he/she may then file an appeal with UNBC's Senate Committee on Academic Appeals (see "Appeals Process").

Teacher candidates are not allowed to use 600, or higher, level courses from the Education Program, or any other program to meet degree requirements.

Students who plan to undertake work at other institutions are required to seek prior approval from the Office of the Registrar and the Chair of Education if they wish such courses to be credited toward a BEd degree at UNBC.

## Diploma and BEd Teaching Practicum Regulations

## *All arrangements for school placements are made through the School Experience Office.

Teacher candidates taking the Classroom Practice \& Seminar courses must be prepared to travel to any regional school district. In order to do this, teacher candidates should budget for transportation. Practica may be arranged in other selected districts. Extra expenses will be involved and teacher candidates should budget accordingly.

Teacher candidates must successfully complete all first year courses before they will be allowed to proceed to second year courses and commence their second year field placements. These requirements include the completion of core assignments designed to link theory and practice.

UNBC's Education Program reserves the right to approve or disapprove any school placement for teacher candidates, to place teacher candidates in schools, and to change any placement assigned to a teacher candidate. The teacher candidate must be informed in writing of the reasons for any required change in placement. UNBC bears no responsibility for the costs associated with a change in placement.

The Education Program is responsible for seeking a sufficient number of school placements to serve the needs of all enrolled teacher candidates. A teacher candidate may be required to withdraw from a Classroom Practice \& Seminar course if none of the available schools will accept that particular teacher candidate.

UNBC's Education Program reserves the right to provide information to the principal of a school for a practicum placement for a particular teacher candidate where it is deemed necessary for the principal to have the information in order to carry out his/her duties as a principal. The School Experience Office must inform the principal if concerns have been raised within the Education Program or in a previous practicum placement about a more than usual potential for a negative impact on the quality of the learning and/or working in the classroom and/or school as a result of the presence of the candidate teacher. The Practicum Placement Co-ordinator and/or the Stream Co-ordinator must inform the teacher candidate in writing of the reasons for the concerns giving rise to such notification to the principal.

The dates of the practica will be made known to the teacher candidates at the beginning of each term. Placement locations will be made available as soon as possible after classes have begun.

The expectations of teacher candidates during the practica will be published and distributed to all teacher candidates, Faculty Advisors, and Co-operating Teachers at the start of each year in the course outlines for the Classroom Practice \& Seminar courses. Regular attendance during the practica is required. Teacher candidates are required to notify the school whenever classroom experience appointments cannot be kept and also inform their Faculty Advisor. Teacher candidates will be disbarred from the Classroom Practice \& Seminar course if they have more than three unexcused absences.

## Undergraduate Programs: Education

All teacher candidates in the program placed in schools for classroom experience are subject to the provisions of the Schools Act, School Regulations, the British Columbia Teachers' Federation (BCTF) Code of Ethics, and any regulation and/or code of behaviour applicable to teachers and staff in the school. Any teacher candidate may be required to withdraw from a classroom experience for violation of any part of the School Act, School Regulations, the BCTF Code of Ethics, or upon written notice from the school principal or the superintendent in the district where the teacher candidate is placed.

Faculty Advisors or Co-operation Teachers who refuse teacher candidates' continued participation in a practicum experience for misconduct or repeated absence must immediately discuss the matter with the Practicum Placement Co-ordinator, who shall then either inform the teacher candidate of the conditions under which they may resume participation in the practica or inform the teacher candidate that the Chair of Education or Chair's designate is being advised that the teacher candidate's performance in the classroom experience is considered unsatisfactory by those responsible for supervision of the practicum experience.

## Denial and Withdrawal

Teacher candidates will be denied the practica placement if their preparatory course work is considered to be unsatisfactory (e.g. below "C" work, or incomplete work) by the Stream Co-ordinator (based on written assessments by Faculty Advisor and/or Co-operating Teacher).

Teacher candidates may be required to withdraw from a practicum experience if their performance in their school placement is considered to be unsatisfactory by the Stream Co-ordinator (based on written assessments by Faculty Advisor and/or Co-operating Teacher). Teacher candidates seeking voluntary withdrawal from a practicum placement, whether permanent or temporary, must receive permission to do so from the Chair of Education. Teacher candidates should make this decision only after careful consideration of the possible impact on their practicum experience-based assignments.

Failure to give appropriate notice of withdrawal during a practicum placement, without consultation and approval of the Practicum Placement Co-ordinator, and/or Stream Co-ordinator, will result in withdrawal from UNBC's Education Program. Teacher candidates who withdraw voluntarily from a practicum placement must notify the Practicum Placement Co-ordinator in writing at least one week in advance of the commencement of the classroom placement. Teacher candidates who are required to withdraw from a practicum placement must make an appointment to see Practicum Placement Co-ordinator and the Chair of Education.

Teacher candidates who have withdrawn for any reason from a Classroom Practice \& Seminar course, or who wish to re-enter, or re-take, the course must apply to the BEd Admissions and Standards Committee for re-admission to the course. Teacher candidates should not assume that re-admission would automatically be granted. The number of times a teacher candidate can be re-admitted to Classroom Practice \& Seminar courses is limited to once except in cases where there are dire circumstances beyond the teacher candidates' control as set out in the UNBC "Conditions of Academic Standing". Teacher candidates will only be re-admitted to a Classroom Practice \& Seminar
course when, in the opinion of those responsible for the supervision of the previous attempt, there was evidence of significant progress toward meeting the outcomes for the practicum placement. Teacher candidates will not be re-admitted to any single Classroom Practice \& Seminar more than once. Teacher candidates will not be re-admitted to a Classroom Practice \& Seminar course if they have previously been re-admitted to any other Classroom Practice \& Seminar course in any of UNBC's BEd programs.

## Part-Time Students in the BEd Program

The Bachelor of Education program at UNBC is a full-time study program with a program fee. It is expected that all students registered in this program will be enrolled on a full-time basis. However, under exceptional circumstances, where students are unable to fulfill fulltime study for family, personal, or health reasons, students may be allowed to continue the program on a part-time basis. Application to continue on a part-time basis must be made in writing to the Program Chair of Education and approved by the Dean of the College of Arts, Social and Health Sciences. Where this is approved, the student's fees will be assessed on a pro-rated basis using the current Bachelor of Education program fee for the semester.

## BEd Graduation Requirements

To be eligible for a Bachelor of Education degree the candidate must normally have earned:

- a passing grade in each of the courses comprising the degree program, and no lower than a "C" grade on all Education courses; and,
- a minimum " $\mathrm{C}+$ " GPA.
- The British Columbia College of Teachers: Current legislation requires that every person appointed or retrained as a teacher in a public school be a member of the British Columbia College of Teachers and hold a valid certificate of qualification issued by the BCCT. It is the responsibility of the individual to make an application to the Registrar of the British Columbia College of Teachers for initial certification, or for a change in certification, and to provide all documentation.
- The Teacher Qualification Service: Salary categories for teachers are established by the Teacher Qualification Service upon application, and only when a British Columbia teaching credential has already been granted by the British Columbia College of Teachers. Categories are assigned on the basis of completed years of academic and professional preparation. Partial years are not considered.
- Procedure and Documentation: Application forms for the British Columbia College of Teachers and the Teacher Qualification Service are available from the School Experience Office, as well as directly from the agencies.


## English (BA Program)

Stan Beeler, Associate Professor, and Program Chair<br>Karin Beeler, Associate Professor<br>Dee Horne, Associate Professor<br>Kevin Hutchings, Associate Professor, and Canada Research Chair, Romantic Studies: Environment, Culture, and Representation<br>Robert Budde, Assistant Professor<br>Lisa Dickson, Assistant Professor<br>Kristen Guest, Assistant Professor<br>Maryna Romanets, Assistant Professor<br>Blanca Schorcht, Assistant Professor<br>Marian Scholtmeijer, Instructor

UNBC's English program includes course offerings in Canadian, British, American and International English literatures as well as world literature in English translation, and literary theory. Key areas include First Nations Literature, Canadian Literature, Comparative Literature, Women's Literature, Feminist Criticism and Theory, literature and media technology, and the relationship between literature and other disciplines. Creative writing and other kinds of writing courses are also available. The program encourages interdisciplinarity between literature, cultural studies, and science or technology. Computer literacy is a priority, as is the delivery of courses on the World Wide Web. The interdisciplinary perspective prepares students for a number of graduate or professional programs (e.g. English, Journalism, Creative Writing, Law, Education, Business) or employment in the public or private sectors.

## Major in English

The major in English requires students to take 18 English courses (54 credit hours) at least 30 credit hours of which must be upper division courses ( 300 and 400 level) with at least nine credit hours of these at the 400 level. Students wishing to take more than 66 credit hours in English must obtain written permission from the Chair of the English Program.

The minimum requirement for completion of a Bachelor of Arts with a major in English is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Subject Requirement

The major in English requires students to take 18 courses ( 54 credit hours) of English or approved ancillary courses and must include:

One of:
ENGL 100-3 Introduction to Literary Structures
ENGL 102-3 Introduction to Poetry
ENGL 103-3 Introduction to Fiction
ENGL 104-3 Introduction to Drama and/or Film
Both:
ENGL 211-3 Survey of English Literature I
ENGL 212-3 Survey of English Literature II
One of:
ENGL 200-3 Gender and Literary Theory
ENGL 300-3 Theory
ENGL 400-3 Contemporary Theory
Two of:
ENGL 210-3 Women and Literature: A Survey
ENGL 280-3 Shakespeare
or ENGL 281-3 Introduction to Renaissance Literature or ENGL 381-3 Renaissance Literature
ENGL 282-3 Introduction to Restoration and 18th Century Literature
or ENGL 382-3 Restoration and 18th Century Literature
ENGL 283-3 Introduction to Romantic Literature or ENGL 383-3 Romantic Literature
ENGL 284-3 Introduction to Victorian Literature or ENGL 384-3 Victorian Literature or ENGL 386-3 19th Century Literature in the United States
ENGL 285-3 Modern British Literature or ENGL 385-3 Modern and Contemporary Literature in the United States

Two of:

| ENGL 320-3 | First Nations Literature |
| :--- | :--- |
| ENGL 331-3 | Genres in Canadian Literature |
| ENGL 340-3 | Postcolonial Literature |
| ENGL 350-3 | Comparative Literature |
| ENGL 410-3 | Contemporary Women's Literature |
| ENGL 420-3 | Advanced First Nations Literature |
| ENGL 430-3 | Special Topics in Canadian Literature |
| ENGL 440-3 | Postcolonial Literature I |
| ENGL 450-3 | Special Topics in Comparative Literature |

An additional 10 courses ( 30 credit hours) of English or approved ancillary courses (chosen to ensure fulfillment of upper division requirement).

## Approved Ancillary Courses for a Major in English

Up to three of the following ancillary courses may be counted towards the English major requirements, but none may be counted towards an English minor.

WMST 209-3 Gender and Cultural Studies: An Introduction
WMST 304-3 Contemporary Women's Writing in an International Frame
WMST 309-3 Gender and Film
WMST 306-3 Indigenous Women: Perspectives
WMST 311-3 History of Feminist Theories
WMST 401-3 Cultural Studies: Gender, Race and Representation
WMST 403-3 Science, Technology, and Women's Lives
WMST 411-3 Contemporary Feminist Theories
Note: a maximum of three ancillary courses (nine credit hours) may be used to fulfill English subject requirements.

Students planning to continue on to a graduate degree in English should consult with English faculty and/or the receiving institution to assist them in determining which courses are most appropriate in fulfilling the additional 10 courses ( 30 credit hours) of English subject requirements.

## Upper Division Requirement

At least 30 credit hours of the 54 required must be at 300 or 400 level, with at least nine credit hours of these at the 400 level. Any of the required 300 or 400 level courses specified above can count towards the 30 credit hours required at the 300 or 400 level.

## Elective Requirement

Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours.

## Joint Major in English/History

The minimum requirement for completion of a Bachelor of Arts with a Joint Major in English and History is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

ENGL 211-3 Survey of English Literature I
ENGL 212-3 Survey of English Literature II
HIST 190-3 The West and the World to 1660
HIST 191-3 The West and the World since 1660
One of:
ENGL 100-3 Introduction to Literary Structures
ENGL 102-3 Introduction to Poetry
ENGL 103-3 Introduction to Fiction
ENGL 104-3 Introduction to Drama and/or Film
One of:
ENGL 200-3 Gender and Literary Theory
ENGL 300-3 Theory
ENGL 400-3 Contemporary Theory
Two of:
ENGL 210-3 Women and Literature: A Survey
ENGL 280-3 Shakespeare
ENGL 281-3 Introduction to Renaissance Literature
ENGL 282-3 Introduction to Restoration and 18th Century Literature
ENGL 283-3 Introduction to Romantic Literature
ENGL 284-3 Introduction to Victorian Literature
ENGL 285-3 Modern British Literature
ENGL 381-3 Renaissance Literature
ENGL 382-3 Restoration and 18th Century Literature
ENGL 383-3 Romantic Literature
ENGL 384-3 Victorian Literature
ENGL 385-3 Modern and Contemporary Literature in the United States
ENGL 386-3 19th Century Literature in the United States
Nine additional credit hours (three courses) of History at the 100 or 200 level.

## Upper Division Requirement

Of the 39 credit hours of English ( 13 courses) required for this degree, at least 21 credit hours (seven courses) must be at the 300 and 400 level, with at least six of those 21 credit hours (two of seven courses) at the 400 level.

HIST 300-3 Historiography: The Nature of the Historical Discipline
Two of:
ENGL 320-3 First Nations Literature
ENGL 331-3 Genres in Canadian Literature
ENGL 340-3 Postcolonial Literature
ENGL 350-3 Comparative Literature
ENGL 410-3 Contemporary Women's Literature
ENGL 420-3 Advanced First Nations Literature
ENGL 430-3 Special Topics in Canadian Literature
ENGL 440-3 Postcolonial Literature I
ENGL 450-3 Special Topics in Comparative Literature

Eighteen credit hours (six courses) in History at the 300 or 400 level.
Fifteen additional credit hours of English (five courses) ensuring fulfillment of the upper division requirement. Two courses may be from the following list of English ancillary courses:

| WMST 209-3 | Gender and Cultural Studies: An Introduction |
| :--- | :--- |
| WMST 304-3 | Contemporary Women's Writing in and |
|  | International Frame |
| WMST 309-3 | Gender and Film |
| WMST 306-3 | Indigenous Women: Perspectives |
| WMST 311-3 | History of Feminism |
| WMST 401-3 | Cultural Studies: Gender, Race and |
|  | Representation |
| WMST 403-3 | Science, Technology, and Women's Lives |
| WMST 411-3 | Contemporary Feminist Theories |

## Elective Requirement

Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours.

## Joint Major in English/Political Science

The minimum requirement for completion of a Bachelor of Arts with a Joint Major in English and Political Science is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

ECON 205-3 Statistics for the Social and Management Sciences
ENGL 211-3 Survey of English Literature I
ENGL 212-3 Survey of English Literature II
POLS 100-3 Contemporary Political Issues
POLS 200-3 Canadian Government and Politics
POLS 202-3 Comparative Government and Politics
POLS 270-3 Political Philosophy: Plato to Hobbes
One of:

ENGL 100-3 Introduction to Literary Structures
ENGL 102-3 Introduction to Poetry
ENGL 103-3 Introduction to Fiction
ENGL 104-3 Introduction to Drama and/or Film

One of:

| ENGL 200-3 | Gender and Literary Theory |
| :--- | :--- |
| ENGL 300-3 | Theory |
| ENGL 400-3 | Contemporary Theory |

Two of:

| ENGL 210-3 | Women and Literature: A Survey |
| :--- | :--- |
| ENGL 280-3 | Shakespeare |
| ENGL 281-3 | Introduction to Renaissance Literature |
| ENGL 282-3 | Introduction to Restoration and 18th Century |
|  | Literature |
| ENGL 283-3 | Introduction to Romantic Literature |
| ENGL 284-3 | Introduction to Victorian Literature |
| ENGL 285-3 | Modern British Literature |
| ENGL 381-3 | Renaissance Literature |
| ENGL 382-3 | Restoration and 18th Century |
| ENGL 383-3 | Romantic Literature |
| ENGL 384-3 | Victorian Literature |
| ENGL 385-3 | Modern and Contemporary Literature in the |
|  | United States |
| ENGL 386-3 | 19th Century Literature in the United States |

Nine additional credit hours (three courses) of History at the 100 or 200 level

## Upper Division Requirement

Of the 39 credit hours of English ( 13 courses) required for this joint major, 21 credit hours (seven courses) must be at the 300 and/or 400 level, with at least six of those 21 credit hours (two of seven courses) at the 400 level.

POLS 320-3 Canadian Politics and Policy
POLS 303-3 Democracy and Dictatorship
POLS 370-3 Political Philosophy: Locke to Marx
Two of:
ENGL 320-3 First Nations Literature
ENGL 331-3 Genres in Canadian Literature
ENGL 340-3 Postcolonial Literature
ENGL 350-3 Comparative Literature
ENGL 410-3 Contemporary Women's Literature
ENGL 420-3 Advanced First Nations Literature
ENGL 430-3 Special Topics in Canadian Literature
ENGL 440-3 Postcolonial Literature I
ENGL 450-3 Special Topics in Comparative Literature
One of:
POLS 313-3 Women and Politics
POLS 317-3 Ethics
POLS 325-3 Canadian Politics and Identity
One of:
POLS 400-3 Classics in Political Theory
POLS 472-3 Contemporary Theories of Political Communities

Fifteen additional credit hours in English (five courses). Up to two of the following ancillary courses (up to six credit hours) may be counted among those five additional courses:

WMST 209-3 Gender and Cultural Studies: An Introduction
WMST 304-3 Contemporary Women's Writing in an International Frame
WMST 309-3 Gender and Film
WMST 306-3 Indigenous Women: Perspectives
WMST 311-3 History of Feminism
WMST 401-3 Cultural Studies: Gender, Race and Representation
WMST 403-3 Science, Technology, and Women's Lives
WMST 411-3 Contemporary Feminist Theories

## Elective Requirement

Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours.

## Joint Major in English/Women's Studies

The minimum requirement for completion of a Bachelor of Arts with a Joint Major in English and Women's Studies is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

WMST 100-3 Introduction to Women's Studies
WMST 210-3 Research Methods
ENGL 200-3 Gender and Literary Theory or WMST 220-3 Gender and Literary Theory
ENGL 210-3 Women and Literature: A Survey or WMST 221-3 Women and Literature: A Survey
ENGL 211-3 Survey of English Literature, I
ENGL 212-3 Survey of English Literature, II
HIST 312-3 An Introduction to the History of Gender or WMST 312-3 An Introduction to the History of Gender

One of:
ENGL 100-3 Introduction to Literary Structures
ENGL 102-3 Introduction to Poetry
ENGL 103-3 Introduction to Fiction
ENGL 104-3 Introduction to Drama and/or Film

## Upper Division Requirement

WMST 302-3 Women and the Contemporary World
HIST 311-3 History of Feminism
or WMST 311-3 History of Feminism
ENGL 410-3 Contemporary Women's Literature
or WMST 420-3 Contemporary Women's Literature
One of:
ENGL 300-3 Theory
ENGL 400-3 Contemporary Theory
One of:
ENGL 320-3 First Nations Literature
ENGL 331-3 Genres in Canadian Literature
ENGL 340-3 Postcolonial Literature
ENGL 350-3 Comparative Literature
ENGL 410-3 Contemporary Women's Literature
ENGL 420-3 Advanced First Nations Literature
ENGL 430-3 Special Topics in Canadian Literature
ENGL 440-3 Postcolonial Literature I
ENGL 450-3 Special Topics in Comparative Literature

## Additional Requirements:

Two of:
ENGL 280-3 Shakespeare
ENGL 281-3 Introduction to Renaissance Literature
ENGL 282-3 Introduction to Restoration and 18th Century Literature
ENGL 283-3 Introduction to Romantic Literature
ENGL 284-3 Introduction to Victorian Literature
ENGL 285-3 Modern British Literature
ENGL 381-3 Renaissance Literature
ENGL 382-3 Restoration and 18th Century Literature
ENGL 383-3 Romantic Literature
ENGL 384-3 Victorian Literature
ENGL 385-3 Modern and Contemporary Literature in the United States

Three additional English courses at the 300 or 400 level.
At least five additional courses selected from the following:
ANTH 401-3 Anthropological Perspectives on Inequality
ANTH 406-3 Feminist Perspectives in Anthropology
COMM 333-3 Women in Organizations
ECON 301-3 Women and the Economy
ENVS 309-3 Women and Environmental Studies
FNST 302-3 First Nations Health and Healing
FNST 306-3/
WMST 306-3 Indigenous Women: Perspectives
HIST 402-3 Women in Canada
HIST 453 (3-6) Topics in the History of Gender
HIST 454 (3-6) Topics in Women's History
INTS 308-3 Gender and International Studies
POLS 313-3 Women and Politics
POLS 403-3 Social and Health Policy and Administration
POLS 434-3 Resource Communities in Transition

## Elective Requirement

Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours.

## Minor in English

The minor in English requires that students take at least six English courses ( 18 credit hours), at least four ( 12 credit hours) of which must be upper division. A maximum of two courses (six credit hours) used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in English. The minor must include:

One of:
ENGL 200-3 Gender and Literary Theory
ENGL 300-3 Theory
ENGL 400-3 Contemporary Theory
Five English courses selected to ensure a minimum of four courses are completed at the 300 or 400 level.

## Environmental Programs (BASc, BA, and BSc Programs)

Environmental and ecological problems are of increasing concern to Canadians. In northern British Columbia, the concerns are especially acute in a primarily resource-based economy. The Environmental Programs recognize the complex nature of these issues through the integrated approach contained in the three degree offerings: the Joint UNBC/UBC Bachelor of Applied Science in Environmental Engineering, the Bachelor of Arts in Environmental Studies, and the Bachelor of Science in Environmental Science.

## Environmental Engineering (BASc Program)

Ron Thring, Professor, and Program Chair<br>Joselito Arocena, Professor, and Canada Research Chair, Soil and Environmental Sciences<br>Peter Jackson, Associate Professor<br>Michael Rutherford, Associate Professor<br>Youmin Tang, Associate Professor, and Canada Research Chair, Climate Prediction and Predictability<br>Stephen Dery, Assistant Professor, and Canada Research Chair, Northern Hydrometeorology<br>Jianbing Li, Assistant Professor<br>Jueyi Sui, Assistant Professor<br>Joseph Ackerman, Adjunct Professor<br>Albert Koehler, Adjunct Professor

Engineers serve society across a wide range of economic sectors, and an increased number of engineering graduates are needed by the province to assure its economic growth and maintain its high quality of life. As one aspect of this, future development decisions in most major sectors of the British Columbia economy must fully integrate environmental and economic factors. Problems in water, air and soil pollution control and remediation, solid waste management, mine waste disposal, and geo-environmental engineering require highly skilled engineers with a solid background in environmental engineering, strong communication skills and the ability to work across disciplines. The program prepares graduates for a wide range of employment opportunities where the technical expertise and problem solving skills of engineers are needed in conjunction with a strong awareness and understanding of environmental issues and problems. This is the case most particularly for resource industries (e.g. forestry, fisheries, mining, oil and gas, pulp and paper, and the agri-food industry); various government departments and research organizations; and in environmental engineering consulting companies. It is also anticipated that graduates will work in the new environmental economy - areas related to environmental reclamation, remediation and restoration.

The Environmental Engineering Bachelor of Applied Science program is a 4.5 year (nine semester) joint degree between the University of British Columbia and the University of Northern British Columbia. The program is based on a unique collaboration between UNBC and UBC that capitalizes on the strength of UNBC in Environmental Science and the strength of UBC in Engineering. It incorporates complementary elements and expertise from each institution while maintaining the exposure of students to the distinctive character of both institutions. The program starts with a two-year foundation in mathematics, basic and environmental sciences from UNBC. In the third and fourth years, the program provides a thorough education and training in engineering fundamentals, engineering analysis and engineering design, largely through courses in Civil Engineering and Chemical and Biological Engineering at the University of British Columbia. The final term at UNBC exposes students to practical environmental engineering problems.

# Undergraduate Programs: Environmental Engineering 

The program is designed to meet both the criteria for accreditation of the Canadian Engineering Accreditation Board and for environmental engineering registration with the Association of Professional Engineers and Geoscientists of the Province of British Columbia. The program will be evaluated for accreditation when the first students graduate.

## Admission Requirements

Admission to the program is limited and is based on academic qualifications and available space. Priority admission will be given to students who meet admission criteria and apply by the deadline of March 1.

Applicants from BC and Yukon secondary schools must:

- Meet UNBC admission requirements, and
- Have an average of at least $75 \%$ based on the following four courses: Principles of Math 12, English 12 and two provincially examinable Science 12 courses. In addition, applicants must have successfully completed Chemistry 11 and either Biology 11 or Biology 12 in order to meet course prerequisites in the Program. Physics 12 or an equivalent is strongly recommended, as it is a prerequisite for first-year Physics courses in the program. Students who are admitted without the Physics 12 prerequisite may be delayed in their studies as they may not be able to complete the first four semesters of the program in the normal two year time period. Meeting the minimum GPA does not guarantee admission. Under exceptional circumstances the prerequisites may be waived.

Other applicants must demonstrate that they possess qualifications at least equivalent to the BC and Yukon requirement.

## Regulations

Unless otherwise specified, the rules and regulations will be those applicable at the institution (UBC or UNBC) at which the students are attending at the time the rules/regulations need to be applied. In the case where the rules and regulations are needed to cover the program as a whole, or where the institution of attendance is not relevant, then the more stringent rules/regulations will be applied. Any academic appeals will be handled using the procedures at the institution where the rules/regulations need to be applied.

## Residency

The minimum residency requirement is 30 credits at each of UNBC and UBC.

## Progression

Progression between years and institutions requires good academic standing in the program at the most recent institution of residence (UNBC or UBC). At UNBC this means a GPA of at least 2.0 or $63 \%$. At UBC this means an average of at least $55 \%$, and passing grades in at least $65 \%$ of the credits taken.

## Graduation

It is the responsibility of the student to ensure that his/her degree requirements are met. Students must have a CGPA of at least 2.0 (63\%) over all courses at both institutions to graduate. The diploma will carry crests from both granting institutions (UNBC and UBC).

## Transfers

Transfers into the program (into year two and beyond) are allowed as long as the prerequisite courses or articulated courses are completed, and there is space available in the program. Acceptance of transfers into the program will be based upon GPA, with priority given to those with the highest GPA. Regardless of the articulated courses transferred, students must complete a minimum of 30 credit hours of their program at each of the granting institutions (at UBC and at UNBC).

## GPA Calculation for Transfer Students

Only transfer courses used in meeting degree requirements will be used in the calculation of GPA and CGPA for continuance, progression and graduation, as described above.

## Co-operative Education

Co-operative education is an optional but strongly recommended element of the Environmental Engineering program. The co-op option of the program will be administered by UNBC with the close cooperation of UBC. Students will require a 2.75 GPA in their program of study to qualify for entry and continuance in the co-op option. Students will be eligible to apply for the co-op option during their first academic year at UNBC and will be eligible to experience their first work term upon completion of 30 credits at UNBC. Students will be eligible to experience their second work term after completing 60 credits at UNBC.

## Program Requirements

| UNBC degree requirements: | 85 credit hours |
| :--- | :--- |
| UNBC elective credits: | 6 credit hours |
| UBC degree requirements: | 59 credit hours |
| UBC technical elective credits: | 9 credit hours |
| UBC design elective credits: | 3 credit hours |
| Total credits for degree: | 162 credit hours |

## Undergraduate Programs: Environmental Engineering

Semester 1 and 2 completed at UNBC
BIOL 101-4 Introduction to Biology I
BIOL 102-4 Introduction to Biology II
CHEM 100-3 General Chemistry I
CHEM 101-3 General Chemistry II
CHEM 120-1 General Chemistry Lab I
CHEM 121-1 General Chemistry Lab II
CPSC 110-3 Introduction to Computer Systems and Programming
ENSC 100-1 Introduction to Engineering Seminar
MATH 100-3 Calculus I
MATH 101-3 Calculus II
NRES 100-3 Communications in NRES
PHYS 110-4 Introductory Physics I: Mechanics
PHYS 111-4 Introductory Physics II: Waves and Electricity
CORE 101-3 Humanities
or CORE 103-3 Social Sciences or three credit hours of course work selected from the list of acceptable courses under the Social Sciences or Arts and Humanities quadrants. POLS 100-3 is recommended in meeting this requirement as it is a prerequisite for ENPL 401-3 in semester 9 of the program.

## Semester 3 and 4 completed at UNBC

CHEM 200-3 Physical Chemistry I
CHEM 220-3 Organic and Biochemistry
ENSC 200-3 Fundamentals of Environmental Engineering
ENSC 201-3 Introduction to Atmospheric Science
ENSC 202-3 Introduction to Aquatic Systems
ENSC 350-3 Fluid Mechanics
FSTY 205-3 Introduction to Soil Science
MATH 200-3 Calculus III
MATH 220-3 Linear Algebra
MATH 230-3 Linear Differential Equations and Boundary Value Problems
MATH 342-3 Biostatistics

## Semester 5 and 6 completed at UBC

CHBE 241-3 Mass, Energy, Momentum Balance
CHBE 242-3 Chemical and Biological Process Technology
CHBE 364-2 Environmental Engineering Laboratory
CHBE 373-3 Water Pollution Control
CHBE 484-3 Pollution Prevention Engineering
CIVL 200-3 Engineering and Sustainable Development
CIVL 210-4 Soil Mechanics I
CIVL 315-4 Fluid Mechanics II
CIVL 316-4 Hydrology and Open Channel Flow
MMPE 391-3 Mining and the Environment
Three credit hours of technical elective chosen from a constrained list.

## Semester 7 and 8 completed at UBC

CHBE 346-3 Chemical and Biological Engineering Thermodynamics
CHBE 351-3 Transport Phenomena II
CHBE 459-3 Chemical and Biological Engineering Economics
CHBE 485-3 Air Pollution Control
CHBE 489-3 Pollution Control in the Pulp and Paper Industry
CIVL 402-2 Engineering Law and Contracts in Civil Engineering
CIVL 408-3 Geoenvironmental Engineering
CIVL 409-3 Design of Water Supply and Waste Conveyance Systems
CIVL 416-3 Environmental Hydraulics
Three credit hours of design elective chosen from a list of design oriented courses.
Six credit hours of technical electives chosen from a constrained list.

## Semester 9 completed at UNBC

ENPL 401-3 Environmental Law
ENSC 417-6 Designing Solutions in Environmental Engineering
ENSC 418-3 Environmental Measurement and Analysis
Three credit hours of Social Science or Humanities elective. Three credit hours of elective.

# Environmental Science <br> (BSc Program) 

Ron Thring, Professor, and Program Chair<br>Joselito Arocena, Professor, and Canada Research Chair, Soil and Environmental Sciences<br>Peter Jackson, Associate Professor<br>Michael Rutherford, Associate Professor<br>Youmin Tang, Associate Professor, and Canada Research Chair, Climate Prediction and Predictability<br>Stephen Dery, Assistant Professor, and Canada Research Chair, Northern Hydrometeorology<br>Jianbing Li, Assistant Professor<br>Jueyi Sui, Assistant Professor<br>Joseph Ackerman, Adjunct Professor<br>Jean Wang, Senior Lab Instructor

## Major in Environmental Science

The Environmental Science Bachelor of Science degree is an interdisciplinary one in which students take a core curriculum in the environmental sciences with a focus in the area of their choice. Students in this degree will gain an appreciation of the fundamental biological, chemical and physical and applied aspects integral to the field of environmental science. In addition, they will receive exposure to the human dimensions that underlie many of these issues. This approach will ensure a uniform preparation among students and allow for the development of a diversity of expertise necessary to address the complexity of present environmental problems and future unanticipated ones.

The program has been designed in part to address educational components of the National Occupational Standards (NOS) for Environmental Employment set out by The Canadian Council for Human Resources in the Environment Industry (CCHREI). The NOS forms the basis of the Canadian Certified Environmental Practitioner (CCEP) accreditation process of the Canadian Environmental Certification Approvals Board (CECAB).

Degree requirements: 103 credit hours
Area of focus: 12 credit hours
Elective credit hours in any subject as necessary to ensure completion of a minimum of 127 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

Note: Students without a background in Political Science should take POLS 100-3 (Contemporary Political Issues) in meeting the Social Science Breadth Requirements.

## Program Requirements

*Important: Courses with an asterisk (*) have prerequisites not taken in the major requirements; it is the student's responsibility to ensure that they have completed the required prerequisites.

## Lower Division Requirement

100 Level
BIOL 101-4 Introductory Biology I
BIOL 102-4 Introductory Biology II
CHEM 100-3 General Chemistry I
CHEM 101-3 General Chemistry II
CHEM 120-1 General Chemistry Lab I
CHEM 121-1 General Chemistry Lab II
MATH 100-3 Calculus I
MATH 101-3 Calculus II
PHYS 100-4 Introduction to Physics I
and PHYS 101-4 Introduction to Physics II
or PHYS 110-4 Introductory Physics I: Mechanics
and PHYS 111-4 Introductory Physics II: Waves and Electricity

## 200 Level

BIOL 201-3 Ecology
BIOL 203-3 Microbiology
CHEM 201-3 Organic Chemistry I
CHEM 250-1 Organic Chemistry Lab I
ENSC 201-3 Introduction to Atmospheric Science
ENSC 202-3 Introduction to Aquatic Systems
FSTY 205-3 Introduction to Soil Science
GEOG 205-3 Cartography and Geomatics
GEOG 210-3 Geomorphology
MATH 342-3 Biostatistics

## Upper Division Requirement

300 Level
ENSC 308-3 Northern Contaminated Environments
ENPL 305-3 Environmental Impact Assessment
Two of:
CHEM 200-3 Physical Chemistry I
CHEM 203-3 Organic Chemistry II
with CHEM 251-1 Organic Chemistry Lab II
CHEM 210-3 Analytical Chemistry I
CHEM 204-3 Introductory Biochemistry
CHEM 302-4 Environmental Chemistry I
PHYS 307-3 Environmental Physics

## Undergraduate Programs: Environmental Science

Two of:

| BIOL 302-3 | Limnology |
| :--- | :--- |
| ENSC 312-3 | Boundary-layer Meteorology |
| ENSC 350-3 | Fluid Mechanics |
| ENSC 408-3 | Storms |
| ENSC 425-3 | Global Change Science |
| FSTY 455-3 | Biogeochemical Processes in Soil Systems |
| GEOG 310-3 | Hydrology |
| GEOG 311-3 | Concepts in Geomorphology |

One of:
ENVS 309-3 Women and Environmental Studies
FNST 304-3 First Nations Environmental Philosophy and Knowledge
GEOG 401-3* Resource Geography
GEOG 402-3* Geography of the Circumpolar North
GEOG 403-3* Aboriginal Geography
INTS 307-3* Global Resources
INTS 340-3* The Circumpolar North in Global Perspective
INTS 410-3* Environment and Development in the Circumpolar North

## 400 Level

ENSC 406-3 Environmental Modelling
ENSC 418-3 Environmental Measurement and Analysis
ENPL 401-3* Environmental Law
ENVS 414-3 Environmental and Professional Ethics
Two of:
ENSC 404-3 Waste Management
ENSC 412-3 Air Pollution
ENSC 451-3 Groundwater Hydrology
ENSC 452-3 Reclamation and Remediation of Disturbed Environments
ENSC 453-3 Environmental Resources Management and Decision Making
NREM 410-3 Watershed Management

## Areas of Focus

Students may choose to focus in an environmental system (atmospheric, aquatic, terrestrial or ecological), in Environmental Chemistry or in Environmetrics (environmental techniques). Four courses chosen from one of the following lists are required, with the provision that 1) at least two of the courses must be at the upper division ( 300 or 400 level), and 2) courses used to fulfill major requirements above may not be used to fulfill an area of focus requirement.
*Note: It is the student's responsibility to ensure prerequisite courses have been completed for the courses listed below.

Aquatic Systems

| BIOL 204-3 | Plant Biology |
| :--- | :--- |
| BIOL 302-3 | Limnology |
| BIOL 307-3 | Ichthyology and Herpetology |
| BIOL 402-3 | Aquatic Plants |
| BIOL 406-3 | Fish Ecology |
| ENSC 350-3 | Fluid Mechanics |
| ENSC 451-3 | Groundwater Hydrology |
| GEOG 310-3 | Hydrology |
| GEOG 405-3 | Fluvial Geomorphology |
| NREM 410-3 | Watershed Management |
| or one of: | (Environmetrics list) |

Atmospheric Systems
CHEM 200-3 Physical Chemistry I
CHEM 302-4 Environmental Chemistry I
ENSC 312-3 Boundary-layer Meteorology
ENSC 408-3 Storms
ENSC 412-3 Air Pollution
ENSC 425-3 Global Change Science
PHYS 307-3 Environmental Physics
or one of: (Environmetrics list)

## Ecological Systems

BIOL 202-3 Invertebrate Zoology
BIOL 204-3 Plant Biology
BIOL 210-3 Genetics
BIOL 301-3 Systematic Botany
BIOL 307-3 Ichthyology and Herpetology
BIOL 308-3 Ornithology and Mammalogy
BIOL 401-3 Plant-Microbial Interactions
BIOL 402-3 Aquatic Plants
BIOL 404-3 Plant Ecology
BIOL 406-3 Fish Ecology
BIOL 410-3 Population and Community Ecology
BIOL 411-3 Conservation Biology
FSTY 206-3 Forest Biology
or one of: (Environmetrics list)

## Terrestrial Systems

ENSC 404-3 Waste Management
ENSC 451-3 Groundwater Hydrology
FSTY 315-3 Forest Soil Management
FSTY 425-3 Soil Formation and Classification
FSTY 455-3 Biogeochemcial Processes in Soil Systems
GEOG 311-3 Concepts in Geomorphology
GEOG 405-3 Fluvial Geomorphology
GEOG 411-3 Advanced Elements in Geomorphology
GEOG 412-3 Geomorphology of Cold Regions
GEOG 414-3 Weathering Processes
Or one of: (Environmetrics list)

1) Aquatic Systems
2) Atmospheric Systems
3) Terrestrial Systems
4) Ecological Systems
5) Environmental Chemistry
6) Environmetrics

Environmental Chemistry
Note: Students selecting this focus area and who have not taken CHEM 210-3 elsewhere in their program, must select it here.)

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CHEM 200-3 Physical Chemistry I
CHEM 203-3 Organic Chemistry II
CHEM 210-3 Analytical Chemistry I
CHEM 302-4 Environmental Chemistry I
CHEM 310-3 Analytical Chemistry II
CHEM 311-3 Analytical Chemistry III
CHEM 400-3 Topics in Environmental Chemistry
CHEM 403-3 Topics in Inorganic Chemistry
CHEM 405-3 Topics in Biochemistry
CHEM 408-3 Environmental Chemistry II
CHEM 410-3 Topics in Analytical Chemistry
FSTY 455-3 Biogeochemical Processes in Soil Systems
Or one of: (Environmetrics List)
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## Environmetrics

CPSC 110-3 Introduction to Computer Systems and Programming
CPSC 311-3 Computer Applications Programming
ENSC 453-3 Environmental Resources Management and Decision Making
GEOG 300-3 Geographic Information Systems
GEOG 413-3 Advanced GIS
GEOG 432-3 Remote Sensing
MATH 200-3 Calculus III
MATH 220-3 Linear Algebra
MATH 230-3 Linear Differential Equations and Boundary Value Problems
MATH 333-3 Partial Differential Equations
MATH 334-3 Ordinary Differential Equations
MATH 335-3 Numerical Analysis I
MATH 433-3 Topics in Partial Differential Equations
MATH 434-3 Topics in Applied Mathematics

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 127 credit hours.

## BSc Honours-Environmental Science

The BSc Honours-Environmental Science provides a higher level of specialization and research experience, especially for students planning to proceed to postgraduate work. Honours students are required to complete the degree requirements for the BSC Environmental Science Major. In addition to the total number of credits required for the Environmental Science Major (i.e. Degree Requirements plus Area of Focus courses and Electives), each student must complete 6 credit hours of upper division courses selected from their Area of Focus, as well as ENSC 430-6 or NRES 430-6 (Undergraduate Thesis) under the supervision of a faculty member. The honours program is available after completing 60 credits in the Environmental Science Major and attaining a CGPA of not less than 3.33. Attaining the minimum requirement will not guarantee
admission to the honours program, which will be at the discretion of the Program. Maintenance of a CGPA of 3.33 is required to remain in the honours program.

## Minor in Environmental Science

The minor in Environmental Science offers an introduction to four environmental systems: aquatic, atmospheric, ecological, and terrestrial, as well as pollution and management, with the ability to develop more depth in one or two areas. Students in this minor will gain an exposure to fundamental biological, chemical and physical aspects integral to the field of environmental science.

The minor in Environmental Science requires the completion, from the courses listed below, of 21 credit hours, 12 of which must be at the upper division level. A maximum of two courses (six credits hours) used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in Environmental Science.

Students must select at least one course from each of the following categories (important: all courses listed for the minor have prerequisites; it is the student's responsibility to ensure that they have the required prerequisites):

## Aquatic Systems

| BIOL 302-3 | Limnology |
| :--- | :--- |
| BIOL 402-3 | Aquatic Plants |
| BIOL 406-3 | Fish Ecology |
| ENSC 202-3 | Introduction to Aquatic Systems |
| ENSC 350-3 | Fluid Mechanics |
| ENSC 451-3 | Groundwater Hydrology |
| GEOG 310-3 | Hydrology |
|  |  |
| Atmospheric |  |
| ENSC |  |
| ENSC 201-3 | Introduction to Atmospheric Science |
| ENSC 408-3 | Boundary-layer Meteorology |
| ENSC 412-3 | Air Pollution |
| ENSC 425-3 | Global Change Science |

## Ecological Systems

BIOL 201-3 Ecology
BIOL 202-3 Invertebrate Zoology
BIOL 203-3 Microbiology
BIOL 210-3 Genetics
BIOL 301-3 Systematic Botany
BIOL 401-3 Plant-Microbial Interactions
BIOL 404-3 Plant Ecology
BIOL 410-3 Population and Community Ecology
BIOL 411-3 Conservation Biology

## Undergraduate Programs: Environmental Science, Environmental Studies

## Terrestrial Systems

ENSC 451-3 Groundwater Hydrology
ENSC 452-3 Reclamation and Remediation of Disturbed Environments
FSTY 205-3 Introduction to Soil Science
FSTY 455-3 Biogeochemical Processes in Soil Systems
GEOG 210-3 Geomorphology
GEOG 311-3 Concepts in Geomorphology
GEOG 405-3 Fluvial Geomorphology
GEOG 411-3 Advanced Elements in Geomorphology
GEOG 412-3 Geomorphology of Cold Regions
GEOG 414-3 Weathering Processes
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 451-3 Groundwater Hydrology
ENSC 452-3 Reclamation and Remediation of Disturbed Environments
ENSC 453-3 Environmental Resources Management and Decision Making
NREM 410-3 Watershed Management

## Environmental Studies (BA Program)

Keith Egger, Professor, and Program Chair<br>Darwyn Coxson, Professor<br>Staffan Lindgren, Professor<br>Annie Booth, Associate Professor<br>Phil Burton, Associate Professor<br>Russell Dawson, Associate Professor, and Canada Research Chair, Avian Ecology<br>Arthur Fredeen, Associate Professor<br>Michael Gillingham, Associate Professor<br>Alex Hawley, Associate Professor<br>Paul Sanborn, Associate Professor<br>Scott Green, Assistant Professor<br>Anne Hardy, Assistant Professor<br>Dezene Huber, Assistant Professor, and Canada Research Chair, Forest<br>Entomology and Chemical Ecology<br>Chris Johnson, Assistant Professor<br>Lisa Poirier, Assistant Professor<br>Tracy Summerville, Assistant Professor<br>Jane Young, Assistant Professor<br>Roy Rea, Senior Lab Instructor

## Major in Environmental Studies

The Bachelor of Arts in Environmental Studies emphasizes a social science and humanities perspective on environmental issues. The program concentrates on issues arising from resource use and the effects of that use on the environment. Conflicting uses, political processes and value systems related to natural resources are studied.

Degree requirements: 81 credit hours
Elective credit hours in any subject as necessary to ensure completion of a minimum of 120 credit hours (at least 15 credit hours must be at the 300 or 400 level).

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

# Undergraduate Programs: Environmental Studies 

## Program Requirements

## Lower Division Requirement

100 Level
BIOL 110-3 Introductory Ecology
CHEM 110-3 Chemistry for Everyday Life
ECON 100-3 Microeconomics
ENPL 104-3 Introduction to Planning
GEOG 100-3 Environments and People
POLS 100-3 Contemporary Political Issues
Note: CPSC 150-3 (Computer Applications) is recommended for students without computing experience. Students are strongly encouraged to take an appropriate methodology course as part of their electives.

## 200 Level

ENPL 204-3 Principles and Practices of Planning
ENPL 205-3 Environment and Society
ENVS 203-3 Environmental Policy
GEOG 204-3 GIS for the Social Sciences
or GEOG 300-3 Geographic Information Systems
GEOG 205-3 Cartography and Geomatics
POLS 200-3 Canadian Government and Politics

## Upper Division Requirement

300 Level
ENPL 301-3 Sustainable Communities: Structure and Sociology
ENPL 305-3 Environmental Impact Assessment
ENSC 308-3 Northern Contaminated Environments
ENVS 306-3 Human Ecology
ENVS 309-3 Women and Environmental Studies
GEOG 301-3 Cultural Geography
HIST 360-3 An Introduction to Environmental History
INTS 307-3 Global Resources
or GEOG 401-3 Resource Geography
NREM 303-3 First Nations' Approaches to Resource Management
400 Level
ENPL 401-3 Environmental Law
ENPL 419-3 Social Research Methods
ENVS 414-3 Environmental and Professional Ethics
The Research Methodology and Undergraduate Thesis (ENPL 420-1
and ENPL 430-3) are optional courses.

## Elective Requirement

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).

## Minor in Environmental Studies

The minor in Environmental Studies offers an opportunity for students in other disciplines to gain knowledge of social systems and policy as they affect environmental and natural resources issues. A maximum of two courses (six credit hours) used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in Environmental Studies.

The minor in Environmental Studies requires the completion of 18 credit hours, 12 of which must be at the upper division level.

## Required

ENPL 205-3 Environment and Society
ENVS 414-3 Environmental and Professional Ethics
GEOG 100-3 Environments and People
Three of:
ENPL 301-3 Sustainable Communities: Structure and Sociology
ENSC 308-3 Northern Contaminated Environments
ENVS 306-3 Human Ecology
ENVS 309-3 Women and Environmental Studies
ENPL 401-3 Environmental Law
FNST 304-3 First Nations Environmental Philosophy and Knowledge
GEOG 401-3 Resource Geography
NREM 303-3 First Nations' Approaches to Resource Management
NREM 306-3 Society, Policy and Administration

# First Nations Studies (BA Program) 

Antonia Mills, Associate Professor, and Program Chair<br>Margaret Anderson, Professor<br>Michael Murphy, Assistant Professor, and Canada Research Chair, Comparative Indigenous-State Relations<br>Wendy Aasen, Adjunct Professor<br>Joanne Fiske, Adjunct Professor<br>Heather Harris, Adjunct Professor<br>Paul Michel, Adjunct Professor<br>Deanna Nyce, Adjunct Professor<br>Tina Fraser, Lecturer<br>Karen Sharp, Lecturer

First Nations Studies takes the points of view of First Nations people and communities as the starting point for description and analysis, and contextualizes issues from this perspective. Courses in First Nations Studies will re-orient students to question the underlying assumptions of everyday understanding and will develop clarity in thought and presentation critical to advanced study.
First Nations Studies is a valuable part of any good undergraduate education in the contemporary world; it is an appropriate undergraduate major for students aspiring to careers in education, business, public administration, law, communications, cultural property management, social services, health care delivery and administration, and many other fields. With an undergraduate major in First Nations Studies students may apply for admission to graduate programs in several academic disciplines, and to many professional programs. Students intending to apply for graduate or professional programs should ensure that their programs include all required prerequisites.

## Major in First Nations Studies

A major in First Nations Studies requires students to take 48 credit hours of First Nations Studies, at least 21 credit hours of which must be upper division courses. Those courses from the offerings of other programs with content focused on First Nations are designated as Approved ancillary courses for a major in First Nations Studies, and may be included among the 48 credit hours required for a major [for example HIST 390-3 (Aboriginal People in Canada)]. Students may not take more than 60 credit hours of First Nations Studies without written permission from the Chair of the First Nations Studies program. After the 100 level courses taken by all students majoring in First Nations Studies, the program requires only two other mandatory three-credit courses, FNST 200-3 (Methods and Perspectives in First Nations Studies), and FNST 305-3 (Seminar in First Nations Studies), permitting each student to design a program emphasizing various aspects of First Nations Studies such as contemporary political issues, languages and cultures, etc.

The minimum requirement for completion of a Bachelor of Arts with a major in First Nations Studies is 120 credit hours.
students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

## 100 and 200 Level

FNST 100-3 The Aboriginal Peoples of Canada
FNST 200-3 Methods and Perspectives in First Nations Studies
Any one of the following culture or language courses:

| FNST 131-3 | A First Nations Language: Level 1 |
| :--- | :--- |
| FNST 132-3 | A First Nations Language: Level 2 |
| FNST 133-3 | Carrier Language: Level 1 |
| FNST 134-3 | Carrier Language: Level 2 |
| FNST 135-3 | Haisla Language (X-a'islak'ala): Level 1 |
| FNST 136-3 | Haisla Language (X-a'islak'ala): Level 2 |
| FNST 137-3 | Tsimshian Language (Sm'algyax): Level 1 |
| FNST 138-3 | Tsimshian Language (Sm'algyax): Level 2 |
| FNST 139-3 | Nisga'a Language: Level 1 |
| FNST 140-3 | Nisga'a Language: Level 2 |
| FNST 161-3 | A First Nations Culture: Level 1 |
| FNST 162-3 | A First Nations Culture: Level 2 |
| FNST 163-3 | Carrier Culture: Level 1 |
| FNST 164-3 | Carrier Culture: Level 2 |
| FNST 167-3 | Tsimshian Culture: Level 1 |
| FNST 168-3 | Tsimshian Culture: Level 2 |
| FNST 169-3 | Nisga'a Culture: Level 1 |
| FNST 170-3 | Nisga'a Culture: Level 2 |
| FNST 171-3 | Métis Studies: Level 1 |
| FNST 172-3 | Métis Studies: Level 2 |

## Upper Division Requirement

## 300 Level

FNST 305-3 Seminar in First Nations Studies

Eighteen credit hours of 300 or 400 level First Nations Studies courses or approved ancillary courses for the major in First Nations Studies.

## Subject Requirement

Eighteen credit hours of First Nations Studies or approved ancillary courses at any level.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all

## Elective Requirement

Nine credit hours of upper division electives (to meet UNBC residency requirement).

Fifty-seven credit hours at any level in any subject to ensure completion of a minimum of 120 credit hours.

## Approved Ancillary Courses for a Major in First Nations Studies

This list is reviewed annually by the First Nations Studies program. Approved ancillary courses are those courses from other disciplines with content focused on First Nations. The following courses are included, and may be counted towards the required courses for a major in First Nations Studies.

| ANTH 206-3 | Ethnography in Northern British Columbia |
| :--- | :--- |
| ANTH 404-3 | Comparative Study of Indigenous Peoples of the |
|  | World |
| ANTH 407-3 | Topics in British Columbia Ethnography |
| ANTH 409-3 | Topics in British Columbia Archaeology |
| BIOL 350-3 | Ethnobotany |
| ENGL 320-3 | First Nations Literature |
| ENGL 420-3 | Advanced First Nations Literature |
| GEOG 403-3 | Aboriginal Geography |
| HIST 110-3 | Indigena |
| HIST 390-3 | Aboriginal People in Canada |
| HIST 391-3 | Aboriginal People in the United States |
| HIIS 303-3 | British Columbia |
| HIST 456 (3-6) | Topics in Cultural Encounters |
| NREM 303-3 | First Nations' Approaches to Resource Management |
| NURS 205-3-3 | Introduction to First Nations Health |
| NURS 422-3 | First Nations Health and Nursing |
| NURS 498-3 | The Health of First Nations People |
| POLS 220-3 | Canadian Law and Aboriginal Peoples |
| POLS $311-3$ | Russian Politics and Society |
| POLS 340-3 | First Nations Self-Government and Administration |
| POLS 412-3 | Comparative Aboriginal State Relations |
| SOCW 301-3 | Critical Social Work Practice |
| WMST 306-3 | Indigenous Women: Perspectives |
| WMST 412-3 | Political Economy and First Nations Women |

## Joint Major in First Nations Studies/Women's Studies

The First Nations Studies/Women's Studies Joint Major will equip students to understand the role of women in First Nations societies, political and social institutions, and economies. The degree ought to be particularly attractive to students who intend to pursue a career in education, business, public administration, communications, social services, and many other fields.

The minimum requirement for completion of a Bachelor of Arts with a Joint Major in First Nations and Women's Studies is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## ENGL 200-3/

WMST 220-3 Gender and Literary Theory
ENGL 210-3/
WMST 221-3 Women and Literature: A Survey
FNST 100-3 The Aboriginal Peoples of Canada
FNST 200-3 Methods and Perspectives in First Nations Studies
FNST 302-3 First Nations Health and Healing
FNST 305-3 Seminar in First Nations Studies
FNST 306-3/
WMST 306-3 Indigenous Women: Perspectives
HIST 312/
WMST 100-3 Introduction to Women's Studies
WMST 210-3 Research Methods
WMST 302-3 Women and the Contemporary World
WMST 311-3/
WMST 312-3 An Introduction to the History of Gender
HIST 311-3 History of Feminism
WMST 412-3 Political Economy and First Nations Women
At least one additional First Nations 100-level course in a culture or language.

## Upper Division Requirement

At least four additional courses selected from the following:

| ANTH 401-3 | Anthropological Perspectives on Inequality |
| :--- | :--- |
| ANTH 406-3 | Feminist Perspectives in Anthropology |
| COMM 333-3 | Women in Organizations |
| ECON 301-3 | Women and the Economy |
| ENGL 410-3/ |  |
| WMST 420-3 | Contemporary Women's Literature |
| ENGL 430-3 | Special Topics in Canadian Literature |
| ENVS 309-3 | Women and Environmental Studies |
| HIST 402-3 | Women in Canada |
| HIST 453 (3-6) | Topics in the History of Gender |
| HIST 454 (3-6) | Topics in Women's History |
| INTS 308-3 | Gender and International Studies |
| POLS 313-3 | Women and Politics |
| POLS 403-3 | Social and Health Policy and Administration |
| POLS 434-3 | Resource Communities in Transition |

At least five additional First Nations 300-400-level courses.

## Undergraduate Programs: First Nations Studies, First Nations Diplomas

## Elective Requirement

Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours.

## Minor in First Nations Studies

The minor in First Nations Studies allows students to learn about the field, and to combine a minor concentration in FNST with a major concentration in another area. Students wishing to develop a particular focus could select a set of courses, for example on aboriginal issues, aboriginal languages, and/or aboriginal cultures (Nisga'a, Métis or Carrier). Other combinations are possible with the guidance of the undergraduate student advisor.

A maximum of two courses (six credit hours) used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in First Nations Studies.

The minor requires completion of 18 credit hours (six courses):
FNST 100-3 The Aboriginal Peoples of Canada
Three credit hours of First Nations Studies at any level. Twelve credit hours of 300 or 400 level First Nations Studies.

## First Nations Diploma Programs

A Diploma allows a student who has completed a Certificate to build on that qualification. After completing a Certificate, a Diploma will require another 30 credit hours (for a total of 60 credit hours) with a minimum of 15 credit hours being in upper division courses. A maximum of 30 credit hours from other institutions may be applied to a Diploma.

## Aboriginal Health Sciences

The Diploma in Aboriginal Health Sciences offers a multidisciplinary program allowing individuals to pursue their interest in Aboriginal Health Science through a concentrated program of courses on Aboriginal Health and Health Science subjects. Individuals working with Aboriginal communities in a health related field or desiring to pursue a degree in the health sciences with a concentration on Aboriginal health will be especially interested in this program.

The Diploma in Aboriginal Health Sciences allows individuals to receive a credential after 62 credit hours of study. The Diploma especially complements a major in First Nations Studies, Anthropology, Environmental Studies, Community Health, and Psychology. Students desiring to complete a degree after completion of the Diploma are strongly encouraged to speak with the relevant program Academic Advisor.

The diploma program is based on existing undergraduate courses with the addition of four new courses (Aboriginal Medicines II-Administering and Ethics, Aboriginal Health Management, Aboriginal Health and Chronic IIIness, and Aboriginal Healing Practices).

## Diploma Requirements

Successful completion of the Certificate in Aboriginal Health Sciences:

| BIOL 102-4 | Introductory Biology II |
| :--- | :--- |
| HHSC 102-3 | Introductory to Health Sciences II - Rural and |
|  | Aboriginal Issues |
| PSYC 102-3 | Psychology and Human Problems |
| PSYC 215-3 | Research Design and Methodology in Psychology I |
| FNST 281-3 | Aboriginal Medicines II - Administering and Ethics |
| FNST 302-3 | First Nations Health and Healing |
| FNST 304-3 | First Nations Environmental Philosophy and |
|  | Knowledge |
| FNST 315-3 | Aboriginal Health Management |
| FNST 316-3 | Aboriginal Health and Chronic IIIness |
| FNST 317-3 | Aboriginal Healing Practices |

HHSC 102-3 Introductory to Health Sciences II - Rural and Aboriginal Issues
PSYC 102-3 Psychology and Human Problems
PSYC 215-3 Research Design and Methodology in Psychology I
FNST 281-3 Aboriginal Medicines II - Administering and Ethics
FNST 302-3 First Nations Health and Healing
FNST 304-3 First Nations Environmental Philosophy and Knowledge
FNST 315-3 Aboriginal Health Management
FNST 316-3 Aboriginal Health and Chronic IIIness
FNST 317-3 Aboriginal Healing Practices

## Undergraduate Programs: First Nations Diplomas, First Nations Certificates

## First Nations Language

The Diploma in First Nations Language offers a program that allows individuals to pursue their interests in First Nations language through a concentrated program of courses on a particular language.

This diploma program is directed towards individuals who may not wish to commit to a full majors program in First Nations Studies, with the associated requirements of a Bachelor's degree. Persons of First Nations descent and people who are working in the area of aboriginal education will be especially interested in this shorter term program. The diploma program enhances public access to a university education with a course of study that allows flexibility in scheduling individual study programs, establishes a progression mechanism, and provides a short term exit or the option of continuing into other programs, including the Bachelor program.

The diploma program is based on existing undergraduate courses with the addition of two additional levels of language courses (level 5 and 6) and two specific Advanced Immersion First Nations Language courses, which may be delivered through language mentoring.

## Diploma Requirements

Successful completion of 10 courses ( 30 credit hours):

- Six credit hours (two courses) of First Nations Language courses
- Three credit hours (one course) of Introduction to Linguistics
- $\quad$ Nine credit hours (three courses) in the structure of First Nations Languages
- Six credit hours (two courses) of First Nations Language Mentoring/Advanced Immersion
- Six credit hours (two courses) in First Nations Studies


## First Nations Certificate Programs

The Certificate program is intended to enhance public access to a university education with a flexible course of study that allows either a short term exit (upon completion of Certificate requirements) or the option of laddering into other programs, including the Bachelor program.

The Certificate also provides flexibility. All courses in the Certificate are university-credit courses. This means that students can apply credit taken in their Certificate to other programs should they later decide to pursue a Bachelor's degree. Moreover, the requirements for the Certificate could be completed in one year or could be completed on a part-time basis over several years, depending upon course scheduling and the situation of the student.

As soon as a student completed the 10 courses required in the program of study, the student would be eligible to receive his or her Certificate. The completion of the Certificate would give students the equivalent of one full year of university credit. This provides a laddered program of study which could result in the completion of a Bachelor's degree with three more years of study at UNBC or another university. Because the program is based on existing undergraduate courses, Certificate students will take their courses alongside regular, full-time students.

The requirements for admission into a Certificate program are the same as for any student enrolled in a UNBC undergraduate program. To be eligible for a certificate, students must achieve a minimum GPA of C , based on all courses taken at UNBC that are applied to the Certificate. University transfer credits also can be applied to the program, as appropriate, to a maximum of 15 credit hours.

## Aboriginal Community Resource Planning

The Aboriginal Community Resource Planning Certificate (ACP) consists of 10 courses (minimum 30 credit hours) drawn primarily from First Nations Studies and Environmental Studies, with offerings from Geography, Commerce, Resource Recreation and Tourism, and Natural Resources and Environmental Management. The courses from First Nations Studies provide students with foundations in First Nations in Canada, cultures and languages, internal and external issues, First Nations environmental philosophies, and the courses from Environmental Studies provide foundations in the principles of traditional planning. The program is generic in nature so that the knowledge can be transferred to different community settings, as well as to the variety of situations that students will encounter throughout their lives.

Two important purposes of the Certificate are, first, to provide requisite education to assist individuals involved in the resource planning in First Nations communities and, second, to provide expanded educational opportunities at the university level for students who are not in a position to commit to a four year program of study.

Students must meet with a First Nations Studies undergraduate student advisor prior to starting this program.

## Undergraduate Programs: First Nations Certificates

## Certificate Requirements

ENPL 104-3 Introduction to Planning
ENPL 204-3 Principles of Practices of Planning
FNST 100-3 The Aboriginal Peoples of Canada
FNST 304-3 First Nations Environmental Philosophy and Knowledge
FNST 249-3 Aboriginal Resource Planning
GEOG 205-3 Cartography and Geomatics
Any First Nations Culture Level 1 course or any First Nations Language Level 1 course

One of:
ARTS 102-3 Research Writing
ENGL 170-3 Writing \& Communication Skills
FNST 200-3 Methods in First Nations Studies
One of:
FNST 215-3 Issues in External Relations for Contemporary Indigenous Peoples
FNST 216-3 Issues in Internal Relations for Contemporary Indigenous Peoples
POLS 200-3 Canadian Politics and Government

One of:
COMM 100-3 Introduction to Canadian Business
GEOG 202-3 Economic Geography
NRES 100-3 Communication in Natural Resource and Environmental Sciences

## Aboriginal Health Sciences

The Certificate in Aboriginal Health Sciences offers a multidisciplinary program allowing individuals to pursue their interest in Aboriginal Health Science through a concentrated program of courses on Aboriginal Health and Health Science subjects.
The Certificate requires completion of 10 courses (31 credit hours). Individuals working with Aboriginal communities in a health related field or desiring to purse a degree in the health sciences with a concentration on Aboriginal health will be especially interested in this program.

The Certificate in Aboriginal Health Sciences allows individuals to receive a credential after 31 credit hours of study. The Certificate especially complements a major in First Nations Studies, Anthropology, Environmental Studies, Community Health, and Psychology. Students desiring to complete a degree after the Certificate are strongly encouraged to speak with the relevant program academic advisor. Students must establish their course of study with approval from the Chair of First Nations Studies.

## Certificate Requirements

```
BIOL 110-3 Introductory Ecology
CHEM 110-3 Chemistry of Everyday Life
    or CHEM 100-3 General Chemistry I
FNST 100-3 The Aboriginal Peoples of Canada
HHSC 101-3 Introduction to Health Sciences I: Issues and
                Controversies
PHYS 115-4 General Introduction to Physics
PSYC 101-3 Psychology as a Science
FNST 200-3 Methods and Perspectives in First Nations Studies
FNST 280-3 Aboriginal Medicines I-Harvesting and Preservation
FNST 282-3 Aboriginal Health Philosophy
MATH 115-3 Pre-Calculus
```


## First Nations Language

The Certificate in First Nations Language offers a program that allows individuals to pursue an interest in First Nations language through a concentrated program of courses on a particular language.

This certificate program is directed towards individuals who may not wish to commit to a full majors program in First Nations Studies, with the associated requirements of a Bachelor's degree. Persons of First Nations descent and people who are working in the area of aboriginal education will be especially interested in this shorter term program. The certificate program enhances public access to a university education with a course of study that allows flexibility in scheduling individual study programs, establishes a progression mechanism, and provides a short term exit or the option of continuing into other programs, including the Bachelor's degree program.

Credits earned in the certificate program can be applied to the major or minor in First Nations Studies, subject to the requirements of those First Nations Studies programs.

Students must establish their course of study with approval from the Chair of First Nations Studies.

## Certificate Requirements

Five courses ( 15 credit hours) of study in a First Nations language of Northern BC, including one immersion course.

Two courses (six credit hours) of introductory First Nations Studies, including courses on culture and issues.

Two courses (six credit hours) of English.
One course (three credit hours) of Linguistics of First Nations languages.

## Undergraduate Programs: First Nations Certificates

## First Nations Public Administration

The Certificate in First Nations Public Administration consists of 10 courses ( 30 credit hours) drawn primarily from the program of First Nations Studies and Political Science, with offerings from Business Administration, and Economics. The courses from First Nations Studies provide students with foundations in internal and external First Nations issues and culture, and the courses from Political Science provide foundations in the principles of government, politics, and public administration, as well as some specialization in First Nations law, selfgovernment and administration. The program is generic in nature so that the knowledge can be transferred to different community settings, as well as to the variety of situations that students will encounter throughout their lives.

Two important purposes of the Certificate are, first, to provide requisite education to assist individuals involved in the administration of First Nations governments and, second, to provide expanded educational opportunities at the university level for students who are not in a position to commit to a four-year program of study.

Students must establish their course of study with approval from the Chair of First Nations Studies.

## Certificate Requirements

COMM 210-3 Financial Accounting
ECON 101-3 Macroeconomics
ENGL 170-3 Writing and Communication Skills or ARTS 102-3 Research Writing
FNST 100-3 The Aboriginal Peoples of Canada
POLS 100-3 Contemporary Political Issues
POLS 200-3 Canadian Government and Politics
POLS 220-3 Canadian Law and Aboriginal Peoples
or FNST 250-3 Canadian Law and Aboriginal Peoples
POLS 340-3 First Nations Self-Government and Administration
Two of:
FNST 215-3 Issues in External Relations for Contemporary Indigenous Peoples
FNST 216-3 Issues in Internal Organization for Contemporary Indigenous Peoples

Any First Nations Culture Level 1 course or any First Nations Language Level 1 course.

## General First Nations Studies

The Certificate in General First Nations Studies is a multidisciplinary program allowing individuals to pursue their interests in First Nations Studies through a concentrated program of courses on First Nations subjects.

The program ladders well into a major in First Nations Studies, Anthropology, Biology, History, Education, English, Environmental Studies, Forestry, Geography, Nursing and Community Health, Political Science, Psychology, Social Work and Women's Studies.

The Certificate requires successful completion of 10 courses ( 30 credit hours). Eighteen of these credit hours are earned by completing six required courses. The remaining four courses ( 12 credit hours) consist of options from the First Nations Studies program, including at least one course from the approved ancillary course list.

Students must establish their course of study with approval from the Chair of First Nations Studies.

## Certificate Requirements

FNST 100-3 The Aboriginal Peoples of Canada
FNST 200-3 Methods and Perspectives in First Nations Studies
FNST 215-3 Issues in External Relations for Contemporary Indigenous Peoples
ANTH 206-3 Ethnography in Northern British Columbia or FNST 304-3 First Nations Environmental Philosophy and Knowledge
HIST 110-3 Indigena
Any First Nations Culture Level 1 course or any First Nations Language Level 1 course.

Nine credit hours of First Nations Studies at any level approved by the Chair of First Nations Studies.

Three credit hours from the approved list of ancillary courses. Please refer to page 115 for the list of Approved Ancillary Courses.

## Métis Studies

The Certificate in Métis Studies offers a program that allows individuals to pursue their interests through a concentrated program of courses on the Métis Nation.

The certificate requires successful completion of 10 courses ( 30 credit hours).

Persons of Métis descent, other aboriginal people, and people who are working with aboriginal organizations will be especially interested in this program.

The Certificate in Métis Studies allows students to receive a credential after one year of studies which can be laddered into any UNBC program. It especially complements a major in First Nations Studies, Anthropology, History, English, Environmental Studies, Forestry, Geography, Nursing and Community Health, Political Science, Psychology, Social Work and Women's Studies.

The Certificate will be primarily offered through the Prince George campus. First Nations Studies is committed to distance delivery where possible. Students at other regional locals could take the certificate through a combination of face to face and distance delivery.

Students must establish their course of study with approval from the Chair of First Nations Studies.

## Undergraduate Programs: First Nations Certificates

## Certificate Requirements

FNST 100-3 The Aboriginal Peoples of Canada
FNST 200-3 Methods and Perspectives in First Nations Studies
Three of:

| FNST 171-3 | Métis Studies Level 1 |
| :--- | :--- |
| FNST 172-3 | Métis Studies Level 2 |
| FNST 271-3 | Métis Studies Level 3 |
| FNST 272-3 | Métis Studies Level 4 |
| FNST 131-3 | First Nations Language |
|  | (Cree Language): Level 1 |
| FNST 132-3 | First Nations Language |
|  | (Cree Language): Level 2 |
| FNST 231-3 | First Nations Language |
|  | (Cree Language): Level 3 |
| FNST 232-3 | First Nations Language |
|  | (Cree Language): Level 4 |

Note: Cree is subject to the availability of language instructors.

Fifteen credit hours (5 courses) of First Nations Studies courses dealing with Métis culture, language, or issues. These options will be determined by FNST course offerings in that year. They can be either lower division or upper division courses. They can include ancillary courses identified by the program. An ancillary course is defined as a course in a program other than First Nations Studies which has sufficient substantive content in common with First Nations Studies. The program maintains a list of approved ancillary courses.

## Nisga'a Studies

The Certificate in Nisga'a Studies offers a program that allows individuals to pursue their interests in First Nations Studies through a concentrated program of courses on the Nisga'a First Nation.

The certificate requires successful completion of 10 courses ( 30 credit hours).

Persons of Nisga'a descent, other aboriginal people, and people who are working with aboriginal organizations will be especially interested in this program.

It especially complements a major in First Nations Studies, Anthropology, History, English, Environmental Studies, Forestry, Geography, Nursing and Community Health, Political Science, Psychology, Social Work and Women's Studies.

The Certificate will be primarily offered through the WWN. First Nations Studies is committed to distance delivery where possible. Students at the Prince George campus or other regional locals could take the certificate through a combination of face to face and distance delivery.

Students must establish their course of study with approval from the Chair of First Nations Studies.

## Certificate Requirements

FNST 200-3 Methods and Perspectives in First Nations Studies
FNST 215-3 Issues in External Relations for Contemporary Indigenous Peoples

Six of:

| FNST 139-3 | Nisga'a's Language: Level 1 |
| :--- | :--- |
| FNST 140-3 | Nisga'a Language: Level 2 |
| FNST 169-3 | Nisga'a Culture: Level 1 |
| FNST 170-3 | Nisqa'a's Culture: Level 2 |
| FNST 239-3 | Nisga'a Language: Level 3 |
| FNST 240-3 | Nisga'a Language: Level 4 |
| FNST 269-3 | Nisga'a Culture: Level 3 |
| FNST 270-3 | Nisga'a Culture: Level 4 |

Note: It is possible to take all four levels of one category, either language or culture, and two levels of the other category.

Six credit hours (two courses) of First Nations Studies dealing with Nisga'a culture, language, or issues. These two options will be determined by FNST course offerings in that year. They can be at any level. They can include ancillary courses identified by the program. An ancillary course is defined as a course in a program other than First Nations Studies which has sufficient substantive content in common with First Nations Studies. The program maintains a list of approved ancillary courses.

## Traditional Environmental Knowledge

The Certificate in Traditional Environmental Knowledge (TEK) is a multidisciplinary program allowing individuals to pursue their interests in TEK through a concentrated program of courses on First Nations and Environmental subjects.

This program ladders well into a major in First Nations Studies, Anthropology, Biology, History, Education, English, Environmental Studies, Forestry, Geography, Nursing and Community Health, Political Science, Psychology, Social Work and Women's Studies as well as leading into majors in Physics and Chemistry.

The Certificate requires successful completion of 10 courses (minimum 30 credit hours). Eighteen of these hours are earned by completing six required First Nations courses. The remaining four courses (minimum 12 credit hours) consist of options from four different streams: Non-Science, Biology, and Chemistry or Physics. Students must establish their course of study with approval from the Chair of First Nations Studies.

## Certificate Requirements

FNST 100-3 The Aboriginal Peoples of Canada
FNST 203-3 Introduction to Traditional Environmental Knowledge
FNST 304-3 First Nations Environmental Philosophy and Knowledge

Any First Nations Culture Level 1 course or any First Nations Language Level 1 course.

One of:
ARTS 102-3 Research Writing
ENGL 170-3 Writing \& Communication Skills
FNST 200-3 Methods in First Nations Studies
One of:
FNST 206-3 First Nations Oral Literatures
FNST 215-3 Issues in External Relations for Contemporary Indigenous Peoples
FNST 216-3 Issues in Internal Relations for Contemporary Indigenous Peoples
FNST 302-3 First Nations Health and Healing
FNST 303-3 First Nations Religions and Philosophy

## Ecology Stream

BIOL 101-4 Introductory Biology I
BIOL 102-4 Introductory Biology II
BIOL 201-3 Ecology
ENSC 201-3 Introduction to Atmospheric Science
or NREM 204-3 Introduction to Wildlife and Fisheries

## Chemistry Stream

MATH 115-3 Precalculus or MATH alternative
CHEM 100-3 General Chemistry I and/or CHEM 120-1 General Chemistry Lab I
CHEM 101-3 General Chemistry II
and/or CHEM 121-1 General Chemistry Lab II
ENSC 201-3 Introduction to Atmospheric Science or Optional Course

## Non-Science Major Stream

CORE 104-3 Life Sciences
NREM 100-2* Natural Resource Management I or NREM 101-2 Natural Resource Management II
NREM 210-4 Integrated Resources Management
or Optional Course (except ENSC 201-2)
*Note: Applications for exemption from NREM 100-2 must be made within the first year of study in any Natural Resource Management major.

## Physics Stream

MATH 115-3 Precalculus
or MATH alternative
PHYS 115-4 General Introduction to Physics
PHYS 100-4 Introduction to Physics I
or PHYS 110-4 Introduction to Physics I: Mechanics
PHYS 101-4 Introduction to Physics II
or PHYS 111-4 Introduction Physics II: Waves and Electricity

## Optional Courses

COMM 100-3 Introduction to Canadian Business
ENPL 104-3 Introduction to Planning
GEOG 100-3 Environments and People
ENSC 201-3 Introduction to Atmospheric Science
GEOG 200-3 Geography of BC

## Geography (BA and BSc Programs)

Gail Fondahl, Associate Professor, and Program Chair Kevin Hall, Professor<br>Greg Halseth, Professor and Canada Research Chair, Rural and Small Town Studies<br>Ellen Petticrew, Associate Professor<br>Debra Straussfogel, Associate Professor<br>Roger Wheate, Associate Professor/GIS Coordinator<br>Sarah Boon, Assistant Professor<br>Neil Hanlon, Assistant Professor<br>Brian Menounos, Assistant Professor<br>Catherine Nolin, Assistant Professor<br>Jeff Curtis, Adjunct Professor<br>Zhongyou Lu, Adjunct Professor<br>James Randall, Adjunct Professor<br>J. Kent Sedgwick, Adjunct Professor<br>Ping Bai, Senior Lab Instructor (GIS)<br>Scott Emmons, Senior Lab Instructor (GIS)<br>Christine Jackson, Senior Lab Instructor

The Geography program offers both a Bachelor of Science and a Bachelor of Arts in Geography. The programs place strong emphasis on the geography of the North, the Pacific Northwest, and the importance of contemporary geographic technologies. The Bachelor of Science program emphasizes physical geography (geomorphology and watershed processes) while the Bachelor of Arts provides exposure to a range of courses in human geography.

Students entering a Geography program should be comfortable with the use of a computer for word processing. Introductory computer courses are available at UNBC.

## Geography Program (BA)

## Major in Geography

The Bachelor of Arts emphasizes human and cultural geography. Strong emphasis is placed on the geography of the North in general and of the Pacific Northwest in particular.

Undergraduate students are required to take 19 Geography courses ( 57 credit hours). Of these courses, 10 must be upper division. Elective credit hours must be taken to ensure completion of 120 credit hours, and must include at least 21 elective credit hours at the 300 or 400 level, in any subject.

The minimum requirement for the completion of a Bachelor of Arts with a major in Geography is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

## 100 Level

GEOG 100-3 Environments and People
GEOG 101-3 Human Geography
ECON 100-3 Microeconomics
or ECON 101-3 Macroeconomics
POLS 100-3 Contemporary Political Issues
HIST 110-3 Indigena
or HIST 190-3 The West and the World to 1660
or HIST 191-3 The West and the World Since 1660
or HIST 210-3 Canada Before Confederation
or HIST 211-3 Canada Since Confederation
WMST 100-3 Introduction to Women's Studies
or WMST 110-3 Women, Culture and Society
200 Level
ENSC 201-3 Introduction to Atmospheric Science
GEOG 200-3 Geography of BC
GEOG 202-3 Economic Geography
GEOG 203-3 Geography of Canada
or GEOG 207-3 Historical Geography of Canada
GEOG 204-3 Introduction to GIS for the Social Sciences
GEOG 205-3 Cartography and Geomatics
GEOG 206-3 Social Geography
GEOG 210-3 Geomorphology
MATH 242-3 Statistics for Social and Health Sciences or ECON 205-3 Statistics for Social and Management Sciences

## Upper Division Requirement

## 300 Level

ENPL 301-3 Sustainable Communities: Structure and Sociology
GEOG 301-3 Cultural Geography
GEOG 305-3 Political Geography
GEOG 309-3 Geographies of Migration and Settlement
Three of:
GEOG 300-3 Geographic Information Systems
GEOG 302-3 Geography of Russia
GEOG 303-3 Recreational Geography
GEOG 306-3 Geography of International Development GEOG 308-3 Introduction to Medical Geography

400 Level
ENPL 419-3 Social Research Methods
ENVS 414-3 Environmental and Professional Ethics
or COMM 332-3 Business and Professional Ethics or POLS 317-3 Ethics
GEOG 403-3 Aboriginal Geography
Three of:

| GEOG 401-3 | Resource Geography |
| :--- | :--- |
| GEOG 402-3 | Geography of the Circumpolar North |
| GEOG 413-3 | Advanced GIS |
| GEOG 422-3 | Geography of the World Economy |
| GEOG 424-3 | Social Geography of Northern Communities |
| GEOG 428-3 | Advanced Medical Geography |
| GEOG 432-3 | Remote Sensing |
| GEOG 498 (1-3) | Special Topics |
| GEOG 499 (3-6) Independent Studies |  |

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 120 credit hours, of which 21 credit hours in any subject must be at the 300 or 400 level.

## Geography Program (BSc)

## Major in Geography

Undergraduate students are required to take 13 Geography courses ( 39 credit hours). Of these courses, nine must be upper division. Students are required to take a minimum of 21 credit hours of electives from Science courses, of which 15 credit hours must be upper division. Additional electives, as necessary, are required to ensure the completion of a minimum of 125 credit hours.

The minimum requirement for completion of a Bachelor of Science with a major in Geography is 125 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

100 Level
BIOL 101-4 Introductory Biology I
BIOL 102-4 Introductory Biology II
CHEM 100-3 General Chemistry I
CHEM 101-3 General Chemistry II
CHEM 120-1 General Chemistry Lab I
CHEM 121-1 General Chemistry Lab II
GEOG 101-3 Human Geography
or GEOG 202-3 Economic Geography
MATH 152-3 Calculus for Non-majors
PHYS 100-4 Introduction to Physics I
200 Level
BIOL 201-3 Ecology
ENSC 201-3 Introduction to Atmospheric Science
FSTY 205-3 Introduction to Soil Science
GEOG 200-3 Geography of BC
GEOG 205-3 Cartography and Geomatics
GEOG 210-3 Geomorphology

## Upper Division Requirement

300 Level
GEOG 300-3 Geographic Information Systems
GEOG 310-3 Hydrology
GEOG 311-3 Concepts in Geomorphology
MATH 342-3 Biostatistics
Two of:
ENSC 312-3 Boundary-layer Meteorology
BIOL 301-3 Systematic Botany
FSTY 425-3 Soil Formation and Classification
One of:
GEOG 301-3 Cultural Geography
GEOG 302-3 Geography of Russia
GEOG 303-3 Recreational Geography
GEOG 305-3 Political Geography
GEOG 306-3 Geography of International Development
400 Level
GEOG 402-3 Geography of the Circumpolar North or GEOG 403-3 Aboriginal Geography
NREM 411-3 Environmental and Professional Ethics
Four of:
GEOG 405-3 Fluvial Geomorphology
GEOG 411-3 Advanced Elements in Geomorphology
GEOG 412-3 Geomorphology of Cold Regions
GEOG 413-3 Advanced GIS
GEOG 414-3 Weathering Processes
GEOG 432-3 Remote Sensing

## Elective Requirement

## Science Electives

Six credit hours of Science electives at any level.
Fifteen credit hours of Science electives at the 300 or 400 level.

## Elective Sciences Courses

## Biology:

All courses allowed, except BIOL 350-3 Ethnobotany

## Chemistry:

All courses allowed

## Computer Science:

All courses allowed

## Environmental Studies:

The following courses are allowed:
ENPL 402-3 Terrain Assessment
ENSC 202-3 Aquatic Systems
ENSC 312-3 Boundary-layer Meteorology
ENSC 406-3 Environmental Modelling
ENSC 408-3 Storms
ENSC 412-3 Air Pollution
ENSC 418-3 Environmental Measurement and Analysis

## Forestry:

All courses allowed

## Geography:

The following courses are allowed:
GEOG 210-3 Geomorphology
GEOG 300-3 Geographic Information Systems
GEOG 310-3 Hydrology
GEOG 311-3 Concepts in Geomorphology
GEOG 405-3 Fluvial Geomorphology
GEOG 411-3 Advanced Elements in Geomorphology
GEOG 412-3 Geomorphology of Cold Regions
GEOG 413-3 Advanced GIS
GEOG 414-3 Weathering Processes
GEOG 432-3 Remote Sensing

## Math:

All courses allowed

## Natural Resources Management:

The following courses are allowed:
NREM 203-3 Resource Inventories and Measurement
NREM 204-3 Introduction to Wildlife and Fisheries
Physics:
All courses allowed

## General Electives

Elective credit hours as necessary to ensure completion of a minimum of 125 credit hours.

## Joint Major in <br> Anthropology/Geography

See Calendar entry under Anthropology.

## Minor in Geomorphology

The aim of the minor is to show a level of competence in a theme, field or program direction that a student feels would be beneficial to her/his career and which would be ancillary to the major. The minors offered are those where there is a group of courses which, when taken together, provide a degree of proficiency in that field. By designating this group of courses as a minor the student is able to demonstrate a level of proficiency in that field.

This minor is appropriate to those who wish to attain a degree of specialization in geomorphology.

A maximum of two courses (six credit hours) used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in Geomorphology.

The minimum requirement for the completion of the minor in Geomorphology is 18 credit hours.

## Requirements

```
GEOG 210-3 Geomorphology
GEOG 311-3 Concepts in Geomorphology
Four of:
    GEOG 310-3 Hydrology
    GEOG 405-3 Fluvial Geomorphology
    GEOG 411-3 Advanced Elements in Geomorphology
    GEOG 412-3 Geomorphology of Cold Regions
    GEOG 300-3 Geographic Information Systems
        or GEOG 413-3 Advanced GIS
        or GEOG 432-3 Remote Sensing
    GEOG 414-3 Weathering Processes
    FSTY 205-3 Introduction to Soil Science
        or FSTY 425-3 Soil Formation and Classification
```


## Minor in GIS (Geographic Information Systems)

The aim of the minor is to provide a level of competence in, and exposure to, a combination of courses in Geographic Information Systems and Computer Science technologies. This grouping is designed to serve both majors in NRES programs and in Computer Science. Combining these selected courses in Geography and Computer Science will provide a level of proficiency in geographic data processing and analysis suitable for careers in the GIS industry.

The four required Geography courses are the core of the minor, augmented by a selection of three Computer Science courses, of which CPSC 110-3 (Introduction to Computer Systems and Programming), CPSC 126-3 (Introduction to Computer Systems), and CPSC 311-3 (Computer Applications Programming) are aimed at those not majoring in Computer Science. The final project course is designed to integrate the Minor components.

A maximum of two courses (six credit hours) at or above the 200 level used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in GIS.

The minimum requirement for the completion of the minor in GIS is 24 credit hours.

## Requirements

GEOG 205-3 Cartography and Geomatics
GEOG 300-3 Geographic Information Systems
GEOG 413-3 Advanced GIS
GEOG 432-3 Remote Sensing
Three of:
CPSC 100-4 Computer Programming I
or CPSC 110-3 Introduction to Computer Systems
and Programming

CPSC 126-3 Introduction to Computer Systems
CPSC 270-3 Human Interface Design
CPSC 311-3 Computer Applications Programming
CPSC 422-3 Database Systems
CPSC 440-3 Computer Networks
One of:
GEOG 430-3 Undergraduate Thesis
GEOG 440-3 Internship
GEOG 498-3 Directed Studies
GEOG 499-3 Independent Studies
CPSC 490-3, 491-3 Computing Project I, II
CPSC 495-3, 496-3 Undergraduate Research Project I, II

## Minor in Physical Geography

The aim of the minor is to show a level of competence in a theme, field or program direction that a student feels would be beneficial to her/his career and which would be ancillary to the major. The minors offered are those where there is a group of courses which, when taken together, provide a degree of proficiency in that field.

This minor may be appropriate for someone who needs a broader background than in the geomorphology minor, such as for prospective teachers.

A maximum of two courses (six credit hours) used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in Physical Geography.

The minimum requirement for the completion of the minor in Physical Geography is 18 credit hours.

## Requirements

## GEOG 210-3 Geomorphology

FSTY 205-3 Introduction to Soil Science
ENSC 201-3 Introduction to Atmospheric Science
Three of:*
ENSC 312-3 Boundary-layer Meteorology or ENSC 408-3 Storms
GEOG 310-3 Hydrology or GEOG 405-3 Fluvial Geomorphology
GEOG 311-3 Concepts in Geomorphology
GEOG 411-3 Advanced Elements in Geomorphology
GEOG 412-3 Geomorphology of Cold Regions
GEOG 300-3 Geographic Information Systems or GEOG 413-3 Advanced GIS or GEOG 432-3 Remote Sensing
GEOG 414-3 Weathering Processes
*Note: Courses used to fulfill requirements for a major or another minor may not be used to fulfill this requirement. Where students have the three required courses included in their major, they shall take four of the alternatives from the above list.

## Minor in Human Geography

The aim of the minor is to show a level of competence in a theme, field or program direction that a student feels would be beneficial to her/his career and which would be ancillary to the major. By designating this group of courses as a minor the student is able to demonstrate a level of proficiency in that field.

The minor in Human Geography is designed to provide the student with: 1) an introduction to the basics of Human Geography; 2) a well-rounded introduction to several of the key sub-fields of Human Geography; and 3) the chance to explore at least one facet of Human Geography of special interest to the student at the 400 level.

A maximum of two courses (six credit hours) at or above the 200 level used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in Human Geography.

The minimum requirement for completion of a minor in Human Geography is 24 credit hours, including twelve upper division credit hours.

## Requirements

| GEOG 100-3 | Environments and People |
| :--- | :--- |
| GEOG 101-3 | Human Geography |
| GEOG 202-3 | Economic Geography |
| GEOG 206-3 | Social Geography |
|  |  |
| A minimum of two, maximum of three of: |  |
| GEOG 301-3 | Cultural Geography |
| GEOG 305-3 | Political Geography |
| GEOG 306-3 | Geography of International Development |
| GEOG 308-3 | Introduction to Medical Geography |
| GEOG 309-3 | Geographies of Migration and Settlement |
|  |  |
| A minimum of one, maximum of two of: |  |
| GEOG 401-3 | Resource Geography |
| GEOG 403-3 | Aboriginal Geography |
| GEOG 422-3 | Geography of the World Economy |
| GEOG 424-3 | Social Geography of Northern Communities |
| GEOG 428-3 | Advanced Medical Geography |

GEOG 101-3 Human Geography
GEOG 202-3 Economic Geography
GEOG 206-3 Social Geography
A minimum of two, maximum of three of:
GEOG 301-3 Cultural Geography
GEOG 305-3 Political Geography
GEOG 306-3 Geography of International Development
GEOG 308-3 Introduction to Medical Geography
GEOG 309-3 Geographies of Migration and Settlement
A minimum of one, maximum of two of:
GEOG 401-3 Resource Geography
GEOG 403-3 Aboriginal Geography
EOG 422-3 Geography of the World Economy
GEOG 428-3 Advanced Medical Geography

## Health Sciences (BHSc Program)

Bachelor of Health Sciences (Biomedical Studies)

Bachelor of Health Sciences (Community and Population Health-Aboriginal and Rural Health)

Bachelor of Health Sciences (Community and Population Health-Environmental Health)

Henry Harder, Associate Professor, and Chair (Health Sciences Programs)<br>Laurie Chan, Professor<br>Shannon Wagner, Assistant Professor<br>Note: At the time of publication final approval by the Ministry of Advanced Education for the new Bachelor of Health Sciences (BHSC) program is pending. Students who qualify for admission to the program will be admitted to UNBC and, once final approval is received, admitted to the BHSc program.

The Bachelor of Health Sciences degree is a four year program consisting of a range of courses that relates directly to the science of health, in the recognition that health is a complex entity defying a simple explanation or a single disciplinary perspective. The courses identified within the Program offer learning opportunities from a variety of disciplines, including the Life Sciences, Social Sciences, Behavioural Sciences, and Ethics and Law, to enable students to develop a body of knowledge and understanding relating to the dimensions of Health. Some of these courses are considered to be 'core' and therefore central to the basic understandings of health, while others offer the student opportunities to learn about a specific health perspective that is focused on one of three Majors: (i) Biomedical Studies, (ii) Community and population Health-Environmental Health, or, (iii) Community and Population Health-Aboriginal and Rural Health. Graduation from either of the community and Population Health Majors enables students to embark on careers or graduate programs related to health care management, administration, information systems or public health.

Students pursuing the Biomedical Studies Major are required to complete a set of courses that enables them to be better prepared for application to professional programs, for example, in medicine, nursing, pharmacy, occupational therapy, dentistry, speech pathology or physiotherapy. This major provides a foundational knowledge base that is focused more on the natural and physical sciences, thus enabling those students to be better prepared to undertake healthrelated research or to work in scientific laboratories.

All students graduating with the Bachelor Health Sciences degree will have developed critical analytical skills, life-long learning skills, and the ability to work from the evidence of best practice.

## General Requirements

To be awarded the BHSc degree students are required to complete 120 credit hours of University-level courses. This consists of 57 credit hours of common requirements for all BHSc students, with the remainder coming from the following Majors, and electives, as follows:

Biomedical Studies - 48 credit hours of courses from the Biomedical Studies major and 15 elective credit hours.

Community and Population Health-Aboriginal and Rural Health

- 33 credit hours from the common course requirements for both Community and Population Health Majors, as well as a minimum of 12 credit hours ( 6 specified, 6 with some choice) in Aboriginal and Rural Health-related courses, thus adding to a focus of knowledge and understanding of this specific subject material. The remaining 18 credit hours will be obtained from elective credit hours.


## Community and Population Health-Environmental Health

- 33 credit hours form the common course requirements for both Community and Population Health Majors, as well as a minimum of 12 credit hours ( 6 specified, 6 with some choice) in Environmental Health-related courses, thus adding to a focus of knowledge and understanding of this specific subject material. The remaining 18 credit hours will be obtained from elective credit hours.


## Breadth Requirement

UNBC requires all students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listing on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirement or as part of their elective requirement, and that they have the total number of credits required for their degree.

Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Admission Requirement

Admission to the Bachelor of Health Sciences program is based on academic qualifications and available space. At the time of application, students must specify whether they intend to pursue either the Biomedical Studies Major or one of the two Community and Population Health Majors. Priority admission is given to students who meet admission criteria and apply by the deadline of March 1st. Applications received after the deadline may be reviewed based on available space in the program. Self-identified Aboriginal applicants who meet or exceed the minimum requirements for admission to the program are given priority for up to twenty percent (20\%) of the firstyear seats for the Bachelor of Health Sciences program.

Applicants from BC and Yukon secondary schools must:

- Meet the basic UNBC admission requirements, and
- Have completed Principles of Mathematics 11, English 12 and other approved Grade 12 courses as specified in the Admissions sections of the Undergraduate Calendar.

Other Applicants must:

- Meet UNBC admission requirements, and
- Have completed the equivalent of Principles of Mathematics 11, English 12, and other approved Grade 12 courses as specified in the Admissions section of the Undergraduate Calendar with a minimum of $\mathrm{C}+(65 \%)$ in each course.

Students interested in specializing in the Biomedical Studies Major are strongly encouraged to take: Principles of Mathematics 12, Chemistry 12 and Biology 12 before entering the Program.

## Common Requirements: All Majors

In order to meet the graduation requirements for a BHSc all students must successfully complete the following common requirements consisting of 57 credit hours. It is recommended that students take the courses listed below in the year of study indicated:

## First year-15 credits

FNST 100-3 The Aboriginal Peoples of Canada
HHSC 101-3 Introduction to Health Science I: Issues and Controversies
PHSC 103-3 Health Care Systems
PSYC 101-3 Psychology as a Science
PSYC 102-3 Psychology and Human Problems

## Second year-15 credits

HHSC 111-3 Anatomy and Physiology I
HHSC 112-3 Anatomy and Physiology II
HHSC 201-3 Ethics and Law in Health Care
HHSC 311-3 Nutrition
MATH 242-3 Statistics for Social and Health Sciences
Or ECON 205-3 Statistics for the Social and Management Sciences

## Third year-15 credits

FNST 302-3 First Nations Health and Healing
HHSC 350-3 Introduction to Epidemiology
HHSC 351-3 Research Design and Methods for Health Sciences
PSYC 309-3 Introduction to Health Psychology
PSYC 345-3 Lifespan Development
Or SOCW 421-3 Human Growth and Development

## Fourth year-12 credits

HHSC 451-3 Health Sciences Research Project
HHSC 471-3 Aboriginal Health and Chronic Disease
POLS 403-3 Social and Health Policy and Administration
PSYC 409-3 Advanced Health Psychology

## Major in Biomedical Studies

Students pursuing a major in Biomedical Studies are required to complete the following 48 credit hours of courses. It is recommended that students take the courses listed below in the year of study indicated:

## First year-22 credits

BIOL 101-4 Introductory Biology I
BIOL 102-4 Introductory Biology II
CHEM 100-3 General Chemistry I
CHEM 120-1 General Chemistry Lab I
CHEM 101-3 General Chemistry II
CHEM 121-1 General Chemi stry Lab II
Two of:
ENGL 100-3 Introduction to Literary Structures
ENGL 102-3 Introduction to Poetry
ENGL 103-3 Introduction to Fiction
ENGL 104-3 Introduction to Drama and/or Film

## Second year-17 credits

BIOL 203-3 Microbiology
BIOL 210-3 Genetics
CHEM 201-3 Organic Chemistry I
CHEM 250-1 Organic Chemistry Lab I
CHEM 203-3 Organic Chemistry II
CHEM 251-1 Organic Chemistry Lab II
CHEM 204-3 Introductory Biochemistry
Third and Fourth years-9 credits
BIOL 311-3 Cell and Molecular Biology
CHEM 306-3 Intermediary Metabolism
CHEM 307-3 Proteins
Note: Students intending to apply to professional health degree programs are encouraged to take as electives the following courses:
PHYS 110-4, PHYS 111-4, MATH 100-3 and MATH 101-3.

## Majors in Community and Population Health

Students pursing a major in either Community and Population HealthAboriginal and Rural Health, or Community and Population HealthEnvironmental Health are required to complete the following 33 credit hours. It is recommended that students take the courses listed below in the year of study indicated:

## First year-9 credits

CHEM 110-3 Chemistry of Everyday Life
Or CHEM 100-3 General Chemistry I
ECON 110-3 Introduction to Health Economics and Policy
One of:
ENGL 100-3 Introduction to Literary Structures
ENGL 102-3 Introduction to Poetry
ENGL 103-3 Introduction to Fiction
ENGL 104-3 Introduction to Drama and/or Film

## Undergraduate Programs: Health Sciences

## Second year-6 credits

HHSC 102-3 Introduction to Health Science II: Rural and Aboriginal Issues
HHSC 110-3 Basic Microbiology
Or BIOL 203-3 Microbiology
Third year-12 credits
HHSC 330-3 Health Information Management Technology
HHSC 370-3 Occupational Health
NURS 301-3 Advanced Pathophysiology
SOCW 444-3 Social Work Critical Issues in Aging
Fourth year-6 credits
HHSC 421-3 Medical Geography
NURS 402-3 Health Promotion
In addition to the 33 credit hours listed above, students pursuing a major in either Community and Population Health-Aboriginal and Rural Health, or Community and Population Health-Environmental Health, are required to complete 12 credit hours focused in either Aboriginal and Rural Health or Environmental Health, specific to their major, as listed below.

## Major in Community and Population HealthAboriginal and Rural Health

Students must take:
ENPL 313-3 Rural Community Economic Development
FNST 315-3 Aboriginal Health Management
Students must take an additional 6 credit hours from the following list (please note that some of these courses may require additional prerequisites):

ANTH 200-3 Biological Anthropology
ANTH 201-3 Medical Anthropology
ECON 410-3 Health Economics
PSYC 417-3 Behaviour Modification
SOCW 440-3 Social Work and Mental Health
SOCW 441-3 Social Work and Substance Abuse
SOCW 443-3 Medical Social Work

## Major in Community and Population HealthEnvironmental Health

Students must take:
ENPL 205-3 Environment and Society
ENSC 308-3 Northern Contaminated Environments
Students must take an additional 6 credit hours from the following list (please note that some of these courses may require additional prerequisites):

ECON 410-3 Health Economics
ENPL 208-3 First Nations Community and Environmental Planning
ENPL 304-3 Mediation, Negotiation and Public Participation
ENVS 306-3 Human Ecology
HIST 360-3 An Introduction to Environmental History
INTS 470-3 International Environmental Policy
NREM 306-3 Society, Policy and Administration
Or POLS 334-3 Society, Policy and Administration of Natural Resources

## Elective Requirement for all BHSC Majors

Electives at any level sufficient to ensure completion of a minimum 120 credit hours.

# History (BA Program) 

Jonathan Swainger, Associate Professor, and Program Chair<br>Charles Jago, Professor<br>Gordon Martel, Professor<br>William Morrison, Professor<br>Theodore Binnema, Associate Professor<br>Aileen Espiritu, Assistant Professor<br>Jacqueline Holler, Assistant Professor<br>Rhonda Semple, Assistant Professor<br>Marianne Ainley, Adjunct Professor<br>Gavin Brockett, Adjunct Professor<br>Neil Lettinga, Adjunct Professor

Historians study what people have thought, said, and done in the past. By description, examination, and analysis they attempt to explain the past in order to understand the present. The study of history contributes to critical thinking, helps to develop intellectual maturity, and assists students to present ideas clearly and accurately.

The study of history, as well as being valuable in itself, can lead to a career in business, government service, teaching, law, journalism, archival and museum work.

## Major in History

A degree in History requires students to take 19 History courses (57 credit hours), at least 30 credit hours of which must be upper division courses. Students may not take more than 57 credit hours of History without written permission from the Chair of the History program.

The minimum requirement for completion of a Bachelor of Arts with a major in History is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

100 Level
HIST 190-3 The West and the World to 1660
HIST 191-3 The West and the World since 1660
Twelve additional credit hours in 200 level courses.

## Upper Division Requirement

## 300 and 400 Level

HIST 300-3 Historiography: The Nature of the Historical Discipline
Eighteen credit hours of History at the 300 level courses, in addition to HIST 300-3.

Nine credit hours of History at the 400 level.

## Subject Requirement

Six additional credit hours of History at any level to ensure completion of 57 credit hours of History in total.

## Elective Requirement

Six credit hours of upper division electives (to meet UNBC residency requirement).

Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours.

## BA Honours - History

The BA Honours - History provides a higher level of training and specialization for students planning to proceed to postgraduate work or professional schools. The program of study is offered to students majoring in history who have completed their first two years ( 60 credit hours).

In order to enter the honours degree program, students must have completed HIST 190-3 (The West and the World to 1660), HIST 191-3 (The West and the World Since 1660); 12 credit hours in 200 level history courses; HIST 300-3 (Historiography: The Nature of the Historical Discipline) and have attained a cumulative GPA of no less than 3.33 upon completion of second year (i.e., 60 credit hours).

Having fulfilled the requirements of admission to the History honours degree program, students must then complete 18 credit hours in 300 level history courses; 15 credit hours in 400 level history courses; and 12 credit hours in four additional history courses designed for honours students, for a total of 66 credit hours as a component of an undergraduate degree totalling 120 credit hours. These honours history courses are designed to be taken in the sequence indicated, which can be altered only under exceptional circumstances and with the permission of the Program Chair. These honours history courses are designed to be taken in the sequence indicated, which can be altered only under exceptional circumstances and with the permission of the Program Chair:

HIST 501-3 Honours Directed Readings
(September term of third year)
HIST 500-3 Historiography: Contemporary Theories and Methods (January term of third year)
HIST 505-6 Honours Thesis
(September and January term of fourth year)
A Cumulative GPA of not less than 3.33 must be maintained while in the honours program.

## Joint Major in English/History

See Calendar entry under English

## Joint Major in History/Political Science

The minimum requirement for completion of a Bachelor of Arts with a Joint Major in History and Political Science is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

HIST 190-3 The West and the World to 1660
HIST 191-3 The West and the World since 1660
POLS 100-3 Contemporary Political Issues
ECON 205-3 Statistics for the Social and Management Sciences
POLS 200-3 Canadian Government and Politics
POLS 202-3 Comparative Government and Politics
POLS 270-3 Political Philosophy: Plato to Locke
Nine credit hours of History at the 100 or 200 level.

## Upper Division Requirement

HIST 300-3 Historiography: The Nature of the Historical Discipline
POLS 303-3 Democracy and Dictatorship
POLS 320-3 Canadian Politics and Policy
POLS 370-3 Political Philosophy: Locke to Marx
Twelve credit hours in Political Science at the 300 or 400 level. Eighteen credit hours in History at the 300 or 400 level.

## Elective Requirement

Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours.

## Joint Major in History/Women's Studies

The minimum requirement for completion of a Bachelor of Arts with a Joint Major in History and Women's Studies is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

HIST 190-3 The West and the World to 1660
HIST 191-3 The West and the World since 1660
WMST 100-3 Introduction to Women's Studies
WMST 210-3 Research Methods
ENGL 200-3/
WMST 220-3 Gender and Literary Theory
ENGL 210-3/
WMST 221-3 Women and Literature: A Survey
HIST 312-3/
WMST 312-3 An Introduction to the History of Gender
Two (2) additional History courses at the 100 or 200 level.

## Upper Division Requirement

WMST 302-3 Women and the Contemporary World
HIST 300-3 Historiography: The Nature of the Historical Discipline WMST 311-3/
HIST 311-3 History of Feminism
HIST 402-3 Women in Canada
HIST 453 (3-6) Topics in History of Gender
HIST 454 (3-6) Topics in Women's History
Three (3) additional History courses at the 300 or 400 level.

# Undergraduate Programs: History, International Studies 

## Additional Requirement

Five additional courses selected from the following:

ANTH 401-3 Anthropological Perspectives on Inequality
ANTH 406-3 Feminist Perspectives in Anthropology
COMM 333-3 Women in Organizations
ECON 301-3 Women and the Economy
ENGL 410/
WMST 420-3 Contemporary Women's Literature
ENGL 430-3 Special Topics in Canadian Literature
ENVS 309-3 Women and Environmental Studies
FNST 302-3 First Nations Health and Healing
FNST 306/
WMST 306-3 Indigenous Women: Perspectives
INTS 308-3 Gender and International Studies
POLS 313-3 Women and Politics
POLS 434-3 Resource Communities in Transition
POLS 403-3 Social and Health Policy and Administration

## Elective Requirement

Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours.

## Minor in History

The minor in History provides students with an understanding of how to evaluate historical sources and historical writings and with specialized knowledge of historical processes in fields of the student's choosing.

The minor in History requires students to take at least 24 credit hours, of which at least 12 must be upper division credits. A maximum of two courses (six credit hours) used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in History.

## Program Requirements

HIST 190-3 The West and the World to 1660
HIST 191-3 The West and the World since 1660
HIST 300-3 Historiography: The Nature of the Historical Discipline
Twelve additional credit hours of 300 or 400 level History courses.

## International Studies (BA Program)

Heather Smith, Associate Professor, and Program Chair<br>Don Munton, Professor<br>James Randall, Professor<br>Heather Myers, Associate Professor<br>Nadine Busmann, Assistant Professor<br>Nicholas Tyrras, Assistant Professor<br>Ken Wilkening, Assistant Professor<br>Ami Hagiwara, Lecturer<br>Hiroe Wood, Lecturer<br>Jason Lacharite, Instructor

The International Studies program seeks to familiarize students with the global community in which they live and to prepare them to pursue careers involving international interactions. Participants are provided with a variety of opportunities to explore issues from economic, political, social, cultural and environmental perspectives. Foreign language training and study abroad experiences are incorporated into the program and special attention is given to British Columbia's immediate international neighbours: the Pacific Rim countries, the nations of the Circumpolar North, and the United States.

## Major in International Studies

Undergraduate students are required to complete 54 credit hours of International Studies coursework as part of their overall program in order to graduate with a major in International Studies. 12 credit hours are required in foreign language study, and 33 credit hours are required at the upper division $(300 / 400)$ level.

The minimum requirement for completion of a Bachelor of Arts with a major in International Studies is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

100 and 200 Level
COMM 100-3 Introduction to Canadian Business
ECON 100-3 Microeconomics
ECON 101-3 Macroeconomics
or ECON 202-3 History of Economic Thought or POLS 202-3 Comparative Government and Politics
ECON 205-3 Statistics for the Social and Management Sciences or MATH 242-3 Statistics for Social and Health Sciences
INTS 200-3 Contemporary Russia
or INTS 202-3 Contemporary United States
or INTS 203-3 Contemporary Japan
or INTS 204-3 Contemporary China
or INTS 240-3 Contemporary Circumpolar North
INTS 101-3 Canada and the World
or INTS 206-3 Contemporary International Issues
INTS 205-3 Introduction to International Studies
POLS 200-3 Canadian Government and Politics
INTS 240-3 Contemporary Circumpolar North

## Language Requirement

Students majoring in International Studies must complete four language courses. The normal pattern is to take one of the following sequences.

## Chinese (Mandarin)

INTS 161-3 Beginning Chinese I
INTS 162-3 Beginning Chinese II
INTS 261-3 Intermediate Chinese I
INTS 262-3 Intermediate Chinese II
or

## Japanese

INTS 121-3 Beginning Japanese I
INTS 122-3 Beginning Japanese II
INTS 221-3 Intermediate Japanese I
INTS 222-3 Intermediate Japanese II
or

Russian

| INTS 131-3 | Beginning Russian I |
| :---: | :--- |
| INTS 132-3 | Beginning Russian II |
| INTS 231-3 | Intermediate Russian I |
| INTS 232-3 | Intermediate Russian II |
| or |  |

## Swedish

INTS 141-3 Beginning Swedish I
INTS 142-3 Beginning Swedish II
INTS 241-3 Intermediate Swedish I
INTS 242-3 Intermediate Swedish II

Other
INTS 151-3 Beginning International Language I
INTS 152-3 Beginning International Language II
INTS 251-3 Intermediate International Language I
INTS 252-3 Intermediate International Language II
It is also possible to fulfill this requirement by taking courses in more than one language, as long as at least six credit hours are in one language. Students wishing to take advantage of this option must get approval from the Program's undergraduate advisor.

Credit for training in languages other than English or French at the university/college level will be considered and prior learning assessment is offered where possible. In all such cases, students must contact the Program Chair prior to registration.

## Upper Division Requirement

## 300 and 400 Level

INTS 310-3 Origins and Evolution of International Studies
Thirty credit hours of additional 300 and 400 level International Studies courses.

Students should know that certain 300 and 400 level courses are offered only in alternate years.

## Elective Requirement

Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours.

## BA Honours - International Studies

The BA Honours - International Studies provides a higher level of training and specialization for students, especially those planning to proceed to postgraduate work.

In order to enter the International Studies honours BA program, students must have taken INTS 205-3 (Introduction to International Studies), completed a total of 60 credit hours, and achieved an accumulated GPA of 3.33 or higher.

Students taking the honours BA will fulfill all the requirements of the major in International Studies including the three courses listed below for a total of 120 credit hours:

INTS 409-3 Theories of International Studies
INTS 590-3 Honours Seminar
INTS 591-3 Honours Thesis
Students must maintain an accumulative GPA of 3.33 or higher while in the honours program.

## Joint Major in International Studies/Political <br> Science

The minimum requirement for completion of a Bachelor of Arts with a Joint Major in International Studies and Political Science is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

ECON 100-3 Microeconomics or ECON 202-3 History of Economic Thought
ECON 101-3 Macroeconomics
ECON 205-3 Statistics for the Social and Management Sciences
INTS 101-3 Canada and the World
INTS 205-3 Introduction to International Studies
POLS 100-3 Contemporary Political Issues
POLS 200-3 Canadian Government and Politics
POLS 202-3 Comparative Government and Politics
POLS 270-3 Political Philosophy: Plato to Locke
One of:
INTS 200-3 Contemporary Russia
INTS 202-3 Contemporary United States
INTS 203-3 Contemporary Japan
INTS 204-3 Contemporary China
INTS 240-3 Contemporary Circumpolar North

## Upper Division Requirement

INTS 310-3 Origins and Evolution of International Studies
Nine credit hours of 300 or 400 level International Studies.

```
POLS 370-3 Political Philosophy: Locke to Marx
POLS 303-3 Democracy and Dictatorship
```

Three of:
POLS 305-3 United States Politics
POLS 308-3 Japanese Politics and Government
POLS 311-3 Russian Politics and Society
POLS 314-3 European Politics and Government
POLS 405-3 Politics of Democratic Transition
POLS 415-3 Comparative Northern Development
Fifteen additional credit hours of 300 or 400 level. International Studies and Political Science courses.

## Language Requirement

Twelve credit hours of language courses. At least two courses must be in one language

## Elective Requirement

Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours.

## Minor in International Studies

Eighteen credit hours, 12 of which must be upper-division International Studies courses.

A maximum of two courses (six credit hours) used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in International Studies.

One of:
INTS 101-3 Canada and the World
INTS 205-3 Introduction to International Studies
INTS 206-3 Contemporary International Issues
Three credit hours of International Studies at any level. Twelve credit hours of 300 or 400 level International Studies.

Students should know that certain 300 or 400 level courses are offered only in alternate years.

Alternative courses may be substituted for the above with the written permission of the Program Chair and Dean of the College.

## Mathematics (BSc Program)

Sam Walters, Associate Professor, and Program Chair Lee Keener, Professor
Iliya Bluskov, Associate Professor
Jennifer Hyndman, Associate Professor
Kevin Keen, Associate Professor
Pranesh Kumar, Associate Professor
Patrick Montgomery, Associate Professor
Cristian Ivanescu, Assistant Professor
Anamaria Savu, Adjunct Professor
The Mathematics Program provides undergraduate and postgraduate instruction and training in pure mathematics, applied mathematics, and statistics. A Bachelor of Science degree is available in Mathematics, as well as joint BSc degrees in Mathematics and Physics, Economics and Mathematics, Chemistry and Mathematics, and Computer Science and Mathematics. In addition, there are two minors in Mathematics. A graduate degree (MSc-Mathematical, Computer, and Physical Sciences) is also supported by the mathematics program. Students interested in graduate studies are advised to consult the UNBC Graduate Calendar for further information.

The Mathematics Program offers Mathematics and Statistics service courses to students in the biological sciences, health sciences, management, economics, social sciences, and other areas.

Some sections of introductory calculus are enhanced through the use of computer software which provides exceptional computational power and high-quality graphical display. Introductory statistics courses teach the use of statistical analysis software to analyze data.

An important feature of the Mathematics degree program is the early emphasis on the development of abstract reasoning and the relation of the abstract to the concrete. The degree requirements have been chosen so as to provide students with a broad background in Mathematics while still leaving them room to pursue individual interests.

For more information please visit our website at www.unbc.ca/math.

## Major in Mathematics

A major in Mathematics requires 19 mathematics courses ( 57 credit hours), at least 30 credit hours of which must be upper division courses and of those upper division credits, at least 12 must be taken at the 400 level.

MATH 342-3 (Biostatistics) may not be used for credit towards any Mathematics major, minor, or joint major.

MATH 150-3 (Finite Mathematics for Business and Economics) may not be used for credit towards any Mathematics major or joint major.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree.

Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

Note: Students enrolling in any Mathematics courses with prerequisites are required to have completed all prerequisite courses for that course with a C- or better, or have permission to enrol from the Program Chair.

## Literacy Requirement

One of:
ENGL 170-3 Writing and Communication Skills
ENGL 270-3 Expository Writing

## Lower Division Requirement

## 100 Level

CPSC 100-4 Computer Programming I
CPSC 141-3 Discrete Computational Mathematics
MATH 100-3 Calculus I
or MATH 105-3 Enriched Calculus
MATH 101-3 Calculus II
200 Level
MATH 200-3 Calculus III
MATH 201-3 Introduction to Complex Analysis
MATH 220-3 Linear Algebra
MATH 221-3 Operations Research
MATH 224-3 Foundations of Modern Mathematics
MATH 226-3 Advanced Linear Algebra
MATH 230-3 Linear Differential Equations and Boundary Value Problems

## Recommended

CPSC 101-4 Computer Programming II
CPSC 142-3 Discrete Computational Mathematics II

The minimum requirement for completion of a Bachelor of Science with a major in Mathematics is 120 credit hours.

## General Science Requirement

Two of:
BIOL 101-4 Introductory Biology I
BIOL 102-4 Introductory Biology II
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
PHYS 100-4 Introduction to Physics I or PHYS 110-4* Introductory Physics I: Mechanics
PHYS 111-4* Introductory Physics II: Waves and Electricity
*Note: PHYS 110-4 (Introductory Physics I: Mechanics) and PHYS 111-4 (Introductory Physics II: Waves and Electricity) are strongly recommended for all majors.

## Upper Division Requirement

300 Level
MATH 302-3 Theory of Metric Spaces
MATH 320-3 Survey of Algebra
MATH 321-3 Topology
or MATH 370-3 Geometry I
MATH 333-3 Partial Differential Equations
or MATH 334-3 Ordinary Differential Equations
or MATH 335-3 Numerical Analysis I
MATH 340-3 Introduction to Probability
MATH 341-3 Introduction to Statistics
400 Level
Twelve credit hours of 400 level Mathematics courses.

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 120 credit hours.

## Joint Major in Chemistry/Mathematics

See Calendar entry under Chemistry.
Joint Major in Computer Science/ Mathematics

See Calendar entry under Computer Science.

## Joint Major in Mathematics/Physics

The minimum requirement for completion of a Bachelor of Science with a Joint Major in Mathematics and Physics is 125 credit hours.

MATH 342-3 (Biostatistics) may not be used for credit towards any Mathematics major, minor, or joint major.

MATH 150-3 (Finite Mathematics for Business and Economics) may not be used for credit towards any Mathematics major or joint major.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

CPSC 100-4 Computer Programming I
MATH 100-3 Calculus I
or MATH 105-3 Enriched Calculus
MATH 101-3 Calculus II
MATH 200-3 Calculus III
MATH 201-3 Introduction to Complex Analysis
MATH 220-3 Linear Algebra
MATH 221-3 Operations Research
or MATH 226-3 Advanced Linear Algebra
MATH 230-3 Linear Differential Equations and Boundary Value Problems
PHYS 110-4 Introductory Physics I: Mechanics
PHYS 111-4 Introductory Physics II: Waves and Electricity
PHYS 200-3 Thermal Physics
PHYS 202-4 Electromagnetism and Optics
PHYS 205-3 Modern Physics I
PHYS 206-4 Modern Physics II

## Upper Division Requirement

| MATH 320-3 | Survey of Algebra |
| :--- | :--- |
| MATH 334-3 | Ordinary Differential Equations |
| MATH 335-3 | Numerical Analysis I |
| MATH 340-3 | Introduction to Probability |

*Six credit hours of 300 or 400 level Mathematics.
Six credit hours of 400 level Mathematics.
PHYS 300-3 Classical Mechanics
PHYS 302-3 Quantum Mechanics I
PHYS 310-3 Classical Electromagnetism I
PHYS 400-3 Quantum Mechanics II
PHYS 407-3 Statistical Mechanics
*Six credit hours of 300 or 400 level Physics.
Three of these 12 credit hours must be at the 400 level so that a minimum of 15 credit hours of 400 level Mathematics and Physics are completed.

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 125 credit hours.

## Joint Major in Economics/Mathematics

## See Calendar entry under Economics.

## Minor in Mathematics

The minor in Mathematics requires students to take 27 credit hours, 12 of which must be upper division credits.

There is no limit to the number of courses that may be used to fulfill program requirements for a major (or another minor) and also a minor in Mathematics.

MATH 342-3 (Biostatistics) may not be used for credit towards any Mathematics major or joint major.

## Requirements

100 Level
CPSC 141-3 Discrete Computational Mathematics
MATH 100-3 Calculus I
or MATH 105-3 Enriched Calculus
MATH 101-3 Calculus II

## 200 Level

MATH 200-3 Calculus III
MATH 220-3 Linear Algebra

## Minor in Applied Mathematics

The minor in Applied Mathematics will serve to complement the studies of a student working in a major field where more sophisticated quantitative methods are required. Completion of such a minor should enhance a student's appreciation of the power of the interdisciplinary approach and of the importance of modern mathematical techniques in a great variety of disciplines.

The minor in Applied Mathematics requires students to complete 8 to 10 courses (25-30 credit hours) in Mathematics.

There is no limit to the number of courses that may be used to fulfill program requirements for a major (or another minor) and also a minor in Applied Mathematics.

MATH 342-3 (Biostatistics) may not be used for credit towards any Mathematics major, minor, or joint major.

## Requirements

MATH 100-3 Calculus I
or MATH 105-3 Enriched Calculus
MATH 101-3 Calculus II
MATH 200-3 Calculus III
At least five courses must be taken from the following list, four of which must be upper division:

| CPSC 100-4 | Computer Programming I |
| :--- | :--- |
| CPSC 141-3 | Discrete Computational Mathematics |
| CPSC 142-3 | Discrete Computational Mathematics II |
| MATH 201-3 | Introduction to Complex Analysis |
| MATH 220-3 | Linear Algebra |
| MATH 221-3 | Operations Research |
| MATH 230-3 | Linear Differential Equations and Boundary |
|  | Value Problems |
| MATH 333-3 | Partial Differential Equations |
| MATH 334-3 | Ordinary Differential Equations |
| MATH 335-3 | Numerical Analysis I |
| MATH 340-3 | Introduction to Probability |
| MATH 341-3 | Introduction to Statistics |
| MATH 433-3 | Topics in Partial Differential Equations |
| MATH 434-3 | Topics in Applied Mathematics |
| MATH 435-3 | Numerical Analysis II |
| MATH 440-3 | Advanced Probability and Statistics |
| MATH 455-3 | Graphs and Algorithms |

# Natural Resources Management (BSc Program) 

Keith Egger, Professor, and Program Chair

Ian Hartley, Assistant Professor, and Associate Chair
Oscar Garcia, Professor, and Endowed Chair, Forest Growth and Yield
Staffan Lindgren, Professor
William McGill, Professor
Annie Booth, Associate Professor
Arthur Fredeen, Associate Professor
Michael Gillingham, Associate Professor
Chris Hawkins, Associate Professor and Endowed Chair, Mixed Wood Ecology and Management
Kathy Lewis, Associate Professor
Hugues Massicotte, Associate Professor
Ken Otter, Associate Professor
Katherine Parker, Associate Professor and Ian McTaggart Cowan
Muskwa Kechika Research Professor
Paul Sanborn, Associate Professor
Mark Shrimpton, Associate Professor
Cecilia Alstrom-Rapaport, Assistant Professor
Scott Green, Assistant Professor
Dezene Huber, Assistant Professor, and Canada Research Chair, Forest
Entomology and Chemical Ecology
Chris Johnson, Assistant Professor
Chris Opio, Assistant Professor
Lisa Poirier, Assistant Professor
Yves Bergeron, Adjunct Professor
Bryan Bogdanski, Adjunct Professor
Philip Burton, Adjunct Professor
Michael Carlson, Adjunct Professor
Alan Carroll, Adjunct Professor
Craig Delong, Adjunct Professor
Brad Hawkes, Adjunct Professor
Doug Heard, Adjunct Professor
Winifred Kessler, Adjunct Professor
Dan Lousier, Adjunct Professor
Roy Rea, Senior Lab Instructor
The Natural Resources Management program offers students an integrated resource management approach with specialization through majors in Forestry, Wildlife and Fisheries, and Resource Recreation.

The recognition that management of any natural resource has implications for all other natural resources is a primary driving factor in the undergraduate curriculum for this degree program. Multiple and sustainable resource management is emphasized. The Forestry major is accredited by the Canadian Forestry Accreditation Board and meets certification requirements for the BC Forest Professional. In addition the Resource Recreation major is designed to meet the accreditation standards of the National Recreation and Parks Association.

Government, industry and private experts assist in course presentations. The University has two research forests available to students in this program.

## Major in Forestry

Undergraduate students are required to take 22 Forestry and Natural Resources Management courses ( 68 credit hours). Of these, 15 courses must be upper division.

The minimum requirement for completion of a Bachelor of Science with a major in Forestry is 136 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree.

Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

100 Level
BIOL 101-4 Introductory Biology I
BIOL 102-4 Introductory Biology II
CHEM 100-3 General Chemistry I
CHEM 101-3 General Chemistry II
CHEM 120-1 General Chemistry Lab I
CHEM 121-1 General Chemistry Lab II
CPSC 110-3 Introduction to Computer Systems and Programming
ECON 100-3 Microeconomics
MATH 152-3 Calculus for Non-majors
NREM 100-2* Natural Resources Management I
NREM 101-2 Natural Resources Management II
NRES 100-3 Communications in Natural Resources and Environmental Studies
PHYS 115-4 General Introduction to Physics
*Note: Applications for exemption from NREM 100-2 must be made within the first year of study in any Natural Resource Management major.

## 200 Level

| BIOL 201-3 | Ecology |
| :--- | :--- |
| ENSC 201-3 | Introduction to Atmospheric Science |
| FSTY 201-4 | Plant Systems |
| FSTY 205-3 | Introduction to Soil Science |
| FSTY 206-3 | Forest Biology |
| FSTY 208-3 | Silvics |
| GEOG 205-3 | Cartography and Geomatics |
| $\quad$ or | GEOG 300-3 Geographic Information Systems |

GEOG 210-3 Geomorphology
NREM 203-3 Resource Inventories and Measurements
NREM 210-4 Integrated Resource Management

## Upper Division Requirement

## 300 Level

ENPL 305-3 Environmental Impact Assessment
FSTY 302-3 Forest Harvesting Systems
FSTY 305-3 Silviculture I
FSTY 307-4 Forest Health
FSTY 309-3 Fire Ecology and Management
FSTY 310-3 Forest Economics
INTS 307-3 Global Resources
MATH 342-3 Biostatistics
NREM 303-3 First Nations' Approaches to Resource Management
NREM 306-3 Society, Policy and Administration
NREM 333-3 Field Applications in Resource Management

## 400 Level

FSTY 405-3 Silviculture II
FSTY 407-3 Forest Products
FSTY 408-3 Forest Practices and Management
NREM 400-4 Natural Resources Planning
NREM 410-3 Watershed Management
NREM 411-3 Environmental and Professional Ethics
NRES 421-1 Professional Writing
and NRES 422-2 Undergraduate Report
or NRES 430-6 Undergraduate Thesis

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 136 credit hours.

## BSc Honours-Forestry

The Honours in Forestry offers students a higher level of education and research experience for proceeding to post graduate studies. Honours students are required to complete the degree requirements for the BSc Natural Resources Management (Forestry Major). In addition, required hours of electives credits must be at the 300 or 400 level and each student must complete a 6 credit hour research thesis under the supervision of a faculty member.

Admission to the honours program will take place after the completion of 60 credit hours and will require a minimum CGPA of 3.33. Attaining the minimum requirement will not guarantee admission to the honours program, which will be at the discretion of the Program. Maintenance of a CGPA of 3.33 is required to remain in the honours program.

## Major in Resource Recreation

Northern British Columbia provides an unparalleled setting for learning, teaching and researching the various aspects of resource recreation management. British Columbia has a large land base and a range of natural environments that support a vast array of dispersed and concentrated outdoor recreation opportunities. The program examines the components of planning and managing recreation opportunities through the study of such subject areas as ecology, integrated resource management, planning, protected areas management, tourism management, environmental studies and geography (e.g., GIS).

Undergraduate students are required to take 12 Resource Recreation and Tourism courses ( 36 credit hours). Of these, 9 courses are upper division.

The minimum requirement for the completion of a Bachelor of Science with a major in Resource Recreation is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirement

## Lower Division Requirement

100 Level
BIOL 101-4 Introductory Biology I
BIOL 102-4 Introductory Biology II
CHEM 100-3 General Chemistry I
CHEM 101-3 General Chemistry II
or PSYC 101-3 Psychology as a Science
or PHYS 100-4 Introduction to Physics I
ECON 100-3 Microeconomics
or FNST 100-3 The Aboriginal Peoples of Canada
or GEOG 100-3 Environments and People
or POLS 100-3 Contemporary Political Issues
NREM 100-2* Natural Resources Management I
RRT 100-3 Leisure in Life
Students with little or no computer experience are strongly encouraged to take CPSC 150-3 (Computer Applications) or CPSC 110-3 (Introduction to Computer Systems and Programming).
*Note: Applications for exemption from NREM 100-2 must be made within the first year of study in any Natural Resource Management major.

# Undergraduate Programs: Natural Resources Management 

200 Level
BIOL 201-3 Ecology
ECON 205-3 Statistics for the Social and Health Sciences or MATH 242-3 Statistics for the Social and Management Sciences
GEOG 204-3 Introduction to GIS for the Social Sciences or GEOG 205-3 Cartography and Geomatics
NREM 203-3 Resource Inventories and Measurements or NREM 204-3 Introduction to Wildlife and Fisheries or GEOG 210-3 Geomorphology
NREM 210-4 Integrated Resource Management
RRT 200-3 Sustainable Resource Recreation and Tourism
RRT 204-3 Visitor Behaviour

## Upper Division Requirement

300 Level
ENPL 305-3 Environmental Impact Assessment
NREM 303-3 First Nations' Approaches to Resource Management or FNST 304-3 First Nations Environmental Philosophy and Knowledge
NREM 306-3 Society, Policy and Administration
RRT 300-3 Recreation and Tourism Impacts
RRT 301-3 Environmental Interpretation
RRT 305-3 Protected Area Planning and Management
RRT 333-3 Field Experience
One of:

$$
\begin{array}{ll}
\text { BIOL 301-3 } & \text { Systematic Botany } \\
\text { or } & \text { FSTY 201-4 Plant Systems } \\
\text { BIOL 307-3 } & \text { Ichthyology and Herpetology } \\
\text { BIOL 308-3 } & \text { Ornithology and Mammalogy } \\
\text { GEOG 300-3 } & \text { Geographic Information Systems }
\end{array}
$$

| 400 Level |  |
| :--- | :--- |
| NREM 400-4 | Natural Resources Planning |
| NREM 411-3 | Environmental and Professional Ethics |
| RRT 400-3 | Recreation and Tourism Ecology, Management and <br>  <br> Design |
| RRT 410-3 | Research Methods and Analysis <br> RRT 412-3 <br> Issues and Trends in Resource Recreation and <br> Tourism |

Six credit hours from the following:
RRT 306-3 Indigenous Tourism and Recreation
RRT 403-3 International Dimensions in Resource
Recreation and Tourism
RRT 407-3 Recreation, Tourism and Communities
RRT 408-3 Psychology of Recreation and Tourism
RRT 413-3 Polar Tourism and Management
RRT 440 (2-6) Internship
RRT 498 (1-3) Special Topics
RRT 499 (1-6) Independent Study

One of:
BIOL 404-3 Plant Ecology
BIOL 412-3 Wildlife Ecology
BIOL 420-3 Animal Behaviour
NREM 410-3 Watershed Management
GEOG 432-3 Remote Sensing

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 120 credit hours.

## Major Wildlife and Fisheries

Undergraduate students are required to take 16 Biology courses (50 credit hours) and six Natural Resources Management courses (17-18 credit hours). Of these, 14 courses must be upper division. The minimum requirement for completion of a Bachelor of Science with a major in Wildlife and Fisheries is 125 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

## 100 Level

BIOL 101-4 Introductory Biology I
BIOL 102-4 Introductory Biology II
CHEM 100-3 General Chemistry I
CHEM 101-3 General Chemistry II
CHEM 120-1 General Chemistry Lab I
CHEM 121-1 General Chemistry Lab II
MATH 152-3 Calculus for Non-majors
NREM 100-2* Natural Resources Management I
NREM 101-2 Natural Resources Management II
NRES 100-3 Communications in Natural Resources and Environmental Studies
or ENGL 170-3 Writing and Communication Skills
PHYS 115-4 General Introduction to Physics
or PHYS 100-4 Introduction to Physics I
*Note: Applications for exemption from NREM 100-2 must be made within first year of study in any Natural Resource Management major.

200 Level
BIOL 201-3 Ecology
BIOL 210-3 Genetics
CHEM 220-3 Organic and Biochemistry
FSTY 201-4 Plant Systems
FSTY 205-3 Introduction to Soil Science
NREM 204-3 Introduction to Wildlife and Fisheries
NREM 210-4 Integrated Resource Management
Two of:
BIOL 202-3 Invertebrate Zoology
BIOL 204-3 Plant Biology
FSTY 206-3 Forest Biology
GEOG 210-3 Geomorphology

## Upper Division Requirement

## 300 Level

BIOL 302-3 Limnology
BIOL 307-3 Ichthyology and Herpetology
BIOL 308-3 Ornithology and Mammalogy
BIOL 315-3 Animal Diseases and Parasites
BIOL 325-3 Ecological Analyses
ENPL 305-3 Environmental Impact Assessment
or NREM 411-3 Environmental and Professional Ethics
GEOG 300-3 Geographic Information Systems
MATH 342-3 Biostatistics
NREM 303-3 First Nations- Approaches to Resource Management or NREM 306-3 Society, Policy and Administration

400 Level
BIOL 402-3 Aquatic Plants
or BIOL 404-3 Plant Ecology
BIOL 406-3 Fish Ecology
BIOL 410-3 Population and Community Ecology
BIOL 411-3 Conservation Biology
BIOL 412-3 Wildlife Ecology
BIOL 413-3 Wildlife Management
BIOL 414-3 Fisheries Management
NREM 400-4 Natural Resources Planning
or NREM 410-3 Watershed Management

## Electives

Elective credit hours as necessary to ensure completion of a minimum of 125 credit hours.

# Northern Studies (BA Program) 

Heather Myers, Associate Professor, and Program Chair

## Major in Northern Studies

Northern Studies is an interdisciplinary field of particular importance to the University of Northern British Columbia, and of growing relevance globally. Circumpolar environmental processes are becoming recognized as key indicators of global change; circumpolar indigenous peoples are gaining a greater voice both nationally and internationally; circumpolar political arrangements are illustrating new forms of regional governance. For these and other reasons, we need to develop better understanding of northern conditions and issues.

Students are required to complete one foundation course (3 credit hours); six core courses (18 credit hours) in three themes of: Peoples and Cultures, Lands and Environments, and Contemporary Issues; one course (3 credit hours) in Methodology; at least seven courses (21 credit hours) from one Advanced Emphasis (Autonomy and Self Government; Community Development; Northern Peoples and Environments; Northern Health; or Northern History and Development). The remaining electives and prerequisites are open to design by the student, but 30 credit hours must be at the Upper Division level. Note: completion of a Bachelor of Arts with a major in Northern Studies graduation requires a minimum of 120 credit hours.

Block transfer of credit up to 60 credit hours towards the Northern Studies BA at UNBC may be given to students from Yukon College who have completed one of the following two year Northern Studies programs at Yukon College: Diploma of Northern Studies, General Studies; Diploma of Northern Studies, Native Studies; Diploma of Northern Studies, Outdoor and Environmental Studies.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Foundation Course

NORS 101-3 Introduction to the Circumpolar North

## Core Courses

NORS 311-3 Lands and Environments of the Circumpolar North 1
NORS 312-3 Lands and Environments of the Circumpolar North 2
NORS 321-3 Peoples and Cultures of the Circumpolar North 1
NORS 322-3 Peoples and Cultures of the Circumpolar North 2
NORS 331-3 Contemporary Issues in the Circumpolar World 1 or INTS 340-3 Circumpolar North in Global Perspective
NORS 332-3 Contemporary Issues in the Circumpolar World 2
Note: These courses may be available in face-to-face format, crosslisted with other UNBC courses, or through web-based courses, offered in conjunction with the University of the Arctic.

Advanced Emphasis Stream (at least twenty one credit hours to be taken from one):

Stream 1 Autonomy and Self-Government
ECON 407-3 The Economy of Northern BC
FNST 215-3/
FNST 216-3 Issues in External Relations for Contemporary
Indigenous Peoples
FNST 250-3/
POLS 220-3 Canadian Law and Aboriginal Peoples
INTS 377-3 Redefining Security
INTS 410-3 Environment and Development in the Circumpolar North
INTS 444-3 Russian Foreign Policy
POLS 340-3 First Nations Self-Government and Administration
POLS 412-3 Comparative Aboriginal State Relations
POLS 414-3 Comparative Federalism
POLS 415-3 Comparative Northern Development
POLS 472-3 Contemporary Theories of Political Community.
WMST 306-3 Indigenous Women: Perspectives

## Stream 2 Community Development

ANTH 422-3 Ethnographic Research Project
ECON 407-3 The Economy of Northern BC
GEOG 424-3 Social Geography of Northern Communities
POLS 316-3 Community Government and Politics
POLS 332-3 Community Development
POLS 335-3 Community Politics
POLS 401-3 Resource Politics
POLS 415-3 Comparative Northern Development
POLS 430-3 Comparative Self-Government
WMST 306-3 Indigenous Women: Perspectives
WMST 403-3 Science, Technology and Women's Lives
WMST 412-3 Political Economy and First Nations

## Stream 3 Northern Peoples and Environments

ANTH 312-3 Human Adaptability
ANTH 320-3 Biology of Circumpolar Peoples
ANTH 407-3 Topics in BC Ethnography
ANTH 409-3 Topics in BC Archaeology
ANTH 422-3 Ethnographic Research Project
ANTH 451-3 Traditional Use Studies
ENGL 320-3 First Nations Literature
FNST 304-3 First Nations Environmental Philosophy and Knowledge
FNST 310-3/
FNST 311-3 Lisims Anadromous Summer and Fall Fisheries in Nisga'a Culture
GEOG 302-3 Geography of Russia
GEOG 403-3 Aboriginal Geography
GEOG 412-3 Geomorphology of Cold Regions
GEOG 424-3 Social Geography of Northern Communities
HIST 390-3 Aboriginal People of Canada
NREM 303-3 First Nations Approaches to Resource Management
POLS 334-3 Society, Policy and Administration of Natural Resources
POLS 401-3 Resource Politics
POLS 434-3 Resource Communities in Transition

## Stream 4 Northern Health

ANTH 206-3 Ethnography in Northern BC
ANTH 320-3 Biology of Circumpolar Peoples
ANTH 422-3 Ethnographic Research Project
FNST 302-3 First Nations Health and Healing
NURS 101-3 The Art and Science of Nursing
NURS 205-3 Introduction to First Nations Health
NURS 306-3 Introduction to Epidemiology
NURS 422-3 First Nations Health and Nursing
POLS 403-3 Social and Health Policy and Administration
SOCW 435-3 Community Social Policy
SOCW 437-3 Social Work With Groups and Communities
SOCW 438-3 Comparative Welfare Analysis
Stream 5 Northern History and Development
ANTH 309-3 Anthropological Perspectives on Inequality
ANTH 407-3 Topics in British Columbia Ethnography
ECON 407-3 The Economy of Northern BC
ENPL 305-3 Environmental Impact Assessment
FNST 249-3 Aboriginal Resources Planning
GEOG 302-3 Geography of Russia
HIST 301-3 The Canadian North
HIST 355-3 Russian Imperial History
HIST 356-3 Soviet History
HIST 357-3 Nordic History
HIST 405-(3-6) Topics in the Canadian North
INTS 410-3 Environment and Development in the Circumpolar North
POLS 325-3 Canadian Politics and Identity
POLS 415-3 Comparative Northern Development
WMST 306-3 Indigenous Women: Perspectives

Methodology
Three credit hours from one of the following:
ANTH 300-3 Anthropological Methods
ANTH 421-3 Ethnographic Field Methods
ANTH 451-3 Traditional Use Studies
ECON 205-3 Statistics for the Social and Management Sciences
ENPL 305-3 Environmental Impact Assessment
ENVS 419-3 Social Research Methods
FNST 200-3 Methods and Perspectives in First Nations Studies
FNST 300-3 Research Methods in First Nations Studies
FNST 300-3 Research Methods in First Nations Studies
GEOG 204-3 Introduction to GIS for the Social Sciences
GEOG 205-3 Cartography and Geomatics
GEOG 333-3 Geography Field School
NURS 403-3 Introduction to Nursing Research
PHIL 200-3-3 Critical Thinking
WMST 210-3 Research Methods

Note: Students will be encouraged to participate in an optional semester at another university in the circumpolar north, through exchange agreements between UNBC and other circumpolar universities. This should be done in consultation with the NORS Coordinator.

## Elective Requirement

Other electives, at least 30 credit hours at the upper division level, in any subject, to ensure completion of a minimum of 120 credit hours.

## Minor in Northern Studies

Northern Studies is an interdisciplinary field of particular importance to the University of Northern British Columbia, and of growing relevance globally. Many circumpolar issues are gaining importance, and there are important lessons that can be exchanged between circumpolar regions and other areas of the globe. Northern Studies can be an interesting and useful complement to students' other areas of study. A minor is seven courses ( 21 credit hours), four courses (12 credit hours) of which must be at the upper division level. Students must take NORS 101-3 (Introduction to the Circumpolar North) and three courses ( 9 credit hours) from each of list $A$ and $B$ below. Nor more than two courses ( 6 credit hours) may be taken from any one discipline.

Courses used to fulfill program requirements for a major or another minor may not be used to fulfil requirements for this minor.

## Required Course

NORS 101-3 Introduction to the Circumpolar North

## Course List A: The Circumpolar North

GEOG 402-3 Geography of the Circumpolar North
GEOG 412-3 Geomorphology of Cold Regions
HIST 354-3 The Circumpolar North
INTS 410-3 Environment and Development in the Circumpolar North
POLS 415-3 Comparative Northern Development
NORS 311-3 Lands and Environments of the Circumpolar North 1
NORS 312-3 Lands and Environments of the Circumpolar North 2
NORS 321-3 Peoples and Cultures of the Circumpolar North 1
NORS 322-3 Peoples and Cultures of the Circumpolar North 2 or NORS 331-3 Contemporary Issues in the Circumpolar World 1
NORS 332-3 Contemporary Issues in the Circumpolar World 2
Any one of the First Nations courses on a relevant northern First Nation culture:

| FNST 161-3 | A First Nations Culture: Level 1 |
| :---: | :---: |
| FNST 162-3 | A First Nations Culture: Level 2 |
| FNST 163-3 | Carrier Culture: Level 1 |
| FNST 164-3 | Carrier Culture: Level 2 |
| FNST 167-3 | Tsimshian Culture: Level 1 |
| FNST 168-3 | Tsimshian Culture: Level 2 |
| FNST 169-3 | Nisga'a Culture: Level 1 |
| FNST 170-3 | Nisga'a Culture: Level 2 |
| urse List B : The Canadian North |  |
| H 206-3 Et | ography in Northern British Columbia |
| H 320-3 Bi | gy of Circumpolar Peoples |
| N 407-3 Th | Economy of Northern BC |
| G 200-3 G | graphy of BC |
| G 411-3 Ad | nced Elements in Geomorphology |
| G 424-3 So | al Geography of Northern Communities |
| 301-3 Th | Canadian North |
| 405-(3-6) To | s in the Canadian North |

## Substitute Courses

One of the following courses may be substituted for one course in either list A or list B depending upon the course content:

NORS 498-3 Special Topics in Northern Studies NORS 499 (3-6) Independent Research/Directed Reading in Northern Studies

## Nursing (BScN Program)

Ian Blue, Professor, and Program Chair
Penelope Barrett, Associate Professor
Martha MacLeod, Associate Professor
Eileen Owen-Williams, Associate Professor
Sylvia Barton, Assistant Professor
Susan Johnson, Assistant Professor
Linda Lowe, Assistant Professor
Lela Zimmer, Assistant Professor
June Anonson, Adjunct Professor
Mary Applegate, Adjunct Professor
Virginia Brown, Adjunct Professor
Marion Healey-Ogden, Adjunct Professor
Sandra Ollech, Adjunct Professor
Rose Perrin, Adjunct Professor
Cathy Ulrich, Adjunct Professor
Kathleen Yeulet, Adjunct Professor
Heather Correale, Senior Lab Instructor

## Statement of Nursing

Nursing is a professional practice discipline which offers a valuable service to the public by working with individuals, families, groups, and communities, to develop and implement strategies to meet health care needs. Caring is a central and dominant feature of nursing. Nursing:
a) considers the physical, psychological, social, environmental, and spiritual domains of clients;
b) requires cultural sensitivity; and,
c) collaborates with clients, other health care providers, and the community.

Nursing is based on knowledge and skills developed in its own and related disciplines. Nursing knowledge is developed through research and other methods.

Nursing advocates for a health care system that:
a) emphasizes health promotion, and illness prevention,
b) is based on practical, affordable, manageable, and culturally acceptable care and technology, and
c) is available for all clients in a universal, equitable manner.

## Statement of Nursing Education

Nursing education responds to societal concerns by developing a curriculum that is relevant and considers future trends in health care. Nursing education strives to provide an environment that is challenging and supportive, where all students learn the practice of nursing through the application and evaluation of knowledge, the practise of skills, and the internalization of caring and professional attitudes. A dynamic and positive relationship occurs between health care services and education through the sharing of knowledge, skills, and research.

## Undergraduate Programs of Study

## UNBC offers the following programs:

- Northern Collaborative Baccalaureate Nursing Program (NCBNP) is offered collaboratively between UNBC and the College of New Caledonia (CNC) and provides entry into the nursing profession. The integrated program of studies leads to a Bachelor of Science in Nursing (BSCN), awarded by UNBC. Graduates are eligible to write the RN examination and to apply for registration with the Registered Nurses Association of British Columbia (RNABC) after passing the exam.
- Post-Diploma Baccalaureate Nursing Program for registered nurses is offered by UNBC. Acknowledging the previous learning of post-RNs, the program is organized to expand and update knowledge and skills for nursing practice. Students have the opportunity to focus in one area of practice. Successful completion of the program leads to a BScN .


## Aims of BScN Program

The goal of the BScN program is to improve access to and successful completion of nursing education for residents of the north. The aim of the nursing program is to prepare professional nurses who will:

- practise with cultural sensitivity
- practise with awareness of particular health needs of northern populations
- practise assessment and promotion of holistic health with individuals, families, groups, and communities
- participate in activities that reflect the appraisal of population health needs and implement and evaluate the appropriate interventions to meet those needs
- make nursing judgments that reflect application of current nursing research and research from related disciplines
- practice in a broad range of settings with an emphasis on northern communities
- influence health services to bring about policy development that meets the health needs of northern populations
- practice effectively within collaborative interdisciplinary and intersectorial health care teams
- demonstrate critical thinking skills and effective clinical decision making
- demonstrate skills of a self-directed learner
- meet professional practice requirements as identified in Standards for Nursing Practice in British Columbia
- NCBNP students will meet professional practice requirements as identified in the RNABC Competencies Required of a New Graduate (1998)


## General Requirements

Nursing courses will normally be restricted to students admitted into the BScN program, unless otherwise specified in a course description. Not all courses in the Calendar are offered every semester or academic year. Admission to the BScN program does not guarantee registration in any specific course; early registration is advised. A maximum number of three nursing courses may be taken by a nonnursing student without being admitted to the NCBNP.
The admission criteria and general requirements set out in the Admissions section of this Calendar are applicable to this section.

## Student Professional Membership

NCBNP students are required to become student members of the RNABC, the cost of which will be the responsibility of the student. In addition to membership benefits, this requirement will provide student malpractice insurance.

## Standards of Professional Conduct

All students are expected to abide by professional standards as set forth in the RNABC Standards for Nursing Practice in BC and the Canadian Nurses Association (CNA) Code of Ethics for Registered Nurses (1997). Violation of professional standards may result in suspension or dismissal from the program or the educational institution.

## Criminal Records Search

Students will be required to undergo a criminal records search prior to being admitted. (Refer to Academic Regulation \#19 in this Calendar). Health Assessment, Immunization \& CPR Certification

All students accepted into the undergraduate nursing program will be sent documentation and information regarding health status and immunization policies. Prior to registration in courses, all students must submit:

- a health assessment completed and signed by a physician within 12 months prior to the commencement of course work which testifies that the applicant is able to undertake nursing studies, including clinical practica
- evidence of current immunization status for diphtheria, tetanus, poliomyelitis, measles, mumps, rubella, and Mantoux test (PPD) for tuberculosis; hepatitis B immunization is highly recommended
- documentation of CPR certification, level C , which must be maintained throughout the program


## Clinical Practica Scheduling and Expectations

Clinical practica may be configured and offered outside the existing timetable structure and sessional dates, such as a four or six week block. The students in the NCBNP must complete a nursing practicum following both their fourth and sixth semesters of study in the program.

Attendance in each nursing practicum course is mandatory. Students may only miss clinical hours for approved reasons following prior consultation with their clinical instructor. Students who miss more than $10 \%$ of their total required practicum experience hours will be considered at risk for failure and may be required to withdraw from the course.

## Academic Performance

The student is subject to all policies and regulations of the institution(s) where they are registered for courses. In matters related to academic appeals and academic dishonesty, students are subject to the policies and rules of the institution where they are registered for courses. Issues related to progression through the program, such as probation, are governed by UNBC guidelines on academic standing and continuance.

Students may repeat a nursing course once. Students who fail a required nursing course twice are required to withdraw from the program.

## Qualification for Degree

It is the responsibility of the student to ensure that his/her degree requirements are met. Graduation requirements are found in the Regulations and Policies section of this Calendar. To fulfill the requirements of graduation, the student must:

- attain a minimum cumulative GPA of $2.33(\mathrm{C}+$ ) on courses for credit towards the degree
- obtain a minimum passing grade of 2.0 (C) in all nursing courses for credit towards the degree with the exception of designated clinical practica nursing courses where a passing grade $(P)$ is required.
- complete all requirements for either BScN program within eight years of admission into the program or from the first nursing course used for credit towards the degree.


## Transfer Credit

Transfer credit and/or advanced standing may be awarded for course work completed at other recognized institutions. All transfer credit for course work taken prior to admission to the BScN program will be evaluated at the request of the student, and applied at the time of initial registration in the program. Once admitted to the nursing program, course work taken in other institutions for transfer credit towards the degree requires a letter of permission prior to registration in the course.

## Course Challenge

Course challenge is available for up to six credits of the required nursing courses in the Post-diploma Baccalaureate Nursing program. Up to six credits of course challenge may be applied towards the degree if less than nine credit hours of nursing courses have been transferred in. Only three credits of course challenge can apply towards the degree if the maximum of nine credit hours in nursing have been transferred in.

## Part-time Studies

With prior approval by the Nursing Program Officer, and subject to course availability, undergraduate Nursing programs may be taken on a part-time basis; however, students may be required to enrol full-time during a portion of their program.

## Withdrawal from Nursing Program

Students who voluntarily withdraw from the Nursing program must notify, in writing, the Nursing Program Officer. Where students fail to notify the Nursing Program Officer, the Nursing Program Officer will deem a student to have voluntarily withdrawn from the Nursing program where the student has not registered in Nursing courses in any of the last three semesters.

## Northern Collaborative Baccalaureate Nursing Program

The minimum requirement for completion of the Northern Collaborative Baccalaureate Nursing Program BScN is 134 credit hours, 98 of these required credits in nursing.

The total transfer credit awarded on the basis of acceptable work completed at other recognized institutions may not exceed 60 credit hours. Nursing courses must have been completed within the five years prior to admission to be eligible for transfer credit into the nursing program.

## Admission Requirements

Self-identified Aboriginal applicants who meet or exceed the minimum requirements for admission to the program will be given priority for up to twenty percent ( $20 \%$ ) of the first-year seats for the Northern Collaborative Baccalaureate Nursing Program (NCBNP).

Admission is based on academic qualifications and available space. Priority admission will be given to students who meet admission criteria and apply by the deadline of March 31. Applications received after the deadline may be reviewed based on available space in the program.

Applicants from BC and Yukon secondary schools must:

- meet UNBC admission requirements, and
- have completed Principles of Math 11, English 12, Biology 12, Chemistry 11 with a minimum $C+(65 \%)$ in each course

Other applicants must:

- meet UNBC admission requirements, and
- have completed the equivalent of Principles of Math 11, English 12, Biology 12, Chemistry 11 with a minimum of C+ (65\%) in each course

In order to meet the graduation requirements for a BSCN , the student must successfully complete the following courses:

## Program Requirements

## Lower Division Requirement

## 100 Level

NURS 101-3 The Art and Science of Nursing
NURS 102-3 Communication Theory and Practice
ANTH 101-3 Peoples and Cultures or equivalent
PSYC 101-3 Psychology as a Science or equivalent
HHSC 110-3 (Basic Microbiology) at UNBC
or BIOL 105 at CNC or equivalent
HHSC 111-3 (Anatomy and Physiology I) at UNBC or BIOL 111 at CNC or equivalent
HHSC 112-3 (Anatomy and Physiology II) at UNBC or BIOL 112 at CNC or equivalent

## 200 Level

NURS 201-4
NURS 202-3
NURS 203-3 Health Promotion in Families
NURS 204-3 Healing Modalities
NURS 205-3 Introduction to First Nations Health
NURS 206-3 Basic Nutrition
NURS 210-3 Nursing Practice with the Adult
NURS 211-5 Clinical Practicum: Adult
NURS 220-5 Extended Clinical Practicum I
MATH 242-3 (Statistics for Social and Health Sciences) at UNBC
or MATH 104 at CNC or equivalent

## Upper Division Requirement

## 300 Level

NURS 304-3 Introduction to Nursing Knowledge
NURS 306-3 Introduction to Epidemiology
NURS 308-3 Ethics and Law in Nursing
NURS 310-3 Nursing Practice with the Childbearing Family
NURS 311-5 Clinical Practicum: Childbearing Family
NURS 312-3 Mental Health Nursing Practice
NURS 313-3 Nursing Practice with the Elderly Adult
NURS 315-2.5 Clinical Practicum: Mental Health
NURS 316-2.5 Clinical Practicum: Elderly Adult
NURS 320-5 Extended Clinical Practicum II

## 400 Level

NURS 403-3 Introduction to Nursing Research
NURS 408-3 Nursing Leadership
NURS 415-3 Introduction to Community Health and Nursing
NURS 416-4 Clinical Practicum: Community Nursing
POLS 403-3 Social and Health Policy and Administration

At least one of the following areas of clinical focus:
both NURS 420-3 Community Health Nursing
and NURS 440-8 Practicum: Community Health Nursing or
both NURS 422-3 First Nations Health and Nursing
and NURS 441-8 Practicum: First Nations Health and Nursing or
both NURS 424-3 Rural Nursing
and NURS 442-8 Practicum: Rural Nursing
or
both NURS 426-3 Acute Care Nursing
and NURS 443-8 Practicum: Acute Care Nursing or
both NURS 432-3 Mental Health Nursing and NURS 444-8 Practicum: Mental Health Nursing

## Elective Requirement

Twenty-one credit hours chosen to ensure completion of a minimum of 134 credit hours and fulfillment of the following requirements:

- Three credit hours in First Nations Studies Three credit hours in Humanities
- At least three credit hours at the 200 level or above At least three credit hours at the 300 level or above
- Three credit hours at 200 level or above and related to focus area (with permission of program)
- Three credit hours at any level in any subject


## Program Costs

Costs associated with study in the BScN programs are the responsibility of the individual student, including transportation costs and any expenses involved in academic studies, lab, and clinical practica. Students may be required to complete clinical experiences at sites other than Prince George. Provision for all travel, accommodation, and living expenses associated with required clinical practice is the sole responsibility of the student.

## Post-Diploma Baccalaureate Nursing Program

The minimum requirement for completion of the Post-diploma Baccalaureate Nursing Program BScN is 63 credit hours with 42 of these required credits in nursing. Admission occurs in September and January. The fulfillment of admission requirements does not guarantee admission to the post-diploma program and is based on available space.

## Admission Requirements

Applicants must:

- meet UNBC admission requirements
- submit official transcript(s) from diploma program
- provide evidence of active and continuing registration as a nurse in British Columbia or, in the case of newly graduated students, provide evidence of an interim working permit from the Registered Nurses Association of British Columbia (RNABC). Should new graduates admitted to the program subsequently fail in the CRNE examination, they will be required to withdraw from the program. Annual documentation of current, practising RNABC licensure is required while enrolled in the program.

A total of 30 credits may be transferred from other recognized institutions into the nursing program. In order to meet the clinical concentration requirement of the nursing program, students may transfer credit from successfully completed studies at the nursing post-diploma level, provided that the certificate or diploma was completed within the five years prior to admission. Normally, the student is currently practising in that specialty area.

In order to meet the graduation requirements for the BScN , the postRN student must successfully complete the following courses:

## Program Requirements

## Lower Division Requirement

## 100 Level

ANTH 101-3 Peoples and Cultures

## 200 Level

COMM 230-3 Organizational Behaviour
MATH 242-3 Statistics for Social and Health Sciences or equivalent

## Upper Division Requirement

300 Level
NURS 301-3 Advanced Pathophysiology
NURS 302-3 Health Assessment
NURS 304-3 Introduction to Nursing Knowledge
NURS 306-3 Introduction to Epidemiology

400 Level<br>NURS 402-3 Health Promotion<br>NURS 403-3 Introduction to Nursing Research<br>NURS 408-3 Nursing Leadership<br>NURS 415-3 Introduction to Community Health and Nursing<br>NURS 416-4 Clinical Practicum: Community Nursing<br>POLS 403-3 Social and Heath Policy and Administration<br>One of:<br>\section*{NURS 409-3 Pharmacotherapeutics for Nurses}<br>NURS 411-3 Medical Diagnostics for Nurses<br>At least one of the following areas of clinical concentration:<br>NURS 420-3 Community Heath Nursing<br>and NURS 440-8 Practicum: Community Health Nursing<br>or<br>NURS 422-3 First Nations Health and Nursing<br>and NURS 441-8 Practicum: First Nations Health and Nursing<br>or<br>NURS 424-3 Rural Nursing<br>and NURS 442-8 Practicum: Rural Nursing<br>NURS 426-3 Acute Care Nursing<br>and NURS 443-8 Practicum: Acute Care Nursing<br>or<br>NURS 428-3 Nursing Management<br>and NURS 429-8<br>Practicum: Nursing Management<br>NURS 430-3 Community Continuing Care Nursing<br>and NURS 431-8 Practicum: Community Continuing Care Nursing or<br>NURS 432-3 Mental Health Nursing<br>and NURS 444-8 Practicum: Mental Heath Nursing

## Elective Requirement

Nine credit hours chosen to ensure completion of a minimum of 63 credit hours and fulfillment of the following requirements:
Three credit hours of First Nations Studies.
Three credit hours at the 200 level or above and related to area of clinical concentration (with permission of program).

## Program Costs

Costs associated with study in the Nursing programs are the responsibility of the individual student, including transportation costs and any expenses involved in academic studies, lab, and clinical practica. Students may be required to complete clinical experiences at sites other than Prince George. Provision for all travel, accommodation, and living expenses associated with required clinical practice is the sole responsibility of the student.

## Nursing Certificate Program

## Rural and Northern Nursing

The Certificate in Rural and Northern Nursing provides the opportunity for experienced Registered Nurses to pursue post-diploma undergraduate studies through a concentrated program of courses in Rural and Northern Nursing. The Certificate will provide students with some of the essential knowledge and clinical skills needed to provide nursing care in rural and northern community hospitals, clinics and health centres.

At present, the major employers of nurses are Community and Regional Health Boards (in hospitals, public health and home care). Other employers include Ministry of Children and Families, community agencies, First Nations communities and Medical Services Branch of Health Canada. This Certificate will be of particular relevance to nurses employed in rural and northern communities.

The Certificate program is based upon the principles of primary health care, and an orientation to the needs of communities. The program includes some existing courses that have been offered within the Post -diploma BScN program, with the addition of some enhanced courses in health assessment, health promotion, and management of emergent situations.

The Certificate requires successful completion of 30 credit hours. A maximum of 15 credit hours may be transferred from other recognized institutions into the Certificate program.

A maximum of 30 credit hours from other recognized institutions may be transferred into the BScN completion option only.

The Certificate can be completed in one year of study or extended over several years. Students can complete their BScN through the attainment of 33 additional credit hours of prescribed courses.

This Certificate does not replace the UNBC Post-diploma BScN program as it offers a focus in one specialized area only. Other focus areas previously provided through the Post Diploma BScN, notably community health, community continuing care, First Nations health and nursing, and nursing management are not included in the Certificate program.

Applicants must meet the admission criteria for the Post-diploma Baccalaureate Nursing Program, and in addition have a minimum of one year (1700 hours) experience as a registered nurse. Nursing Program policies for Registered Nurse students pursuing a degree will apply to Certificate students.

## Undergraduate Programs: Nursing, Philosophy

## Certificate Requirements

NURS 301-3 Advanced Pathophysiology
NURS 302-3 Health Assessment
NURS 401-4 Introduction to Community Nursing
NURS 402-3 Health Promotion
NURS 409-3 Pharmacotherapeutics for Nurses
NURS 417-4 Management of Emergent Situations
NURS 460-4 Advanced Health Assessment
NURS 450-6 Rural and Northern Nursing

## BScN Completion

Students wishing to complete the Post-diploma BScN will be required to successfully complete 33 credit hours in addition to the Certificate in Rural and Northern Nursing.

## 100 Level

ANTH 101-3 Peoples and Cultures

## 200 Level

COMM 230-3 Organizational Behaviour
MATH 242-3 Statistics for Social and Health Sciences or equivalent

## 300 Level

NURS 304-3 Introduction to Nursing Knowledge
NURS 306-3 Introduction to Epidemiology

## 400 Level

NURS 403-3 Introduction to Nursing Research
NURS 408-3 Nursing Leadership
POLS 403-3 Social and Health Policy and Administration

## Electives

Three credit hours of First Nations Studies. Additional electives to total 63 credit hours (normally, six credit hours).

## Philosophy

Boris DeWeil, Associate Professor, and Coordinating
Committee Chair
Paul Bowles, Professor (Economics)
Kevin Hutchings, Associate Professor (English)
Jacqueline Holler, Assistant Professor (Women's Studies and History)
John Young, Assistant Professor
Philosophy is the oldest academic discipline taught at a university. From a functional point of view, philosophy is synonymous with critical thinking. From a formal point of view, it is a body of knowledge answering three questions: what is it (ontology)?; what good is it (axiology)?; and, how do you know it (epistemology)?

## Minor in Philosophy

A minor in philosophy requires students to take PHIL 205-3 and POLS 317-3 in addition to 12 credit hours chosen from courses listed below. A total of 12 must be at the 300 or 400 level.

A maximum of two courses (six credit hours) used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in Philosophy.

## Required

## PHIL 205-3 Introduction to the History of Philosophy

POLS 317-3 Ethics
One of:

| ECON 202-3 | History of Economic Thought |
| :--- | :--- |
| ENGL 200-3 | Gender and Literary Theory |
| PHIL 200-3 | Critical Thinking |
| PHIL 201-3 | Philosophy of Science |
| PHIL 202-3 | Comparative Religion |
| POLS 270-3 | Political Philosophy: Plato to Locke |

Three of:
COMM 332-3 Business and Professional Ethics
ENGL 300-3 Theory
FNST 303-3 First Nations Religion and Philosophy
FNST 304-3 First Nations Environmental Philosophy and Knowledge
HIST 300-3 Historiography: The Nature of the Historical Discipline
POLS 370-3 Political Philosophy: Locke to Marx
WMST 311-3 History of Feminism
ANTH 401-3 Anthropological Perspectives on Inequality
ANTH 405-3 Topics in Landscapes and Place
ANTH 406-3 Feminist Perspectives in Anthropology
ENGL 400-3 Contemporary Theory
ENVS 414-3 Environmental and Professional Ethics
POLS 400-3 Classis in Political Theory
POLS 472-3 Contemporary Theories of Political Community
WMST 411-3 Contemporary Feminist Theories

## Physics (BSc Program)

Eric Jensen, Associate Professor, and Program Chair<br>Elie Korkmaz, Professor<br>Mark Shegelski, Professor<br>Moustafa Mohamed, Associate Professor<br>Matthew Reid, Assistant Professor<br>Valerio Faraoni, Adjunct Professor<br>Patrick Mann, Adjunct Professor<br>Christine Domning, Senior Lab Instructor

Physics is the study of nature at its most fundamental level. As such it is the science upon whose principles all other sciences and technologies are based. Because it is so basic, a major in physics is ideal preparation, not only for further study in physics, but also for advanced study in such diverse fields as biophysics, medicine, astrophysics, chemical physics, engineering, meteorology, and computer science.

## Major in Physics

A major in Physics requires students to complete 55 credit hours of Physics (17 courses); 33 credit hours of these must be at the upper division level.

The minimum requirement for completion of a Bachelor of Science degree with a major in Physics is 124 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

Lower Division Requirement
100 Level
CHEM 100-3 General Chemistry I
MATH 100-3 Calculus I
or MATH 105-3 Enriched Calculus
MATH 101-3 Calculus II
PHYS 110-4 Introductory Physics I: Mechanics
PHYS 111-4 Introductory Physics II: Waves and Electricity
CPSC 100-4 Computer Programming I
or CPSC 110-3 Introduction to Computer Systems and Programming

## 200 Level

MATH 200-3
MATH 201-3 Introduction to Complex Analysis
MATH 220-3 Linear Algebra
MATH 230-3 Linear Differential Equations and Boundary Value
Problems
PHYS 200-3 Thermal Physics
PHYS 202-4 Electromagnetism and Optics
PHYS 205-3 Modern Physics I
Four additional credit hours of Physics at the 200 level [other than PHYS 215-3 (Energy, Physics and the Environment)].

## Upper Division Requirement

300 Level
MATH 334-3 Ordinary Differential Equations
PHYS 300-3 Classical Mechanics
PHYS 302-3 Quantum Mechanics I
PHYS 390-3 Advanced Physics Laboratory
Nine additional credit hours of Physics at the 300 level.

## 400 Level

PHYS 400-3 Quantum Mechanics II
PHYS 401-3 Seminar on Contemporary Topics in Physics
PHYS 407-3 Statistical Mechanics
Six additional credit hours of Physics at the 400 level.

## Elective Requirement

Elective credit hours as necessary to ensure completion of a minimum of 124 credit hours.

Recommended electives include:
CPSC 101-4 Computer Programming II
or CPSC 311-3 Computer Applications Programming
CHEM 101-3 General Chemistry II
CHEM 200-3 Physical Chemistry I
MATH 335-3 Numerical Analysis I
MATH 340-3 Introduction to Probability

## Joint Major in Chemistry/Physics

See Calendar entry under Chemistry.

## Joint Major in Computer Science/Physics

See Calendar entry under Computer Science.
Joint Major in Mathematics/Physics
See Calendar entry under Mathematics.

## Undergraduate Programs: Physics, Planning

## Minor in Physics

Students interested in obtaining a minor in Physics must complete 27 credit hours of Physics, of which 12 must be at the upper level.

A maximum of two courses (six credit hours) used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in Physics.

The following courses are required:
PHYS 110-4 Introductory Physics I: Mechanics
PHYS 111-4 Introductory Physics II: Waves and Electricity
PHYS 202-4 Electromagnetism and Optics
PHYS 205-3 Modern Physics I

The other courses are selected in consultation with an advisor from the Physics program to reflect the student's specific interests.

## Planning (BPI)

John Curry, Associate Professor, and Program Chair Raymond Chipeniuk, Associate Professor David Connell, Assistant Professor Eric Rapaport, Assistant Professor Orland Wilkerson, Assistant Professor
Doug Baker, Adjunct Professor
Theresa Healy, Adjunct Professor
James Randall, Adjunct Professor
Finlay Sinclair, Adjunct Professor

## Bachelor of Planning

Accredited by the Canadian Institute of Planners and the Planning Institute of British Columbia.

The Bachelor of Planning degree provides a broad general education in professional planning, in addition to the requirement for specialization in one of the following themes:

- Energy Specialization (Fort St. John only)
- Northern and Rural Community Planning
- First Nations Planning
- Natural Resources Planning

This course of studies will be useful to students intending to seek employment as accredited professional planners and to students planning to pursue studies in various post-baccalaureate professional programs, including advanced degrees in planning.

Students enrolled in this degree program must successfully complete 122 credit hours including a minimum of 53 credit hours of upper division courses. Theme specialization and elective course requirements must also be met. Students must ensure that they complete course prerequisites before registering in any course.

Degree requirements: $\quad 69$ credit hours
Theme credits: 39-41 credit hours
Elective credit hours sufficient to ensure completion of 122 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Undergraduate Programs: Planning

## Program Requirements

## Lower Division Requirement

100 Level
ECON 100-3 Microeconomics
ENPL 104-3 Introduction to Planning
POLS 100-3 Contemporary Political Issues

## 200 Level

ECON 205-3 Statistics for the Social and Management Sciences
ENPL 204-3 Principles and Practices of Planning
ENPL 205-3 Environment and Society
ENPL 206-3 Planning Analysis and Techniques
ENPL 207-3 Introduction to Computer Aided Design for Planners
ENPL 208-3 First Nations Community and Environmental Planning
GEOG 204-3 Introductory Geographical Information Systems for the Social Sciences
POLS 200-3 Canadian Government and Politics

## Upper Division General Planning Requirement

## 300 Level

ENPL 301-3 Sustainable Communities: Structure and Sociology
ENPL 303-3 Spatial Planning with Geographical Information Systems
ENPL 304-3 Mediation, Negotiation and Public Participation
ENPL 305-3 Environmental Impact Assessment
ENPL 318-3 Professional Planning Practice
400 Level
ENPL 401-3 Environmental Law
ENPL 410-3 Land Use Planning
ENPL 411-3 Planning Theory, Process and Implementation
ENPL 415-3 Ecological Design
ENPL 419-3 Social Research Methods
ENVS 414-3 Environmental and Professional Ethics
In addition, students may undertake ENPL 430-6 Undergraduate
Thesis, ENPL 431-3 Professional Report, ENPL 440 (1-6) Internship as part of their electives.

## Theme Specialization Requirements

Students must choose to specialize in ONE theme. All course requirements in the theme must be completed.

## Energy Specialization (Fort St. John only)

An energy specialization is offered at the UNBC Fort St. John campus. This specialization deals with energy and energy alternatives including oil and gas exploration, production, transportation, and site remediation within the context of energy planning. For further information, contact the Chair of Planning in Prince George or staff at the Fort St. John campus.

## Natural Resources Planning Theme

The theme 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 theme is intended to address both project level and large-scale environmental planning issues that occur in developments that impact the natural environment.

The objective of this them 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 characterised by complex and intricate problems that revolve around 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 theme emphasizes understanding planning in both the substantive realm (natural and social sciences), and the procedural realm (the process of including people in the decision-making process).

## Lower Division

BIOL 101-4 Introduction to Biology I
BIOL 102-4 Introduction to Biology II
BIOL 201-3 Ecology
GEOG 210-3 Geomorphology
NREM 210-4 Integrated Resource Management

## Upper Division

ECON 305-3 Environmental Economics
or ECON 331-3 Forest Economics
ENVS 306-3 Human Ecology
ENPL 402-3 Terrain Assessment
NREM 400-4 Natural Resources Planning
Choice of three of the following:
BIOL 302-3 Limnology
ENSC 201-3 Introduction to Atmospheric Science
ENSC 202-3* Introduction to Aquatic Systems
ENSC 308-3 Northern Environments
ENSC 404-3 Hazardous Waste Management
GEOG 401-3* Resource Geography
NREM 204-3* Introduction to Wildlife and Fisheries
NREM 410-3 Watershed Management

* indicates course has pre-requisite.


## Northern and Rural Community Planning Theme

The focus of this theme 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 rural and community planning theme combines concepts such as bioregionalism, sustainability, and landscape design within the context of physical land use planning, social planning and community economic development.

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 understanding of relationships between northern communities and surrounding rural resource regions, an understanding 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.

## Lower Division

| BIOL 110-3 | Introductory Ecology |
| :--- | :--- |
| GEOG 100-3 | Environments and People |
| GEOG 206-3 | Social Geography |

## Upper Division

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ENPL 313-3 Rural Community Economic Development
POLS 316-3 Community Government and Politics
    or NREM 306-3 Society, Policy and Administration
GEOG 402-3* Geography of the Circumpolar North
GEOG 424-3 Social Geography of Northern Communities
POLS 434-3 Resource Communities in Transition
    or GEOG 305-3 Political Geography
Choice of five of the following:
    ENVS 306-3 Human Ecology
    ENVS 309-3 Women in Environmental Studies
    GEOG 306-3 Geography of International Development
    HHSC 102-3 Introduction to Health Sciences II:
    Rural and Aboriginal Issues
    INTS 340-3* The Circumpolar North in Global Perspective
    INTS 410-3* Environment and Development in the
        Circumpolar North
    POLS 251-3 Local Services and Public Policy
    POLS 335-3 Community Politics
    RRT 305-3* Protected Area Planning and Management
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* indicates course has pre-requisite.


## First Nations Planning Theme

First Nation communities have significant, and growing, demands for qualified planners. As many First Nations move to define land claims in Canada, potentially giving Nations significant responsibilities for land and community planning, and as others work to build upon existing treaties, the availability of skilled planners becomes essential. However, planning by, and with, First Nations require specific skills and abilities in the planner, whether or not they themselves are First Nation.

For most First Nation communities few distinctions are made between ecological/environmental planning and planning for social and cultural needs. Cultural and social needs are developed from within, and are grounded in, the ecosystem. First Nations planning must necessarily integrate all. However, few First Nations wish to remain grounded in tradition; most seek to move into the future through sound community economic development and skilled land management. Most, finally, face significant community development needs, including infrastructure development, housing , and health planning. Students will need not just a sound grasp of planning principles, but will need to understand the history, sociology, anthropology and ecology of Canadian First Nations. Further, cross cultural translation skills, community participation techniques, and a sound grounding in ethics will be required.

## Lower Division

BIOL 110-3 Introductory Ecology
FNST 100-3 The Aboriginal Peoples of Canada
GEOG 100-3 Environments and People
FNST 203-3 Introduction to Traditional Environmental Knowledge
FNST 250-3 Canadian Law and Aboriginal Peoples

## Upper Division

ENPL 313-3 Rural Community Economic Development
ENPL 409-4 Advanced First Nations Community and Environmental Planning
ENVS 306-3 Human Ecology
FNST 451-3 Traditional Use Studies
NREM 303-3 First Nations' Approaches to Resource Management

Choice of three of the following:
FNST 161-3 A First Nations Culture: Level 1
FNST 215-3 Issues in External Relations for Contemporary Indigenous Peoples
FNST 216-3 Issues in Internal Organization for Contemporary Indigenous Peoples
FNST 302-3 First Nations Health and Healing
FNST 303-3 First Nations Religion and Philosophy
FNST 304-3 First Nations Environmental Philosophy and Knowledge
FNST 407-3 First Nations Perspectives on Race, Class, Gender and Power

| GEOG 403-3 | Aboriginal Geography |
| :--- | :--- |
| INTS 340-3* | The Circumpolar North in Global Perspective |
| INTS 410-3** | Environmental and Development in the |
|  | Circumpolar North |
| NREM 210-4 | Integrated Resource Management |
| POLS 316-3 | Community Government and Politics |
| POLS 415-3 | Comparative Northern Development |
| POLS 434-3 | Resource Communities in Transition |
| RRT 305-3* | Protected Area Planning and Management |
| * indicates course has pre-requisite. |  |

## Elective Requirement

Students must complete sufficient elective credit hours to complete a minimum of 122 credit hours.

## Minor in Planning

The minor in Planning is designed to provide students an opportunity to acquire a basic knowledge of planning theory and methods. The minor consists of 12 required credits (four designated courses) and six credits from a set of elective courses. A maximum of two courses (six credit hours) used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in Planning.

The Minor in Planning requires the completion of 18 credit hours of ENPL Planning Courses, of which 12 credit hours must be at the upper division level. Of the 12 upper division credit hours, a minimum of 6 credit hours must be at the 400 level.

## Required

ENPL 104-3 Introduction to Planning
ENPL 204-3 Principles and Practices of Planning
ENPL 301-3 Sustainable Communities: Structure and Sociology ENPL 411-3 Planning Theory, Process and Implementation

Two of:
ENPL 305-3 Environmental Impact Assessment
ENPL 318-3 Professional Planning Practice
ENPL 410-3 Land Use Planning
ENPL 415-3 Ecological Design
ENPL 419-3 Social Research Methods
ENVS 414-3 Environmental and Professional Ethics

## Political Science (BA Program)

Alex Michalos, Professor Emeritus
John Young, Assistant Professor, and Program Chair
Deborah Poff, Professor
Boris DeWiel, Associate Professor
Michael Murphy, Assistant Professor, and Canada Research Chair, Comparative Indigenous-State Relations
John Soroski, Assistant Professor
Tracy Summerville, Assistant Professor
Gary Wilson, Assistant Professor
Jason Lacharite, Instructor
Jason Morris, Instructor
Besides literacy and numeracy, citizenship and diplomacy are fundamental skills needed to achieve a good quality of life. Citizenship includes both the rights and duties of membership in a political community. Diplomacy is the art and practice of reaching agreements through negotiation. A healthy democracy requires the active and informed participation of its citizens, but this is only possible with a good understanding of its political institutions, processes and issues. Political Science is the discipline devoted to the systematic investigation of citizenship and diplomacy in local, national and international communities.

To achieve its purposes, the Political Science program offers the opportunity to study political philosophy, comparative politics, Canadian government, international politics and public administration. The latter field is offered in two public administration certificates. These certificates are available in municipal administration and First Nations administration.

Majors in Political Science must take a minimum of 15 courses in Political Science or other designated disciplines.
The minor requires a minimum of six Political Science courses. Students may also choose to complete one or both of the above mentioned certificates in public administration (see below for a description and a listing of requirements for the two certificate programs).

## Political Philosophy

Political philosophy investigates normative questions about political life: What is the best form of government? What is justice? Is there an inherent right to self-government?

## Comparative Politics

Comparative politics examines the relationships between government and society around the world. This includes studies of individual countries such as Russia or Japan, as well as political issues such as the role of government in the economy, transitions to democracy or aboriginal-state relations across sets of countries.

## Canadian Government

The study of Canadian government investigates the conflicts and challenges within Canadian society and the institutions of government at federal, provincial, local and First Nations levels. This includes such topics as Canadian political culture, federalism, political economy and the Charter.

## International Politics

International politics examines politics among nations and will cover a wide variety of topics such as Canadian Foreign Policy, International Organizations as well as a diversity of theoretical approaches.

## Major in Political Science

Political Science majors are required to take 16 courses in Political Science and related disciplines.

The Political Science major offers a foundation in four fields of political science: Canadian Government, Comparative Politics, Political Philosophy, and International Politics.

The minimum requirement for completion of a Bachelor of Arts with a major in Political Science is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirement

## Lower Division Requirement

## 100 Level

POLS 100-3 Contemporary Political Issues

## 200 Level

ECON 205-3
INTS 205-3
Statistics for Social and Management Sciences

POLS 200-3
POLS 202-3 Comparative Government and Politics
POLS 270-3 Political Philosophy: Plato to Locke

Upper Division Requirement<br>300 and 400 Level<br>INTS 310-3 Origins and Evolution of International Studies<br>POLS 303-3 Democracy and Dictatorship<br>POLS 320-3 Canadian Politics and Policy<br>POLS 370-3 Political Philosophy: Locke to Marx

Six upper division courses in POLS or INTS, two of which must be at the 400 level.

## Elective Requirement

Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours.

## Joint Major in Economics/Political Science

See Calendar entry under Economics.

## Joint Major in English/Political Science

See Calendar entry under English.

## Joint Major in History/Political Science

See Calendar entry under History.

## Joint Major in International Studies/Political Science

See Calendar entry under International Studies.

## Joint Major in Political Science/Women's Studies

The Political Science/Women's Studies Joint Major will equip students to understand the relationship between the study of the literature and its women's studies context. The degree will be particularly attractive to students who intend to pursue a career in teaching or further studies in Political Science or Women's Studies.

The minimum requirement for completion of a Bachelor of Arts with a Joint Major in Political Science and Women's Studies is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree.

# Undergraduate Programs: Political Science 

Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

POLS 100-3 Contemporary Political Issues
POLS 200-3 Canadian Government and Politics
WMST 100-3 Introduction to Women's Studies
ENGL 200-3/
WMST 220-3 Gender and Literary Theory
ENGL 210-3/
WMST 221-3 Women and Literature: A Survey
WMST 210-3 Research Methods
POLS 202-3 Comparative Government and Politics
ECON 205-3 Statistics for the Social and Management Sciences
POLS 270-3 Political Philosophy: Plato to Locke

## Upper Division Requirement

HIST 312-3/
WMST 312-3 An Introduction to the History of Gender
INTS 308-3 Gender and International Studies
POLS 303-3 Democracy and Dictatorship
POLS 313-3 Women and Politics
POLS 320-3 Canadian Politics and Policy
POLS 370-3 Political Philosophy: Locke to Marx
WMST 302-3 Women and the Contemporary World
WMST 311-3/
HIST 311-3 History of Feminism
Two additional Political Science courses at the 300 or 400 level.

## Additional Requirement

Five additional courses selected from:
ANTH 401-3 Anthropological Perspectives on Inequality
ANTH 406-3 Feminist Perspectives in Anthropology
COMM 333-3 Women in Organizations
ECON 301-3 Women and the Economy
ENGL 410/
WMST 420 Contemporary Women's Literature
ENGL 430-3 Special Topics in Canadian Literature
ENVS 309-3 Women and Environmental Studies
FNST 302-3 First Nations Health and Healing
FNST 306/
WMST 306-3 Indigenous Women: Perspectives
HIST 402-3 Women in Canada
HIST 453 (3-6) Topics in the History of Gender
HIST 454 (3-6) Topics in Women's History
POLS 403-3 Social and Health Policy and Administration
POLS 434-3 Resource Communities in Transition
Three of:

$$
\begin{array}{ll}
\text { POLS 305-3 } & \text { United States Politics } \\
\text { POLS 308-3 } & \text { Japanese Politics and Government } \\
\text { POLS 311-3 } & \text { Russian Politics and Society }
\end{array}
$$

POLS 314-3 European Politics and Government<br>POLS 405-3 Politics of Democratic Transition<br>POLS 415-3 Comparative Northern Development

Fifteen additional credit hours of 300 or 400 level Women's Studies and Political Science courses.

## Elective Requirement

Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours.

## Minor in Political Science

This minor provides students with a foundation in each of the fields of Canadian Politics, Comparative Politics, and Political Theory, as well as permits some specialization in upper division courses.

A minor in Political Science requires students to take at least six Political Science courses ( 18 credit hours), at least four of which must be upper division.

A maximum of two courses (six credit hours) used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in Political Science.

To fulfill the minor, students must successfully complete the following courses:
POLS 100-3 Contemporary Political Issues
One of:
POLS 200-3 Canadian Government and Politics
POLS 202-3 Comparative Government and Politics
POLS 270-3 Political Philosophy: Plato to Locke and four upper division courses in Political Science.

Alternative courses may be substituted for the above with the written permission of the Program Chair or Dean of the College.

## Psychology (BSc Program)

William Owen, Associate Professor, and Program Chair
Kenneth Prkachin, Professor
Robert Tait, Professor
Sherry Beaumont, Associate Professor
Henry Harder, Associate Professor
Cindy Hardy, Associate Professor
Han Li, Associate Professor
Glenda Prkachin, Associate Professor
Loraine Lavallee, Assistant Professor
Kyle Matsuba, Assistant Professor
Paul Siakaluk, Assistant Professor
William Wong, Assistant Professor
Ted Altar, Adjunct Professor
James Taylor, Adjunct Professor
Julie Orlando, Senior Lab Instructor
Psychology is the study of behaviour and mental processes. It focuses on fundamental mechanisms and processes that regulate the behaviour of organisms. The goal of the Psychology program at UNBC is to provide advanced knowledge in the substantive areas of psychology to students in the north, with special emphasis on areas of particular need and relevance to the region, especially applications of psychology to the understanding of human social and health problems. In addition, the program will provide training adequate to ensure students' competitiveness for advanced graduate study in psychology.

## Major in Psychology

Undergraduate students are required to take 17 psychology courses ( 53 credit hours). Of these, at least 12 (38 credit hours) must be upper division courses.

The minimum requirement for completion of a Bachelor of Science with a major in Psychology is 122 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

100 and 200 Level
CPSC 150-3 Computer Applications
PSYC 101-3 Psychology as a Science
PSYC 102-3 Psychology and Human Problems
PSYC 215-3 Research Design and Methodology in Psychology I
PSYC 216-3 Research Design and Methodology in Psychology II
PSYC 260-3 Psychological Foundations
It is strongly recommended that students planning to major in
Psychology select at least one elective course in mathematics and one in biology within the first two years.

## Upper Division Requirement

300 and 400 Level
PSYC 315-4 Design and Analysis of Psychological Research I
PSYC 316-4 Design and Analysis of Psychological Research II
One of:

$$
\begin{array}{ll}
\text { PSYC 301-3 } & \text { Social Psychology } \\
\text { PSYC 306-3 } & \text { Theories of Personality } \\
\text { PSYC 309-3 } & \text { Introduction to Health Psychology }
\end{array}
$$

One of:
PSYC 307-3 Motivation and Emotion
PSYC 320-3 The Psychology of Learning
PSYC 330-3 Cognition
One of:
PSYC 317-3 Psychobiology
PSYC 318-3 Sensation and Perception
One of:
PSYC 303-3 Introduction to Abnormal Psychology
PSYC 345-3 Lifespan Development
One of:
PSYC 442-3 Methods in Developmental Psychology
PSYC 445-3 Methods in Perception and Psychophysics
PSYC 450-3 Tests and Measures
PSYC 455-3 Methods in Social Psychology
PSYC 460-3 Methods in Cognitive Psychology
PSYC 470-3 Psychophysiology
PSYC 475-3 The Evaluation of Social Programs
PSYC 480-3 Critical Analysis in Psychology and the Health Sciences
PSYC 485-3 Current Topics in Psychological Research
Fifteen credit hours of 300 or 400 level Psychology courses.

## Undergraduate Programs: Psychology

## Elective Requirement

Electives at any level in any subject sufficient to ensure completion of a minimum of 122 credit hours.

## BSc Honours - Psychology

Honours students are required to complete 134 credit hours. In addition to the requirements for the Psychology BSc program, students are required to take 12 additional credit hours including the following:

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PSYC 490-3 Honours Thesis I
PSYC 495-3 Honours Thesis II
PSYC 497-3 Senior Seminar
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One of:
PSYC 442-3 Methods in Developmental Psychology
PSYC 445-3 Methods in Perception and Psychophysics
PSYC 450-3 Tests and Measures
PSYC 455-3 Methods in Social Psychology
PSYC 460-3 Methods in Cognitive Psychology
PSYC 470-3 Psychophysiology
PSYC 475-3 The Evaluation of Social Programs
PSYC 480-3 Critical Analysis in Psychology and the Health Sciences
PSYC 485-3 Current Topics in Psychological Research
Each student will complete a thesis project [PSYC 490-3 (Honours Thesis I), PSYC 495-3 (Honours Thesis II)] under the supervision of a faculty member.

Admission to the honours program will take place after the end of the second year (i.e., upon completion of 60 credit hours) and will require a minimum CGPA of 3.33 . Attaining the minimum requirement will not guarantee admission to the honours program, which will be at the discretion of the Program. To remain in the honours program requires the maintenance of a minimum CGPA of 3.33 .

## Minor in Psychology

The minor in Psychology provides students with a foundation in the natural and social science components of the discipline and exposure to its basic observational and analytical methods. It also allows the student to pursue special interests within the discipline at the upper year levels.

A maximum of two courses (six credit hours) used to fulfill program requirements for a major or another minor may also be used to fulfill requirements for a minor in Psychology.

To fulfill the minor, students must successfully complete the following courses:

PSYC 101-3 Psychology as a Science
PSYC 102-3 Psychology and Human Problems
PSYC 215-3 Research Design and Methodology in Psychology
One of:
PSYC 301-3 Social Psychology
PSYC 303-3 Introduction to Abnormal Psychology
PSYC 306-3 Theories of Personality
PSYC 309-3 Introduction to Health Psychology
PSYC 345-3 Lifespan Development
One of:
PSYC 307-3 Motivation and Emotion
PSYC 317-3 Psychobiology
PSYC 318-3 Sensation and Perception
PSYC 320-3 The Psychology of Learning
PSYC 330-3 Cognition
Two other 300 or 400 level Psychology courses.

## Undergraduate Programs: Public Administration Certificate

## Public Administration Certificate Program

The Certificate program is intended to enhance public access to a university education with a flexible course of study that allows either a short term exit (upon completion of Certificate requirements) or the option of laddering into other programs, including the Bachelor program.

The Certificate also provides flexibility. All courses in the Certificate are university-credit courses. This means that students can apply credit taken in their Certificate to other programs should they later decide to pursue a Bachelor's degree. Moreover, the requirements for the Certificate could be completed in one year or could be completed on a part-time basis over several years, depending upon course scheduling and the situation of the student.

As soon as a student completed the 10 courses required in the program of study, the student would be eligible to receive his or her Certificate. The completion of the Certificate would give students the equivalent of one full year of university credit. This provides a laddered program of study which could result in the completion of a Bachelor's degree with three more years of study at UNBC or another university. Because the program is based on existing undergraduate courses, Certificate students will take their courses alongside regular, full-time students.

The requirements for admission into a Certificate program are the same as for any student enrolled in a UNBC undergraduate program. To be eligible for a certificate, students must achieve a minimum GPA of $C$, based on all courses taken at UNBC that are applied to the Certificate. University transfer credits also can be applied to the program, as appropriate, to a maximum of 15 credit hours.

## Public Administration

The Certificate in Public Administration consists of 10 courses (30 credit hours) drawn primarily from the Political Science program; offerings from Business Administration, Economics and English are also included. The program is generic in nature so that the knowledge acquired from the program of study can be transferred to different government settings, as well as to the variety of situations that students will encounter throughout their lives. At the same time, the courses in the Certificate place special emphasis on local government in the north which sets it apart from similar programs offered by institutions in the southern regions of the province.

The purpose of the certificate is three-fold: first, to provide educational opportunities to assist individuals involved in the administration of municipal governments, health boards, school boards and provincial government departments and agencies in northern British Columbia; second, to deliver the four specialized courses in local government administration for the Municipal Officers' Association Intermediate Certificate in Municipal Administration; and, third, to provide expanded educational opportunities at the university level for students who are not in a position to commit to a four-year program of study.

## Certificate Requirements

100 Level
ENGL 170-3 Writing and Communication Skills
ECON 101-3 Macroeconomics
POLS 100-3 Contemporary Political Issues

## 200 Level

COMM 210-3 Financial Accounting
POLS 200-3 Canadian Government and Politics
*POLS 250-3 Law and Municipal Government
*POLS 251-3 Local Services and Public Policy
*POLS 260-3 Politics of Public Finance
300 Level
*POLS 316-3 Community Government and Politics
Three credit hours of electives at any level and in any subject.
*Courses for the MOA Intermediate Certificate in Municipal Administration.

# Resource-Based Tourism <br> (BA Program) 

Gail Fondahl, Associate Professor, and Program Chair John Shultis, Associate Professor<br>Pamela Wright, Associate Professor<br>Anne Hardy, Assistant Professor<br>Pat Maher, Assistant Professor<br>Gordon Borgstrom, Adjunct Professor<br>Mike Murtha, Adjunct Professor<br>Sanjay Nepal, Adjunct Professor<br>Website: http://www.unbc.ca/rrt

Tourism has become the largest industry and employer in the world. Once of the most important and fastest growing sectors in tourism is resource-based tourism, which comprises attractions, activities and experiences involving and interaction with natural and cultural resources (e.g., ecotourism, adventure tourism, indigenous tourism). This degree examines the various components of the resource-based tourism system, giving emphasis to the entrepreneurial perspectives and sustainability issues in the industry. Students also choose to specialize in other content areas and disciplines closely related to resource-based tourism, such as tourism marketing, indigenous tourism, geography, international studies, environmental planning, political science, and natural resource management.

## Major in Resource-Based Tourism

Undergraduate students are required to complete a minimum of thirteen (13) Resource Recreation Tourism courses ( 39 credit hours).

The minimum requirement for completion of a Bachelor of Arts with a major in Resource-Based Tourism is 122 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree.

Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program 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
GEOG 100-3 Environments and People
or GEOG 101-3 Human Geography
or FNST 100-3 The Aboriginal Peoples of Canada
or POLS 100-3 Contemporary Political Issues
NREM 100-2* Natural Resources Management I
RRT 100-3 Leisure in Life
Students with little or no computer experience are strongly encouraged to take CPSC 150-3 (Computer Applications) or CPSC 110-3 (Introduction to Computer Systems and Programming)
*Note: Applications for exemption from NREM 100-2 must be made within the first year of study in any Natural Resource Management major.

## 200 Level

COMM 230-3 Organizational Behaviour
COMM 240-3 Introduction to Marketing
ECON 205-3 Statistics for the Social and Management Sciences or MATH 242-3 Statistics for Social and Health Sciences
RRT 200-3 Sustainable Resource Recreation and Tourism
RRT 202-3 Ecotourism and Adventure Tourism
RRT 204-3 Visitor Behaviour
Two of:
ENPL 204-3 Principles and Practices of Planning
ENPL 205-3 Environment and Society
ENPL 208-3 First Nations Community and Environmental Planning
FNST 215-3 Issues in External Relations for Contemporary Indigenous Peoples
GEOG 200-3 Geography of BC
INTS 307-3 Global Resources
GEOG 204-3 Introduction to GIS for the Social Sciences or GEOG 205-3 Cartography and Geomatics
INTS 205-3 Introduction to International Studies
NREM 210-4 Integrated Resource Management

## Undergraduate Programs: Resource-Based Tourism

## Upper Division Requirement

## 300 Level

COMM 302-3 Entrepreneurship
COMM 342-3 Services Marketing
COMM 343-3 Consumer Behaviour
FNST 304-3 First Nations Environmental Philosophy and Knowledge
or NREM 303-3 First Nations' Approaches to Resource Management
RRT 300-3 Resource Recreation and Tourism Impacts
RRT 301-3 Environmental Interpretation
RRT 306-3 Indigenous Tourism and Recreation
RRT 333-3 Field Experience

One of:
ENPL 305-3 Environmental Impact Assessment
ENPL 313-3 Rural Community Economic Development
GEOG 300-3 Geographic Information Systems
INTS 307-3 Global Resources
NREM 306-3 Society, Policy and Administration
POLS 332-3 Community Development

## 400 Level

RRT 410-3 Research Methods and Analysis
RRT 412-3 Issues and Trends in Resource Recreation and Tourism

Nine credit hours from:
RRT 305-3 Protected Area Planning and Management
RRT 400-3 Recreation and Tourism Ecology, Management and Design
RRT 403-3 International Dimensions in Resource Recreation and Tourism
RRT 407-3 Recreation, Tourism and Communities
RRT 408-3 The Psychology of Recreation and Tourism
RRT 414-3 Polar Tourism and Recreation
RRT 440 (2-6) Internship
RRT 498 (1-3) Special Topics
RRT 499 (1-6) Independent Study
Two of:
COMM 441-3 International Marketing
COMM 442-3 Marketing Strategy
COMM 449-3 Advanced Topics in Marketing
ENPL 409-3 Advanced First Nations Community and Environmental Planning
ENPL 410-3 Land Use Planning
GEOG 401-3 Resource Geography
GEOG 403-3 Aboriginal Geography
INTS 407-3 International Environmental Policy
NREM 400-3 Natural Resources Planning
NREM 411-3 Environmental and Professional Ethics
POLS 401-3 Resource Politics
POLS 434-3 Resource Communities in Transition

## Course Prerequisites

Students should review all proposed course selections in advance to make sure course prerequisites are taken where needed.

## Elective Requirement

Electives at any level in any subject sufficient to ensure completion of a minimum of 122 credit hours.

## Potential Resource-Based Tourism Streams

The following streams in the Resource-Based Tourism degree provide students with the opportunity to focus course selections, towards possible career options. Students are not required to follow these particular streams.

## Tourism Marketing Stream

COMM 100-3 Introduction to Canadian Business
ECON 100-3 Microeconomics
COMM 230-3 Organizational Behaviour
COMM 240-3 Introduction to Marketing
COMM 302-3 Entrepreneurship
COMM 342-3 Services Marketing
COMM 343-3 Consumer Behaviour
RRT 408-3 The Psychology of RRT
At least two of:
COMM 441-3 International Marketing
COMM 442-3 Marketing Strategy
COMM 449-3 Advanced Topics in Marketing

## Indigenous/Cultural Tourism Stream

FNST 100-3 The Aboriginal Peoples of Canada
FNST 215-3 Issues in External Relations for Contemporary Indigenous Peoples
ENPL 208-3 First Nations Community and Environmental Planning
NREM 303-3 First Nations' Approaches to Resource Management
RRT 306-3 Indigenous Tourism and Recreation
POLS 332-3 Community Development
ENPL 409-3 Advanced First Nations Community and Environmental Planning
GEOG 403-3 Aboriginal Geography
RRT 403-3 International Issues in Resource Recreation and Tourism
RRT 407-3 Recreation, Tourism and Communities
RRT 414-3 Polar Tourism and Recreation

# Undergraduate Programs: Resource-Based Tourism, Russian Studies 

## Minor in Resource-Based Tourism

The minor in Resource-Based Tourism and Recreation is designed to afford students an opportunity to gain a foundational set of knowledge in tourism and recreation while pursuing another major. The minor requires students to take a total of 18 credits. The minor has three required courses basic to the field of Resource-Based Tourism and Recreation (nine credits) and a set of elective courses (minimum of nine credits). A maximum of two courses (six credit hours) used to fulfill program requirements for a major (or another minor) may also be used to fulfill requirements for this minor.

## Required Courses

RRT 100-3 Leisure in Life
One of:
RRT 200-3 Sustainable Resource Recreation and Tourism
RRT 202-3 Ecotourism and Adventure Tourism
RRT 204-3 Visitor Behaviour
RRT 300-3 Recreation and Tourism Impacts

## Elective Courses

Nine credit hours from the following list with a minimum of three credit hours at the 400 level:

RRT 301-3 Environmental Interpretation
RRT 305-3 Protected Area Planning and Management
RRT 306-3 Indigenous Tourism and Recreation
RRT 403-3 International Issues in Resource Recreation and Tourism
RRT 407-3 Recreation, Tourism and Communities
RRT 408-3 The Psychology of Resource Recreation and Tourism
RRT 412-3 Issues and Trends in Resource Recreation and Tourism
RRT 414-3 Polar Tourism and Recreation

## Russian Studies

Aileen A. Espiritu, Assistant Professor, and Coordinator (History) Michel Bouchard, Associate Professor (Anthropology) Gail Fondahl, Associate Professor (Geography) Nicholas Tyrras, Assistant Professor (International Studies) Gary Wilson, Assistant Professor (Political Science)
John Young, Assistant Professor (Political Science)

## Minor in Russian Studies

This minor is designed to provide students with an interdisciplinary course of study of Russia as a complement to their major program. The minor requires students to take a total of 21 credit hours. To fulfill the minor, students must successfully complete the following courses:

## Language

| INTS 131-3 | Beginning Russian I |
| :--- | :--- |
| INTS 132-3 | Beginning Russian II |

## Area Studies

GEOG 302-3 Geography of Russia
HIST 356-3 Soviet History
INTS 200-3 Contemporary Russia
POLS 311-3 Russian Politics and Society

## Additional Requirements

One of:
ENGL 351-3 Russian Literature in Translation
HIST 355-3 Russian Imperial History
INTS 444-3 Russian Foreign Policy
POLS 405-3 Politics of Transition in Russia and Eastern Europe

Students intending to pursue advance Russian studies are strongly recommended to take the second year level Russian language courses:

INTS 231-3 Intermediate Russian I
INTS 232-3 Intermediate Russian II

## Transfer Credits

Courses taken in other programs or at other universities (including those in Russia) may be counted as courses towards the minor requirements with permission from the Russian Studies Committee.

# Social Work (BSW Program) 

Dawn Hemingway, Assistant Professor, and Program Chair<br>Bruce Bidgood, Associate Professor<br>Glen Schmidt, Associate Professor<br>Gerard Bellefeuille, Assistant Professor, and BSW Coordinator<br>Christine Leischner, Assistant Professor<br>Joelle McKiernan, Assistant Professor<br>Christina McLennan, Assistant Professor<br>Heather Peters, Assistant Professor<br>Dave Sangha, Assistant Professor<br>Si Chava Transken, Assistant Professor<br>Eleanor Wint, Assistant Professor<br>Greg Beattie, Adjunct Professor<br>Robert Hart, Adjunct Professor<br>Dora Tam, Adjunct Professor<br>Anita Vaillancourt, Adjunct Professor

The Social Work program offers a schedule of studies leading to the degree of Bachelor of Social Work (BSW).

The Bachelor of Social Work at UNBC is designed to prepare students for beginning level generalised social work practice with individuals, families, groups and communities. The program's orientation places emphasis on Social Work in northern and remote areas, First Nations, women and the human services, and community practice and research. Analyses of class, gender and race relations are considered central to the Social Work program. As mandated by its accrediting body, the Canadian Association of Schools of Social Work (CASSW), and relevant Social Work Codes of Ethics. Social Work at UNBC provides a professional program that advocates for justice and equality, and equips graduates with the intellectual, analytical, practical and professional skills needed to promote beneficial change.

## Admission Requirements

Admission to the Bachelor of Social Work program is limited and is based on academic qualifications and available space. Students will normally complete 60 credit hours of study and achieve a minimum grade point average of 2.67 (B-) (calculated on a student's most recent 60 credit hours of study) and meet other selection criteria prior to program entry. More information about these criteria can be found in the BSW Supplementary Application for Admission form.

The Social Work Program will permit up to three Social Work elective courses to be taken prior to formal admission to the BSW program. Successful completion of these courses does not guarantee admission into the program.

Under collaborative agreements between UNBC and the three northern community colleges (College of New Caledonia, Northern Lights College, and Northwest College) students who have completed social service worker training programs at those colleges are eligible to receive credit as determined under the agreement.

Students who have completed a social service worker training program at other colleges may be eligible for discretionary credit. Students will be required to undergo a criminal records search prior to being admitted. Refer to (Academic Regulation \#19).

Undergraduate students are required to take 60 credit hours of Upper Division Social Work courses. The minimum requirement for a Bachelor of Social Work is 120 credit hours.

It will be expected that students applying to the Social Work Program with a Baccalaureate degree in a related discipline will normally have completed courses that are equivalent to the four BSW course pre-requisites:

| SOCW 200-3 | Introduction to Social Work Practice |
| :--- | :--- |
| SOCW 201-3 | Introduction to Social Welfare |
| FNST 100-3 | The Aboriginal Peoples of Canada |
| WMST 100-3 | Introduction to Women's Studies |

Students admitted to the Bachelor of Social Work program are required to withdraw from the Bachelor of Social Work program if they register a second fail in Social Work Field Education (SOCW 302-6 and/or SOCW 402-15).

Students outside one of the specializations are required to select 15 credit hours of Social work electives.

The minimum requirement for a Bachelor of Social Work is 120 credit hours.

## Field Placements

Every effort will be made to secure appropriate field placements for students in the Social Work Program. However, the location and type of placement are subject to availability.

## Costs Associated with the Social Work Program

Costs associated with study in the Social Work Program are the responsibility of the individual student, including transportation costs and any expenses involved in academic studies, lab, and field placement. In some circumstances, students may complete field experiences at sites other than their campus of registration. Provision for all travel, accommodation, and living expenses associated with field education is the sole responsibility of the student.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Standards of Professional Conduct

All students are expected to abide by professional standards as set forth by the Canadian Association of Schools of Social Work (CASSW) and the relevant Social Work Codes of Ethics. Violation of professional standards may result in suspension or dismissal from the program or the educational institution.

## Academic Performance

Students may repeat a Social Work course once. Students who fail a required Social Work course twice are required to withdraw from the program.

## Qualification for Degree

It is the responsibility of the student to ensure that his/her degree requirements are met. Graduation requirements are found in the Regulations and Policies section of this Calendar. To fulfill the requirements of graduation, the student must:

- attain a minimum cumulative GPA of 2.33 (C+) on courses for credit towards the Social Work degree.
- obtain a minimum passing grade of 2.0 (C) in every Social Work course for credit towards the degree
- complete all requirements for the BSW program within eight years of admission into the program or from the first Social Work course used for credit towards the degree.


## Transfer Credit

All transfer credit for course work taken prior to admission to the BSW program will be evaluated, and applied at the time of initial registration in the program. After students have been admitted to the Social Work program, course work taken in other institutions for transfer credit towards the degree requires a letter of permission prior to the registration in the course.

## Program Requirements

## Lower Division Requirement

100 and 200 Level
SOCW 200-3 Introduction to Social Work Practice
SOCW 201-3 Introduction to Social Welfare
FNST 100-3 The Aboriginal Peoples of Canada
WMST 100-3 Introduction to Women's Studies

## Upper Division Requirement

300 Level
SOCW 300-3 Social Work Communication Skills
SOCW 301-3 Critical Social Work Practice
SOCW 302-6 Social Work Field Education
SOCW 320-3 Critical Social Policy
SOCW 330-3 Social Work Research/Policy/Practice
SOCW 336-3 Social Work Philosophy and Ethics

400 Level
SOCW 401-3 Northern/Remote Social Work Practice
SOCW 402-15 Social Work Field Education 2
SOCW 410-3 First Nations Social Work Issues
SOCW 420-3 Family/Child Welfare Policy
SOCW 421-3* Human Growth and Development

* Please see note on SOCW 421-3 in the course description listings in this calendar.


## Elective Courses

Fifteen (15) credit hours of Social Work electives. The elective courses are numbered in the 400 ranges, but may be taken by students enrolled in their third or fourth year of studies.

SOCW 422-3 Child Welfare Practice
SOCW 424-3 Child Welf/Sites of Resistance
SOCW 426-3 Current Issues in Child Welfare Practice
SOCW 432-3 Unemployment and Social Work
SOCW 433-3 Women in the Human Services
SOCW 435-3 Community Social Policy
SOCW 437-3 Social Work with Groups and Communities
SOCW 438-3 Comparative Welfare Analysis
SOCW 439-3 Social Work/Law and the Justice System
SOCW 440-3 Social Work in Mental Health
SOCW 441-3 Social Work and Substance Abuse
SOCW 442-3 Social Work with Victims of Abuse
SOCW 443-3 Medical Social Work
SOCW 444-3 Social Work Critical Issues in Aging
SOCW 445-3 Social Work and Cross-Cultural Practice
SOCW 448-3 Inequality and Income Security
SOCW 449-3 Gender and Sexuality
SOCW 450-3 Social Work and Family Practice
SOCW 452-3 Social Work/Crisis Intervention
SOCW 454-3 Disability Issues
SOCW 455-3 First Nations Governance and Social Policy
SOCW 456-3 Family Caring System
SOCW 457-3 Individual and Community Wellness
SOCW 498 (3-6) Special Topics
SOCW 499-3 Directed Readings

## Elective Requirement

Electives at any level in any subject sufficient to ensure completion of a minimum of 120 credit hours.

## BSW: Child Welfare Specialization

The Child Welfare Specialization has been designed to provide a program of studies that prepares students for practice in child welfare, while also satisfying the general practice criteria required for BSW accreditation and for designation as a Registered Social Worker (RSW). Students must meet all prerequisites for entry into the BSW program at UNBC and be accepted into the program. The fourth year practicum will take place in a government child welfare service (BC Ministry for Children and Families, or a fully delegated First Nations child welfare agency or an approved government agency in another province). Completion of the specialization is noted on the student's graduating transcript.

The Child Welfare Specialization has been designed to provide a social work degree that will prepare students for social work practice in all child and family serving agencies. In addition, the program has been designed to meet the BC Ministry for Children and Families entry level expectations for child protection positions.

## Program Requirement

SOCW 300-3 Communication Skills in Social Work Practice
SOCW 301-3 Critical Social Work Practice
SOCW 302-6 Social Work Field Education I
SOCW 320-3 Critical Social Policy
SOCW 330-3 Social Work Research, Policy and Practice
SOCW 336-3 Social Work Philosophy and Ethics
SOCW 401-3 Northern and Remote Social Work Practice
SOCW 402-15 Social Work Field Education II
SOCW 410-3 First Nations Social Work Issues
SOCW 420-3 Family/Child Welfare Policy
SOCW 421-3* Human Growth and Development
SOCW 422-3 Child Welfare Practice
SOCW 426-3 Current Issues in Child Welfare Practice
SOCW 439-6 Social Work/Law and the Justice System
*or equivalent

## Elective Courses

One Social Work Elective.

## BSW: First Nations Specialization

The First Nations Specialization has been designed to provide a program of studies that prepares students for practice with First Nations people, while also satisfying the general practice criteria required for BSW accreditation and for designation as a Registered Social Worker (RSW).

Students must meet all prerequisites for entry into the BSW program at UNBC and be accepted into the program. The fourth year practicum will take place with a First Nations organization.

Completion of the specialization is noted on the student's transcript.

## Program Requirement

SOCW 300-3 Communication Skills in Social Work Practice
SOCW 301-3 Critical Social Work Practice
SOCW 302-6 Social Work Field Education I
SOCW 320-3 Critical Social Policy
SOCW 330-3 Social Work Research, Policy and Practice
SOCW 336-3 Social Work Philosophy and Ethics
SOCW 401-3 Northern and Remote Social Work Practice
SOCW 402-15 Social Work Field Education
SOCW 410-3 First Nations Social Work Issues
SOCW 421-3* Human Growth and Development
SOCW 455-3 First Nations Governance and Social Policy
SOCW 456-3 Family Caring Systems
SOCW 457-3 Individual and Community Wellness

## Elective Courses

Any three upper division social work electives.

## Women's Studies (BA Program)

Jacqueline Holler, Assistant Professor, and Coordinator
Deborah Poff, Professor
Maryna Romanets, Assistant Professor
Theresa Healy, Adjunct Professor
Rhonda Semple, Adjunct Professor
Si Transken, Adjunct Professor
The program in Women's Studies provides an interdisciplinary study
of women and gender relations with an emphasis on women's
history, social and cultural contributions, contemporary roles, and
the structures and processes of gender differentiation. The program
is designed to provide students with a systematic knowledge of
scholarship by, for and about women.
Additionally, the program develops students' awareness of the
gendered nature of society through the analysis of changing ideals and
practices that underlie social perceptions of womanhood, femininity,
and female and male relations.
Finally, the Women's Studies program develops students' capacity to analyze their own gendered identities by questioning the underlying assumptions of their everyday world.

Women's Studies develops students' skills in critical thinking and oral and written expression as they study the complexity of social life, the inter-relations among different cultures, and the connections between gender, sexuality, race and class. The program enhance students' qualifications for careers in the public, para-public, and private sectors: in business, education, international relations, government, communications, the sciences and/or social sciences. It also prepares students for post-graduate Women's or Gender Studies.

## Major in Women's Studies

A major in Women's Studies requires students to take 54 credit hours of Women's Studies (18 courses), at least 39 credit hours of which must be upper division courses. Nine of the upper division courses must be from the offerings of other programs with content on women or the study of gender relations.

The minimum requirement for completion of a Bachelor of Arts with a major in Women's Studies is 120 credit hours.

## Breadth Requirement

UNBC requires students to gain a breadth of knowledge prior to graduation; this is accomplished, in part, by requiring that all students successfully complete one course from each of the Arts and Humanities, Social Science, Natural Science, and Physical Science quadrants listed on page 64 of the Calendar. Students need to ensure they have a course from each of the quadrants as part of their major or minor requirements or as part of their elective requirements, and that they have the total number of credits required for their degree. Students admitted to UNBC with 45 or more transfer credits are exempt from the Breadth Requirement.

## Program Requirements

## Lower Division Requirement

## 100 Level

WMST 100-3 Introduction to Women's Studies

## 200 Level

ENGL 200-3/
WMST 220-3 Gender and Literary Theory
ENGL 210-3/
WMST 221-3 Women and Literature: A Survey
WMST 210-3 Research Methods

## Upper Division Requirement

## 300 Level

FNST 306-3/
WMST 306 Indigenous Women: Perspectives
HIST 312-3/
WMST 312-3 An Introduction to the History of Gender
WMST 302-3 Women and the Contemporary World
WMST 311-3/
HIST 311-3 History of Feminism
400 Level
WMST 412-3/
FNST 412-3 Political Economy and First Nations Women

## Additional Requirement

Nine courses selected from the following:
ANTH 401-3 Anthropological Perspectives on Inequality

ANTH 406-3 Feminist Perspectives in Anthropology
COMM 333-3 Women in Organizations
ECON 301-3 Women and the Economy
ENGL 410-3/
WMST 420-3 Contemporary Women's Literature
ENGL 430-3 Special Topics in Canadian Literature
ENVS 309-3 Women and Environmental Issues
FNST 302-3 First Nations Health and Healing
HIST 402-3 Women in Canada
HIST 453 (3-6) Topics in the History of Gender
HIST 454 (3-6) Topics in Women's History
INTS 308-3 Gender and International Studies
POLS 313-3 Women and Politics
POLS 403-3 Social and Health Policy and Administration
POLS 434-3 Resource Communities in Transition

## Elective Requirement

Electives to ensure completion of a minimum of 120 credit hours.

## Joint Major in English/Women's Studies

See Calendar entry under English.

## Joint Major in First Nations Studies/Women's Studies

See Calendar entry under First Nations Studies.

## Joint Major in History/Women’s Studies

See Calendar entry under History.

## Joint Major in Political Science/Women's Studies

See Calendar entry under Political Science.

## Minor in Women's Studies

In conjunction with a major in another program, students may pursue a minor in Women's Studies. A minor in Women's Studies requires 18 credit hours of Women's Studies courses, 12 of which must be upper division courses. Courses used to fulfill program requirements for a major (or another minor) may not be used toward a minor in Women's Studies.

## Course Descriptions

## Course Abbreviations Listed Alphabetically

Course Code Courses

| ANTH | Anthropology |
| :--- | :--- |
| ARTS | Arts |
| BIOL | Biology |
| CHEM | Chemistry |
| COMM | Commerce/Business Administration |
| COOP | Cooperative Education |
| CPSC | Computer Science |
| CORE | Core |
| ECON | Economics |
| EDUC | Education |
| ENGL | English |
| ENPL | Environmental Planning |
| ENSC | Environmental Science and Engineering |
| ENVS | Environmental Studies |
| FNST | First Nations Studies |
| FSTY | Forestry |
| GEOG | Geography |
| HHSC | Health and Human Science |
| HIST | History |
| INTS | International Studies |
| INTX | International Exchange |
| MATH | Mathematics |
| NORS | Northern Studies |
| NREM | Natural Resources Management |
| NRES | Natural Resources and Environmental Studies |
| NURS | Nursing |
| PHIL | Philosophy |
| PHYS | Physics |
| POLS | Political Science |
| PSYC | Psychology |
| RRT | Resource Recreation and Tourism |
| SOCW | Social Work |
| WMST | Women's Studies |
|  |  |
|  |  |


genetic considerations for the maintenance of biological
 diversity and the practical applications to the management of natural resources.

Prerequisites: BIOL 210-3

Precluded: BIOL 601-3

Upper Division and Graduate Level Courses
Credit is not granted for both 400 and 600 level courses having the same title, unless otherwise specified in the course description.

## Prerequisites

A prerequisite course is an academic requirement that must be completed prior to the student taking a course. Unless otherwise stated, a passing grade of " D -" or better is required to satisfy as a prerequisite course.

Prerequisites are used to ensure that a student has the required background to successfully complete the course. Prerequisites may also have prerequisites. These prerequisites must also be fulfilled.

For example: COMM 314-3 has a prerequisite of COMM 313-3, COMM 313-3 has a prerequisite of COMM 210-3, and COMM 210-3 has a pre- or co-requisite of COMM 100-3. In this case, a student must have credit for COMM 313-3, COMM 210-3, and COMM 100-3 before being eligible to enrol in COMM 314-3.

## Course Offerings

Not all courses are offered every year. Check online Course Listings for a list of the courses being offered in each semester.

## Course Descriptions

The following explanation will help clarify the terms found in the course descriptions.

Course Number - indicates discipline and level of study (100-299 for lower division, 300-499 for upper division, 500 for honours level courses).

## Credit Value

## Course Title

## Course Description

Prerequisites/Co-requisites - are requirements needed before or concurrent with a student's registration in the course. This section may also contain recommendations that will help students understand the course materials better.

Precluded Courses - Students cannot receive credit for both the course being described and the course listed in this section.

## Anthropology

## ANTH 100-3 Archaeological and Biological Approaches

Introduction to the study of the biological basis of our humanity, the range of cultural adaptations represented by human societies in the archaeological record, and the means and techniques by which these are investigated.
Prerequisites: none
ANTH 101-3 Peoples and Cultures Examines the diversity of human cultures and languages through the comparison of contemporary societies, patterns of social organization.
Prerequisites: none
ANTH 200-3 Biological Anthropology A survey of the origins and evolution of human population diversity. Topics covered include an introduction to evolutionary and population genetic theory; trends and debates in human evolution; principles of human growth, development and aging; and polymorphism, polytypism and biocultural adaptation in human populations.
Prerequisites: none
Recommended: ANTH 100-3
ANTH 201-3 Medical Anthropology Understanding of wellness in various cultural systems studied through the classification of health and illness categories, and the range of approaches to maintaining and intervening in health processes. Examples relevant to Northern people and issues will be developed.

Prerequisites: none
Recommended: ANTH 100-3 or 101-3
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.
Prerequisites: none
Recommended: ANTH 100-3
ANTH 205-3 Introduction to Archaeology An introduction to archaeological methods. This course will trace the developmental history of the discipline, and will focus on current methods and techniques used in archaeology. Using case studies drawn from around the globe, the course will highlight the holistic and interdisciplinary nature of archaeology.
Prerequisites: none
Recommended: ANTH 100-3
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.
Prerequisites: none
Recommended: ANTH 101-3

ANTH 207-3 Popular Culture The study of contemporary cultural phenomena with anthropological methods.

## Prerequisites: none

Recommended: ANTH 101-3
Precluded: ANTH 412-3
ANTH 209-3 Pacific Ethnography A survey of the ethnographic literature of the Pacific with a focus on selected cultures and/or regions. The course will discuss the methodology and paradigms of the area's ethnographic research.

## Prerequisites: none

Recommended: ANTH 101-3
ANTH 210-3 Understanding Theory This course investigates the major theoretical trends in anthropology from the nineteenth century to the present. It will introduce central issues in anthropology theory, key concepts in the discipline, important authors and debates over theoretical perspectives.
Prerequisites: ANTH 100-3, 101-3, or 211-3
ANTH 211-3 Anthropology Through Film This course will introduce the student to the subject matter and theories of social and cultural anthropology through the extensive use of anthropological and documentary film. Topics will cover a spectrum of issues, including: marriage and the family; economics; ritual and religion; conflict and conflict resolution; and culture change, among others.
Prerequisites: none
Recommended: ANTH 101-3
ANTH 212-3 Archaeology of the Old World This survey course focuses on human antiquity outside of the Americas. Temporally the course covers some two and a half million years of prehistory, beginning with the earliest known archaeological evidence in Africa, and ending with the great civilizations of Asia, Europe and Africa.
Prerequisites: none
Recommended: ANTH 100-3
ANTH 214-3 Anthropology of Europe A survey of the anthropological literature of Europe, with a focus on selected cultures or regions. The course will discuss the methodology and paradigms of the area's ethnographic research.

## Prerequisites: none

Recommended: ANTH 101-3

ANTH 215-3 Anthropology of Canada A survey of the anthropological literature describing Canada, with a focus on selected cultures or regions. Examples relevant to northern peoples and issues will be used. The course will discuss the methodology and paradigms of the area's ethnographic research. This course will allow students to make inferences to analyze what is happening in their own community.

Prerequisites: none
Recommended: ANTH 101-3

ANTH 220-3 Introduction to Primatology A survey of major issues in contemporary primatology, including origins and evolution, taxonomy, socioecology, mating systems, dominance, co-operative and coercive structures, intelligence and conservation.

Prerequisites: none
ANTH 298-(3-6) Topics in Anthropology This course will cover particular aspects of anthropology selected by the instructor. May be repeated for credit (maximum six credit hours) with the permission of the instructor and the Program Chair (permission to be given only when the subject matter differs substantially).

Prerequisites: permission of the Program Chair
ANTH 300-3 Methods in Social Anthropology Research design, data collection, statistics and analysis as used in social anthropology. The seminar will discuss field methods and use of archival materials.

Prerequisites: ANTH 210-3
ANTH 301-3 Archaeological Lab Methods This course introduces students to laboratory methods used in archaeological analyses. Topics will include chipped and ground stone tools, fauna, bone tools, basketry, quantitative methods and more. Students will conduct research projects, and may have the opportunity to analyze artifacts from archaeological sites in BC and elsewhere.

Prerequisites: ANTH 205-3
ANTH 303-3 Archives, Texts, Museums, and Contemporary
Communities Students will engage in projects in which they combine the use of archival, textual, museum and interview methodologies.

Prerequisites: upper division standing or permission of the instructor
ANTH 304-3 Kinship and Social Organization A review of the literature on kinship and social organization, and an examination of selected cases from various societies.

Prerequisites: upper division standing
Precluded: ANTH 408-3

ANTH 305-3 Circumpolar Ethnography A survey of the archaeological and ethnographic literature on the north, with a focus on selected cultures from Alaska, Northern Canada, Greenland, Northern Scandinavia and Northern Russia. The course will discuss the methodology and paradigms of the area's ethnographic research.

Prerequisites: none
Recommended: ANTH 101-3
Precluded: ANTH 208-3, NORS 321-3
ANTH 306-3 Culture and Communication This course will provide an overview of the ways anthropology analyzes languages and communication. Topics may include: Ethnolinguistics and Ethnoscience; discourse analysis; and language use and language planning in the modern nation-state.
Prerequisites: ANTH 210-3 or permission of the instructor Precluded: ANTH 402-3

ANTH 310-3 Applied Anthropology Theory in practice as it is understood by those who practice and advocate what many consider to be an entire sub field in anthropology: Applied Anthropology. The course will focus on the practice of anthropology using examples relevant to the northern world, and will consider issues associated with doing anthropology in difficult situations.

Prerequisites: upper division standing
Recommended: ANTH 210-3

ANTH 311-3 Nutritional Anthropology This lab/seminar course undertakes a biocultural examination of the relationship between food (e.g., acquisition/avoidance; distribution; preparation), human health, and society in past and present populations. Lab exercises will examine aspects of research methodology, including anthropometrics, dietetics and energetics.

Prerequisites: ANTH 200-3 or permission of the instructor
ANTH 312-3 Human Adaptability This course will examine the genetic, epigenetic, and behavioural/cultural avenues used by humankind in adapting to environmental stresses associated with extreme habitats, (e.g., cold, heat, hypoxia). Human (mal-) adaption to post-industrial revolution urban conditions (e.g., crowding, noise, pollution) will also be addressed.
Prerequisites: ANTH 200-3 or permission of the instructor

ANTH 316-3 The Social Theory and Structure of Contemporary Canadian Society A consideration of basic themes, theories and concepts in advanced social thought as they relate to modern Canadian industrial society. Theories to be reviewed will include: functionalism, conflict theory, exchange theory and interactionist theory. These will be reviewed in relation to key issues impacting modern Canadian industrial societies, including: social inequality, ethnic and gender relations, the family, political and economic organization, work and occupations, community and region, the environment and utilization of natural resources, and social movements and social change.

Prerequisites: ANTH 101-3
Recommended: ANTH 210-3
ANTH 320-3 Biology of Circumpolar Peoples A lecture/seminar course exploring biological variability in contemporary circumpolar peoples, notably growth and development, morphology (size, shape and body composition) and physiology, within a framework of evolutionary ecology. Also addressed will be effects of culture change on, e.g., work capacity, nutritional adaptation, demography, and morbidity.
Prerequisites: ANTH 200-3
ANTH 325-3 Archaeological Theory Over the last three decades, there has been a tremendous explosion of literature concerning theory in archaeology. In this seminar course, students will learn about the historical contexts and development of the various theoretical schools that have contributed to our current state of knowledge. Weekly readings and seminar discussion will be mandatory.
Prerequisites: ANTH 205-3

ANTH 335-3 Archaeological Heritage Management In this lab-seminar course, weekly readings focus on topics relevant to archaeological heritage management, also known as Cultural Resource Management (CRM). Discussions will center on issues such as: heritage legislation in British Columbia and elsewhere, First Nations and private sector concerns, and archaeological consulting. Labs will focus on methodological issues such as survey techniques, culturally modified trees and more.
Prerequisites: ANTH 205-3
ANTH 380-3 Special Topics in Archaeology Occasional course offering to enable existing or visiting faculty to teach courses not normally offered in the program. Each course will reflect the geographic and topical interests of the instructor, and will only be offered at any given time depending on availability of an instructor.

Prerequisites: permission of the instructor
ANTH 400-3 Topics in Anthropological Theory The course will survey and critique selected contemporary approaches to cultural and social theory.

Prerequisites: ANTH 210-3 or permission of the instructor
ANTH 401-3 Anthropological Perspectives on Inequality An examination of the embedding of inequality in cultural systems, and the intersection of categories such as race, class and gender in systems of hegemony; examples will be selected from a variety of cultural contexts.
Prerequisites: upper division standing or permission of the instructor Precluded: ANTH 309-3

ANTH 404-3 Comparative Study of Indigenous Peoples of the
World A project-based seminar in which students will examine the similarities and differences of selected groups, focusing on issues such as relations with state societies, etc.

Prerequisites: ANTH 206-3, 208-3, or 211-3 or permission of the instructor

ANTH 405-3 Topics in Landscapes and Place An examination and critique of the anthropological approaches to landscape, space and place. Cross-cultural and cross-temporal case studies will be used.

Prerequisites: upper division standing
Precluded: ANTH 413-3
ANTH 406-3 Feminist Perspectives in Anthropology This course will survey and critique selected theoretical approaches and ethnographies to examine key area of interest and debate in the field of feminist anthropology. This course will draw from the political ideology in feminism concerned with critical examination of gender relations and cross-cultural anthropological study.
Prerequisites: upper division standing or permission of the instructor Precluded: ANTH 307-3

ANTH 407-3 Topics in British Columbia Ethnography A
comparative critique of contemporary ethnographic research of selected cultures or regions.
Prerequisites: upper division standing
Recommended: prior course(s) in sociocultural anthropology
ANTH 409-3 Topics in British Columbia Archaeology A problembased seminar in which selected issues will be examined from several points of view.

Prerequisites: any prior archaeology course or permission of instructor
ANTH 410-3 Theory of Nation and State A critical examination of theories of ethnicity, nationalism and statehood from an anthropological perspective.
Prerequisites: upper division standing
ANTH 411-3 Topics in Biological Anthropology A problemoriented and project-based seminar in which one (or more) selected topics in biological anthropology will be examined.

Prerequisites: ANTH 200-3 or permission of the instructor
ANTH 413-3 Topics in Environmental Anthropology An examination of the anthropological literature on ecology and environmental practices. Contemporary issues and examples relevant to indigenous practices and northern peoples will be developed.
Prerequisites: upper division standing Recommended: prior course(s) in anthropology

ANTH 414-3 Religion, Ideology, and Belief Systems A review of anthropological approaches to religion, ideology and belief systems with comparative examples from several cultures.
Prerequisites: prior course(s) in sociocultural anthropology or permission of the instructor

ANTH 415-3 Economic Anthropology An introduction to the field of economic anthropology, looking at social and cultural contexts for processes of production, distribution, and consumption. Contemporary issues such as development will be explored.

Prerequisites: prior course(s) in sociocultural anthropology or permission of the instructor

ANTH 416-6 Archaeological Survey and Mapping Course participants will learn about archaeological survey, from both the academic perspective, and from the perspective of professional consulting archaeology. Students will become proficient at map reading, compassing, sampling strategies in forest and non-forest environments, and recognizing cultural features pertinent to the area. Participants will learn skills necessary for potential employment with professional archaeology firms; this will include observing protocols with First Nation communities and liaising with government and corporate entities. Where possible, students will have an opportunity to work for a few days with professional consultants.
Prerequisites: permission of the instructor
Co-requisites: ANTH 417-6 and 418-3

## ANTH 417-6 Excavation and Field Interpretation in Archaeology

Excavation forms a central aspect of archaeology. As part of this course, students and community members will participate in a 6-8 week excavation of an archaeological locality. This will involve initial set up of the area, excavation and record-keeping, and basic field laboratory procedures. In addition to "hands-on" participation, daily seminar discussion will be mandatory; topics will centre on each day's survey and excavation results. These sessions will be interdisciplinary, reflecting the interests of the instructors, community members, visiting researchers and students. Topics will invariably focus on geomorphology, lithic artifacts, zooarchaeology, paleoethnobotany, paleoecology, oral traditions and traditional use, and the social context of conducting archaeology. The field school will often take place in remote localities in British Columbia and elsewhere, and so students may have to live in a field camp situation. In addition to basic tuition, there may be additional fees to cover camp and transportation costs.

Prerequisites: permission of the instructor
Co-requisites: ANTH 416-6 and 418-3
ANTH 418-3 Archaeology and First Nations 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.

Prerequisites: permission of Program Chair
Co-requisites: ANTH 416-6 and 417-(3-6)
ANTH 419-3 Political and Legal Anthropology Comparative study of power; political organization; leadership; non-centralized and centralized political systems social control; and a cross-cultural study of law. Contemporary issues relevant to the north will be addressed, for example self government and sovereignty.

Prerequisites: prior course(s) in sociocultural anthropology or permission of the instructor

ANTH 420-3 Races, Racism, and Human Biology This seminar course investigates the biological basis of human diversity and difference. It deals with the origin and mechanisms of human population variation, the nature of racial and racist studies in both historical and social context, and the question of race as a valid subject of scientific inquiry.

## Prerequisites: ANTH 100-3 or permission of the instructor

ANTH 421-(3-6) Ethnographic Field Methods A project-based seminar in which students will actualize field methods in ethnographic research, in addition to closely examining questions of ethical research and community participation in ethnographic research. This course consists of at least three weeks of classroom instruction in a field location and will emphasize the actualization of conventional ethnographic methods and procedures in an actual field setting. Students will be expected to participate in a larger field project and to gain direct experience in field methods while being sensitized to the requirements of ethical research and community involvement in ethnography.

Prerequisites: ANTH 101-3, ANTH 210-3

ANTH 422-(3-6) Ethnographic Research Project A project-based course in which students shall examine and compare selected aspects of cultures and peoples before integrating this acquired knowledge to design and carry out a major research project arising from the field experience. The ethnographic material covered shall be appropriate to the field school's locality and/or general research topic.
Prerequisites: ANTH 101-3, ANTH 210-3
ANTH 423-3 Urban Anthropology A review of the anthropological approaches to and the social theory of contemporary urban society in the local, national and global contexts of the modern world. Contemporary issues relevant to the North will be addressed.

Prerequisites: prior course(s) in sociocultural anthropology or permission of the instructor

ANTH 425-3 Introduction to Zooarchaeology This lab course introduces students to the study of animal bones found in archaeological contexts. The first part of the course focuses on animal bone identification, while the second part centers on theoretical aspects of animal use by pre-Industrial human societies. As part of the course, students may have to prepare animal skeletons.

Prerequisites: ANTH 301-3 or permission of the instructor
ANTH 430-3 Stone Tools in Archaeology Stone tools are the most ubiquitous type of artifacts found around the world. This lab-seminar course focuses on methods and techniques for analyzing stone tools, and includes a strong theoretical component on stone tool production and use in pre-Industrial societies. Weekly labs will focus on analytical procedures, and in addition students are expected to complete assigned readings and participate in discussions.

Prerequisites: ANTH 301-3 or permission of the instructor

## ANTH 440-(3-6) Internship

Prerequisites: upper division standing and permission of the Program Chair

## ANTH 450-(3-6) Undergraduate Thesis in Anthropology

Prerequisites: upper division standing and permission of the Program Chair

ANTH 451-3 Traditional Use Studies An advanced seminar on traditional use studies, their use, application, and development. The seminar will examine the origins and development of this field, review case studies and recent applications, and contemporary policies.

Prerequisites: ANTH 101-3 or FNST 100-3 or permission of instructor Precluded: FNST 451-3

## ANTH 498-(3-6) Special Topics in Anthropology

Prerequisites: upper division standing and permission of the Program Chair

## ANTH 499-(3-6) Independent Study

Prerequisites: upper division standing and permission of the Program Chair

ANTH 500-3 Method and Theory Seminar An examination of current developments within the subdiscipline in which the student is taking the honour's program. Developed in consultation with and supervised by a member of the Anthropology faculty, the aim is as much to explore where linkages do and do not exist across Anthropology's subdisciplines as it is to understand the state-of-the-art of the chosen subdiscipline. The course will conclude with a seminar discussion developed and directed by the student, open to all Anthropology faculty and the student's peers.
Prerequisites: admission to the Honours Program
ANTH 501-3 Research Prospectus In consultation with the supervisor, the student will design an original research project which will form the core of the Honour's thesis. The design will be presented as a colloquium open to the university community.

Prerequisites: ANTH 500-3 or permission of the Program Chair
ANTH 502-3 Honours Thesis In accordance with the program guidelines for thesis projects, the student will present the results of their project in a paper of $12,500-15,000$ words, to be evaluated by the thesis supervisor and an outside reader. Successful completion of the Honours thesis course will be based on the quality of the written work, as well as an oral defense open to the university community.
Prerequisites: ANTH 501-3

## Arts

Northern Advancement program students are required to take these courses and so have priority for registration. Any spaces remaining may be filled by other students.

ARTS 101-3 Learning Strategies This course helps students identify their strengths and weaknesses as learners, master essential academic learning strategies, identify appropriate career goals and majors, and make a successful transition to university.
Prerequisites: none
Precluded: CORE 100-3, NRES 100-3
ARTS 102-3 Research Writing This course is the second half of a comprehensive study in University Study Skills that will focus primarily on skills associated with effective research writing techniques. In addition, the course will also focus on the knowledge and skills necessary for the productions of university level, library based research papers. Using the library, mastering computers, reviewing grammar, and presenting findings orally will be integral components of the process.
Prerequisites: none
Precluded: CORE 100-3, NRES 100-3
ARTS 110-3 Musical Appreciation A survey of "art" music, building an appreciation of the development of music from mediaeval times to the present, emphasizing the relation of musical works to their historical and social origins.
Prerequisites: none

## Biology

BIOL 101-4 Introductory Biology I This course is an introduction to the biological sciences including nature of life, cell structure, function, development, metabolism, genetics and evolutionary theory.
Prerequisites: Biology 11 or Biology 12
Precluded: BIOL 100-4
BIOL 102-4 Introductory Biology II This course is a survey of living organisms, plant and animal form and function, ecology and population biology.
Prerequisites: Biology 11 or Biology 12 or BIOL 101-4
Precluded: BIOL 100-4
Recommended: BIOL 101-4
BIOL 110-3 Introductory Ecology This course is designed to introduce non-science majors to ecological systems. Principles of ecology, biotic and abiotic conditions, population, community and ecosystem structure, human impacts on these systems, and basic concepts of conservation and preservation of ecosystems.

## Prerequisites: none

Precluded: BIOL 201-3
BIOL 201-3 Ecology The relationship of the environment to organisms, principles of animal and plant ecology, populations, communities, ecosystems and human ecology.
Prerequisites: BIOL 101-4 and 102-4
BIOL 202-3 Invertebrate Zoology Systematics, development and evolution of the invertebrates.

Prerequisites: BIOL 101-4 and 102-4
BIOL 203-3 Microbiology This course introduces students to the classification and biology of prokaryotic and eukaryotic microorganisms. and applications to forestry, agriculture, environmental science, medicine and industry. In the laboratory, students will learn techniques for culturing and characterizing micro-organisms.
Prerequisites: BIOL 101-4 and 102-4
Recommended: BIOL 210-3 and at least one of CHEM 201-3, 204-3, or 220-3 (may be taken concurrently).

BIOL 204-3 Plant Biology The interrelationships between form and function of the living plant, including systematics, development, physiology and evolution.
Prerequisites: BIOL 101-4 and 102-4
BIOL 210-3 Genetics Principles of modern and classical genetics.
Prerequisites: BIOL 101-4 and 102-4

BIOL 301-3 Systematic Botany This course introduces students to plant taxonomy and biodiversity, including principles of systematic botany, nomenclature and classification. Special attention is given to the identification of the native regional flora. Students contemplating registration in this course should consult with the instructor before the end of the previous spring term regarding the making of a summer collection for study during the course. This course includes scheduled field trips as a required course component.
Prerequisites: BIOL 101-4 and BIOL 102-4
BIOL 302-3 Limnolog Ecology of aquatic systems, their chemical, physical and biological characteristics.
Prerequisites: BIOL 201-3
BIOL 303-3 Plant Physiology Growth and development, water and energy relations, photosynthesis, mineral nutrition, membrane and plant transport.
Prerequisites: BIOL 204-3, CHEM 101-3 and PHYS 101-4 or PHYS 111-4 or permission of the instructor

BIOL 305-3 Plant Morphology and Anatomy Form and structure of vascular and non-vascular plants. Analysis of the relationship between structure, form and function in the context of plant evolution and adaptation.

Prerequisites: BIOL 204-3
BIOL 307-3 Ichthyology and Herpetology The identification, comparative anatomy and evolution of fishes, amphibians and reptiles. Particular reference is made to species endemic to British Columbia.

Prerequisites: BIOL 101-4 and 102-4
BIOL 308-3 Ornithology and Mammalogy The identification, comparative anatomy and evolution of birds and mammals. Particular reference is made to species endemic to British Columbia.

Prerequisites: BIOL 101-4 and 102-4
BIOL 311-3 Cell and Molecular Biology Cellular structure and function, molecular genetics, genome organization, and gene regulation in eukaryotic and prokaryotic organisms.
Prerequisites: BIOL 210-3 and one of CHEM 204-3 or 220-3

BIOL 315-3 Animal Diseases and Parasites Biological aspects of infectious diseases, parasites and environmental contaminants in wild vertebrate animal populations.
Prerequisites: one of BIOL 307-3 or 308-3
BIOL 321-3 Animal Physiology Basic animal functions and physiology. Operation and integration of major life support and reproductive systems, with emphasis on vertebrates.
Prerequisites: one of BIOL 307-3 or 308-3

BIOL 322-3 Entomology Diversity, structure, function, evolution, behaviour and importance of insects. Students intending to take the course should contact the instructor as early as possible for information and materials regarding the required insect collection.

Prerequisites: BIOL 202-3 or FSTY 307-4 or permission of the instructor
Precluded: BIOL 422-3
BIOL 323-3 Evolutionary Biology This course covers the mechanisms and processes of evolution of biological organisms. It discusses the evolutionary principles from Darwinism to molecular evolution.
Prerequisites: BIOL 201-3 and 210-3
Precluded: BIOL 403-3
BIOL 325-3 Ecological Analyses This course is an introduction to the application of analytical methods for addressing common ecological problems. Particular emphasis is placed on: sampling design, formulating hypotheses, statistical inference and the writing of abstracts. Students learn to analyze data by applying the scientific method to ecological research.
Prerequisites: BIOL 201-3 and MATH 342-3
BIOL 333-3 Field Camp Two week field course to be taken between semester six and seven or after semester eight. Field applications in integrated resource management. Open to biology majors.
Prerequisites: permission of the instructor
Precluded: NREM 333-3 and RRT 333-3
BIOL 350-3 Ethnobotany Native uses of indigenous plants.
Prerequisites: none
BIOL 401-3 Plant - Microbial Interactions Parasitic diseases and mutualistic associations of plants, especially forest trees. Emphasis will be placed on the ecology and phylogeny of fungal plant pathogens and mycorrhizal symbionts, and the physiology of plant-microbe interactions.

Prerequisites: BIOL 203-3 or permission of the instructor
BIOL 402-3 Aquatic Plants Classification, physiology, ecology, and environmental implications of aquatic plants. Both marine and freshwater systems are covered with emphasis on the aquatic plants of British Columbia.
Prerequisites: BIOL 204-3 or permission of the instructor
BIOL 404-3 Plant Ecology The ecology of terrestrial plants and ecosystems. Structure, function, classification, and analytical tools for describing the dynamic behaviour of plant communities.

Prerequisites: BIOL 201-3 or 204-3
BIOL 406-3 Fish Ecology The general life history, ecology, zoogeography and habitats of freshwater, anadromous and marine fishes.

Prerequisites: BIOL 201-3 and 307-3

BIOL 410-3 Population and Community Ecology This course is an advanced treatment of population and community ecology including theoretical and applied aspects of structure and dynamics.

Prerequisites: BIOL 325-3
BIOL 411-3 Conservation Biology Ecological and genetic considerations for the maintenance of biological diversity and the practical applications to the management of natural resources.
Prerequisites: BIOL 201-3 and 210-3

BIOL 412-3 Wildlife Ecology The general ecology and biology of wildlife species, including physiology, behaviour, nutrition and endocrinology.

Prerequisites: BIOL 201-3 and 308-3
BIOL 413-3 Wildlife Management Management criteria for reptiles, amphibians, birds and mammals. Emphasis on the socioeconomic aspects of management. Communication processes are addressed.

Prerequisites: BIOL 410-3 and 412-3
Recommended: NREM 204-3
BIOL 414-3 Fisheries Management Management of freshwater and anadromous fishes of British Columbia.
Prerequisites: BIOL 406-3
Recommended: NREM 204-3

BIOL 420-3 Animal Behaviour Adaptive significance and evolutionary basis of behaviour patterns exhibited by the major animal phyla.
Prerequisites: one of BIOL 202-3, 307-3, or 308-3
BIOL 421-3 Insects, Fungi and Society The historical, social and economic importance of insects and fungi to human society, including underlying biological and ecological principles.
Prerequisites: 60 credit hours which includes BIOL 101-4 and 102-4, or permission of the instructor

BIOL 423-3 Molecular Evolution and Ecology This course is lecture and laboratory based and focuses on the evolution of macromolecules, the reconstruction of the evolutionary history of species, populations, or genes, and the use of genetic information to gain insights into the ecology of species.

Prerequisites: BIOL 323-3
BIOL 424-3 Molecular Cell Physiology The molecular basis of cellular processes from cell-division to cell signalling, cell and tissue interactions, cellular mechanisms of development, cell differentiation, and the immune system.
Prerequisites: BIOL 311-3

BIOL 425-3 Applied Genetics and Biotechnology Introduction to advanced genetic laboratory techniques and processes. Lectures will cover applications of genetic techniques and biotechnology as well as ethics issues regarding the use of these technologies. Specific topics will include: animal forensics, recombinant and transgenic theory, genomics/bioformatics, biotechnology and molecular ecology.
Prerequisites: BIOL 311-3
Recommended: CHEM 308-3 and BIOL 423-3
BIOL 440-(2-6) Internship May be repeated for credit (maximum six credit hours).

BIOL 499-(1-6) Independent Study May be repeated for credit (maximum six credit hours).

## Chemistry

CHEM 100-3 General Chemistry I The first course in a two-course lecture-based sequence of chemistry courses emphasizing the basic principles of chemistry. Topics include: classification of matter, periodic properties of elements, atomic and molecular structure, stoichiometry, chemical reactions, thermochemistry, chemical bonding and an introduction to organic chemistry. Students requiring the first year laboratory courses in their program of study are encouraged to enrol in CHEM 120-1 concurrently.
Prerequisites: Principles of Math 12 or MATH 115-3 (or equivalent). Note: MATH 115-3 may be taken concurrently.

CHEM 101-3 General Chemistry II The second course in a twocourse lecture-based sequence of chemistry courses emphasizing the basic principles of chemistry. Topics include: intermolecular forces, properties of solutions, reaction kinetics, chemical equilibrium, acids and bases, applications of aqueous equilibria, entropy and free energy, and electrochemistry. Students requiring the first year laboratory courses in their program of study are encouraged to enrol in CHEM 121-1 concurrently.
Prerequisites: CHEM 100-3 and Principles of Math 12; MATH 115-3 (or equivalent) may substitute for Principles of Math 12

CHEM 110-3 Chemistry of Everyday Life A lecture-based chemistry course for non-science majors which presents the chemistry of substances of our everyday world and discusses realworld societal issues that have important chemistry components. Environmentally relevant topics including the ozone layer and its depletion, global warming, and acid rain will be studied. The use of energy in our society in its various forms will be looked at from a chemical perspective. The importance and implications of using man made materials and drugs will be discussed. A discussion of these topics will give students a fundamental background in chemistry, and allow them to better understand issues of relevance to our modern industrial society.
Prerequisites: none

CHEM 120-1 General Chemistry Lab I A laboratory course designed to accompany CHEM 100-3 and introduce basic chemistry laboratory procedures. Experiments will be performed which complement the material presented in CHEM 100-3.

Prerequisites: CHEM 100-3 (may be taken concurrently)
CHEM 121-1 General Chemistry Lab II A laboratory course designed to accompany CHEM 101-3 and introduce basic chemistry laboratory procedures. Experiments will be performed which complement the material presented in CHEM 101-3.

Prerequisites: CHEM 120-1, 101-3 (may be taken concurrently)
CHEM 200-3 Physical Chemistry I Fundamental concepts of classical thermodynamics, thermochemistry, chemical and phase equilibria.

Prerequisites: CHEM 101-3, 121-1, MATH 101-3 or permission of instructor

CHEM 201-3 Organic Chemistry I A lecture based course providing an introduction to the structure, nomenclature, classification, properties and reactions of the major functional groups of organic compounds. Examples of the syntheses and the reactions of the major functional groups will be given, supported by reaction mechanisms where appropriate. Students requiring the second year Organic Chemistry laboratory courses in their program of study are encouraged to enrol in CHEM 250-1 concurrently.

Prerequisites: CHEM 101-3, 121-1 or permission of instructor
CHEM 202-3 Inorganic Chemistry I An introductory course in inorganic chemistry, focusing on structure and bonding, crystal field and molecular orbital theory and the chemistry of the main group.
Prerequisites: CHEM 101-3, 121-1 or permission of the instructor
CHEM 203-3 Organic Chemistry II A continuation of the topics covered in CHEM 201-3, with emphasis on the mechanistic aspect of organic chemical reactions. Students requiring the second year Organic Chemistry laboratory courses in their program of study are encouraged to enrol in CHEM 251-1 concurrently.
Prerequisites: CHEM 201-3
CHEM 204-3 Introductory Biochemistry A lecture based course designed to introduce the basic principles of biological chemistry, focusing on the structure, composition and role of proteins, nucleic acids, carbohydrates and lipids in living systems. Other major topics include the nature and functions of enzymes, principles of bioenergetics and the energy-trapping metabolic pathways and their regulation in animals and plants.
Prerequisites: CHEM 201-3, BIOL 101-4 and BIOL 102-4 Co-requisites: CHEM 203-3

CHEM 210-3 Analytical Chemistry I A laboratory course (two hours of lecture and three hours of laboratory per week), designed to introduce the discipline of analytical chemistry. Topics include data handling (basic statistics, use of spreadsheets, graphing techniques), electronic spectroscopy (UV-Vis, fluorescence, AA, ICP) and functional group identification in organic and inorganic molecules (IR spectroscopy)
Prerequisites: CHEM 101-3, 121-1
CHEM 220-3 Organic and Biochemistry A lecture based course designed to present an introductory sequence of organic chemistry and biochemistry. An understanding of organic chemistry is required to properly understand biochemistry. This course treats organic chemistry in enough depth to make biochemistry understandable.

Prerequisites: CHEM 101-3
Precluded: Students may not take 220-3 if they have previously taken CHEM 201-3, CHEM 203-3 or CHEM 204-3

CHEM 221-1 Organic and Biochemistry Lab A laboratory based course designed to accompany and complement CHEM 220-3. This course will introduce common laboratory techniques as well as introduce some of the properties and reactions of organic and biochemical compounds.
Prerequisites: CHEM 121-1
Co-requisites: CHEM 220-3
CHEM 250-1 Organic Chemistry Lab I A laboratory based course providing an introduction to the techniques used in organic chemistry.
Prerequisites: CHEM 201-3 (may be taken concurrently)
CHEM 251-1 Organic Chemistry Lab II A laboratory based course focusing on the practical aspects of organic chemistry.
Prerequisites: CHEM 250-1, 203-3 (may be taken concurrently)
CHEM 255-1 Biochemistry Lab I This is a laboratory based course exploring the basic biochemical and molecular biological laboratory techniques. Topics include buffers, calculations in biochemistry, spectroscopy, enzyme kinetics and lipids.
Prerequisites: CHEM 201-3
Co-requisites: CHEM 204-3
CHEM 300-3 Physical Chemistry II Fundamental concepts in statistical mechanics, reaction theory, chemical kinetics and surface chemistry.
Prerequisites: CHEM 200-3, MATH 101-3
CHEM 301-3 Advanced Organic Chemistry I An advanced course emphasizing the structural, physical and mechanistic aspects of organic reactions.

Prerequisites: CHEM 203-3

CHEM 302-4 Environmental Chemistry I The chemistry of the environment, including considerations of the physical processes in the air, soil and water and the influence, monitoring, and removal of pollutants from the environment.

Prerequisites: CHEM 101-3, 121-1. CHEM 200-3 is strongly recommended

CHEM 303-3 Quantum Chemistry Basic quantum mechanics including the origin of quantum theory, atomic models, waves, particles, Schrodinger equations, free and bound states, the hydrogen atom, atomic structure and spectra.
Prerequisites: PHYS 205-3
Co-requisites: MATH 201-3
Precluded: PHYS 302-3

CHEM 304-3 Advanced Organic Chemistry II An advanced course studying modern methods in synthetic organic chemistry.
Prerequisites: CHEM 203-3
CHEM 305-3 Physical Chemistry III Fundamental concepts of quantum mechanics and spectroscopy.
Prerequisites: CHEM 200-3, MATH 101-3
CHEM 306-3 Intermediary Metabolism A lecture based course emphasizing the importance of biochemical pathways and macromolecules in physiological systems. Topics include metabolism of amino acids, lipids, carbohydrates, nucleotides and how these pathways are interrelated at tissue and organ levels.

Prerequisites: CHEM 204-3
CHEM 307-3 Proteins A lecture based course designed to provide in-depth knowledge of contemporary protein biochemistry, and its applications. Major topics include structure and function of protein, protein purification, protein sequencing, protein metabolism, protein biotechnology, proteomics and techniques applied to proteins.

## Prerequisites: CHEM 204-3

CHEM 308-3 Biochemistry Lab II A laboratory based course exploring modern biochemical and molecular biological laboratory techniques. Topics include purification and characterization of proteins and nucleic acids. Techniques include centrifugation, chromatography, gel electrophoresis, Western blotting, Northern blotting, in-vitro transcription and translation.

Prerequisites: CHEM 255-1 and either CHEM 204-3 or CHEM 220-3
CHEM 310-3 Analytical Chemistry II A laboratory course (two hours of lecture and three hours of laboratory per week) designed as a sequel to CHEM 210-3. Topics include separation techniques (column chromatography, TLC, HPLC, GC), mass spectroscopy and NMR spectroscopy. An emphasis is placed on the isolation and structural elucidation of molecules.
Prerequisites: CHEM 203-3, 210-3

CHEM 311-3 Analytical Chemistry III A laboratory course (two hours of lecture and three hours of laboratory per week) designed to augment CHEM 210-3 and CHEM 310-3. Topics include pH and ion specific electrodes, electrochemical methods and crystallography.

Prerequisites: CHEM 203-3, 210-3
CHEM 312-3 Organic Chemistry Lab III A laboratory based course (one hour lecture, six hour lab) teaching the various techniques used in modern organic chemistry, with an emphasis on synthetic methods. This course is designed to complement the material taught in CHEM 301-3 and 304-3.
Prerequisites: one of CHEM 301-3 or 304-3
CHEM 315-3 Physical Chemistry Lab This is a laboratory course in physical chemistry consisting of six hours of laboratory work weekly. The course covers the fundamental aspects of physical chemistry such as spectroscopy, thermodynamics, equilibrium, and kinetics.
Prerequisites: CHEM 200-3
Precluded: CHEM 313-1.5 and CHEM 314-1.5
CHEM 315-3 Physical Chemistry Lab This is a laboratory course in physical chemistry consisting of six hours of laboratory work weekly. The course covers the fundamental aspects of physical chemistry such as spectroscopy, thermodynamics, equilibrium, and kinetics.

Prerequisites: CHEM 200-3
Prercluded: CHEM 313-1.5 and CHEM 314-1.5

CHEM 320-3 Inorganic Chemistry II A lecture-based course that is focused on the chemistry of the first row of transition elements, along with symmetry and group theory.

## Prerequisites: CHEM 202-3

CHEM 321-3 Inorganic Chemistry III A lecture-based course that is focused on the chemistry of the second and third row transition elements. In addition, organometallic chemistry (particularly as it applies to industrial processes) is discussed.
Prerequisites: CHEM 202-3
CHEM 322-3 Inorganic Chemistry Lab A laboratory-based course (one hour lecture, six hour lab) examining the descriptive side of modern inorganic chemistry, including organometallic and bioinorganic chemistry. This course will provide both general and specific laboratory skills.

Prerequisites: CHEM 202-3

CHEM 330-3 Nucleic Acids A lecture based course designed to provide in-depth knowledge of contemporary nucleic acid biochemistry, and its application. Major topics include structure and function of DNA and RNA, small molecules nucleic acid interactions, protein nucleic acid interactions, catalytic RNA, techniques applied to nucleic acids and post-transcriptional control of gene expression.
Prerequisites: CHEM 204-3

CHEM 340-3 Physical Biochemistry This is a lecture based survey course designed to provide students with a basis for understanding the physical aspects of Biochemistry. Topics include biological applications of thermodynamics, chemical and biochemical kinetics, electrochemical equilibria, cell membrane potentials, oxidative phosphorylation, transport processes, photochemistry, and photosystem II.
Prerequisites: CHEM 204-3
Co-requisites: CHEM 255-1
Precluded: CHEM 230-3
CHEM 400-3 Topics in Environmental Chemistry This course considers advanced and selected topics in chemistry. Topics depend on instructor and student interest and normally focus on advanced material not dealt with in other courses. Note: Credit may be granted for both 400 and 600 level offerings of Topics in Chemistry courses, and either the 400 or 600 level or a combination of both may be repeated to a maximum of 6 credit hours, provided the content of the independent offerings of the courses is sufficiently different (as determined by the Program Chair or College Dean).
Prerequisites: CHEM 302-4
Co-requisites: CHEM 408-3
CHEM 401-3 Chemistry Seminar A workshop-based course emphasizing oral and written communication in the sciences. Topics include preparation of visuals, lecture and seminar presentation, scientific writing (including grant applications and scientific articles).

Prerequisites: upper division standing in a science program and permission of the Instructor

CHEM 402-3 Topics in Organic Chemistry This course considers advanced and selected topics in organic chemistry. Topics depend on instructor and student interest and normally focus on advanced material not dealt with in other courses. Note: Credit may be granted for both 400 and 600 level offerings of Topics in Chemistry courses, and either the 400 or 600 level or a combination of both may be repeated to a maximum of 6 credit hours, provided the content of the independent offerings of the courses is sufficiently different (as determined by the Program Chair or College Dean). Prerequisites: one of CHEM 301-3 or 304-3

CHEM 403-3 Topics in Inorganic Chemistry This course considers advanced and selected topics in inorganic chemistry. Topics depend on instructor and student interest and normally focus on advanced material not dealt with in other courses. Note: Credit may be granted for both 400 and 600 level offerings of Topics in Chemistry courses, and either the 400 or 600 level or a combination of both may be repeated to a maximum of 6 credit hours, provided the content of the independent offerings of the courses is sufficiently different (as determined by the Program Chair or College Dean).
Prerequisites: one of CHEM 320-3 or 321-3

CHEM 404-3 Topics in Physical Chemistry This course considers advanced and selected topics in physical chemistry. Topics depend on instructor and atudent interest and normally focus on advanced material not dealt with in other courses. Note: Credit may be granted for both 400 and 600 level offerings of Topics in Chemistry courses, and either the 400 or 600 level or a combination of both may be repeated to a maximum of 6 credit hours, provided the content of the independent offerings of the courses is sufficiently different (as determined by the Program Chair or College Dean).
Prerequisites: one of CHEM 300-3 or 305-3
CHEM 405-3 Topics in Biochemistry This course considers advanced and selected topics in biochemistry. Topcis depend on instructor and student interest and normally focus on advanced material not dealt with in other courses. Note: Credit may be granted for both 400 and 600 level offerings of Topics in Chemistry courses, and either the 400 or 600 level or a combination of both may be repeated to a maximum of 6 credit hours, provided the content of the independent offerings of the courses is sufficiently different (as determined by the Program Chair or College Dean).
Prerequisites: CHEM 330-3
Co-requisites: CHEM 307-3
CHEM 406-3 Advanced Laboratory I The two courses, CHEM 4063 and 407-3, are intended to act as capstone lab courses, providing experience with a wide variety of advanced synthetic, analytical and physical techniques. The courses are taken separately but a common set of experiments will be available throughout.
Prerequisites: permission of instructor
CHEM 407-3 Advanced Laboratory II The two courses, CHEM 406-3 and 407-3, are intended to act as capstone lab courses, providing experience with a wide variety of advanced synthetic, analytical and physical techniques. The courses are taken separately but a common set of experiments will be available throughout.
Prerequisites: CHEM 406-3
CHEM 408-3 Environmental Chemistry II An advanced treatment of selected topics in environmental chemistry. Credit may be granted for both 400 and 600 level offerings of the course provided the content is sufficiently different (as determined by the Program Chair or Dean)
Prerequisites: CHEM 302-4
CHEM 409-3 Enzymology A lecture based course emphasizing the importance and the role of enzymes in biochemistry and molecular biology. Topics include kinetic analysis, mechanisms of enzyme action, regulation of enzyme activity and clinical aspects of enzymology.
Prerequisites: CHEM 307-3
Co-requisite: CHEM 330-3

CHEM 410-3 Topics in Analytical Chemistry This course provides an advanced treatment of selected topics in analytical chemistry such as spectroscopy, separation technology and analytical instrumentation. Credit may be granted for both 400 and 600 level offerings of Topics in Chemistry courses, and either the 400 or 600 level or a combination of both may e repeated to a maximum of 6 credit hours, provided the content of the independent offerings of the courses is sufficiently different (as determined by the Program Chair or College Dean).
Prerequisites: CHEM 310-3
CHEM 499-(3-6) Independent Study Concentration on particular topic(s) agreed upon by the students and a member of the Chemistry faculty. May be repeated for a maximum of six credit hours. Credit may be granted for both 400 and 600 level offerings of the course provided the content is sufficiently different (as determined by the Program Chair or Dean).

Prerequisites: permission of the Program Chair

## Commerce/School of Business

Registration priority in 200, 300 and 400 level Commerce courses may be given to students who require those specific courses for completion of their programs.

Students enrolling in any Commerce Course with prerequisites are required to have completed all prerequisite courses for that course with a $C$ - or better, or have permission to enroll from the Program Chair.

COMM 100-3 Introduction to Canadian Business This course is an overview of the Canadian business environment, forms of organizations, the management function, and an introduction to the functional areas of business management.

This course includes the challenges and opportunities facing small business.

Prerequisites: none. Note: Students transferring with 30 credit hours of Commerce courses are exempt from COMM 100-3 as a course, and as a prerequisite to other courses.

COMM 210-3 Financial Accounting Introduction to the construction and interpretation of financial reports prepared primarily for external use. Students need a basic understanding of a spreadsheet application.

Prerequisites: COMM 100-3
COMM 211-3 Managerial Accounting Introduction to the development and use of accounting information for managerial planning and control and the development of cost information for financial reports. Problems in managerial accounting using spreadsheet tools.
Prerequisites: COMM 210-3

COMM 220-3 Financial Management I Deals with functions of the financial manager within the corporate setting. Topics include the Canadian financial environment, forms of business organizations and taxation, financial forecasting and planning, financial statement analysis, time value of money, capital budgeting under certainty, working capital management and short, intermediate and long term financing.
Prerequisites: COMM 100-3, COMM 210-3, and ECON 205-3; MATH 242-3 may substitute for ECON 205-3

COMM 230-3 Organizational Behaviour This course provides an introduction to the study of people and groups in organizations. Topics include perceptions, personality, learning, work motivation, job attitudes, group dynamics, and leadership.

Prerequisites: COMM 100-3
COMM 240-3 Introduction to Marketing This course is an introduction to the study of marketing in the context of social, consumer, and managerial processes. In this course, students study how marketing decisions concerning the choice of target markets, the development of product/services, price, promotion and distribution strategies influence the evolution of the exchange process and the satisfaction of buyer needs.
Prerequisites: COMM 100-3
COMM 251-3 Introduction to Management Science A study of analytical approaches in management science that assist managerial decision-making under conditions of both certainty and uncertainty. Attention will be given to the formulation of quantitative models from a variety of areas. Topics include linear programming, transportation/ assignment problems, integer programming, multicriteria decisions, dynamic programming, decision analysis, queuing theory, and simulation.
Prerequisites: MATH 150-3, MATH 152-3, and ECON 205-3; MATH 242-3 may substitute for ECON 205-3

COMM 300-3 Introduction to Business Law This course provides an introduction to the general principles of law relating to contract and tort. Special contracts include: agency, assignment, bailment, employment guarantee, insurance, negotiable instruments, sale of goods, and contracts creating a security interest in goods. Some aspects of the law relating to real property, partnership and corporations will be discussed.
Prerequisites: COMM 100-3
COMM 302-3 Entrepreneurship This course focuses on the processes and techniques required to convert ideas, inventions and innovations into profitable business undertakings. Students have the opportunity to develop a new venture business plan.
Prerequisites: COMM 240-3

COMM 303-3 Introduction to International Business Introduces the student to the global setting in which international business decisions are made. Emphasis is placed on the factors which are relevant to decision-making and a wide range of international business functions (e.g. marketing, finance, human resource management) and international business forms (e.g. export-import, foreign manufacturing, joint ventures).
Prerequisites: COMM 240-3
COMM 310-3 Intermediate Financial Accounting I An examination of financial accounting theory from the viewpoint of procedures, principles and professional requirements related to the measurement, recording and reporting of assets and related income and expenses for use by third parties.

Prerequisites: COMM 211-3
COMM 311-3 Intermediate Financial Accounting II Continuation of COMM 310-3.

Prerequisites: COMM 310-3
COMM 312-3 Intermediate Managerial Accounting The provisions and analysis of cost accounting information that will assist management in making operating decisions and in evaluating operations and performance. The utilization of statistical analysis and linear models is included.
Prerequisites: COMM 211-3
COMM 313-3 Personal Taxation Interpretation problems associated with the Income Tax Act and the provisions of the Act concerned with the computation of taxable income and tax payable by an individual are examined.
Prerequisites: COMM 210-3
COMM 314-3 Corporate Taxation The provisions of the Income Tax Act relating to the taxes payable by various types of corporate entities and trusts are considered. Application of the provisions of the Act to business situations is examined in detail.
Prerequisites: COMM 313-3
COMM 315-3 International Accounting Examines the underlying causes of international accounting problems in terms of both internal financial control and external financial reporting. Emphasis is placed on understanding the environmental, social, economic and legal influences which have affected accounting evolution in various countries.

Prerequisites: COMM 210-3, COMM 211-3
COMM 320-3 Financial Management II Deals with analytical techniques and broad issues of financial management. Topics include capital budgeting and uncertainty, risk and return, the capital asset pricing model and market efficiency, determination of discount rates for capital projects including the weighted average cost of capital, leasing options and applications to corporate finance, capital structure and dividend policy, mergers and acquisitions, bankruptcy and reorganization.

COMM 321-3 Investments and Security Analysis The principles and techniques of investing in securities are discussed. Material covered includes sources and analysis of investment information, evaluation of risks and returns associated with various financial instruments including futures and options. Security analysis including fundamental and technical analysis.
Prerequisites: COMM 320-3
COMM 322-3 International Financial Management An introduction to the various international financial markets and the problems, risks and opportunities involved in the financial management of multinational enterprises. Hedging of foreign exchange risk, international capital budgeting and import/export financing are among the topics covered.

Prerequisites: COMM 320-3
COMM 323-3 Risk, Insurance and Financial Planning Deals with the concepts of risk and business risk management, the various kinds of insurance including life, health and property and liability. Financial planning for the individual and employees including pension plans, taxation issues and real asset investment decisions including real estate.
Prerequisites: COMM 320-3
COMM 330-3 Human Resource Management The analysis, design, operation and management of HRM processes, their contribution to employee and organization effectiveness and the influence of organizational and external environment. The principal topics considered are HRM planning and its link to strategic planning, employment equity, staffing, training/development (including performance appraisal) and employee maintenance. The course views the management of human resources as the joint responsibility of line and HRM managers.
Prerequisites: COMM 230-3, and ECON 205-3; MATH 242-3 may substitute for ECON 205-3

COMM 331-3 Organizational Theory This course focuses on the structure of the organization, examining such determining factors as the organization's size, environment, technology and strategy. It also examines internal politics, conflict, decision-making, and culture from a macro perspective.
Prerequisites: COMM 230-3
COMM 332-3 Business and Professional Ethics This course focuses on ethical philosophies and their application to specific ethical issues of relevance to work organizations and to the demands of multiple stakeholders.
Prerequisites: none
COMM 333-3 Women in Organizations A seminar course that examines the issues faced by women in the work force. Topics include women in non-traditional occupations and women as entrepreneurs. Individual, organizational and societal approaches to enhancing opportunities and quality of work life for working women are explored.
Prerequisites: COMM 230-3

COMM 340-3 Marketing Communication A study of communication theory and its application to advertising and sales promotion decisions. An examination of the role of advertising in relation to the overall marketing strategy.

Prerequisites: COMM 240-3
COMM 341-3 Sales Management The study of the management of the personal selling area, including an examination of the selling function, the sales manager, and sales management.

Prerequisites: COMM 240-3
COMM 342-3 Services Marketing Applies marketing management principles specifically to the service industries, including the financial services and tourism industries.

Prerequisites: COMM 240-3
COMM 343-3 Consumer Behaviour This course focuses on concepts, principles and theories drawn from marketing and related social science disciplines that are relevant to the prediction and explanation of individual, group and environmental influences on consumption behaviour. Beyond understanding how consumption behaviour is manifested in all of its forms, students are exposed to a managerial decision-making perspective by examining how target market and positioning strategies can be used to influence consumer cognitions, feelings, attitudes, and behaviour.

Prerequisites: COMM 240-3
COMM 344-3 Marketing Channels A study of the marketing distribution system, retailing, wholesaling, merchandising and relevant legislation.

Prerequisites: COMM 240-3
COMM 345-3 Retail Management The role of retailing in marketing; structure of retailing in Canada; retail management of location, layout, buying inventory, personnel, sales, promotion, financial control and pricing procedures.
Prerequisites: COMM 240-3
COMM 350-3 Production and Operations Management An introduction to the production/operations function with emphasis on the use of both qualitative and quantitative analysis to assist decision-making. Topics include forecasting, product design, capacity planning, process selection, facility location and layout, aggregate planning, material requirement planning, JIT, scheduling, inventory management, project planning, statistical quality control and total quality management.
Prerequisites: COMM 251-3
COMM 351-3 Management Information Systems This course emphasizes the strategic role of information systems in modern business. Topics include the technical foundations of information systems, the impact of information systems on business operations and decision-making, and the processes that are required for successful implementation of business information systems.
Prerequisites: COMM 100-3, CPSC 250-3, and ECON 205-3; MATH 242-3 may substitute for ECON 205-3

COMM 400-3 Business Policy I An integrated course which focuses on the functions and responsibilities of senior management. The course deals with the concept of organizational strategy, including how it is developed and implemented in actual situations. The course includes extensive use of case analysis. Focus on cases related to small business, tourism and other industries of regional significance.
Recommended: open to Commerce students in their graduating year
COMM 401-3 Business Policy II In this integrated course, students work in groups to analyze a particular industry. They focus on strategic, human resource, accounting, finance, and regulatory issues facing organizations in that industry or sector. Groups are required to prepare a comprehensive written report as well as to make an oral presentation. Focus is on industries of regional significance.

Recommended: open to Commerce students in their graduating year

COMM 410-3 Accounting Theory A critical examination of problem areas of current interest in financial accounting theory. Consideration of methods by which accounting theory is developed and examination of specific models including historical costs, resale price and price level adjustment models.

## Prerequisites: COMM 311-3

COMM 411-3 Advanced Management Accounting Design of management planning and control systems. Development of depth of understanding in the quantitative techniques relevant to the managerial accountant. Consideration is given to cost analysis, transfer pricing and information for capital expenditure and inventory decisions.

Prerequisites: COMM 312-3

COMM 412-3 Auditing Principles of internal auditing, the nature of evidence, reporting requirements, standards in auditing. The philosophy of auditing, independence and ethics are also considered.

Prerequisites: COMM 311-3
COMM 413-3 Accounting: Advanced Topics Advanced and selected topics in accounting. The general content tends to focus on material not dealt with on a recurring basis in the regular course sequence.
Prerequisites: COMM 311-3, 312-3
COMM 414-3 Advanced Financial Accounting An examination of accounting problems encountered in such areas as complex business organizations, intercorporate investments, foreign operations and foreign currency transactions, and not-for-profit operations.
Prerequisites: COMM 311-3
COMM 420-3 Advanced Financial Management Intensive treatment is given to selected areas of finance, including elements of both theory and practice with an emphasis on the role of financial strategy in the overall corporate business policy. Emphasis is placed on financial policy and strategy issues through discussions, case analysis and presentation covering a variety of topics.

Prerequisites: COMM 320-3, 321-3

COMM 421-3 Portfolio Theory and Management Fundamentals of multi-asset portfolio construction and management including fixedincome portfolio strategies. The uses of derivative securities in portfolio management. Issues involved in setting investment objectives and performance evaluation. International investment and diversification. Asset allocation and contemporary issues.

Prerequisites: COMM 320-3, 321-3
COMM 422-3 Management of Financial Institutions The financial management issues of financial institutions such as chartered banks, insurance companies, trust companies, mortgage and loan companies, pension funds and investment companies. The regulatory environment and the asset and liability management techniques employed.
Prerequisites: COMM 321-3
COMM 423-3 Financial Engineering Study of futures, options, swaps and other complex derivative securities, application of option pricing theory to a broad range of corporate finance and investment decisions.

Prerequisites: COMM 320-3, 321-3
COMM 429-3 Finance: Advanced Topics The examination and application of selected topics in finance. Topics depend upon instructor and student interest.

Prerequisites: COMM 320-3
COMM 430-3 Organization Studies: Selected Topics This course focuses on three to five topics related to the material presented in COMM 230-3 Organizational Behaviour. As the course content may vary with each offering, students can consult the instructor/program for information concerning topics.
Prerequisites: COMM 230-3
COMM 431-3 Industrial Relations Canadian industrial and labour relations with emphasis on the labour-management relationship. Topics include the basic elements of an industrial relations system, the social, economic, legal and political environment in which participants interact, and the process of collective bargaining.
Prerequisites: COMM 330-3
COMM 432-3 Cross-cultural Workplace Practices Examines cross-cultural differences in management practices, industrial relations systems and human resource practices, including those pertaining to First Nations. It also includes a discussion of the management of diversity within North American organizations.

Prerequisites: upper division standing and COMM 330-3
COMM 439-3 HRM: Selected Topics The examination and application of selected, current and emerging topics in human resources management. Topics may vary from semester to semester, depending on student and instructor interest.
Prerequisites: COMM 230-3, 330-3

## COMM 440-3-6 Internship

Prerequisites: upper division standing and permission of the Program Chair

COMM 441-3 International Marketing The problems and opportunities of marketing in foreign environments are examined. The course focuses on the cultural, economic and geographic problems encountered in managing the marketing function from a Canadian manager's perspective.

Prerequisites: COMM 240-3
COMM 442-3 Marketing Strategy Using a marketing simulation, this course is designed to assist students in acquiring skill and experience in strategic marketing decision-making. By understanding how changes in markets, industries, and organizational strengths/ weaknesses create marketing opportunities and threats, students are exposed to the role of strategic marketing decision-maker. In that role, they will learn to develop and execute creative target market and positioning strategies in a competitive environment.

Prerequisites: COMM 240-3, 343-3
COMM 443-3 Marketing Research Assists students in acquiring an understanding of basic marketing research concepts and practice that facilitates the systematic specification, collection, and analysis of information for marketing decision-making. The course is organized around an applied research project in which students will be responsible for conceiving, executing, analyzing and reporting the results of an original marketing research project for a business client.
Prerequisites: COMM 240-3, COMM 343-3, and ECON 205-3; MATH 242-3 may substitute for ECON 205-3

COMM 449-3 Advanced Topics in Marketing Advanced and selected topics in marketing. Topics depend on instructor and student interest and focus on material not dealt with in the regular course sequence.

Prerequisites: COMM 240-3, and permission of instructor
COMM 450-3 Total Quality Management This course examines the basic concepts and tools of total quality management, strategy quality planning, management of process (technology) quality, quality value and engineering, loss function and quality level, statistical quality control, quality and operation results, Taguchi methods, Just-In-Time, preventive maintenance, and other aspects of quality management.
Prerequisites: ECON 205-3 or MATH 242-3 or equivalent Recommended: COMM 350-3

COMM 451-3 Project Management This course considers behavioural and structural aspects of projects, study of project life cycles, project planning, scheduling, budgeting, resource loading, resource levelling, resource planning, and cost estimation and crashing, project monitoring and controlling, project evaluation, auditing and termination. Project management related exercises, case studies and use of project management software are the practical aspects of the course.
Prerequisites: COMM 350-3 or with the permission of the instructor.

## COMM 498-(3-6) Special Topics in Business Administration

Prerequisites: upper division standing and permission of the Program Chair

## COMM 499-(3-6) Independent Study

Prerequisites: upper division standing and permission of the Program Chair

## Computer Science

Unless otherwise stated, a student may enrol in any Computer Science course with permission of the Program Chair.

Note: BC Introductory Mathematics 11, Applications of Mathematics 11 and Applications of Mathematics 12 are not considered as prerequisites for any Computer Science courses as currently taught.

## Students enrolling in any Computer Science or Mathematics course

 with prerequisites are required to have completed all prerequisite courses for that course with a C- or better, or have permission to enrol from the Program Chair.CPSC 100-4 Computer Programming I This course provides an introduction to the discipline of computer science in the object oriented paradigm. Problem solving techniques and program development process through organization and control of classes and objects are introduced. Topics covered include fundamentals of programming style, syntax diagrams, data types, arithmetic and logical expressions, assignments, looping and control structures, arrays, pointers, strings, functions, file i/0, classes and data abstraction, inheritance, function overloading, friend functions/classes and dynamic storage allocation. An introduction to template functions, template classes and standard template library will also be provided. The course will be taught using the C++ programming language running under Unix and will provide a comprehensive overview of the language together with an introduction to editors and debugging tools. The students must also register in a lab and tutorial section.
Prerequisites: Math 12 or Principles of Math 12 or MATH 115-3
CPSC 101-4 Computer Programming II A continuation of CPSC 100-4. Topics include dynamic storage allocation, the run-time stack and the heap, program design and development. In-depth discussion of objects, classes, inheritance and polymorphism in C++. The C++ standard library and templates. Students work co-operatively to complete a modest-sized project. This course has both tutorial and laboratory components.

Prerequisites: CPSC 100-4 and 141-3
CPSC 110-3 Introduction to Computer Systems and Programming
The course provides an introduction to computer systems and programming, concepts in computer architecture including the central processing unit, buses, memory units, input/output and communication devices. The introduction to operating systems emphasizes the file system and program development utilities. Programming concepts and techniques include problem analysis, program design, coding, and testing, as well as language elements
such as data types, variables and assignment statements, expressions, mixed-mode arithmetic, input/output operations, basic data structures and control structures, procedures and abstract data types. Basic database management concepts will also be introduced. Students will develop small applications programs. CPSC 110-3 is a first course in computer science and computer programming. Cannot be counted as a computer science course by computer science majors.
Prerequisites: Math 12 or Principles of Math 12 or MATH 115-3
CPSC 126-3 Introduction to Computer Systems The objective of this course is to provide a breadth-first introduction to the discipline of computer science. Problem solving. Algorithms: formal definition, representations, control structures, examples and efficiency analysis. Hardware design: number systems, binary arithmetic, boolean logic, truth tables, logic gates, basic circuit design algorithms and design of simple circuits. Computer system organization: von Neumann architecture. Programming in machine assembly and high level languages. Language translation: assembler, compilation process and program debugging. System software. Theory of computing. Supporting lab software will be used.
Prerequisites: Math 12 or Principles of Math 12 or Math 115-3
CPSC 141-3 Discrete Computational Mathematics Set theory (review). Elements of combinatorics and probability theory. Mathematical induction. Logic and formal reasoning. Functions and relations. Algorithms. Automata theory and formal languages. Graphs. Trees and tree traversal algorithms. Boolean algebra.

Prerequisites: Math 12 or Principles of Math 12 or MATH 115-3 Precluded: CPSC 240-3

CPSC 142-3 Discrete Computational Mathematics II Elements of number theory. The Euclidean algorithms. The concept of program correctness. Analysis of algorithms. Partial order. The principle of inclusion and exclusion. Generating functions. Recurrence relations. Algorithmic graph theory.
Prerequisites: CPSC 141-3 or 240-3
Precluded: CPSC 241-3
CPSC 150-3 Computer Applications Taught through the use of common applications, beginning with word processing, this course prepares students for future as well as present needs in computing literacy by reaching beyond examples to recognition of principles. Students gain a practical grasp of data formats, program behaviour, using documentation, and the role of hardware. Communications (including the World Wide Web), and cross-platform transference of data, feature prominently, in addition to traditional office applications such as spreadsheets and databases. Students attend lectures and work from web-mounted lab material. Each student undertakes a personal project, which documents independent learning. May not be counted as a computer science course by computer science majors.
Prerequisites: none

CPSC 200-3 Algorithm Analysis and Development Topics include asymptotic complexity and notation. Algorithm analysis. Comparison of various sorting algorithms. NP completeness. Assertions, loop and data type invariants and an introduction to program correctness. Correctness proofs of simple programs. Recursion relationships. Applications.

Prerequisites: CPSC 101-4 and 142-3
CPSC 230-4 Introduction to Logic Design Topics include principles of digital circuit design, boolean algebra, basic switching functions and gate-level implementation, canonical forms, algebraic simplifications, Karnaugh maps, Quine-McCluskey tables, voltage assignments, logic technologies, combinational logic circuits, decoders, encoders, multiplexers, demultiplexers, comparators, adders, sequential logic circuits, clocked flip-flops, registers, counters, register transfer logic, central processing unit, instruction set, addressing modes, arithmetic and logic units, control unit, bus organization.
Prerequisites: CPSC 100-4, CPSC 142-3
CPSC 231-4 Computer Organization and Architecture Topics include computer abstractions and technology, characteristics of good computer architecture, instruction set architecture, Reduced Instruction Set Computers (RISC), Complex Instruction Set Architecture (CISC), CPU, memory system, acceleration mechanisms, I/O system, multiprocessors, Single Instruction Multiple Data (SIMD) machines, Multiple Instructions Multiple Data (MIMD) machines.
Prerequisites: CPSC 230-4
CPSC 250-3 Applied Business Computing This course examines core computing knowledge and techniques as they apply to business applications. The course covers database design and information retrieval techniques with emphasis on web-database integration, advanced features of spreadsheets, recording/analyzing basic business transactions using a variety of accounting software, and implementation of selected financial models. Presentational and interface design techniques are also covered. Students complete a term project that solves a typical business problem using the software and procedures of their choice. This course may not be counted as a computer science course by computer science majors.
Prerequisites: None. Basic knowledge of computers and experience with browsing the World Wide Web is preferable.
Co-requisites: COMM 210-3, if not already completed.
CPSC 270-3 Human Interface Design The course examines the theory and practice of human-computer interaction and interface design. Human aspects of the interaction: cognition, perception, attention and memory constraints, knowledge representation, interface metaphors, learning, communication. Technological aspects of interface design: input-output devices, interaction styles, windowing systems and tools, client-server models, interfaces for collaborative work, virtual environments. A project with a substantial user interface component, involving interface design, validation, implementation, testing, and evaluation will be completed.

Prerequisites: CPSC 200-3

CPSC 281-3 Data Structures I Topics include program performance, data representation, arrays and matrices, lists, stacks and queues, skip lists and hashing, binary trees, balanced and B-trees. AVL trees, splay trees, tree traversals using stacks, expression trees, prefix, infix, and postfix expressions and conversions, priority queues and heaps, search trees, Huffman codes, graphs, graph algorithms, (weighted and unweighted shortest-path, Dijkstra's algorithm, critical paths), minimum-cost spanning trees (Prim's, Kruskal's, and Sollin's algorithms). Implementation of various data structures using objectoriented programming language.

Prerequisites: CPSC 200-3
CPSC 290-3 Systems Analysis and Design Topics include introduction to the basic concepts, ideas and tools involved in the analysis and design phases of software systems development. Comparing and contrasting software systems with other types of systems, the evolution of software system design approaches, basic concepts used to handle complexity and change in software systems, modelling with UML, requirements elicitation. Systems analysis: overview, concepts, activities, and examples. Systems design: overview, concepts, activities, and examples.

Prerequisites: CPSC 101-4
CPSC 300-3 Software Engineering I Fundamental problem-solving concepts, the software development process, software requirements and specifications, software design and implementation, verification and validation, organization and management of programming teams, documentation. Students will work on a major team programming project over two semesters, and should enrol in CPSC 301-3 upon successful completion of this course.
Prerequisites: CPSC 281-3
CPSC 301-3 Software Engineering II A continuation of CPSC 300-3. Instead of following a normal lecture format, the instructor will lecture once per week to the entire class and meet regularly with each individual team.

Prerequisites: CPSC 300-3

CPSC 311-3 Computer Applications Programming Intended to develop programming skills in an object-oriented language with emphasis on applications programming. Topics include system analysis and design of larger programs, programming with classes and objects, dynamic storage allocation, recursion, sorting and searching algorithms. Examples and assignments will be drawn from various areas of computer applications.
Prerequisites: CPSC 110-3 or permission of the instructor Precluded: CPSC 101-3

CPSC 320-3 Programming Languages This course is a general introduction to programming languages. Topics include: Formal grammars, Extended Backus-Naur Form (EBNF), and syntax diagrams; lambda calculus, Floyd-Hoare logic, and denotational semantics; data types, memory models, control structures, definitions, and binding; abstraction and parameter passing; programming paradigms; language design and evaluation; and case studies. Assignments include laboratory work.
Prerequisites: CPSC 231-4 and CPSC 281-3, or permission of the instructor.
Recommended: CPSC 340-3

CPSC 321-3 Operating Systems Tasking and processes, process coordination and synchronization, scheduling and dispatch, physical and virtual memory organization, paging and segmentation, device management, file systems, security and protection, communications and networking, distributed and real-time systems. Students will study a simple operating system and will have an opportunity to make modifications to it in laboratory exercises.
Prerequisites: CPSC 231-4, 281-3, MATH 340-3
CPSC 322-3 Introduction to Concurrent and Distributed
Programming This course introduces the core concepts, techniques, and tools for concurrent and distributed programming. It covers concurrent programming in shared memory systems and distributed programming in message passing systems. After introducing the necessary concepts, various coordination problems are discussed and then solved using different synchronization mechanisms. Relevant programming environments are introduced and the students will gain hands-on experience through programming assignments in both shared memory systems and message passing systems.
Prerequisites: CPSC 231-4 and CPSC 281-3
CPSC 325-3 Introduction to Compiler Design Introduction to programming language translation. Compilers, interpreters, and other language processors. The phases of a compiler. Lexical analysis and scanner design. Syntax analysis and parsing techniques. Semantic analysis and code generation. Compile-time and run-time aspects of semantics. Execution environment and run-time support. Code optimization. Testing. The students will design and implement a compiler for a small Pascal-like language.
Prerequisites: CPSC 281-3, CPSC 340-3
CPSC 340-3 Theory of Computation Regular expressions, deterministic and non-deterministic finite automata, Mealy machines, context-free and other grammars, pushdown automata, Chomsky and Greibach normal forms, Chomsky hierarchy, pumping lemmas, Turing machines, undecid-ability, computability, recursive function theory, complexity of computation, NP-hard and NP-complete problems.
Prerequisites: CPSC 142-3

CPSC 350-3 Introduction to Computer Graphics This course provides an overview of Computer Graphics and covers topics such as Basic Raster Graphics Algorithms for Drawing 2D Primitives, Transformations, 3D Viewing, Visible-Surface Detection, Illumination and Rendering, Visualization and Animation.

Prerequisites: MATH 220-3 and CPSC 281-3
CPSC 370-3 Functional and Logic Programming Introduction to programming in symbolic languages such as the functional language Scheme and the logic programming language PROLOG, with applications to systems programming, symbolic computation, artificial intelligence, and other areas.
Prerequisites: CPSC 142-3 and 281-3
CPSC 371-3 Artificial Intelligence Productions and matching, knowledge representation, search, logical reasoning and the use of PROLOG in learning, natural-language understanding, computer vision, expert systems.
Prerequisites: CPSC 370-3, or permission of the instructor
CPSC 401-3 Software Engineering for Real-Time Systems This course introduces typical real-time applications including hard vs. soft real-time systems. A reference model for real-time systems is developed. Other topics covered include scheduling of periodic and aperiodic tasks, resource access control, multiprocessor scheduling and synchronization, real-time aspects of operating systems and communication protocols, software engineering methods for real-time systems, and representing real-time concepts with Unified Modelling Language (UML). Software tools for development of real-time systems are introduced.

Prerequisites: CPSC 290-3 and CPSC 321-3
Recommended: CPSC 300-3
CPSC 421-3 Advanced Compilation Techniques Based on the concepts established in CPSC 325-3, this course provides a broad overview of modern techniques for lexical analysis, syntax analysis, syntax directed translation, type-checking, code generation, and code optimization. It addresses the implementation aspects of advanced programming language features, and introduces the student to compiler-writing tools and compiler generators.

Prerequisites: CPSC 320-3, 321-3 and 325-3
CPSC 422-3 Database Systems The course will cover relational, hierarchical, and network systems, storage structure and access methods, data definition and data manipulation language, SQL, relational data structure, relational algebra and calculus, query optimization, recovery and concurrency, security and integrity, introduction to functional dependencies, normalization, 1NF, 2NF, 3NF and BCNF. A relational DBMS and data processing software will be used for understanding SQL and other concepts.
Prerequisites: CPSC 142-3, and 321-3, or permission of the instructor

CPSC 434-3 Hardware Architecture CPU architecture including registers and accumulators, ALU design, control unit, operand codes and instruction sets, register transfer level language, fetch execute cycle and branching, address and data buses, microcoding of instructions. Memory design and addressing, memory types and memory performance, cache and caching techniques, memory indirect addressing. Interrupts and exception handling techniques. DMA controllers. Pipeline and parallel architecture.
Prerequisites: CPSC 231-4, 321-3, or permission of the instructor
CPSC 440-3 Computer Networks Data transmission and encoding, multiplexing, circuit switching, packet switching, network protocols, data communication hardware, ISO model, Data Link Layer, Network Layer, Local Area Networks (LANs), Wide Area Networks (WANs), Metropolitan Area Networks (MANs), Backbone Networks (BNs), network design and implementation, network management, and network security.
Prerequisites: CPSC 321-3
CPSC 441-3 Distributed Systems Evolution of technology and concepts underlying distributed computing systems. Fundamentals and principles of distributed computing. Language constructs for distributed programming. Formal specification of distributed systems. Distributed algorithms. Elements of distributed operating systems. Elements of fault-tolerant distributed architecture.

Prerequisites: CPSC 321-3, or permission of the instructor

CPSC 442-3 Parallel Computing Classification of parallel architecture. SIMD vs MIMD. Distributed vs shared memory. Interconnection networks. Topologies of dynamic and static networks. Basic communications operations. Basic procedures on processor networks. Vectorizing. Pipelining. Parallel algorithms (for matrix multiplication, Gaussian elimination, sorting, etc.). Task scheduling. Implementation of parallel programs on parallel machines. Performance issues in parallel computing. Parallel libraries (PVM and MPI).

Prerequisites: CPSC 321-3 or permission of the instructor
CPSC 443-3 Mobile Computing This course provides an overview of Internet, TCP/IP and the field of mobile computing. The topics covered in detail include IEEE 802.11 Wireless LANs, Physical Layer for CDMA and OFDM, MAC Layer for CSMA/CA, 2.5G and 3G cellular architectures, Physical Layer for cellular networks (CDMA, TDMA and OFDM), MAC layer for CDMA and TDMA based cellular networks, Mobile IPv4/v6, and Application Layer (IP Multimedia Subsystem, Multimedia Messaging, Location-Based Services).
Prerequisites: This course must be taken in the 4th year of studies Co-requisites: CPSC 440-3 or permission of the instructor

CPSC 450-3 Bioinformatics Bioinformatics studies the development of computational techniques for solving biological problems. The course introduces the students to the computational analysis of biological sequence data and presents an overview of the research, its applications, and the methods used to analyze the vast amounts of biological information. The topics covered include an introduction to Bioinformatics, DNA, Markov Chains, Gene Algorithms, String Mathing Pairwise Alignment, Multiple Sequence Alignment, Grammatical Framework Hidden Markov Models, Protein Secondary Structure, Protein 3D Structure, RNA Structure, Database Searching, General Programming Skills (e.g. Perl) are required.

Co-requisites: CPSC 422-3 or permission of the instructor
CPSC 460-3 Computer Science Seminar Topic will vary from year to year. Offered in a seminar format with limited enrolment. Students will complete a substantial project under the supervision of the instructor.

Prerequisites: fourth year standing and permission of the instructor
CPSC 472-3 Knowledge Based Systems Rule-based forward chaining and backward chaining systems, theorem provers, inference engines and meta-interpreters. Knowledge representation and knowledge-acquisition, machine learning techniques. Uncertainty, Bayesian probability, certainty factors, non-monotonic logics and reasoning with beliefs, fuzzy logic and other approaches.

Prerequisites: CPSC 371-3 or permission of the instructor
CPSC 474-3 Natural Language Processing Formal grammars and the Chomsky hierarchy. Natural languages and models of syntax. Lexicons and augmented lexicons, feature structures, morphology. Top down and bottom up parsers, left corner and chart parsers. Dealing with context sensitivity. Semantic structures and knowledge representation for NLP. Linguistic models, LFG, HPSG, Principles and Parameters. Introduction to discourse models and extra sentential processing.
Prerequisites: CPSC 371-3 or permission of the instructor
CPSC 482-3 Data Structures II External sorting and merging, best case, worst case, and average case estimates, time and space estimates for algorithms studied in CPSC 200-3 and 281-3.

Prerequisites: CPSC 281-3, and 340-3, or permission of the instructor
CPSC 490-3 Computing Project I This course consists of a large computing project undertaken by the student or by teams of students. Projects will be geared to industrial or research needs and designed to give the senior students first hand experience in applying their knowledge and skills to the design and implementation of medium to large software systems. Students will employ standard software engineering practices. Regular project team meetings will be held to review project milestones.
Prerequisites: CPSC 301-3 or permission of the instructor

CPSC 491-3 Computing Project II This course consists of a large computing project undertaken by the student or by teams of students. Projects will be geared to industrial or research needs and designed to give the senior students first hand experience in applying their knowledge and skills to the design and implementation of medium to large software systems. Students will employ standard software engineering practices. Regular project team meetings will be held to review project milestones.
Prerequisites: CPSC 301-3 or permission of the instructor
CPSC 495-3 Undergraduate Research Project I This course consists of a small research project undertaken by the student or by teams of students. Projects will consist of the definition of a problem in computing and a literature survey of recent work in the field. Students will be encouraged to define their own possible solutions and to prototype the solutions where appropriate. Regular review of progress will be made in meetings. Skills will be developed in the preparation of topic survey notes and in the development of arguments in support of or against published approaches to problems in computing. Students will be expected to prepare and present their work.

Prerequisites: permission of the instructor
CPSC 496-3 Undergraduate Research Project II This course consists of a small research project undertaken by the student or by teams of students. Projects will consist of the definition of a problem in computing and a literature survey of recent work in the field. Students will be encouraged to define their own possible solutions and to prototype the solutions where appropriate. Regular review of progress will be made in meetings. Skills will be developed in the preparation of topics survey notes and in the development of arguments in support of or against published approaches to problems in computing. Students will be expected to prepare and present their work.

Prerequisites: permission of the instructor
CPSC 498-3 Special Topics in Computer Science I The topic of this course will vary depending upon faculty and student interest and faculty availability. May be retaken any number of times, provided all topics are distinct.

Prerequisites: permission of the instructor
CPSC 499-3 Special Topics II The topic for this course will vary, depending on student interest and faculty availability. May be retaken any number of times, provided all topics are distinct.
Prerequisites: permission of the instructor

## Co-operative Education

Unless otherwise stated, the prerequisites for all Co-op Education courses are: acceptance into Co-operative Education, declaration of academic program major, completion of 30 credit hours or permission of the relevant Co-op Coordinators and Program Chair. Minimum GPA 2.75

COOP 395 Co-op Work Semester I First term co-operative work experience.
Prerequisites: none
COOP 396 Co-op Work Semester II Second term co-operative work experience.
Prerequisites: COOP 395
COOP 397 Co-op Work Semester III Third term co-operative work experience.
Prerequisites: COOP 396
COOP 398 Co-op Work Semester IV Fourth term co-operative work experience.
Prerequisites: COOP 397
COOP 399 Co-op Work Semester V Fifth term co-operative work experience.

Prerequisites: COOP 398

## Core Courses

CORE 100-3 Effective University Writing and Communication
This first year course covers both writing and speaking skills. It will not be remedial—instead it will address academic writing, critical thinking, reading, library skills and the theory and practice of speaking in formal settings.

## Prerequisites: none

CORE 101-3 Humanities A study of answers to the question "what sort of people are we?" That is, where have we come from, what are our cultural backgrounds, the sources of our ideas, our philosophies, our faiths, our art, our civil organizations, our economic structures.
Prerequisites: none
CORE 102-3 Physical Sciences A course devoted to the physical sciences that will include such topics as, what is Science, Chemistry, Physics, Earth Science, Astronomy and Mathematics.
Prerequisites: none
CORE 103-3 Social Sciences A study of the forms of societal and economic interaction and the types of communities-local, regional, national and international—of which we are a part.
Prerequisites: none

CORE 104-3 Life Sciences This course is devoted to the natural (biological) sciences and will include topics such as Biology, Environmental Science, Health Sciences and the ethics of science.

Prerequisites: none
Precluded: Students who have completed BIOL 101-4 or BIOL 102-4 may not take CORE 104-3 for credit.

## Economics

Successful completion of grade 12 Math or equivalent is strongly recommended before taking Economics courses.

ECON 100-3 Microeconomics The interactions of households, firms and government policies. An analysis of how different economic agents interact to determine what is produced, how it is produced and to whom it is distributed.
Prerequisites: none
ECON 101-3 Macroeconomics The determinants of unemployment, inflation and growth focusing on Canada's macroeconomic performance.
Prerequisites: none
ECON 110-3 Introduction to Health Economics and Policy This course provides a general understanding of health and health care from an economic perspective. It introduces models of health production and discusses the socio-economic determinants of health. Topics considered in the course may include the efficient and equitable allocation of scarce resources in health, alternative methods of health care financing and delivery, the effect of health uncertainty on insurance, and the effects of externalities and information asymmetries in the health sector on the behaviour of health care providers and receivers. Issues of health policy in Canada, including those for remote and rural areas, and other countries are examined. Prerequisites: none

ECON 202-3 History of Economic Thought The development of economic analysis from the 18th to 20th century. Selections from the writings of Smith, Ricardo, Mill, Marx and Keynes.
Prerequisites: ECON 100-3 and 101-3 or permission of the instructor
ECON 203-3 Canadian Economic History Theories of development, regional differences, First Nations in Canadian economic development.
Prerequisites: ECON 100-3 and 101-3 or permission of the instructor

## ECON 205-3 Statistics for the Social and Management Sciences

An introduction to the principles and applications of statistics relevant to the social and management sciences, with emphasis on making inferences based on observed data. Topics covered include descriptive statistics, probability, random variables, decision theory, estimation, hypothesis testing, statistical software.

[^4]ECON 300-3 Labour Economics An examination of the Canadian labour market. The course considers labour demand and supply, wages and terms of employment, wage structures and differentials, education and training, unemployment, unions, and selected labour market policies.
Prerequisites: ECON 100-3, 101-3, or permission of the instructor
ECON 301-3 Women and the Economy Examination of women's economic situations in Canada and other industrialized economies. Labour market topics such as why women earn lower wages than men, occupational segregation, and the international division of labour will be considered. Other topics include the unequal distribution of resources within the household, pay equity, and the feminization of poverty, attention is paid to public policies relating to these issues.

Prerequisites: ECON 100-3, 101-3, or permission of the instructor
ECON 303-3 Economics of Technological Change Economic analysis of technological change and its impact on income and distribution, invention and diffusion of technology, impacts on education and training, public policy and technology.

Prerequisites: ECON 100-3, 101-3, or permission of the instructor
ECON 305-3 Environmental Economics The study of the relationship between economic performance and policies and environmental consequences. Global and BC issues are addressed.

Prerequisites: ECON 100-3 or permission of the instructor
ECON 306-3 Economics of Industrial Organization Examination of alternative ownership structures and forms of industrial organization, managerial conduct and performance, multinational corporations, service industries.
Prerequisites: ECON 100-3, 101-3, or permission of the instructor
ECON 308-3 International Economic Relations Trade theory, multilateral institutions (such as the World Bank and International Monetary Fund), trading blocs (such as NAFTA), internationalization of finance, world debt, North-South relations.
Prerequisites: ECON 100-3, 101-3, or permission of the instructor
ECON 309-3 Economies of Major World Regions Analysis of the economic successes and problems of the developing economies of East and Southeast Asia and the transitional economies of Central/ Eastern Europe.

Prerequisites: ECON 100-3, 101-3, or permission of the instructor
ECON 310-3 Intermediate Microeconomic Theory The study of the main principles and techniques of economic analysis in their application to modern theories of price, production, distribution and the theory of the firm.

Prerequisites: ECON 100-3, 101-3, MATH 152-3, or permission of the instructor

ECON 311-3 Intermediate Macroeconomic Theory Concepts and methods of analysis of macroeconomic variables: consumption, investment, government and foreign trade. Classical and Keynesian models compared; analysis of economic statics and dynamics.

Prerequisites: ECON 100-3, 101-3, or permission of the instructor
ECON 312-3 Introduction to Econometrics Simple linear regression, maximum likelihood estimators, and multiple regression will be used for applied economic analysis. Students will be introduced to various software programs.

Prerequisites: ECON 100-3, 101-3, 205-3, Math 150-3, 152-3, or permission of the instructor

ECON 315-3 Economics of Social Policy Examination of public expenditure with specific reference to health, education and social security. Examples will be drawn from various countries.
Prerequisites: ECON 100-3, 101-3, or permission of the instructor
ECON 316-3 Government and the Economy An examination of the relationship between government and various aspects of the economy. Topics covered include political business cycles, the economic theory of bureaucracy and political institutions and economic growth.

Prerequisites: ECON 100-3, 101-3, or permission of the instructor
ECON 317-3 Money, Banking and Financial Institutions An examination of the operations of the Canadian financial system and the impact of monetary policy and regulation on the performance of the economy.

Prerequisites: ECON 100-3, 101-3, or permission of the instructor
ECON 320-3 Introduction to Mathematical Economics The mathematical interpretation of fundamental economic concepts such as demand, supply and competitive equilibrium. Application of calculus to production and distribution theory.
Prerequisites: ECON 205-3, 310-3, MATH 150-3, 152-3, or permission of the instructor

ECON 321-3 Economics of Developing Countries An analysis of the economic problems and policy choices facing developing countries. The course takes a comparative approach analyzing why some developing countries have been more successful than others.
Prerequisites: ECON 100-3, 101-3 or permission of the instructor
ECON 322-3 Public Finance Examination of selected policy problems from areas of taxation, income security and public expenditures. Examples in Canadian public pension policy, privatization, tax reform and federal-provincial cost sharing programs.
Prerequisites: ECON 100-3, 101-3 or permission of the instructor
ECON 330-4 Resource Economics Contemporary issues in the allocation of natural resources. Economic concepts and tools applied to forestry, recreation and other natural resource sectors.

Prerequisites: ECON 100-3

ECON 331-3 Forest Economics Economic analysis of private and public forest management. Topics include the measurement of timber and non-timber values, multiple use management, and the regulation of forest practices.

Prerequisites: ECON 100-3, ECON 101-3 or permission of the instructor
Precluded: ECON 330-4, FSTY 310-3
ECON 401-3 Global Economy This course analyzes the evolution of, and assesses competing theories of, the world economy. Particular attention is paid to analyzing the "new globalism" of the 1990s and examining the implications for policy makers.
Prerequisites: ECON 100-3, ECON 101-3, and ECON 311-3 or permission of the instructor

ECON 402-3 Topics in Labour Economics An in-depth examination of selected topics in Labour Economics.
Prerequisites: ECON 300-3
ECON 404-3 Poverty, Inequality and Development This course examines the dimensions and causes of poverty and inequality. It analyzes development strategies aimed at reducing poverty and inequality.
Prerequisites: ECON 100-3, ECON 101-3, and ECON 310-3 or permission of the instructor

ECON 405-3 Topics in Environmental Economics An in-depth examination of selected topics in Environmental Economics.

Prerequisites: ECON 305-3
ECON 407-3 The Economy of Northern BC A comparison of the economic characteristics of Northern BC with other Canadian regions. An examination of regional development and growth concepts and theories. An evaluation of past and present regional economic development programs and initiatives taken by various levels of government.
Prerequisites: ECON 100-3, 101-3, or permission of the instructor Precluded: ECON 307-3

ECON 408-3 Topics in International Economics An in-depth examination of selected topics in International Economics.
Prerequisites: ECON 308-3
ECON 410-3 Health Economics Economic analysis applied to health care. Topics covered may include models of physician induced demand, health insurance (private versus national), cost benefit analysis and the evaluation of health technology.
Prerequisites: ECON 100-3, 101-3 or permission of the instructor

ECON 411-3 Cost-Benefit Analysis Techniques and problems in cost-benefit analysis. Case studies of projects in the areas of natural resources, the environment, human resources, public services and transportation.
Prerequisites: ECON 100-3, 101-3 or permission of the instructor

ECON 415-3 Topics in the Economics of Social Policy An indepth examination of selected topics in the Economics of Social Policy.
Prerequisites: ECON 315-3
ECON 417-3 Topics in Monetary and Financial Economics An in-depth examination of selected topics in Monetary and Financial Economics.

Prerequisites: ECON 317-3

ECON 425-3 Trade and the Environment This course considers the relationship between different international trade regimes and environmental issues.

Prerequisites: ECON 100-3, 101-3, or permission of the instructor

## ECON 440-(3-6) Internship

Prerequisites: upper division standing and permission of Program Chair

ECON 451-3 Advanced Microeconomic Theory Selected topics in microeconomics.

Prerequisites: ECON 310-3, 311-3, 312-3 or permission of the instructor

ECON 452-3 Advanced Macroeconomic Theory Selected topics in macroeconomics.

Prerequisites: ECON 310-3, 311-3, 312-3 or permission of the instructor

ECON 453-3 Advanced Econometrics Selected topics in econometrics.

Prerequisites: ECON 310-3, 311-3, 312-3 or permission of the instructor

ECON 498-(3-6) Special Topics in Economics
Prerequisites: upper division standing

## ECON 499-(3-6) Independent Study

Prerequisites: upper division standing and permission of Program Chair

## Education

EDUC 101-3 Introduction to Education This course is intended to provide students with an understanding of the basic issues facing elementary and secondary teachers in Canadian schools. The topics to be covered include social, emotional, cognitive and physical development, classroom management, social and economic issues, gender, multiculturalism, teacher characteristics, special needs, and reflective practice. It introduces students to the values, concepts, expectations, and responsibilities of classroom teachers. The course will also acquaint students with the British Columbia Teachers' Federation Guide to Professional Practice.

EDUC 176-3 Mathematics and Aboriginal Culture This course explores the use of mathematics within cultural contexts. The focus is primarily on Aboriginal perspectives, and the use of math as it pertains to daily life and traditional practices. Attention is given to classroom applications and hands-on learning.

EDUC 187-3 Science and Aboriginal Culture This course is an exploration of how science is used and understood within cultural practice. The focus is primarily on the integration of the scientific method and Aboriginal ways of knowing, combining current scientific theory with cultural knowledge. Attention is given to classroom applications and hands-on learning.

EDUC 201-3 Education Theory and Practice In this course, students will extend their understanding of contemporary educational issues. The course introduces theoretical models of curriculum and instruction, as well as provincial curricular guidelines. Classroom observation in a variety of settings forms a substantial component of the course. Students will reflect on practical aspects of teaching and learning, and they will identify their own beliefs and aims with respect to teaching. This course builds on and complements the topics addressed in EDUC 101-3.

Prerequisites: EDUC 101-3
Note: This course is a general introductory course and not part of the BEd program, Post-Degree Bachelor of Education Program

EDUC 313-1 Interpersonal Communication An introduction to basic interpersonal communication skills applicable to teaching across the grade levels. The course focuses on developmentally appropriate and effective communication in one-to-one, small-group, and whole-class contexts when listening, imparting information, giving instructions, and facilitating discussion. Other topics include: understanding diverse perspectives, establishing equitable discourse opportunities, reflective listening, negotiation, and problem-solving.

EDUC 315-4 Curriculum \& Instruction: II (Business and Career
Education) Curriculum and instruction methods for the senior years, including accessing, selecting, and developing curricular materials; and planning, instructional, and evaluation methods pertaining to the teachable subject areas.
Prerequisite: EDUC 360-4

EDUC 333-2 Learning, Development \& Motivation Human social, emotional, cognitive, linguistic, and physical development and learning across the lifespan. In particular, the emphasis is children's and adolescents' development during the school years and implications for teaching and learning. Topics will include: theories of development; age-related social, behavioural, and academic expectations; developmental diversity; social, cultural, and gender bases of identity; and the teacher's role in creating developmentally appropriate, nurturing environments for learning. Students will complete a term project relevant to their educational stream (Early Years or Senior Years).

EDUC 340-2 Curriculum Development Models Practical approaches to the development and evaluation of curricula, placed within a theoretical framework. Topics will include epistemological foundations of curriculum, curricular integration and disciplinarity, sociocultural perspectives and equity, collaborative development, evaluative purposes and approaches, curricular leadership, and the teacher as researcher. This course prepares students for curriculum and instruction pedagogy courses in specific subject areas.

EDUC 341-2 Principles of Instruction Theoretical foundations and practical applications of instructional psychology. The course will address: contemporary theories of learning, models of memory and cognition, learning strategies, teaching effectiveness, instructional planning, classroom processes, teaching to accommodate individual differences, and the cultural psychology of education.

EDUC 342-2 Social Dynamics of Classrooms This course addresses the social dynamics of classrooms and introduces contemporary approaches to classroom management. Through a combination of lecture, discussion, small group activities, and case analysis, we will address the following central topics: foundations of classroom management, interpersonal relationships in classrooms, effective instruction to promote learning and motivation, classroom organization and management, and approaches to exceptional cases. Students will interrogate their own assumptions about the roles of teachers and students, and will develop practical strategies for classroom management and discipline.

EDUC 345-4 Language \& Literacy Across the Curriculum In this course, Senior Years students will study the role of language as medium of teaching and learning, and develop approaches to integrating spoken and written language across subject areas to enhance learning. The course includes a substantive focus on English as a Second Language/English as a Second Dialect. Other topics include: the nature of language, classroom discourse, narratives, and journals, construction of meaning, writing and cognition, and diverse oral and literate traditions. The course includes a focus on strategies for integrating language within specific subject areas.

EDUC 346-2 Introduction to Aboriginal Education This course introduces the diverse meanings of the term "Aboriginal education." The concepts of power, control, and culture will help the students analyze contemporary issues surrounding Aboriginal education and Western education. Topics include: historical analysis, current models, defining Aboriginal education, and contemporary issues. Students will build their knowledge and understanding of Aboriginal approaches to education.

## EDUC 351-2 Curriculum \& Instruction: Second Language (EY)

Curriculum and instruction methods for teaching a second language in the Early Years. The language offered may be French, or another provincially approved second language, such as a local First Nations language.

EDUC 356-2 Language \& Literacy: Development (EY) An introduction to the nature of language and literacy, and their development prior to and during the early years of schooling. The course will focus on the components of language, how they develop in oral and written forms, and diversity among learners in language and literacy development. Students will learn the curricular expectations for grades K to 5 for listening, speaking, reading, writing, and spelling, and will be introduced to instructional strategies for oral language and emergent/early literacy.

## EDUC 357-3 Language \& Literacy: Reading \& Writing (EY)

Theoretical models of reading, spelling, and writing processes during the early years. It will also include practical skills and experience in assessing reading, writing, and spelling, planning instruction in these areas, using curricular and other resources for teaching, and adapting reading, spelling, and writing instruction for diverse learners.

## Prerequisite: EDUC 356-2

## EDUC 360-4 Curriculum \& Instruction: Introduction (SY)

Curriculum and instruction methods for the Senior Years, including accessing, selecting, and developing curricular materials; and planning, instruction, and evaluation methods pertaining to the teachable subject areas.
Pre- or Co-requisite: EDUC 340-2
EDUC 361-4 Curriculum \& Instruction: II (Humanities and Social Sciences) Curriculum and instruction methods for the Senior Years, including accessing, selecting, and developing curricular materials; and planning, instruction, and evaluation methods pertaining to the teachable subject areas.
Prerequisite: EDUC 360-4

## EDUC 366-2 Curriculum \& Instruction: Social Studies (EY)

The theory and practice of social studies education in the early years, including objectives, teaching and assessment approaches, curricular models, and resources/materials. Students will examine the nature and purposes of social studies, and will become familiarized with the BC social studies curriculum for the early years, as well as with accessing, selecting, and developing curricular materials. The course will emphasize strategies for thematic instruction, and integration of social studies themes across the curriculum.

EDUC 370-3 Numeracy Across the Curriculum (SY) An exploration of the role of numeracy in society and across disciplines. This course includes strategies for fostering quantitative literacy across Senior Years subject areas.

EDUC 372-4 Curriculum \& Instruction: II (Math, Computers, and Sciences) Curriculum and instruction methods for the Senior Years, including accessing, selecting, and developing curricular materials; and planning, instruction, and evaluation methods pertaining to the teachable subject areas.

## Prerequisite: EDUC 360-4

EDUC 376-2 Numeracy: Math Concepts (EY) This course prepares prospective teachers to teach early years mathematics by 1) improving their knowledge of mathematics, 2) introducing them to the development of numeracy in young children, 3) familiarizing them with the BC mathematics curriculum for the early years; and 4) building connections between mathematical knowledge, development, curricular guidelines, and instructional strategies.

EDUC 377-2 Numeracy: Instructional Strategies (EY) Topics include accessing, selecting, and developing curricular materials; and planning, instruction, and evaluation methods pertaining to early years mathematics. Instructional strategies will emphasize problem solving, learning with manipulatives, mathematical language, group work, and other process-oriented approaches, as well as choosing and using resources such as math manipulatives and Montessori materials, print materials, computer software, videos, and calculators. Students also will explore ways to integrate numeracy across the curriculum, such as through thematic instruction.

Prerequisite: EDUC 376-2
EDUC 380-3 Foundations of Education Introduction to the historical, philosophical, psychological, and sociological foundations of education. Students will reflect on their beliefs about education and teaching, including their assumptions about gender, culture, race, and social class. This course will include an emphasis on the historical roots of present educational institutions and approaches, and change processes in education as applied to contemporary Canadian social and educational contexts.

EDUC 387-2 Curriculum \& Instruction: Science (EY) Students will be introduced to the theory and practice of teaching children science, and the BC curriculum. The course addresses curriculum and instruction methods for the early years, including accessing, selecting, and developing curricular materials and activities; and planning, instruction, and evaluation methods pertaining to early years science. Students also will explore ways to integrate science across the curriculum, such as through thematic instruction.

EDUC 390-3 Classroom Practice and Seminar I Three-weekequivalent practicum, comprising observations and supervised practical experience in a school, along with weekly seminars with team members addressing ongoing practice issues such as: practical skills, case management, reflection, problem-solving, accessing resources, professional issues, teacher research, and portfolio development. Graded on a Pass/Fail basis.

Pre- or Co-requisite: Secondary Years: EDUC 360-4; Elementary Years: EDUC 356-2 and 376-2

EDUC 391-3 Classroom Practice and Seminar II Three-weekequivalent supervised practical experience in a school, along with weekly seminars with team members addressing ongoing practice issues such as: practical skills, case management, reflection, problemsolving, accessing resources, professional issues, teacher research, and portfolio development. Graded on a Pass/Fail basis.

Prerequisite: EDUC 390-3
Pre- or Co-requisite: Secondary Years: EDUC 345-4, 370-3, and one of EDUC 315-4, 361-4, or 372-4; Elementary Years: EDUC 351-2, $357-3,366-2,377-2$, and 387-2

EDUC 395-1 Professional Issues: Legal \& Ethical This seminar will build on the professional guidelines introduced throughout the program, and explored in the Classroom Practice seminars. The course will examine legal and ethical issues pertinent to the professional practice of teachers in the BC public school system, including obligations, policies, and abilities related to contemporary social issues. Students also will be introduced to the expectations and processes for building their professional portfolio over the two years of the program.

## EDUC 406-3 Curriculum \& Instruction: Fine Arts (EY)

 Introduction to the role of music, visual arts, dance, and drama in teaching and learning during the early years. The course includes a focus on appreciating the arts of our diverse communities and understanding children's expressive development, as well as practical approaches to teaching these arts, using tools for art-making, and providing contexts for the performance arts. Strategies for incorporating music, imagery and performance across the curriculum will be emphasized.EDUC 413-1 Counselling Skills (EY) An introduction to the role of the classroom teacher related to collegial work with counsellors, support personnel, school-based teams, and families. Topics include: working with parents, working with the school-based team, understanding the role of the school counsellor, communicating with teaching assistants, and accessing resources; as well as teaching career and personal planning from K-8.

EDUC 414-5 Curriculum \& Instruction: III (Business and Career Education) Curriculum and instruction methods for the senior years, including accessing, selecting, and developing curricular materials; and planning, instructional, and evaluation methods pertaining to the teachable subject areas.
Prerequisite: EDUC 315-4

## EDUC 415-3 Curriculum \& Instruction: IV (Business and Career

Education) Curriculum and instruction methods for the senior years, including accessing, selecting, and developing curricular materials; and planning, instructional, and evaluation methods pertaining to the teachable subject areas.
Prerequisite: EDUC 414-5
EDUC 421-3 Classroom Assessment Practices A critical examination of the purposes, utility, and limitations of classroom assessment and evaluation. Students will learn to select appropriate assessment processes and instruments to evaluate the academic, social, and emotional abilities/needs of the children/adolescents in their classrooms and to plan to evaluate instruction. They will learn to design and interpret assessment processes and instruments, and to implement a fair grading system. The course will include a focus on authentic assessment, portfolios, standardized testing, curriculumbased assessment, conferencing, and reporting.

EDUC 431-3 Educational Technology This course is intended to provide students with the understanding and skills needed to effectively integrate computer based technology in an educational setting. The topics to be covered focus on the use of technology in a school setting and include operations and concepts, curriculum plans, assessment and evaluation, productivity and professional practice, and technology issues (OS and DOC Platforms). It introduces students to the values, concepts, expectations, and responsibilities of classroom teachers with respect to technology and issues arising from its use.

EDUC 434-3 Counselling Skills (SY) An introduction to the role of the classroom teacher related to CAPP, collegial work with counsellors, support personnel, school-based teams, and families. Topics include: working with parents, working with the school-based team, understanding the role of the school counsellor, communicating with teaching assistants, and accessing resources; as well as teaching career and personal planning from grades $9-12$. The course will also introduce teaching approaches and support systems that help students develop and maintain positive achievement-oriented beliefs, that foster their motivation for school learning, and that help them stay in school and experience success in school contexts.

## EDUC 435-2 Learning \& Diversity: Inclusive Classrooms

This course addresses individual differences and inclusion based on the premises that all students have individual differences in their experiences, skills, knowledge, perspectives, and cultural beliefs; and that curricular materials and instruction must be selected, designed, and adapted to include all learners. Within this wider philosophical framework, particular focuses of the course will include: history of special education and contemporary approaches; working with students with physical, intellectual, or emotional/behavioural challenges or talents; individualized education plans; assessment; the team approach; and accommodating social, cultural, and linguistic diversity.

## EDUC 436-2 Learning \& Diversity: Learning Disabilities

This course explores the theoretical bases of learning disabilities; and strategies for assessment, instruction, and coordination of resources to support learners with LD across the developmental levels. Characteristics and educational implications of Fetal Alcohol Syndrome/Effects also will be introduced, and practical instructional approaches explored.

EDUC 446-2 Aboriginal Education: Epistemology This course is an introduction to Aboriginal epistemology. Central to this study are the thinking and listening processes of orality. Oral history stories provide a unique way to know and to understand the world. Topics include: Aboriginal epistemology, Aboriginal education meta-theory, orality, Aboriginal spirituality and education, Aboriginal curricula, and phenomenology.

## EDUC 456-2 Language \& Literacy: Across the Curriculum (EY)

 In this course, students will study the role of language as a medium for teaching and learning in the early years, and develop approaches to integrating spoken and written language across subject areas such as language arts, math, music, science, and social studies. The course includes a substantive focus on English as a Second Language/English as a Second Dialect. Other topics include: classroom discourse, construction of meaning, narratives and journals, writing and cognition, and diverse oral traditions. The course includes a practical focus on learning to use effective instructional language, designing thematic instruction, creating literacy-rich classroom environments, providing diverse routes to learning, and managing student discussion in wholeclass and small-group contexts.Prerequisite: EDUC 357-3

## EDUC 457-2 Language \& Literacy: Oral \& Written Genres (EY)

An introduction to children's literature in the early years, including the various fiction and nonfiction written genres, and oral storytelling. Practical emphases of this course include learning to select and use children's literature, as well as language arts resources and materials, to plan instruction that fits with curricular aims and individual learners' needs. Students will become familiar with the role and resources of the school library and teacher-librarian.

## Prerequisite: EDUC 456-2

## EDUC 460-5 Curriculum \& Instruction: III (Humanities Social

 Sciences) Curriculum and instruction methods for the senior years, including accessing, selecting, and developing curricular materials; and planning, instruction, and evaluation methods pertaining to the teachable subject areas.Prerequisite: EDUC 361-4

## EDUC 461-3 Curriculum and Instruction: IV (Humanities Social

Sciences) Curriculum and instruction methods for the senior years, including accessing, selecting, and developing curricular materials; and planning, instruction, and evaluation methods pertaining to the teachable subject areas.
Prerequisite: EDUC 460-5

EDUC 471-5 Curriculum \& Instruction: III (Math, Computers, and
Sciences) Curriculum and instruction methods for the senior years, including accessing, selecting, and developing curricular materials; and planning, instruction, and evaluation methods pertaining to the teachable subject areas.

Prerequisite: EDUC 372-4

EDUC 472-3 Curriculum \& Instruction: IV (Math, Computers, and Sciences) Curriculum and instruction methods for the senior years, including accessing, selecting, and developing curricular materials; and planning, instruction, and evaluation methods pertaining to the teachable subject areas.

Prerequisite: EDUC 471-5
EDUC 489-2 Curriculum \& Instruction: Physical Education (EY)
Foundational and instructional basis for planning and implementing physical education programs in the early years.

EDUC 490-4 Classroom Practice and Seminar III Four week supervised practicum in a school, along with weekly seminars with team members addressing ongoing practice issues such as: practical skills, case management, reflection, problem-solving, accessing resources, professional issues, teacher research, and portfolio development. Graded on a Pass/Fail basis.

Prerequisite: EDUC 391-3
Pre- or Co-requisite: Secondary Years: One of EDUC 414-5, 460-5, or 471-5; Elementary Years: EDUC 456-2 and 406-3

EDUC 491-10 Classroom Practice and Seminar IV Full-time ten week supervised practicum in a school, along with weekly seminars with team members addressing ongoing practice issues such as: practical skills, case management, reflection, problem-solving, accessing resources, professional issues, teacher research, and portfolio development. Graded on a Pass/Fail basis.

Prerequisite: EDUC 490-4
Pre- or Co-requisite: Secondary Years: One of EDUC 415-2, 461-2, or 472-2; Elementary Years: EDUC 457-2 and 489-2

EDUC 495-1 Professional Issues: Portfolios This seminar will focus on presentation and evaluation of teacher candidates' professional portfolios developed over their past two years of study and practical experience. Other topics will include the transition to work, and developing a personal plan for ongoing professional development.

Pre- or Co-requisite: EDUC 395-1

## English

ENGL 100-3 Introduction to Literary Structures An introduction to the reading of the three major genres: poetry, fiction, and drama. The course will introduce the students to the basic structural principles and rhetorical strategies of literary texts by observing structural and rhetorical theory applied to specific poems, fictions, and plays.

Prerequisites: none

ENGL 102-3 Introduction to Poetry An introduction to the reading of poetry through a detailed examination of a range of poetic texts.

Prerequisites: none

ENGL 103-3 Introduction to Fiction An introduction to the reading of fiction through a detailed examination of a range of narrative texts (e.g. the novel, short fiction).

Prerequisites: none

ENGL 104-3 Introduction to Drama and/or Film An introduction to the study of drama and/or film through a detailed examination of a range of dramatic texts and films. More emphasis may be placed on either genre by an individual instructor.

Prerequisites: none
ENGL 170-3 Writing and Communication Skills Students will be taught how to construct an argument, and how to assemble and present an academic essay. There will be regular practice in writing well. The course includes library research and an oral presentation, and may also include computer skills.
Prerequisites: none
ENGL 200-3 Gender and Literary Theory This course provides an introduction to critical analyses of gender and their implications for literature. Students will gain an overview of some current topics in gender theory and apply these to contemporary texts.

Prerequisites: none

ENGL 201-3 Computing in the Humanities An introduction to the growing use of computer technology in the humanities, including word processing/desktop publishing, research using databases, electronic concordances and bibliographies, and electronic publishing on the World Wide Web. Instead of a research paper, students create a personal home page which reflects the material learned in the class. Classes should incorporate work on all three of the computing platforms available to students at UNBC (Windows and Unix); three one-hour labs a week.

Prerequisites: none

ENGL 205-3 Fiction A study of selected trends in the development of the novel or short story, or of a particular mode or genre of representation. See the English Program handbook for details. (Exclusions: students may have already received credit for ENGL 2033 or ENGL 204-3, but not both).

Prerequisites: none
Precluded: one of ENGL 203-3 or ENGL 204-3

ENGL 210-3 Women and Literature: A Survey A survey of works of poetry and fiction written by women in English from the Renaissance to the present. The course will consider feminist theory and criticism in relation to these works.

Prerequisites: none
ENGL 211-3 Survey of English Literature I A survey of literature in English from the medieval period (c. 10th century) to the late 18th century.

Prerequisites: one of ENGL 100-3, ENGL 102-3, ENGL 103-3, ENGL 104-3
OR
Co-requisites: one of ENGL 100-3, ENGL 102-3, ENGL 103-3, ENGL 104-3

ENGL 212-3 Survey of English Literature II A survey of literature in English from the late 18th century through to the present.
Prerequisites: ENGL 211-3
ENGL 231-3 An Introduction to Canadian Literature A survey of Canadian literature.
Precluded: ENGL 330-3
ENGL 260-3 A Survey of Children's Literature An historical survey tracing literature written for children in texts as varied as The Arabian Nights, and Salman Rushdie's Haroun and The Sea of Stories.
Prerequisites: none

ENGL 270-3 Expository Writing Lectures and workshops in the study and craft of non-fictional prose.
Prerequisites: none

ENGL 271-3 Introduction to Creative Writing Introductory lectures and workshops in the craft of writing fiction, poetry, and/or drama.
Prerequisites: none
ENGL 280-3 Shakespeare A study of selected Shakespearean plays. Some of Shakespeare's non-dramatic poetry may be included. One play by a contemporary of Shakespeare (e.g. Webster, Jonson) may also be considered.

Prerequisites: none

ENGL 281-3 Introduction to Renaissance Literature An introduction to the literature of the English Renaissance in the major genres (poetry and drama), focusing on Spenser, Shakespeare and Milton.

Prerequisites: none

## ENGL 282-3 Introduction to Restoration and 18th Century

Literature A study of selected works of poetry, prose and drama of the Restoration and 18th century, including authors such as Congreve, Dryden, Pope, Swift, Johnson, Behn and early Jane Austen.

Prerequisites: none

ENGL 283-3 Introduction to Romantic Literature A study of the English Romantic poets: Blake, Wordsworth, Coleridge, Byron, Shelley and Keats. Attention will be paid to women Romantic writers such as Mary Shelley, and the later work of Jane Austen.

Prerequisites: none
ENGL 284-3 Introduction to Victorian Literature A study of selected texts of poetry, fiction and non-fiction by authors such as Thackeray, George Eliot, Dickens, Charlotte Brontë, Robert Browning, Tennyson, and Christina Rossetti.

## Prerequisites: none

ENGL 285-3 Modern British Literature A study of Modernism in Britain, focusing on the period around the First World War (19001930) and concentrating on the following prose writers: Joyce, Lawrence, Woolf and Forster.
Prerequisites: none
ENGL 300-3 Theory The development of critical theory from Aristotle to the present. Students will be introduced to influential literary theories in an historical context, from the classical to the modern.

Prerequisites: two lower division English courses excluding ENGL 170-
3 , or 45 credit hours, or permission of the instructor
ENGL 320-3 First Nations Literature This course focuses on the contemporary writing of First Nations people in English in Canada and the United States. It will examine the implications of colonialism and the strategies that writers use to decolonize, redefine and affirm their identity, history and culture.

Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 331-3 Genres in Canadian Literatur A focus on a single genre in Canadian literature such as the short story, the novel, drama, poetry, or non-fiction. See the English Program handbook for details.
Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 340-3 Postcolonial Literature Literature in English written in one or more of the following regions: Africa, the Caribbean, India, Australia, New Zealand. An introduction to postcolonial literatures, their definitions of culture, and their relation to the British Empire.

Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 350-3 Comparative Literature An examination of works in world literature, written in English and other languages, in the context of various literary periods and genres.

Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 351-3 Russian Literature in Translation A study of Russian literature of the nineteenth and twentieth centuries in translation. The course may focus on a specific authors(s), or a period, genre, theme or region.

Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 381-3 Renaissance Literature An advanced version of the 200 level course, with a particular emphasis on the interaction between the visual and written art forms.

Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 382-3 Restoration and 18th Century Literature An intensive study of two or three authors or of a major genre, form or theme of the period.
Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 383-3 Romantic Literature An intensive study of two or three authors or of a major genre, form or theme of the period.
Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 384-3 Victorian Literature An intensive study of two or three authors or of a major genre, form or theme of the period.
Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 385-3 Modern and Contemporary Literature in the United
States American writing since 1900, with an emphasis on the American cultural contexts. The course may focus on a specific author(s), on a particular genre, theme or region, or on ethnic and minority literature.

Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

## ENGL 386-3 19th Century Literature in the United States

A study of American writing in its historical contexts. The course may include Colonial literature, Contact literature, literature of the American Renaissance, African-American slave narratives, and transcriptions of Native oral literatures.

Prerequisites: two lower division English courses excluding ENGL 170-
3 , or 45 credit hours, or permission of the instructor
ENGL 390-3 Language The structure and development of the English language from its beginnings to the present, with close reference to literary texts.

Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 400-3 Contemporary Theory An advanced study of current theoretical modes, including feminism and gender theory, deconstruction, postcolonial theory, discourse analysis, new historicism and Marxist theory, psychoanalytic theory, and cultural studies. The course includes an investigation of the critical positions of contemporary theorists.

Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 410-3 Contemporary Women's Literature Contemporary women writers and their work, emphasizing their cultural diversity and considering them in the context of feminist theory. Writers may include Nadine Gordimer, Joy Kogawa, Amy Tan and Louise Erdrich.
Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 420-3 Advanced First Nations Literature This course looks at contemporary First Nations writers and their work. Writers may include Thomas King, Gerald Vizenor, Leslie Silko, Louise Erdrich and others.

Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 430-3 Special Topics in Canadian Literature An advanced course in contemporary, multicultural Canadian literature. Authors may include Rohinton Mistry, Rudy Wiebe, Aritha van Herk, Joy Kogawa, Marlene Nourbese Philip.
Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 440-3 Postcolonial Literature I An advanced course in the main issues of postcolonial literature, such as postcolonial nationalism and English versus native languages.
Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 444-(2-6) Internship May be repeated for credit (maximum six credit hours).
Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 450-3 Special Topics in Comparative Literature An advanced version of the 300 level course, focusing on a specific genre, theme or period.

Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 460-3 Special Topics in Children's Literature Special topics in children's literature and culture. See the English Program handbook for details.
Prerequisites: two lower division English courses excluding ENGL 1703 , or 45 credit hours, or permission of the instructor

ENGL 470-3 Creative Writing - Poetry Lectures and workshops in the craft of writing poetry.
Prerequisites: permission of the instructor
ENGL 471-3 Creative Writing - Fiction and Creative Non-Fiction Lectures and workshops in the craft of writing fiction and/or creative non-fiction.

Prerequisites: permission of the instructor

## ENGL 472-3 Creative Writing - Drama and Script-

Writing Lectures and workshops in the craft of writing drama and script-writing.

Prerequisites: permission of the instructor
ENGL 480-3 Science Fiction A study of the structures and motifs of science fiction and fantasy.

Prerequisites: two lower division English courses excluding ENGL 170-3, or 45 credit hours, or permission of the instructor

ENGL 483-3 Special Topics in Romantic Literature This course investigates a particular aspect of Romantic Literature. The focus may be on the works of a specific author or school of authors, a literary genre, or a particular social or theoretical concern.

ENGL 484-3 Special Topics in Victorian Studies Special topics in Victorian Studies. See the English Program handbook for details.

Prerequisites: two lower division English courses excluding ENGL 170-3, or 45 credit hours, or permission of the instructor

ENGL 486-3 Literature of the Fantastic Various periods and aspects of fantastic literature. When appropriate, the course will include film and graphic arts as well as literary texts.

Prerequisites: two lower division English courses excluding ENGL 170-3, or 45 credit hours, or permission of the instructor

ENGL 491-3 Special Topics in Renaissance Literature A study of various aspects of Renaissance literature and art. The focus could be on the works of a specific author, a genre, or theoretical considerations.

Prerequisites: two lower division English courses excluding ENGL 170-3, or 45 credit hours, or permission of the instructor

ENGL 493-3 Cultural Studies Special topics in cultural studies with a focus on an interdisciplinary approach. See the English Program handbook for details.

Prerequisites: two lower division English courses excluding ENGL 170-3, or 45 credit hours, or permission of the instructor

ENGL 498-(3-6) Special Topics in Literature (up to 6 credits) Consult the Program Chair for details.

Prerequisites: two lower division English courses excluding ENGL 170-3, or 45 credit hours, or permission of the instructor

ENGL 499-3 Independent Study in Literature Consult the Program Chair for details.

Prerequisites: two lower division English courses excluding ENGL 170-3, or 45 credit hours, and permission of the instructor

## Environmental Planning

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.

Prerequisites: none
Precluded: ENVS 104-3
ENPL 204-3 Principles and Practices of Planning History, theory, methods and processes in regional planning; contemporary issues and professional practices.

Prerequisites: ENPL 104-3 or ENVS 104-3 or permission of instructor Precluded: ENVS 204-3

ENPL 205-3 Environment and Society Interactions between humans and their environments; societal responses to environmental change, both naturally and anthropogenically induced.

Prerequisites: none
Precluded: ENVS 205-3
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.

Prerequisites: ECON 205-3 or MATH 242-3 or permission of the instructor

ENPL 207-3 Introduction to Computer Aided Design (CAD) for
Planners This course teaches students the basic functions and application of CAD to the field of community and environmental design. Students apply design theory within the CAD environment producing 2 D and 3 D models of proposed infrastructure plans.
Prerequisites: Principles of Math 12 or MATH 115-3
ENPL 208-3 First Nations Community and Environmental Planning First Nations are involved in a broad array of environmental and community planning processes. Some of these processes originate in First Nations communities. Others are established as federal and provincial government or business initiatives. This course lays a foundation of student understanding of these planning processes and their future development.

[^5]ENPL 301-3 Sustainable Communities: Structure and Sociology Organization, function, change, development and decline of communities; applications emphasizing rural and urban settings.
Prerequisites: none
Precluded: ENVS 301-3
ENPL 303-3 Spatial Planning with Geographical Information Systems (GIS) Methods from geographical information science can be used in various ways in spatial planning. The course provides knowledge about the methods from GIS and decision support systems that are most important to planners. The laboratories demonstrate how decision support systems are used within various fields of spatial planning. Emphasis is placed upon urban and rural planning issues and location analysis techniques.

Prerequisites: GEOG 204-3 or GEOG 300-3 or permission of instructor.

## ENPL 304-3 Mediation, Negotiation and Public Participation

This course is an introduction to the art and practice of mediation, negotiation and public participation processes. The course focuses on basic principles and best practices, and allows students the opportunity to develop their own skills in the subject areas through simulations and observations.
Prerequisites: 60 credit hours
ENPL 305-3 Environmental Impact Assessment Analysis of environmental impact statements and their legal framework; methods of environmental assessment.
Prerequisites: 60 credit hours
Precluded: ENVS 305-3
ENPL 313-3 Rural Community Economic Development This course offers an introduction to the various theories and concepts of community economic development with specific application to northern, rural, remote and First Nations communities.

Prerequisites: 60 credit hours
ENPL 318-3 Professional Planning Practice This course is an overview of the professional skills required in the practice of planning. The course examines the ethical role of the planner and provides an in-depth assessment of the municipal and sectoral planning environment.
Prerequisites: ENPL 204-3 or ENVS 204-3 and 60 credit hours
ENPL 401-3 Environmental Law International, national and provincial, municipal and First Nation environmental law. Interpretation and application. Advised for pre-law students.
Prerequisites: POLS 100-3
Precluded: ENVS 401-3

ENPL 402-3 Terrain Assessment An evaluation of different techniques used to classify terrain, including an understanding of the dynamics of land surface processes, the impacts of development, applied remediation methods, and the use of terrain information for site and land use planning.
Prerequisites: GEOG 210-3 and 60 credit hours
Precluded: ENVS 402-3

## ENPL 409-4 Advanced First Nations Community and

 Environmental Planning This is a workshop style, fieldbased course that allows students to work on a real world planning project in collaboration with a First Nations community. Students will be expected to be able to work in the field.Prerequisites: 90 credit hours and ENPL 208-3
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.
Prerequisites: 60 credit hours and ENPL 204-3 or ENVS 204-3 or permission of instructor
Precluded: ENVS 410-3
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 important in expediting implementation within the political environment of planning practice.

Prerequisites: 60 credit hours and ENPL 204-3 or ENVS 204-3 or permission of the instructor
Precluded: ENVS 411-3
ENPL 415-3 Ecological Design This course is an overview of the unique planning and development dimensions of small communities and rural regions. Current planning practice and new ecological planning principles will be examined. Design and planning technologies will be utilized in the development of a landscape plan for a small community/rural region.

Prerequisites: ENPL 204-3 or ENVS 204-3 and 90 credit hours Precluded: ENVS 415-3

ENPL 419-3 Social Research Methods This is a capstone course for Environmental Studies BSC and BA majors. An overview of quantitative and qualitative research methods used in environmental studies, social sciences, and humanities, including issues such as research design, data collection techniques, data analysis and management. Approach will be problem-oriented in which students examine a complete system (e.g. pulp industry) cooperatively with students in ENSC 418-3.

Prerequisites: 90 credit hours or permission of the instructor Precluded: ENVS 419-3

ENPL 420-1 Research Methodology An opportunity to examine major methodologies and to prepare a research proposal.

Co-requisites: ENPL 430-3
Precluded: ENVS 420-3
ENPL 430-3 Undergraduate Thesis This is an optional course, allowing students to devote time to a concentrated piece of research.
Co-requisites: ENPL 420-1
Precluded: ENVS 430-3

ENPL 431-3 Professional Report This course allows the development of a professional report relevant to the student's theme of interest.

Prerequisites: 90 credit hours and permission of an approved Academic Supervisor.

ENPL 440-3 (2-6) Internship May be repeated for credit (maximum six credit hours).

ENPL 498-3 (1-6) Special Topics Selected environmental topics. May be repeated for credit (maximum six credit hours).
Prerequisites: permission of the instructor and Program Chair
ENPL 499-3 (1-6) Independent Study May be repeated for credit (maximum six credit hours).
Prerequisites: permission of the instructor and Program Chair

## Environmental Science and Engineering

ENSC 100-1 Introduction to Engineering Seminar This course will introduce Engineering students to Engineering practice, particularly in Northern BC, through seminars and invited presentations involving professional Engineers in the region and province.
Prerequisites: enrolment in an Engineering Program

## ENSC 200-3 Fundamentals of Environmental Engineering

A modular course taught jointly by UBC and UNBC faculty to introduce students to fundamental principles, practices and design in Environmental Engineering, and to serve as a bridge to courses in Engineering taught at UBC during years 3 and 4 of the joint UBC/ UNBC Environmental Engineering Program. Topics may include soil microbiology and remediation, electronics for instrumentation and control, engineering statics, engineering communication, engineering design.
Prerequisites: 30 credit hours and admission to the Environmental Engineering program

ENSC 201-3 Introduction to Atmospheric Science Weather and climate are key physical determinants of many human and natural systems. This course will explain the fundamental processes of weather and climate at all temporal and spatial scales, and will lead the student toward an understanding of how the atmosphere works. Topics covered include: atmospheric energy, solar and terrestrial radiation, the "Greenhouse Effect," stratospheric ozone, humidity, clouds, precipitation, stability and atmospheric statics, geostrophic wind and atmospheric dynamics.

Prerequisites: Physics 12 or CORE 102-3 or 100 level PHYS Precluded: ENVS 201-3

ENSC 202-3 Introduction to Aquatic Systems Aquatic systems are central to all areas of life, as well as human endeavours. In addition to being the site of our earliest evolution, aquatic systems are now recognized as fundamental to the regulation of atmospheric gases and so our climate. This course will provide a broad overview of the physical, chemical, geological, and biological aspects of freshwater and marine systems. Human perspectives will focus on the conservation and exploitation of the resources found within and below lakes, rivers and oceans. Introduction to Aquatic Systems will provide a foundation for students wishing to pursue advanced courses in any area of aquatic study.

Prerequisites: BIOL 101-4, 102-4, CHEM 101-3
Recommended: PHYS 100-4 and MATH 100-3 or MATH 152-3 or permission of the instructor
Precluded: ENVS 202-3
ENSC 302-3 Energy Development An overview of different types of energy uses and the environmental consequences of development. The course will focus on energy development in Western Canada with respect to oil, gas, hydro, and coal. Alternative energy futures will also be examined.

Prerequisites: 30 credit hours
Precluded: ENPL 302-3
ENSC 308-3 Northern Contaminated Environments This course provides students with a broad knowledge base and a sound understanding of various environmental problems in the north, with particular emphasis on practical skills to address such problems. Topics include physical settings of the north, Arctic ecology and environmental pollution, pollutant transport pathways in the Arctic, petroleum hydrocarbon pollution in marine and terrestrial environments, air pollution and climate change, industrial waste management, and environmental and human health risk assessment.

Prerequisites: 60 credit hours
Precluded: ENVS 308-3
ENSC 312-3 Boundary-layer Meteorology Principles of weather and climate at micro-, local, and meso-scales; processes associated with transfer of heat, mass, and momentum and resulting climates near the surface; fog, urban and forest climates, bioclimatology, local winds, transport and dispersion of air pollution.
Prerequisites: ENSC 201-3 or ENVS 201-3 and 100 level Math or PHYS or permission of instructor
Precluded: ENVS 312-3
ENSC 350-3 Fluid Mechanics This course is an introduction to fluid mechanics for environmental science, engineering, physical geography, forestry and fishery students. The course covers the following topics: definition of fluid, fluid properties, variation of pressure in a fluid, hydrostatics forces, buoyancy, dimensional analysis, kinematics of flow, control volumes, continuity equation, momentum equation, energy equation, flow in closed conduits, and open channel flow.

Prerequisites: MATH 100-3 and MATH 101-3, or MATH 152-3. PHYS 100-4 and PHYS 101-4, or PHYS 110-4 and PHYS 111-4.

## Course Descriptions: Environmental Science

ENSC 404-3 Waste Management This course introduces environmental, technical and political aspects of non-hazardous and hazardous wastes. Topics include sources, evaluative methods, risk assessment, treatment, disposal, and current legal and management requirements.

Prerequisites: 100 level 3 credit Chemistry, 100 level 3 credit Biology, and 60 credit hours.
Precluded: ENVS 404-3
ENSC 406-3 Environmental Modelling This course provides an understanding of the physical, chemical and biological processes that govern contaminant transport and fate in environmental media. Topics include modelling fundamentals, mass transport in aquatic ecosystems, and mathematical modelling of a wide variety of contamination issues, such as lake eutrophication, river water quality, groundwater contamination, atmospheric deposition, and climate change. Laboratory exercises will complement lecture topics and focus on the development of computer-based modelling skills.
Prerequisites: 60 credit hours. MATH 152-3 or both of MATH 100-3 and MATH 101-3 or permission of the instructor.
Precluded: ENVS 406-3
ENSC 408-3 Storms This course covers the analysis and dynamics of synoptic weather systems; cyclones and cyclogenesis; fronts, thunderstorms, jet streams and stability; thermodynamic charts, satellite imagery and weather forecasting. May be taught alternate years.

Prerequisites: ENSC 201-3 or ENVS 201-3 or 200 level Math (excluding MATH 242-3) or PHYS or permission of the instructor. Precluded: ENVS 408-3

ENSC 412-3 Air Pollution A multidisciplinary course focusing on air pollution: emissions, chemistry, air pollution meteorology and dispersion modelling, engineering and legislative controls, health effects, airshed planning.
Prerequisites: ENSC 201-3 , ENSC 312-3 or ENVS 201-3 and ENVS 312-3, or permission of instructor
Precluded: ENVS 412-3

## ENSC 417-6 Designing Solutions in Environmental

Engineering In this project-oriented course, students will apply concepts and principles from Environmental Science and fundamentals from Engineering to design Engineering solutions to Environmental problems. The course may include group projects and working with an industry in north/central BC , and cooperative work with students in ENSC 418-3 and ENPL 419-3.

Prerequisites: completion of 90 credit hours in an Engineering Program.
Co-requisites: ENSC 418-3/ENVS 418-3. The students will take the courses concurrently and use ENSC 417-6 to develop a mitigation strategy/design.

ENSC 418-3 Environmental Measurement and Analysis This is a capstone course for Environmental Science and Environmental Engineering Majors. It is a quantitative laboratory and field based course focusing on advanced environmental measurement and analysis of atmospheric, aquatic, and terrestrial systems. The approach is integrative and problem-oriented; students may examine natural and/or managed systems, including engineered systems (eg. waste management) and systems impacted by anthropogenic activity (eg. contamination).
Prerequisites: MATH 342-3, ENSC 308-3 or ENSC 200-3, 200 level 3 credit Chemistry, FSTY 205-3, and 90 credit hours or permission of the instructor.
Strongly recommended: BIOL 203-3, ENSC 201-3, ENSC 202-3. Precluded: ENVS 418-3

ENSC 425-3 Global Change Science Earth's environmental systems-atmosphere, biosphere, lithosphere and hydrosphere-are intimately interconnected and undergoing periodic and chaotic natural variability. A fifth "system" -the anthrosphere (human species)-has become an increasingly significant component of the Earth system. This course covers topics in global change science including: past climate and environmental change, climate and environmental variability and prediction, climate and environmental change interactions with biological organisms and ecosystems, implications of climate and environmental change for terrestrial systems, and the human role in global change.
Prerequisites: ENSC 201-3 and either of BIOL 110-3 or BIOL 201-3 or permission of the instructor.

ENSC 430-6 Undergraduate Thesis The undergraduate thesis allows students in Environmental Science or Environmental Engineering to devote time to a concentrated piece of research. The thesis may be completed over one or two semesters.

Prerequisites: 90 credit hours and permission of the instructor and Program Chair.

ENSC 440-(2-6) Internship May be repeated for credit (maximum six credit hours).
Prerequisites: permission of the instructor and Program Chair.
ENSC 451-3 Groundwater Hydrology This course introduces fundamental principles of groundwater flow and subsurface contaminant transport, and their applications to solve problems related to groundwater resources evaluation, development, and management. Topics include occurrence and movement of groundwater, steady-state and transient well hydraulics, site characterization, unsaturated flow theory, groundwater quality and contamination, contaminant transport simulation, petroleum hydrocarbon transport and remediation systems, and groundwater modelling techniques.
Prerequisites: ENSC 202-3 or ENSC 350-3 or GEOG 310-3 Recommended: ENSC 308-3

## ENSC 452-3 Reclamation and Remediation of Disturbed

Environments This course takes an integrative, scientific approach to the remediation and reclamation of drastically disturbed environments. Industrial activity and chemical spills can result in the contamination of soil, surface water, and groundwater. In addition, some industrial activities such as mining can cause large scale disturbances to the landscape, potentially impacting both terrestrial and aquatic systems. The focus is on the remediation and reclamation of terrestrial systems, but aquatic systems will be included.
Prerequisites: any second year 3-credit Chemistry, FSTY 205-3, and 60 credit hours.
Recommended: ENSC 308-3 and FSTY 455-3

## ENSC 453-3 Environmental Resources Management and

Decision Making This course introduces various decision-making models and methods to aid in environmental resources management. Topics include environmental economics, benefit-cost analysis, planning evaluation and review technique (PERT), linear programming, multi-objective programming, integer programming, stochastic programming, dynamic programming, and nonlinear programming. A number of environmental systems serve as management examples, such as water resources, water quality, air quality, groundwater, solid waste, and forest ecosystem. Supporting computer software may be used.
Prerequisites: MATH 100-3 and MATH 101-3, or MATH 152-3, or permission of the instructor.
Recommended: ENSC 308-3
ENSC 498-(1-6) Special Topics Selected environmental topics. May be repeated for credit (maximum six credit hours).
Prerequisites: permission of the instructor and Program Chair.
ENSC 499-(1-6) Independent Study May be repeated for credit (maximum six credit hours).
Prerequisites: permission of the instructor and Program Chair.

## Environmental Studies

ENVS 203-3 Environmental Policy Global, national and regional environmental issues and policy.

Prerequisites: GEOG 100-3, POLS 100-3 or permission of the instructor
Precluded: ENPL 203-3
ENVS 306-3 Human Ecology A review of ecological theory and research methods as they pertain to problems facing human societies today.
Prerequisites: 60 credit hours or permission of the instructor
ENVS 309-3 Women and Environmental Studies An analysis of various perspectives on women in science and women in environmental studies, including concepts such as ecological feminism.

Prerequisites: none

ENVS 311-3 Northern Perspectives Viewpoints and issues particularly relevant to environmental issues and planning activities in northern $B C$.

Prerequisites: none
Precluded: ENPL 311-3
ENVS 414-3 Environmental and Professional Ethics Analysis of environmental and natural resource issues from an ethical perspective; viewpoints and value systems that determine management decisions; professional ethics in natural resource management.
Prerequisites: 90 credit hours or permission of the instructor Precluded: NREM 411-3

ENVS 440-(2-6) Internship May be repeated for credit (maximum six credit hours).

ENVS 498-(1-6) Special Topics Selected environmental topics. May be repeated for credit (maximum six credit hours).
Prerequisites: permission of the instructor and Program Chair
ENVS 499-(1-6) Independent Study May be repeated for credit (maximum six credit hours).
Prerequisites: permission of the instructor and Program Chair

## First Nations Studies

UNBC's First Nations Studies courses are offered in a number of different locations: Prince George, New Aiyansh, Prince Rupert. Check the Registration Guide for locations in any particular semester.

FNST 100-3 The Aboriginal Peoples of Canada This course is an introduction to the languages, history, culture, and enduring presence of the aboriginal people of Canada, intended to explore the range of aboriginal social formations, both past and present, and to consider the future. Oral, written, and archaeological records will be examined. Special attention will be given to the crucial economic, social, and spiritual contacts that exist within aboriginal societies, as well as to materials on the changes that have occurred since contact with Europeans.
Prerequisites: none
FNST 131-3 A First Nations Language: Level 1 This course provides an introduction to the conversational and written elements of one First Nations language. It may be taught in a number of different sections, each of which may focus on a different language, e.g., Gitksanimx, Tlingit, Sekani, Beaver, Slavey, Tahltan, Chilcotin, or another Athabaskan language, Cree or Shushwap. Student transcripts will indicate the specific language studied.

## Prerequisites: none

FNST 132-3 A First Nations Language: Level 2 This course develops the reading, writing, and speaking skills in a First Nations Language. It may be taught in a number of different sections, each of which may focus on a different language, e.g., Gitxsanimx, Tlingit, Sekani, Beaver, Slavey, Tahltan, Chilcotin, Cree or other Athabaskan language, or Shushwap. Student transcripts will indicate the specific language studied.
Prerequisites: FNST 131-3 or permission of the Program Chair
FNST 133-3 Carrier Language: Level 1 This course provides an introduction to the conversational and written elements of the Carrier language.
Prerequisites: none
FNST 134-3 Carrier Language: Level 2 This course develops reading, writing, and speaking skills in the Carrier language.
Prerequisites: FNST 133-3 or permission of the Program Chair
FNST 135-3 Haisla Language ( X _a'islak'ala): Level 1 This course provides an introduction to the conversational and written elements of the X_a'islak'ala language.
Prerequisites: none
FNST 136-3 Haisla Language ( $X$ _a'islak'ala): Level 2 This course develops reading, writing, and speaking skills in the X_a'islak'ala language.
Prerequisites: FNST 135-3 or permission of the Program Chair
FNST 137-3 Tsimshian Language (Sm'algyax): Level I This course provides an introduction to the conversational and written elements of Sm'algyax.
Prerequisites: none
FNST 138-3 Tsimshian Language (Sm'algyax): Level 2 This course develops reading, writing, and speaking skills in Sm'algyax.
Prerequisites: FNST 137-3 or permission of the Program Chair
FNST 139-3 Nisga'a Language: Level 1 This course provides an introduction to the conversational and written elements of the Nisga'a language using materials from everyday life.

## Prerequisites: none

FNST 140-3 Nisga'a Language: Level 2 This course develops reading, writing, and speaking skills in the Nisga'a language.
Prerequisites: FNST 139-3 or permission of the Program Chair
FNST 143-3 Gitksanimx: Level 1 This course provides an introduction to the conversational and written elements of Gitksanimx.
Precluded: FNST 131-3 when taught as Gitksanimx
FNST 144-3 Gitksanimx: Level 2 This course develops reading, writing, and speaking skills in Gitksanimx.
Prerequisites: FNST 143-3
Precluded: FNST 132-3 when taught as Gitksanimx

FNST 161-3 A First Nations Culture: Level 1 This course focuses on one First Nation's culture. It may be taught in a number of different sections, each of which may focus on a different culture e.g., Haida, Gitxsan, Tlingit, Sekani, Beaver, Slavey, Tahltan, Chilcotin, or other Athabaskan culture, Shushwap, Métis. Student transcripts will indicate the specific culture studied.
Prerequisites: none
FNST 162-3 A First Nations Culture: Level 2 This course focuses on one First Nation's culture. It may be taught in a number of different sections, each of which may focus on a different culture e.g., Haida, Gitxsan, Tlingit, Sekani, Beaver, Slavey, Tahltan, Chilcotin, or other Athabaskan culture, Shushwap, Métis. Student transcripts will indicate the specific culture studied.

Prerequisites: FNST 161-3 or permission of the Program Chair
FNST 163-3 Carrier Culture: Level 1 This course provides an introduction to Carrier culture.

Prerequisites: none
FNST 164-3 Carrier Culture: Level 2 This course provides advanced study of Carrier culture.
Prerequisites: FNST 163-3 or permission of the Program Chair
FNST 167-3 Tsimshian Culture: Level 1 This course provides an introduction to Tsimshian culture.
Prerequisites: none
FNST 168-3 Tsimshian Culture: Level 2 This course provides advanced study in Tsimshian culture.
Prerequisites: FNST 167-3 or permission of the Program Chair
FNST 169-3 Nisga'a Culture: Level 1 This course provides an introduction to Nisga'a culture.
Prerequisites: none
FNST 170-3 Nisga'a Culture: Level 2 This course provides advanced study of Nisga'a culture.
Prerequisites: FNST 169-3 or permission of the Program Chair
FNST 171-3 Métis Studies Level One The course focuses on the Métis from their origins in the early Nineteenth Century, through the flowering of the Métis Nation on the Western Plains, to the situation of the Métis in contemporary Canadian society.
Prerequisites: none
FNST 172-3 Métis Studies Level Two: The Métis Nation and the Canadian State During this course, we will look closely at the historic and contemporary relations between the Métis, the Canadian State, and the ramifications of state policies on the maintenance of the Métis as a distinct people. We will also look at the way that Métis people, as individuals, have experienced the Canadian justice system.
Prerequisites: FNST 171-3

FNST 173-3 Gitksan Culture: Level 1 This course introduces students to Gitksan culture.
Precluded: FNST 161-3 when taught as Gitksan culture.
FNST 174-3 Gitksan Culture: Level 2 This course develops student knowledge of selected topics in Gitksan culture.
Prerequisites: FNST 173-3
Precluded: FNST 162-3 when taught as Gitksan culture
FNST 200-3 Methods and Perspectives in First Nations Studies An introduction to approaches to the cultures of contemporary First Nations including ethics of research and working with communities.
Prerequisites: registration as a major in First Nations Studies or permission of the Program Chair

FNST 203-3 Introduction to Traditional Environmental Knowledge Designed for students with an interest in First Nations traditional environmental knowledge (TEK). Students will develop research, writing and communication skills. The interdisciplinary course combines theory and practices from TEK literature, cultural ecology, ethnoscience and international development literature. Students will learn of particular TEK of particular interest to First Nations in northern British Columbia.

Prerequisites: FNST 100-3
FNST 205-3 Seminar in First Nations Studies Defining questions for the discipline. Major topics in the discipline will be introduced through the study of published examples by well-known contributors.

Prerequisites: registration as a major in First Nations Studies or permission of the Program Chair

FNST 206-3 First Nations Oral Literatures An introduction to oral traditions, storytelling, and the analysis of discourse structures.

Prerequisites: none

## FNST 215-3 Issues in External Relations for Contemporary

Indigenous Peoples An introductory survey of contemporary issues for First Nations people in BC , in Canada, and indigenous peoples of the world. Students will research and present seminars on specific issues in which governments and organizations external to the First Nation are involved, such as land rights, self-government, repatriation of cultural property, etc.
Prerequisites: FNST 100-3, or permission of the Program Chair
FNST 216-3 Issues in Internal Organization for Contemporary Indigenous Peoples An introductory survey of contemporary issues for First Nations people in BC, in Canada, and indigenous peoples of the world. Students will research and present seminars on specific issues in which decision making within First Nations is involved, such as political organization, economic and environmental strategies, and strategies for cultural survival, etc.
Prerequisites: FNST 100-3, or permission of the Program Chair

FNST 220-3 Introduction to Linguistics An introduction to linguistics with emphasis on aspects especially relevant to students interested in native languages of northern $B C$.

Prerequisites: none

## FNST 221-3 Practical Phonetics of First Nations Languages

An examination of the articulatory basis of human languages with an emphasis on the sounds of the First Nations languages of northern British Columbia. Includes intensive practice in the recognition, production and description of classes of sounds and the use of a practical writing system for one or more target languages.
Prerequisites: none
FNST 223-3 First Nations Language Immersion* This course provides intensive immersion experience in one First Nations language to facilitate development of conversational fluency. It will be taught in a number of different sections, each of which will focus on a different language, e.g. Haida, Sm'algyax (Coast Tsimshian), Nisga’a, Gitksanimx, Haisla, Tlingit, Sekani, Beaver, Slavey, Tahltan, Wet'suwet'en, Carrier, Chilcotin, or another Athabaskan language; or Shushwap. Student transcripts will indicate the specific language studied.
Prerequisites: none (may be offered concurrently with first and/or second level language courses). *Specific equivalent courses for each First Nations language may be substituted: e.g. FNST 231-3, 232-3, 233-3, 234-3, 235-3, 236-3, 237-3, 238-3, 239-3, 240-3

FNST 231-3 A First Nations Language: Level 3 This course provides an introduction to the conversational and written elements of one First Nations language. It may be taught in a number of different sections, each of which may focus on a different language, e.g., Gitksanimx, Tlingit, Sekani, Beaver, Slavey, Tahltan, Chilcotin, or another Athabaskan language, or Shushwap. Student transcripts will indicate the specific language studied.
Prerequisites: FNST 132-3, or equivalent, in the appropriate language
FNST 232-3 A First Nations Language: Level 4 This course provides an introduction to the conversational and written elements of one First Nations language. It may be taught in a number of different sections, each of which may focus on a different language, e.g., Gitksanimx, Tlingit, Sekani, Beaver, Slavey, Tahltan, Chilcotin, or another Athabaskan language, or Shushwap. Student transcripts will indicate the specific language studied.
Prerequisites: FNST 231-3, or equivalent, in the appropriate language
FNST 233-3 Carrier Language: Level 3 The development of speaking and understanding of the Carrier language, and reading and writing skills at the Intermediate level.
Prerequisites: FNST 134-3 or permission of the Program Chair
FNST 234-3 Carrier Language: Level 4 The development of speaking and understanding of the Carrier language, and reading and writing skills at the Intermediate level.
Prerequisites: FNST 233-3 or permission of the Program Chair

FNST 235-3 Haisla Language ( X _a'islak'ala): Level 3 The development of speaking and understanding of the X_a'islak'ala language and reading and writing skills at the Intermediate level.
Prerequisites: FNST 136-3 or permission of the Program Chair

FNST 236-3 Haisla Language (X_a'islak'ala): Level 4 The development of speaking and understanding of the X_a'islak'ala language and reading and writing skills at the Intermediate level.

Prerequisites: FNST 235-3 or permission of the Program Chair

FNST 237-3 Tsimshian Language (Sm'algyax): Level 3 The development of speaking and understanding of Sm'algyax and reading and writing skills at the Intermediate level.

Prerequisites: FNST 138-3 or permission of the Program Chair
FNST 238-3 Tsimshian Language: Level 4 The development of speaking and understanding of Sm'algyax and reading and writing skills at the Intermediate level.

Prerequisites: FNST 237-3 or permission of the Program Chair
FNST 239-3 Nisga'a Language: Level 3 The development of speaking and understanding of the Nisga'a language, and reading and writing skills at the Intermediate level. Materials studied will include modern texts as well as tapes of elders.

Prerequisites: FNST 140-3 or permission of the Program Chair or grade 12 equivalent

FNST 240-3 Nisga'a Language: Level 4 The development of speaking and understanding of the Nisga'a language, and reading and writing skills at the Intermediate level. Materials studied will include modern texts as well as tapes of elders.
Prerequisites: FNST 239-3 or permission of the Program Chair
FNST 243-3 Gitksanimx: Level 3 This course provides intermediate study of the conversational and written elements of Gitksanimx.

Prerequisites: FNST 144-3

FNST 244-3 Gitksanimx: Level 4 This course provides advanced study of the conversational and written elements of Gitksanimx.

## Prerequisites: FNST 243-3

Precluded: FNST 232-3 when taught as Gitksanimx

FNST 249-3 Aboriginal Resource Planning Designed for students who have an interest in First Nations and planning. The course will develop students' research, writing and communication skills. The interdisciplinary course combines theory and practices from traditional land use planning and First Nations practices and ideas concerning resource planning. Students will apply what they learn to issues of particular interest to First Nations in northern British Columbia.
Prerequisites: FNST 100-3

FNST 250-3 Canadian Law and Aboriginal Peoples An examination of the constitution, Indian Act, treaties, court decisions, and laws as they relate to the government and politics of aboriginal peoples.

Prerequisites: FNST 100-3 or POLS 100-3
Precluded: POLS 220-3
FNST 261-3 A First Nations Culture: Level 3 This course focuses on one First Nation's culture. It may be taught in a number of different sections, each of which may focus on a different culture e.g., Haida, Gitxsan, Tlingit, Sekani, Beaver, Slavey, Tahltan, Chilcotin, or other Athabaskan culture or Shushwap. Student transcripts will indicate the specific culture studied.
Prerequisites: FNST 162-3 focusing on the same culture, or permission of the Program Chair

FNST 262-3 A First Nations Culture: Level 4 This course focuses on one First Nation's culture. It may be taught in a number of different sections, each of which may focus on a different culture e.g., Haida, Gitxan, Tlingit, Sekani, Beaver, Slavey, Tahltan, Chilcotin, or other Athabaskan culture or Shushwap. Student transcripts will indicate the specific culture studied.
Prerequisites: FNST 261-3 focusing on the same culture, or permission of the Program Chair

FNST 263-3 Carrier Culture: Level 3 This course provides advanced study in Carrier culture.
Prerequisites: FNST 164-3 or permission of the Program Chair
FNST 264-3 Carrier Culture: Level 4 This course provides advanced study in Carrier culture.
Prerequisites: FNST 263-3 or permission of the Program Chair
FNST 267-3 Tsimshian Culture: Level 3 This course provides advanced study in Tsimshian culture.

Prerequisites: FNST 168-3 or permission of the Program Chair
FNST 268-3 Tsimshian Culture: Level 4 This course provides advanced study in Tsimshian culture.
Prerequisites: FNST 267-3 or permission of the Program Chair
FNST 269-3 Nisga'a Culture: Level 3 This course provides advanced study in Nisga'a culture.

Prerequisites: FNST 170-3 or permission of the Program Chair
FNST 270-3 Nisga'a Culture: Level 4 This course provides advanced study in Nisga'a culture.

Prerequisites: FNST 269-3 or permission of the Program Chair

## FNST 271-3 Métis Studies Level 3: Métis Communities in

Town and Country In this course we look at the variety of Métis communities located in both rural and urban areas. We will examine more specifically the manner in which these communities are formed, and the challenges that they face. Our focus is on contemporary social and political issues.
Prerequisites: FNST 172-3 or permission of the Program Chair

## FNST 272-3 Métis Studies Level 4: Working with Métis

Communities This class is designed to develop and apply a set of research skills and competencies for working with Métis Communities.
Prerequisites: FNST 271-3 or permission of the Program Chair
FNST 273-3 Gitksan Culture: Level 3 This course introduces students to advanced study of specific topics in Gitksan culture.
Prerequisites: FNST 174-3
Precluded: FNST 261-3 when taught as Gitksan culture
FNST 274-3 Gitksan Culture: Level 4 This course introduces students to advanced study of specific topics in Gitksan culture, including community-based research.
Prerequisites: FNST 273-3
Precluded: FNST 262-3 when taught as Gitksan culture
FNST 280-3 Aboriginal Medicines I-Harvesting and Preservation This course provides students with an understanding of the traditional health knowledge of a specific Aboriginal group. Students are expected to participate in the identification, description, and methods of harvesting and preserving plants for medicinal purposes. This course is taught in the traditional territory of a specific Aboriginal group.
Prerequisites: FNST 100-3
FNST 281-3 Aboriginal Medicines II-Administering Ethics This course examines the treatment of diseases, administering of medicines and ethical practices and standards within the traditional health knowledge of a specific Aboriginal group. Students are introduced to medicine from an Aboriginal worldview. This course is taught in the traditional territory of an Aboriginal group.

## Prerequisites: FNST 280-3

FNST 282-3 Aboriginal Health Philosophy This is an introductory course that examines traditional health knowledge, Aboriginal approaches to health, connection to the land, Aboriginal worldviews and spirituality, family systems and the importance of traditional food to good health. Students are introduced to the traditional health teachings of a specific Aboriginal group. This course is taught in the traditional territory of an Aboriginal group.
Prerequisites: FNST 100-3
FNST 298-(1-3) Special Topics in First Nations Studies
Prerequisites: permission of Program Chair

FNST 300-3 Research Methods in First Nations Studies Major methodologies such as participant observation, archival research, questionnaires and statistical analysis will be reviewed and considered in the light of other goals of the discipline.

Prerequisites: FNST 200-3

## FNST 301-3 Art and Material Culture of BC First Nations

A survey of major sources in the literature on First Nations art and material culture with an emphasis on contemporary forms. First Nations artists will participate in the seminar.
Prerequisites: upper division standing
FNST 302-3 First Nations Health and Healing A seminar on the concepts of health and healing including a review of major published materials. Representatives of First Nations communities and organizations will participate in the seminar.
Prerequisites: upper division standing
FNST 303-3 First Nations Religion and Philosophy A seminar on philosophy and religion in First Nations cultures. First Nations representatives will participate in the seminar.
Prerequisites: upper division standing

## FNST 304-3 First Nations Environmental Philosophy and

Knowledge A seminar on the knowledge and attitudes about the environment in First Nations cultures. First Nations representatives will participate in the seminar.
Prerequisites: upper division standing
FNST 305-3 Seminar in First Nations Studies This course examines sources for the development of the discipline. The theoretical approaches of major contributors to the discipline are examined in the context of theory in allied disciplines such as anthropology, literature and cultural studies.
Prerequisites: FNST 100-3 or permission of the Program Chair.
FNST 306-3 Indigenous Women: Perspectives The purpose of this course is twofold: first, to understand how Indigenous women's lives have been shaped by colonialism; and second, to delineate the global themes in their current political and social struggles to transcend the colonial legacy that continues to constrain them.
Prerequisites: FNST 100-3 or permission of the instructor. Precluded: WMST 306-3

FNST 310-3 Lisims Anadromous Summer and Fall Fisheries in Nisga'a Culture and History This course provides an opportunity to study the relationship between Nisga'a and anadromous summer and fall fisheries, primarily Salmonids. The course content focuses on Nisga'a culture, history, environmental philosophy and knowledge of these fisheries. Course content will include a holistic discussion of the fisheries, including such topics as spirituality, politics and diplomacy, traditional science and technology, and fisheries resource management. Students already receiving credit in FNST 304-3 at WWN prior to passage of this motion will not be eligible to receive credit in FNST 310-3.

Prerequisites: FNST 100-3 or FNST 169-3 or permission of the Chair

FNST 311-3 The Spring Anadromous Fisheries of Lisims in
Nisga'a Culture and History This course provides an opportunity to study the relationship between Nisga'a and spring anadromous fisheries. The focus will be on important fisheries of oolichan and early salmon, such as steelhead. The course content will focus on Nisga'a culture, history, environmental philosophy and knowledge of these fisheries. Course content will include a holistic discussion of the fisheries, including such topics as spirituality, politics and diplomacy, traditional science and technology, and fisheries resource management. Students already receiving credit in FNST 498-3 at WWN prior to passage of this motion will not be eligible to receive credit in FNST 311-3.

Prerequisites: FNST 100-3 or FNST 169-3 or permission of the Chair
FNST 315-3 Aboriginal Health Management This course examines government policies dedicated to the improvement of Aboriginal health in Canada. Population health, prevention and health promotion theories are explored as well as current health management structures in place in Aboriginal communities. This course is designed to be delivered in collaboration with an Aboriginal/First Nations community partner.
Prerequisites: FNST 282-3
FNST 316-3 Aboriginal Health and Chronic Illness This course provides students an opportunity to critically examine the current health status of Aboriginal people, including the incidence of chronic illness and mental health issues. Students are introduced to traditional Aboriginal healing practices intended to address the current state of Aboriginal health. This course is designed to be delivered in collaboration with an Aboriginal/First Nations community partner.
Prerequisites: FNST 281-3
Precluded: HHSC 471-3
FNST 317-3 Aboriginal Healing Practices This course focuses on the he traditional healing practices of a specific Aboriginal/ First Nations group. Students are expected to participate in the organization, preparation, and hosting of one or more traditional healing practice. This course is taught in the traditional territory of a specific Aboriginal group.
Prerequisites: FNST 281-3

## FNST 320-3 The Structure of a First Nations Language

An introduction to the linguistic structure of a First Nations language-words, phrases and sentences. Student transcripts will indicate the specific language studied.
Prerequisites: FNST 220-3

## FNST 321-3 First Nations Advanced Composition and

Conversation, Level 1 Advanced composition and conversation, using texts and tapes including poetry.
Prerequisites: level 4 (or equivalent) in the appropriate First Nations language

FNST 322-3 First Nations Advanced Composition and
Conversation, Level 2 Advanced composition and conversation, using texts and tapes including poetry.

Prerequisites: FNST 321-3
FNST 323-3 First Nations Advanced Translation and Transcription Translation and transcription from English to a First Nations language and back.

Prerequisites: advanced knowledge of a First Nations language satisfactory to the instructor

## FNST 324-3 Advanced First Nations Language Immersion*

This course provides advanced intensive immersion experience in one First Nations language to extend and deepen student skills and fluency in conversation and other oral genres (public speaking, storytelling, etc.). It will be taught in a number of different sections, each of which will focus on a different language, e.g. Haida, Sm'algyax (Coast Tsimshian), Nisga'a, Gitksanimx, Haisla, Tlingit, Sekani, Beaver, Slavey, Tahltan, Witsuwit'en, Carrier, Chilcotin, or another Athabaskan language, or Shushwap. Student transcripts will indicate the specific language studied. May be repeated for up to three additional credits with permission of the Program Chair; if repeated, credits may substitute for an advanced language course in the relevant language with permission of the Dean.
Prerequisites: FNST 223-3
*Specific equivalent courses for each First Nations language may be substituted.

FNST 325-3 First Nations Language Mentoring* This course provides an opportunity for students of First Nations languages to work with fluent speakers in a mentoring or apprenticeship context to develop language skills. It will be available in a number of different sections, each of which will focus on a different language, e.g. Haida, Sm'algyax (Coast Tsimshian), Nisga'a, Gitksanimx, Haisla, Tlingit, Sekani, Beaver, Slavey, Tahltan, Witsuwit'en, Carrier, Chilcotin, or another Athabaskan language, or Shushwap. Student transcripts will indicate the specific language studied.

Prerequisites: FNST 220-3 or FNST 223-3
Co-requisites: FNST 220-3 or FNST 221-3
*Specific equivalent courses for each First Nations language may be substituted.

FNST 400-3 Community-based Research Project Applying First Nations Research Methods Group projects will be undertaken in partnership with a community or organization under the supervision of a faculty member.

Prerequisites: FNST 300-3
FNST 405-3 Advanced Seminar in First Nations Studies:
Extending the Discipline A seminar on the theory and practice of First Nations Studies emphasizing critiques of theory; this seminar is an excellent preparation for graduate training.

Pre- or co-requisites: FNST 400-3

FNST 406-3 Comparative Rhetoric and Discourse This course is a seminar in which examples of contemporary rhetoric are considered as aesthetic and cultural performances.

Prerequisites: Upper division standing or permission of instructor.
FNST 407-3 First Nations Perspectives on Race, Class, Gender and Power An advanced seminar in which First Nations writings regarding experience of race, class, gender, and power will be discussed in relation to contemporary theory.

Prerequisites: upper division standing or permission of the Chair
FNST 408-3 First Nations Clothing and Adornment In this course, we will look at the clothing and personal adornment of First Nations people in North America, particularly Canada. We will examine clothing styles of the past and the traditional clothing styles worn today by First Nations. We will consider the resources used in the manufacture of materials, the science of clothing manufacture, the cultural meaning of clothing and adornment and the clothing of a number of culture areas. This course will provide students an opportunity to create an item of First Nations-style clothing or ornamentation for part of the grade. The course will begin with a discussion of possible projects, materials and techniques and then will move to a series of lectures. A number of classes thereafter will involve actual work on projects while short presentations are given by the instructor, guest speakers and class members.

Prerequisites: FNST 301-3, or permission of the Program Chair
FNST 409-3 Indigenous Perspectives on Reincarnation and Rebirth This seminar will review indigenous philosophy on the subject of reincarnation and rebirth, both of humans and of the animal realm or four legged, winged and finned creatures of this earth. The importance of these philosophies will be reviewed in terms of indigenous concepts of psychology and the nature of personality, of ecological concerns, of spirit dimensions as well as of nationhood. The course will briefly compare indigenous concepts of reincarnation and rebirth with those in Africa and the Hindu and Buddhist traditions, but the emphasis is on North American indigenous thought and experience regarding returning and rebirth.
Prerequisites: Upper division standing, or permission of the instructor
FNST 410-(3-6) Advanced Topics in First Nations Art and Material Culture Advanced Topics in Art and Material Culture of BC First Nations: A survey of major sources in the literature on focused topics in First Nations Art and Material Culture with an emphasis on contemporary forms. Topical focus may vary with each offering, ranging from clothing and adornment of First Nations Peoples: Northwest Coast design and carving; Métis material culture, etc. The course may cover traditional and contemporary material, sources of materials and science of artists will participate in the seminar, and students will work on projects as well as participate in seminars with the instructor, guest speakers and class members.
Prerequisites: FNST 301-3, or permission of the Program Chair

FNST 411-(3-6) Advanced Topics in Indigenous Religion and Philosophy Review of Indigenous philosophies on a selected topic (such as relations with animals or luck and hunting). The significance of the philosophies will be considered in the light of indigenous concepts of psychology and personality, ecological concerns, and nationhood. First Nations representatives will participate in the seminar.

Prerequisites: FNST 303-3, or permission of the Program Chair.
FNST 412-3 Political Economy and First Nations Women The purpose of this course is to understand how the political economy acts upon First Nation's women's lives in and beyond their home communities as well as to offer comparative examples of similar processes from elsewhere in the new world and from Asia and Africa

Prerequisites: upper division standing or permission of the Program Chair.
Precluded: WMST 412-3 (this is the same course as FNST 412-3)
FNST 416-3 International Perspective Indigenous Issues in International Perspective. An advanced seminar in which issues such as land rights, relations to nation states, and cultural harmony are examined by presenting cases from a variety of indigenous groups. This course may be taught as 416-3/606-3.
Prerequisites: FNST 100-3 or permission of the instructor
FNST 420-3 Developing Language Materials A presentation of design goals and practical considerations in the preparation of reference and pedagogical materials for poorly documented languages, with an emphasis on languages of northern BC.
Prerequisites: FNST 220-3
FNST 421-3 First Nations Songs and Poetry A study of songs and poetry in a First Nation's language.
Prerequisites: level 4 (or equivalent) in the appropriate First Nations language

FNST 422-3 First Nations Speeches and Stories A study of speeches and stories in a First Nation's language. Analysis of the various linguistic variations which accompany different kinds of speeches and stories.
Prerequisites: level 4 (or equivalent) in the appropriate First Nations language

FNST 423-3 A Study of a First Nation's Language Family and Its Linguistic Relatives This course will include: a survey and comparison of the languages in a particular language family; the evidence for the genetic affiliation of the languages; the correspondences among the languages and reconstruction of the proto-language; the evidence for subgrouping; discussion of possible remoter relations of the family; interaction with neighbouring languages; implications for prehistory.

Prerequisites: level 4 (or equivalent) in the appropriate First Nations language

## Course Descriptions: First Nations Studies, Forestry

FNST 424-3 The Literature of a First Nation A study of a First Nation's literature in a First Nation's language.
Prerequisites: level 4 (or equivalent) in the appropriate First Nations language

FNST 440-(3-6) Internship in First Nations Studies May be repeated once for a total of six credit hours.
Prerequisites: permission of the Program Chair
FNST 451-3 Traditional Use Studies An advanced seminar on traditional use studies, their use, application, and development. The seminar will examine the origins and development of this field, review case studies and recent applications, and contemporary policies.

Prerequisites: ANTH 101-3 or FNST 100-3 or permission of instructor Precluded: ANTH 451-3
FNST 497-(3-6) Senior Project in First Nations Studies Prerequisites: must be in final year of study and majoring in First Nations Studies; permission of Program Chair

## FNST 498-3 Special Topics in First Nations Studies

Prerequisites: permission of the Program Chair

## FNST 499-3 Independent Study in First Nations Studies

Prerequisites: permission of the Program Chair

## Forestry

FSTY 201-4 Plant Systems Identification and ecology of important forest plants (woody and herbaceous); attributes significant to vegetation management. Field trips required. Includes development of a plant collection.

Prerequisites: BIOL 101-4 and BIOL 102-4
Co-requisites: FSTY 205-3
FSTY 205-3 Introduction to Soil Science Chemical, physical, and biological properties of forest soils; fundamentals of soil formation; soil-water-plant relations, soil ecology and soil fertility. Field trips required.
Prerequisites: CHEM 100-3, 101-3, 120-1, 121-1

FSTY 206-3 Forest Biology Biology and ecology of forest ecosystems; structure and function of forest trees and stands; influence of biotic and abiotic factors on tree and stand growth.
Prerequisites: BIOL 101-4 and 102-4
FSTY 208-3 Silvics This course covers the physiology and life history of trees, silvicultural attributes of tree species of Western Canada, ecological site quality, and applications in silviculture.
Prerequisites: FSTY 201-4 and FSTY 205-3
Co-requisites: FSTY 206-3

FSTY 302-3 Forest Harvesting Systems Forest harvesting concepts and practices. Road building, machine and cable systems and horse logging. Field trips required.
Prerequisites: CPSC 110-3, FSTY 205-3, and 305-3
Co-requisite: FSTY 310-3
Precluded: FSTY 402-3

FSTY 305-3 Silviculture I Stand dynamics, natural and artificial regeneration methods, site preparation, intermediate stand treatments, relationships of natural resource management to silviculture practices. Field trips required.
Prerequisites: FSTY 201-4, 205-3, 206-3, 208-3, NREM 203-3
FSTY 307-4 Forest Health Principles and concepts of forest entomology and forest pathology. Processes for addressing forest health problems. Field trips required.
Prerequisites: 60 credit hours, FSTY 201-4 and FSTY 208-3
FSTY 309-3 Fire Ecology and Management Physical nature and behaviour of forest fire (natural and prescribed). Fire ecology and practices of forest fire management. Field trips required.
Prerequisites: ENSC 201-3 and FSTY 201-4 or BIOL 301-3
FSTY 310-3 Forest Economics Contemporary issues in the allocation of natural resources. Economic concepts and tools applied to the forestry, recreation, and other natural resource sectors.
Prerequisites: ECON 100-3
Precluded: RRT 310-4
FSTY 315-3 Forest Soil Management This course examines the physical, chemical and biological determinants of forest soil productivity and introduces the basic principles of forest site classification, emphasizing systems used in British Columbia. Forest practices in all phases of land management (harvesting, site preparation, stand tending ) is examined to provide an understanding of their effects on soil properties and productivity. The regulatory framework governing soil conservation in BC forestry is reviewed, along with methods used to restore productivity to damaged forest soils. Field trips and laboratory exercises provide experience in techniques for assessing forest soil properties and management impacts.
Prerequisites: FSTY 205-3
FSTY 405-3 Silviculture II Factors influencing forest yields, traditional prediction methods; growth and yield simulations. Exploration of stand dynamics, quantitative implications of management treatments and environmental limitations to tree and stand growth.
Prerequisites: NREM 203-3, MATH 152-3, 342-3 and FSTY 305-3

FSTY 407-3 Forest Products Properties, values and processing of forest products including wood, pulp and paper, pharmaceuticals, and other botanical products. Life cycle analysis of products manufactured from wood and its derivatives. Value-added strategies and product diversification through manufacturing and marketing. Field trips required.

Prerequisites: CHEM 100-3 and 101-3.
FSTY 408-3 Forest Practices and Management Principles and operational practices for the management of forest land including forest estate planning, harvest scheduling, and legislative requirements.
Prerequisites: FSTY 302-3
Co-requisites: FSTY 405-3
FSTY 425-3 Soil Formation and Classification Examination of soil formation with emphasis on environmental forces including human activity as a factor of soil formation; distribution and classification of soils of northern and interior BC; correlation of Canadian System of Soil Classification with international systems of classification such as Soil Taxonomy and FAO/UNESCO Soil Map of the World. Field trips are required.
Prerequisites: FSTY 205-3 or permission of the instructor
FSTY 440-(2-6) Internship May be repeated for credit (maximum six credit hours).

## FSTY 455-3 Biogeochemical Processes in Soil

Systems Principles, components and measurement of physical, chemical and biological processes in soils. Biogeochemical processes will be related to forest fertility and environmental quality concerns such as pollution of soil and water.
Prerequisites: FSTY 205-3 or permission of the instructor Co-requisites: NREM 655-3

FSTY 498-3 Special Topics May be repeated for credit (maximum three credit hours).

FSTY 499-(1-6) Independent Study May be repeated for credit (maximum of six credit hours)

## Geography

GEOG 100-3 Environments and People This course is intended to provide students with an interdisciplinary understanding of earth and environmental processes and the results of human intervention in these processes. This includes the changing relationship of humans with the natural world and different approaches to understanding and solving environmental problems, local to global. It investigates such issues as human populations, loss of biodiversity, air and water pollution, energy use, climate change and ozone depletion.

[^6]GEOG 101-3 Human Geography This course provides an introduction to the major traditions, themes and theories of human geography. Emphasis is placed on the concepts and methods used to understand the human environment at a range of geographic scales.

Prerequisites: none
Precluded: GEOG 201-3
GEOG 200-3 Geography of BC This course provides an introduction to the biophysical and human landscapes of British Columbia with a special emphasis on the relationship of Northern BC to the rest of the province. The course takes a regional approach to understanding the links between the physical geography of the province and its settlement patterns, resource use and economic development.

## Prerequisites: none

GEOG 202-3 Economic Geography The central focus of this course is the spatial organization of economic activity with particular attention to understanding spatial patterns in the context of the global economy. The course will also provide a survey of the theories and methods which inform contemporary economic geography.

## Prerequisites: none

GEOG 203-3 Geography of Canada A regional approach is used to examine the economic, political, cultural and environmental factors shaping relationships between people and places in Canada. A central concern is with the geographic patterns of regional development and change.

## Prerequisites: none

## GEOG 204-3 Introduction to GIS for the Social Sciences

To manipulate database and spatial information and to create GIS based illustrations and maps. This lab-based introductory course will provide a foundation in GIS for social scientists. Students will incorporate data searching and acquisition, manipulation of information in spreadsheets, reviewing quality of data, spatial properties of geographic information, linking meta-data to spatial features, basic cartographic techniques and map production.

## Prerequisites: none

GEOG 205-3 Cartography and Geomatics This course examines mapping techniques and thematic layers, using GIS software in the labs. Topics include coordinate systems, symbolisation, terrain depiction and visualisation, aerial photography, satellite images and Global Positioning Systems (GPS). It introduces students to the world of maps and to Geographic Information Systems (GIS) technology.

Prerequisites: none
GEOG 206-3 Social Geography The course will survey the theoretical and methodological frameworks in contemporary social geography. Emphasis will be given to examining patterns of change in society by exploring the everyday experience of social groups defined on the basis of social class, ethnicity and "race," household and family status, gender, and community.
Prerequisites: GEOG 100-3 or 101-3 or permission of the instructor Precluded: GEOG 304-3

GEOG 207-3 Historical Geography of Canada This course takes a detailed look at Canada since the beginning of European contact, with emphasis on the changing geographical patterns of settlement, economy and culture.
Prerequisites: None
Precluded: GEOG 307-3

GEOG 210-3 Geomorphology This course reviews the nature and formation of major landforms of the Earth's surface. Consideration is given to rock weathering and slope movement, erosional and depositional effects of wind, wave-action, water and ice movement.

Prerequisites: PHYS 115-4 or Grade 12 Physics or CORE102-3, or permission of instructor

GEOG 300-3 Geographic Information Systems This lab-based course examines the data management and analysis capabilities of GIS, with special emphasis on natural resources and environmental studies. Topics include methods of data input, co-ordinate systems, data sources, attributes, formats and conversion, digital elevation data, raster-vector models, data availability and quality. Lectures introduce two labs per week.

Prerequisites: 30 credits or permission of instructor
GEOG 301-3 Cultural Geography This course examines how the human organization of space differs across cultures. Cultural landscapes, patterns and processes of cultural change and interactions, and the control of space and creation of place, will be central course themes. This course is a writing intensive course.
Prerequisites: GEOG 100-3 or 101-3 or 206-3 or permission of instructor

GEOG 302-3 Geography of Russia This course explores the interaction of the physical and human landscapes of Russia, emphasizing changing spatial relations in the post-Soviet period, nationality issues, and the environment.

Prerequisites: 30 credit hours, and GEOG 100-3 or 101-3, or permission of instructor

GEOG 303-3 Recreational Geography This course considers geographic input to outdoor recreation; behavioural spatial approaches to participation and conflict in resource use, social and ecological carrying capacity and recreation space management.
Prerequisites: GEOG 100-3 or 101-3
GEOG 305-3 Political Geography This course provides an introduction to the field of political geography by examining the interactions between politics and space at a variety of scales. In order to explore these interactions special emphasis is placed on the relationships between political decision-making and geographical location.

Prerequisites: GEOG 100-3 or 101-3 and 60 credit hours

GEOG 306-3 Geography of International Development This course examines themes, concepts, theories, and trends which define the study of international development from a geographical perspective. Students will gain an understanding of the historical and contemporary challenges of global inequality, debt, foreign aid, disasters, displacement, and development assistance. Case studies from around the world are used to provide context-specific, gender differentiated information about international development problems and promise.

Prerequisites: GEOG 100-3 or GEOG 101-3 or GEOG 206-3 or permission of instructor

GEOG 308-3 Introduction to Medical Geography This course provides an introduction to the basic themes, concepts, theories, models, and methods of medical geography.

Prerequisites: 60 credit hours and GEOG 100-3 or GEOG 101-3 Precluded: HHSC 421-3

GEOG 309-3 Geographies of Migration and Settlement This course examines urbanization, globalization, and international migration as dynamic processes related to human settlement which are changing our social and physical spaces. The course examines major theoretical approaches to global migration processes, and the settlement forms and organization resulting from migration, refugee movements, and globalization, with particular emphasis on reconfigured urban and rural spaces in the Americas.

Prerequisites: 30 credit hours, GEOG 206-3, or permission of the instructor.

GEOG 310-3 Hydrology This course is an introduction to hydrology and will include the components of the hydrological cycle, an investigation of the processes of water movement and storage, and an introduction to drainage basin form and process.
Prerequisites: ENSC 201-3
GEOG 311-3 Concepts in Geomorphology This course surveys process geomorphology, including: weathering, fluvial, glacial, periglacial, and near-shore marine processes. Emphasis will be on geomorphologic processes associated with Canadian landforms. Field trips may be required.

Prerequisites: GEOG 210-3 and PHYS 100-4

GEOG 322-3 Economic Geography of Northern BC This course builds upon basic concepts in economic geography through a specific examination of northern British Columbia.

Prerequisites: GEOG 202-3
GEOG 333-3 Geography Field School Students apply field methods in physical and/or human geography towards an integrated study of local and global environments.

Prerequisites: none
Class Restrictions: 60 credit hours

GEOG 401-3 Resource Geography This course examines global resources and their role in questions of conservation and economic development. Emphasis is placed on global and international resource issues and the role of public policy.

Prerequisites: 60 credit hours and at least one of GEOG 100-3, GEOG 101-3 or GEOG 202-3.

GEOG 402-3 Geography of the Circumpolar North This course examines evolving spatial patterns of human occupancy of the North; social, economic and political dimensions of development in the Circumpolar North in light of physical environments; impacts of internal colonialism; and geographical perspectives on Northern selfdetermination movements.
Prerequisites: 60 credit hours, GEOG 100-3, and GEOG 101-3 or GEOG 206-3 or permission of the instructor

GEOG 403-3 Aboriginal Geography This course analyzes aboriginal land tenure systems, processes of land alienation, and First Nations methods used for regaining control over land, including "land claims". Case studies are drawn from First Nations in Canada, and the Circumpolar North.

Prerequisites: 60 credit hours, GEOG 101-3 or GEOG 206-3 or permission of the instructor

GEOG 405-3 Fluvial Geomorphology This course investigates river channel morphometry and landforms developed by running water: a focus on the physical processes and techniques of measurement. Weekend field trips required.
Prerequisites: GEOG 311-3
GEOG 411-3 Advanced Elements in Geomorphology This course emphasizes Quaternary geomorphology. Advanced topics vary from year to year and include examples from the North and BC.
Prerequisites: GEOG 210-3, 311-3
GEOG 412-3 Geomorphology of Cold Regions This course provides a detailed look at the processes and landforms of cold regions.
Prerequisites: GEOG 210-3 or permission of the instructor
GEOG 413-3 Advanced GIS This course is a project- oriented course following on from GEOG 300-3 and including topics such as spatial data set construction, data conversion, advanced digital elevation modelling, visualization and integration of raster imagery.
Prerequisites: GEOG 300-3 or permission of the instructor
GEOG 414-3 Weathering Processes A detailed investigation of weathering processes and their applied aspects.

Prerequisites: GEOG 311-3

GEOG 422-3 Geography of the World Economy This advanced seminar course surveys theoretical approaches in economic geography related to interpreting economic restructuring within the global economy, especially with regard to uneven development and its environmental impacts. Specific topics covered include world-systems theory, dependency theory and the eco-economy approaches, as well as the role of international agreements and trade and partnerships.
Prerequisites: 60 credit hours and GEOG 202-3, or permission of the instructor

GEOG 424-3 Social Geography of Northern Communities This advanced seminar course examines the social geography of communities within the specific context of the North. It emphasizes case study research drawing upon examples from northern BC .
Prerequisites: 60 credit hours and GEOG 206-3, or permission of the instructor

GEOG 426-3 Geographies of Culture, Rights and Power This seminar examines geographical approaches to culture, rights, and power as they relate to issues of political violence experienced by indigenous peoples, labour organizations, and social movements. Primary geographical focus is on the Mesoamerican region, particularly Guatemala, El Salvador, and Chiapas, Mexico. Implications for Canada and the United States are explored through consideration of refugee movements, foreign policy, and grassroots solidarity organizing.

Prerequisites: GEOG 206-3 or GEOG 301-3 or permission of instructor
Precluded: GEOG 498-3 Culture, Rights and Power
GEOG 428-3 Advanced Medical Geography This advanced course provides for a more intricate understanding of the spatial aspects of health and health care delivery. Students apply population health research techniques and tools such as GIS to the circumstances of people in their lived environments. Emphasis is placed on rural and remote places in northern BC .
Prerequisites: 60 credit hours, GEOG 204-3 and GEOG 308-3
GEOG 430-(3-6) Undergraduate Thesis Student must have completed at least 90 credit hours of study and be a Geography Major. The thesis may be taken in one or two semesters in the senior year.

Prerequisites: permission of the instructor and the Program Chair
GEOG 432-3 Remote Sensing This course covers digital processing of satellite imagery and integration with raster and vector GIS technology in natural resources and remote sensing of the environment. Topics include sensor platforms and data collection, preprocessing, enhancement, classification, change detection, multi-data integration and vectorization.
Prerequisites: GEOG 205-3 or GEOG 300-3 or permission of the instructor

GEOG 440-(2-6) Internship May be repeated for credit (maximum six credit hours).

GEOG 457-3 Advanced Remote Sensing This project-oriented course focuses on advanced classification procedures incorporating digital elevation data, fuzzy and object-oriented classification, and new millennium data sources including ASTER, RADAR, MODIS, LIDAR and high-resolution scenes. Repeat imagery is used to assess local and global changes in land cover, oceanic, atmospheric and/or cryospheric environments.

Prerequisites: GEOG 432-3 or permission of the instructor
GEOG 498-(1-3) Special Topics May be repeated for credit (maximum three credit hours).

GEOG 499-(3-6) Independent Studies Concentration is on a particular topic agreed upon by a member of the faculty and the student (maximum six credit hours).
Prerequisites: permission of the Program Chair

## Health and Human Science

## HHSC 101-3 Introduction to Health Sciences I: Issues and

 Controversies A review of current issues and controversies with respect to individual and population health. Topics covered will include infectious disease, cancer, genetic disease, behavioural determinants of health, addictive behaviour, eating behaviour and the role of nutrition in chronic disease.
## Prerequisites: none

## HHSC 102-3 Introduction to Health Sciences II: Rural and

Aboriginal Issues This course will provide an overview of individual and population health, health care systems, legislation, and the roles of the various health care professions in rural and aboriginal communities. Models of interdisciplinary cooperation, models of community health, and ethical issues are also covered.

## Prerequisites: none

HHSC 103-3 Health Care Systems This course examines health care systems from a public versus private perspective and explores how various systems impact the health and well-being of patients.

Prerequisites: Enrolment in the BHSc program, or permission of the instructor.

HHSC 110-3 Basic Microbiology Presents the basic principles of microbiology with an emphasis on the relevance of these principles to human health. A survey of the major types of microorganisms and a discussion on how they are classified and identified is addressed. An introduction to virology and bacterial metabolism including environment factors which affect microbial growth and survival, is presented. A laboratory component is included.

Prerequisites: Biology 12 and Chemistry 11

HHSC 111-3 Anatomy and Physiology I This course is the first half of a comprehensive survey of the structures and functions of the human organ systems. Lecture topics include cellular physiology, histology, and studies of the integumentary, skeletal, nervous and endocrine systems. A laboratory component is included. This course is appropriate for students who intend to enter Health Sciences programs.
Prerequisites: Biology 12 and Chemistry 11
HHSC 112-3 Anatomy and Physiology II This course is a continuation of HHSC 111-3. It is designed to cover the anatomy and physiology of the muscular, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. Emphasis is on the importance of homoeostasis and how it is maintained by the concerted proper functioning of the body systems. A laboratory component is included.

Prerequisites: HHSC 111-3
HHSC 201-3 Ethics and Law in Health Care This course examines ethical and legal concepts as applied to health care and health care research. Further, students explore how new technology and therapeutic practices change the parameters of ethical and moral reasoning, and the impact this has on health law. In addition, students are exposed to ethical practices and policies that form the foundation of health related research.

Prerequisites: Enrolment in the BHSc program, or permission of the instructor.

HHSC 311-3 Nutrition This course reviews nutrient requirements across the lifespan and physiological connections of diet to health and disease. Therapeutic aspects of hyper alimentation and special diets in disease states are covered.

Prerequisites: Enrolment in the BHSc program.
Precluded: NURS 303-3
HHSC 330-3 Health Information Management Technology This course examines the birth and evolution of Health Information Management Technology (HIMT) within the health care system. Topics include the nature of data gathering and analysis in evidencebased practice, the determination of health resource needs, and the application of HIMT in risk management, epidemiology and demographics. It is strongly recommended that students have a working knowledge of spreadsheets and familiarity with databases before taking this course.
Prerequisites: Upper level standing in the BHSc program, or permission of the instructor.

HHSC 350-3 Introduction to Epidemiology This course applies epidemiological principles in the examination of patterns of disease and disability among populations, particularly those in northern latitudes. It introduces students to the interpretation of vital statistics, the critique of cross-sectional, case-control and cohort design and the principles of screening.
Prerequisites: Upper level standing in the BHSc program.
Precluded: NURS 306-3

## HHSC 351-3 Research Design and Methods for Health

Sciences This course examines qualitative and quantitative research methods and design in the health field and the ethical and legal issues associated with health care research.

Prerequisites: MATH 242-3 or ECON 205-3, Upper level standing in the BHSc program, or permission of the instructor.

HHSC 370-3 Occupational Health This course introduces students to the scientific basis of occupational health, specifically the relevant principles and concepts of injury prevention, disability management, ergonomics, toxicology, wellness and the general concepts of healthy workplaces. The nature of common occupational health hazards and their effect on humans is examined. Examples of common preventative and protective measures and controls are also reviewed.

Prerequisites: Upper level standing in the BHSc program, or permission of the instructor.

HHSC 420-3 Interdisciplinary Child Welfare Practice This elective course will identify and provide opportunities to practice the skill, knowledge, abilities and beliefs necessary for collaborative, interdisciplinary practice in child welfare. The course will explore the meaning, context and skills of interdisciplinary practice. It will provide opportunities for understanding the rationale for interdisciplinary practice as well as exploring a critical analysis of interdisciplinary practice. Finally, it will provide opportunities to understand the perspectives and interdependence of the differing disciplines as they relate to child welfare.
Prerequisites: upper division undergraduate standing
HHSC 421-3 Medical Geography This course provides an introduction to the basic themes, concepts, theories, models and methods of medical geography.
Prerequisites: Upper level standing in the BHSc program. Precluded: GEOG 308-3

HHSC 451-3 Health Sciences Research Project This course enables students, individually or in groups, to explore a particular health issue in depth by defining a problem, collecting, analyzing and interpreting secondary and primary data, and presenting results in written and oral formats.
Prerequisites: HHSC 351-3, or permission of the instructor.
HHSC 471-3 Aboriginal Health and Chronic Disease This course provides students an opportunity to examine critically the current health status of Aboriginal people, including the incidence of chronic illness and mental health issues. Students are introduced to traditional Aboriginal healing practices intended to address the current state of Aboriginal health. This course is designed to be delivered in collaboration with an Aboriginal/First Nations community partner.
Prerequisites: Upper level standing in the BHSc program.
Precluded: FNST 316-3

HHSC 473-3 Health Promotion This course examines health promotion theories, principles, and underlying philosophies within a primary health care framework. Students identify and critique health promotion issues and explore strategies which promote well-being among individuals, groups, and communities.

Prerequisites: Upper level standing in the BHSc program. Precluded: NURS 402-3

## History

HIST 110-3 Indigena This course provides an introduction to the history of indigenous peoples around the world, particularly in North America, northern Europe, Siberia, and the Pacific.

## Prerequisites: none

HIST 180-3 War, Terror \& Society I This course will provide an introduction to the relationship between war and society from the classical age of Greece and Rome to the French revolutionary wars. Themes may include the composition and training of military forces, the role of beliefs and ideologies in the conduct of war, the various kinds of human conflict, the importance of technological change and the impact of war on social and political institutions.

Prerequisites: none
HIST 181-3 War, Terror \& Society II This course provides an introduction to the relationship between war and society from the French revolutionary wars to the war in Iraq and beyond. Themes may include the composition and training of military forces, the role of beliefs and ideologies in the conduct of war, the various kinds of human conflict, the importance of technological change and the impact of war on social and political institutions.
Prerequisites: none

HIST 190-3 The West and the World to 1660 This course examines the history of the Western world from antiquity to 1660 , with a particular focus on the history of the West's interactions with other, non-western, societies. Topics to be covered will include the Roman Empire, Christianity, feudalism, the Renaissance, the Reformation, and European expansion overseas. These developments changed Europe, and the world beyond Europe, and are affecting us still. Students will also be introduced to the discipline of history and its practical skills in effective reading, research, analysis, and presentation.

Prerequisites: none
HIST 191-3 The West and the World Since 1660 This course examines the history of the Western world since the rise of absolutist monarchies in the late 17th century, with a particular focus on the history of the West's interactions with other, non-western societies. Topics to be covered include absolutism, nationalism, industrialization, the French Revolution and the world wars of the 20th century. These developments changed Europe, the world beyond Europe, and are affecting us still. Students will also be introduced to the discipline of history and its practical skills in effective reading, research, analysis, and presentation.

Prerequisites: none

HIST 210-3 Canada Before Confederation The political, social and economic development of Canada from the first contact with Native people to 1867.
Prerequisites: none
Precluded: Former HIST 200-3

HIST 211-3 Canada Since Confederation The development of Canada from 1867, with emphasis on social movements, economic development, politics and political protest, and regionalism.

Prerequisites: none
Precluded: HIST 201-3
HIST 221-3 United States from Colonization to 1877 An introduction to the formation of the United States from colony to nation, addressing themes of cultural, social, political and economic history and the relationships among Aboriginal, African and European peoples.
Prerequisites: none
Precluded: HIST 220-3

HIST 222-3 The United States Since 1877 An introduction to the formation of the United States after the Reconstruction Period addressing themes of cultural, social, political and economic history.

Prerequisites: none
Precluded: HIST 220-3

HIST 230-3 Medieval and Renaissance Europe An introduction to the cultural, spiritual, social and political life of Europe from the 5th century to the 15th.

Prerequisites: none
HIST 240-3 The Expansion of Europe The expansion of Europe from the Renaissance to the French Revolution. Themes to be explored include the growth of the early modern state, economic growth and technological innovation, military development and international conflict, and the relationship between religion and expansion. The creation of European empires and settlements in the western hemisphere will be highlighted.

Prerequisites: none
HIST 241-3 The Age of Empire: Europe and the World, 1789-1914
A survey of relations between Europe and Asia, Africa and the Americas from the French Revolution to the First World War.

Prerequisites: none

HIST 280-3 Colonial Latin America This course is an introduction to the history of Latin America from the fifteenth century to the early nineteenth century. Topics to be discussed include Amerindian polities and empires on the eve of contact with Europe; contact, conquest, and colonization; conversion and religious adaptation; colonial imperial administration; Latin American economy in the world system; cultural conflict, resistance, and hybridization among European, African, and Aboriginal peoples; and the gradual emergence of distinctly Latin American identities.
Prerequisites: none

HIST 281-3 Republican Latin America This course is an introduction to the history of modern Latin America from the Wars of Independence in the early nineteenth century to the present day. Topics discussed include the Wars of Independence; personalist rule and institutional instability in the first half of the nineteenth century; class, race, gender, and Latin American identity; neocolonialism and the reintegration of Latin America into the global economy; modernity and Latin American nationalism; socialist revolution and conservative dictatorship; and neoliberalism and its discontents at the end of the twentieth century.
Prerequisites: none

HIST 290-3 The Contemporary World This course explores the conflicting identities and aspirations of local, national, and international groups and communities in the 20th century world. The themes of social movements, ethnicity, nationalism, imperialism, internationalism, and decolonization are explored from a global perspective.
Prerequisites: none

## HIST 300-3 Historiography: The Nature of the Historical

Discipline Students in this course will examine the nature of history as a discipline of study and how historians approach their craft.
Prerequisites: two history courses or permission of the instructor
HIST 301-3 The Canadian North The history of the provincial and territorial Canadian North with emphasis on the pre-contact period, Native-white relations, and the impacts of government on the region.
Prerequisites: two history courses or permission of the instructor

HIST 302-3 The Prairie West This course considers the history of the three prairie provinces from the coming of Europeans to the present with emphasis on Native peoples, the fur trade, the development of society and the economy, political protest and regional alienation.

Prerequisites: HIST 210-3 and HIST 211-3 or permission of the instructor

HIST 303-3 British Columbia This course examines the history of the province from the coming of Europeans to the present, with emphasis on Native cultures, the fur trade, colonization, the development of institutions, society and the economy, as well as the growing sense of regional identity.
Prerequisites: HIST 210-3 and HIST 211-3 or permission of the instructor
Precluded: HIST 303-3 or HIST 406-3
HIST 311-3 History of Feminism This course will survey the history of those various political, social and cultural movementssuffragism, women's liberation etc.-which have combined to create the phenomenon of feminism. Attention will also be devoted to the diverse theories, ideas and values that underpin contemporary feminism.

Prerequisites: HIST 270-3/WMST 270-3/HIST 312-3/WMST 312-3, or HIST 312-3, or permission of the instructor
Precluded: WMST 311-3 (This is the same course as HIST 311-3)

HIST 312-3 An Introduction to the History of Gender The course explores issues of gender in historical context using a case study approach.

Prerequisites: none
Precluded: WMST 270-3/WMST 312-3, HIST 310-3 \& HIST 270-3
HIST 320-3 The Western United States This class focuses on social relations in the US West from pre-contact times to the present and on the West's mythical place in US history.

Prerequisites: HIST 221-3 and HIST 222-3 or permission of the instructor

HIST 321-3 Modern US Social and Intellectual History Students taking this class will study the main social and intellectual movements in the United States from the mid-nineteenth century to the present.

Prerequisites: two history courses or permission of the instructor
HIST 354-3 The Circumpolar World This course provides an introduction to the nature of nordicity through the history of areas such as northern Canada, Alaska, the Nordic Countries, and Siberia.
Prerequisites: None
Precluded: HIST 255-3
HIST 355-3 Russian Imperial History This course explores the history of Imperial Russia from the eleventh century to the Russian Revolutions of 1917. It focuses on Russia and its expansion, covering a range of themes from centre-periphery relations, Aboriginal peoples, the peasantry, women, and revolution, with a particular focus on the north.

Prerequisites: two history courses or permission of the instructor
HIST 356-3 Soviet History This course will explore the history of the Soviet Union from the Bolshevik Revolution of 1917 to break-up. Themes focus on the development of the Soviet Union, emphasizing Soviet power and its impact on peripheral areas, Aboriginal peoples, nationalism, women, and culture, with particular focus on the north.
Prerequisites: two history courses or permission of the instructor
HIST 357-3 Nordic History This course examines the history of Northern Europe from the 16th century to the present, with particular attention to nation-building, indigenous populations, women, and the rise of the welfare state.

Prerequisites: HIST 255-3 or HIST 354-3 or permission of the instructor

HIST 360-3 An Introduction to Environmental History This course examines the relationship between humans and the natural environment from a historical perspective. The effects of the environment on human imagination and the impact of human activities on the environment are considered in a variety of historical settings.
Prerequisites: none
Precluded: HIST 260-3

HIST 380-3 Modern Mexico This course examines the history of Mexico from Independence in 1821 to the present, with emphasis on state building, economic development, and cultural transformations.

Prerequisites: HIST 281-2 (Republican Latin America) or permission of the instructor.

HIST 390-3 Aboriginal People in Canada This course will emphasize the history of Native people since the coming of Europeans. It will look at both the fur trade and the settlement periods as well as the development of Native political protest up to the present.

Prerequisites: HIST 210-3 and HIST 211-3 or permission of the instructor
Precluded: HIST 400-3
HIST 391-3 Aboriginal People in the United States The history of Native People from the coming of Europeans. The course will cover the fur trade, settlement and dispossession, and the resurgence of Native people in recent years.
Prerequisites: HIST 221-3 and HIST 222-3 or permission of the instructor
Precluded: HIST 420-3
HIST 402-3 Women in Canada This course explores the constructions of Canadian womanhood and experiences of Canadian women from early contact to the present. Themes include First Nations women, women in colonial society, women and work, women and reform, women and the state, lesbian women, and feminism.
Prerequisites: HIST 210-3 and HIST 211-3 or permission of the instructor

HIST 405-(3-6) Topics in the Canadian North This course focuses on one or more particular themes in the history of the Canadian North such as Native cultures, Native-European relations, the resource economy, northern society, or the impact of distance and isolation. The course may be repeated with the permission of the instructor and program chair if the subject matter of the course differs substantially.
Prerequisites: HIST 301-3 or permission of the instructor
HIST 407-(3-6) Topics in Local History/Methodology This course examines the craft of history by focusing on the history of localities in northern British Columbia. Students are expected to conduct their own research using primary sources. The course may be repeated with the permission of the instructor and program chair if the subject matter of the course differs substantially.
Prerequisites: HIST 200-3 or permission of the instructor
HIST 421-(3-6) Topics in Environmental History This course explores aspects of environmental history in a variety of geographic settings in various historical periods; the precise content of the course will vary from year to year depending on the expertise of the instructor. The course may be repeated with the permission of the instructor and program chair if the subject matter of the course differs substantially.
Prerequisites: HIST 260-3 or HIST 360-3 or permission of the instructor

HIST 440-(3-6) Internship in History An academic course delivered in relevant workplaces (museums, archives, etc). Students will be supervised in a manner that will enable them to integrate their academic skills with practical application. May be repeated once for a total of six credits.

Prerequisites: History interns must be History majors. Permission of the undergraduate advisor for History. 60 credit hours. HIST 200-3

HIST 453-(3-6) Topics in the History of Gender This course will examine the gendered experience of men and women in several countries. May be repeated for credit (maximum six credit hours) with the permission of the instructor and the Program Chair (permission to be given only when the subject matter differs substantially).
Prerequisites: HIST 270-3 or HIST 312-3 or permission of the instructor

HIST 454-(3-6) Topics in Women’s History This course will examine the diversity of women's experience by comparing a number of countries. May be repeated for credit (maximum six credit hours) with the permission of the instructor and the Program Chair (permission to be given only when the subject matter differs substantially).
Prerequisites: HIST 270-3 or HIST 312-3 or permission of the instructor

HIST 456-(3-6) Topics in Cultural Encounters This course will examine cultural relations, either between European and indigenous cultures or between different Native cultures in different parts of the world. May be repeated for credit (maximum six credit hours) with the permission of the instructor and the Program Chair (permission to be given only when the subject matter differs substantially).

Prerequisites: HIST 110-3 or permission of the instructor
HIST 458-(3-6) Topics in Law, Order, and Society This course explores the historical interrelationships of law, authority, and social ordering in several geographic contexts. The course may be repeated with the permission of the instructor and program chair if the subject matter of the course differs substantially.
Prerequisites: HIST 210-3 and HIST 211-3 or permission of the instructor

HIST 490-(3-6) Topics in Historiography This course will examine particular themes in the history of history as a discipline. Topics might include the study of a particular school of historical thought, different interpretations of a major historical event, noteworthy historical controversies or the work of a significant historian. May be repeated for credit (maximum six credit hours) with the permission of the instructor and the Program Chair (permission to be given only when the subject matter differs substantially).
Prerequisites: HIST 200-3 and HIST 300-3

HIST 491-(3-6) Topics in Intellectual History This course will examine various themes in the history of ideas. Topics might include major intellectual developments such as the scientific revolution, the Enlightenment or modernism; or the influence of ideas on historical events such as the American and French revolutions may be examined; or particular movements, schools of thought or seminal thinkers may be the focus of the course. May be repeated for credit (maximum six credit hours) with the permission of the instructor and the Program Chair (permission to be given only when the subject matter differs substantially).
Prerequisites: HIST 200-3 and HIST 300-3

HIST 492-(3-6) Topics in Cultural History This course will examine various themes in the history of culture. Topics might include major developments in the history of culture such as the Renaissance or Modernism; or the ways in which major historical events such as the Reformation or the First World War have reshaped culture might be examined; or particular cultural movements (such as classicism of 1960s counter-culture) may be the focus of the course. May be repeated for credit (maximum six credit hours) with the permission of the instructor and the Program Chair (permission to be given only when the subject matter differs substantially).

Prerequisites: HIST 200-3 and HIST 300-3
HIST 493-(3-6) Topics in Social History This course will examine various themes in social history. Topics might include major social changes such as the Industrial Revolution or Canadian urbanization; or the social origins of major historical events such as the Reformation or the Russian Revolution might be examined; or particular social movements (such as socialism or utopianism) may be the focus of the course. May be repeated for credit (maximum six credit hours) with the permission of the instructor and the Program Chair (permission to be given only when the subject matter differs substantially).

Prerequisites: HIST 200-3 and HIST 300-3
HIST494-(3-6) Topics in Aboriginal History This seminar course examines particular aspects of aboriginal history in Canada. Participants read, evaluate, and discuss some of the most influential literature on the particular topic of the course, and complete a major research paper in Canadian aboriginal history. The course may be repeated with the permission of the instructor and program chair if the subject matter of the course differs substantially.

Prerequisites: HIST 390-3
HIST 498-(3-6) Topics in History (International) This course covers particular aspects of international history selected by the instructor. The course may be repeated for credit (maximum six credit hours) with the permission of the instructor and the Program Chair (permission to be given only when the subject matter differs substantially).
Prerequisites: HIST 150-3 or HIST 241-3, and HIST 290-3 or permission of the instructor

HIST 500-3 Honours Historiography: Contemporary Theories and Methods The course traces the development or historical thought from 1920s to the present.

Prerequisites: HIST 300-3 and admission to Honours Program

HIST 501-3 Honours Directed Readings A course of specialized readings developed in consultation with, and supervised by, a faculty member in the History Program.

Prerequisites: admission to Honours Program
HIST 505-6 Honours Thesis The Honours Thesis consists of a specialized research project developed in consultation with, and supervised by, a faculty member in the History Program. Credit is based on the presentation of research results in a formal paper of 7,500 to 10,000 words, and defended in an oral examination (the examining committee to consist of the supervisor and a minimum of three additional History Faculty members).
Prerequisites: HIST 500-3, HIST 501-3, and maintenance of a minimum GPA of 3.33
Precluded: HIST 502-3 and HIST 503-2

## International Exchange

INTX 288-(1-18) International Exchange Program Undergraduate students register in this course when they have been accepted to participate in a formal international exchange program at one of UNBC's partner institutions.

Prerequisites: completion of 30 credit hours of course work or permission of the academic advisor and the Exchange Student Selection Committee. At least 24 of these credit hours must be completed at UNBC. A student may register in this course more than once for a maximum of 30 credit hours unless special permission is granted to complete additional credit hours.

INTX 488-(1-18) International Exchange Program Undergraduate students register in this course when they have been accepted to participate in a formal international exchange program at one of UNBC's partner institutions.

Prerequisites: completion of 60 credit hours of course work or permission of the academic advisor and the Exchange Student Selection Committee. At least 24 of these credit hours must be completed at UNBC. A student may register in this course more than once for a maximum of 30 credit hours unless special permission is granted to complete additional credit hours.

## International Studies

INTS 101-3 Canada and the World An examination of Canada's position within the global community, including key economic, political, social and environmental issues and relations with the United States, Pacific Basin, and Circumpolar North.

Prerequisites: none
INTS 121-3 Beginning Japanese I An introduction to conversational and written elements of the language using materials from everyday situations.

Prerequisites: none
INTS 122-3 Beginning Japanese II Continuation of INTS 121-3.
Prerequisites: INTS 121-3
INTS 131-3 Beginning Russian I An introduction to conversational and written elements of the language using materials from everyday situations.

Prerequisites: none
INTS 132-3 Beginning Russian II Continuation of INTS 131-3.
Prerequisites: INTS 131-3
INTS 141-3 Beginning Swedish I An introduction to conversational and written elements of the language using materials from everyday situations.
Prerequisites: none

INTS 142-3 Beginning Swedish II Continuation of INTS 141-3.
Prerequisites: INTS 141-3
INTS 151-3 Beginning International Language I (international language not regularly offered at UNBC) An introduction to conversational and written elements of the language using materials from everyday situations.
Prerequisites: none
INTS 152-3 Beginning International Language II Continuation of INTS 151-3.
Prerequisites: INTS 151-3
INTS 160-3 Mandarin for Chinese Speakers Designed to help speakers of other Chinese dialects (Cantonese, Hakka, Fujian and others) who have the ability to read and write Chinese language, to gain better listening comprehension and fluency in oral Mandarin Chinese and strengthen their language skills in Mandarin Chinese. It will focus on Mandarin pronunciation, syntax and concepts of modern Chinese through reading and discussion.

Prerequisites: approval of instructor

INTS 161-3 Beginning Chinese I A beginning course in modern written Chinese and spoken Mandarin. It is to lay the foundation for the study of Mandarin Chinese and to develop the four basic linguistic skills, namely listening, speaking, reading and writing, through the study of Hanyu Pinyin (a phonetic system using English characters), vocabulary, syntax and culture. It is designed for non-native speakers.
Prerequisites: approval of instructor
INTS 162-3 Beginning Chinese II A continuation of the comprehensive introduction to the basics of Mandarin in INTS 161-3. The multiple approach of this course focuses on perfecting phonetic skills, improving conversation competence (speaking and listening skills) as well as learning more Chinese characters for reading and writing.

Prerequisites: INTS 161-3 or equivalent
INTS 200-3 Contemporary Russia An interdisciplinary survey of the former Soviet Union and its peoples, including an examination of major historical, social, economic, political and cultural features of the country.

Prerequisites: none
INTS 202-3 Contemporary United States An interdisciplinary survey of the country and its people, including an examination of the major historical, social, economic, political and cultural features of the nation.

Prerequisites: none
INTS 203-3 Contemporary Japan An interdisciplinary survey of the country and its people, including an examination of the major historical, social, economic, political and cultural features of the nation.
Prerequisites: none
INTS 204-3 Contemporary China An interdisciplinary survey of China and its peoples, including an examination of the major historical, social, economic, political and cultural features of the country.

Prerequisites: none
INTS 205-3 Introduction to International Studies A survey of ways to analyze international interactions between states, people and the environment.

Prerequisites: none

INTS 206-3 Contemporary International Issues An examination of issues and problems in contemporary international studies.
Prerequisites: INTS 205-3
INTS 221-3 Intermediate Japanese I The development of speaking, writing and reading abilities using modern texts.
Prerequisites: INTS 122-3 or permission of the instructor
INTS 222-3 Intermediate Japanese II Continuation of INTS 221-3.
Prerequisites: INTS 221-3

INTS 231-3 Intermediate Russian I The development of speaking, writing and reading abilities using modern texts.
Prerequisites: INTS 132-3 or permission of the instructor
INTS 232-3 Intermediate Russian II Continuation of INTS 231-3.
Prerequisites: INTS 231-3

INTS 240-3 Contemporary Circumpolar North This course is an introduction to the physical, biological, and human environments of the Arctic and Subarctic regions, and their interactions and relations to the global system. The course also introduces northern cultures, economic development processes, political systems, and international cooperation.

Precluded: NORS 101-3
INTS 241-3 Intermediate Swedish I The development of speaking, writing and reading abilities using modern texts.

Prerequisites: INTS 142-3 or permission of the instructor
INTS 242-3 Intermediate Swedish II Continuation of INTS 241-3.
Prerequisites: INTS 241-3
INTS 251-3 Intermediate International Language I The development of speaking, writing and reading abilities using modern texts.

Prerequisites: INTS 152-3 or permission of the instructor
INTS 252-3 Intermediate International Language II Continuation of INTS 251-3.

Prerequisites: INTS 251-3
INTS 261-3 Intermediate Chinese I This intermediate course is a continuation of INTS 161-3 and INTS 162-3. It provides students with opportunity to strengthen the four basic linguistic skills of the language and to increase their competency in oral and written skills. Some simple Chinese proverbs and idiomatic expressions will be introduced.

Prerequisites: INTS 161-3 and INTS 162-3 or equivalent
INTS 262-3 Intermediate Chinese II This intermediate course is a continuation of INTS 261-3. Students will continue to build proficiency in all four basic skills of the language, and are expected to be, by this level, knowledgeable and competent enough to work independently in acquiring new vocabulary and Chinese characters. Short essay writing will be included. A couple of Tang's poems and Song's verses will be introduced.

Prerequisites: INTS 261-3 or equivalent
INTS 300-3 International Organization An investigation of the evolution, operation and significance of international organization and international organizations. Examinations of the United Nations, other intergovernmental institutions and various non-governmental organizations are included.

Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 301-3 International Law A study of the nature and sources of international law and its application in the contemporary international community.
Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 302-3 Canadian Foreign Policy A survey of the institutions, actors, processes and issues that determine Canadian foreign policy, including a review of the relationship to domestic policies.

Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 304-3 International Development An examination of approaches to and problems of economic, social and political development. Policy-making processes and the role of national and international development institutions are also explored.
Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 306-3 Human Rights An examination of human rights issues and problems within the global community. Human rights questions as disputes in relations between states and societies are explored, as are efforts to establish international codes of conduct and observance.

Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 307-3 Global Resources An examination of the interaction between global economic and environmental resources.

Prerequisites: 60 credit hours, or permission of the instructor
INTS 308-3 Gender and International Studies An investigation of the role of gender in international affairs.

Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 309-3 Global Science and Technology This course is an inquiry into the role of science and technology in an era of "globalization". The origins of science \& technology and their 'merger' in the late 1800s provide the foundation for analysis of science and technology's relationship to present-day security, economic, social, and environmental issues at the international level.
Prerequisite: INTS 205-3, 60 credits or permission of the instructor Precluded: INTS 498-3-Science and Technology in a Global Word

INTS 310-3 Origins and Evolution of International Studies
A review of the origins and theoretical development of contending approaches which inform International Studies.
Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 321-3 Japanese Conversation and Composition I This course is designed for students who have an intermediate Japanese language background. It will focus on developing students' speaking and writing skills as well as reading and listening. Students will practice assigned topics in conversation and writing each week. Participation and skill levels will be evaluated each class session.
Prerequisites: INTS 222-3 or approval of the instructor
INTS 322-3 Japanese Conversation and Composition II This course is the continuation of INTS 321-3 Japanese Conversation and Composition I.
Prerequisites: INTS 321-3 or approval of the instructor

## INTS 340-3 The Circumpolar North in Global Perspective

 An examination of the North in global perspective and the importance of a comparative perspective. The nature and development of conflicts within the region between and within native and nonnative communities, between and within groups on issues such as development, and between nations over matters such as sovereignty and defence of Northern regions are surveyed, as are attempts to reduce conflicts and create a more integrated circumpolar society.Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 350-3 Pacific Relations An investigation of the evolution of relations between the nations of the Asia-Pacific region, including the consideration of economic, political, social and cultural interactions.
Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 371-3 Globalization An examination of the concept of globalization as it relates to political, economic, social, cultural and environmental processes which challenge and redefine the international system.

Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 377-3 Redefining Security A review of the evolution of the notion of security from traditional definitions associated with the military and the state to more recent definition of security which include gender, economics, and the environment.
Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 378-3 Intelligence and Security A comparative analysis of the place of security and intelligence in international relations and within contemporary states. The role of the four major elements of intelligence (collection, counterintelligence, analysis and estimates, and covert action) will be examined as will the oversight and control issues raised by these activities.

Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 402-3 Pacific Affairs A detailed study of contemporary issues in the relations between Asia-Pacific nations, including an assessment of regional and subregional institutions.

Prerequisites: INTS 205-3, INTS 350-3 and 60 credit hours, or permission of the instructor

INTS 403-3 Canadian-American Relations A review of the evolution of relations between Canada and the United States.

Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 404-3 Canada and the Americas An examination of issues and problems in Canada's relationship with the countries of North, Central and South America.

Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 409-3 Theories of International Studies A review of the development of international studies as a discipline and the emergence of contending theoretical approaches.

Prerequisites: INTS 205-3, INTS 310-3 and 60 credit hours, or permission of the instructor

INTS 410-3 Environment and Development in the Circumpolar North Examination of conservation and development issues and experiences in the northern circumpolar countries.
Prerequisites: INTS 205-3, INTS 340-3 and 60 credit hours, or permission of the instructor

## INTS 430-(3-15) Study Abroad

Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

## INTS 440-(3-6) Internship

Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 444-3 Russian Foreign Policy An analysis of the sources of Russian foreign policy and the patterns of external relations, from the Tsarist period to the present.
Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 460-3 Issues in Canadian Foreign Relations A detailed examination of selected problems in Canada's foreign relations.

Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 470-3 International Environmental Policy This seminar considers international actions dealing with environmental problems such as climate change, ozone depletion, hazardous waste, POP's, war and the environment, fresh water quality, deforestation, biodiversity and endangered species. Discussion focuses on the ways and the extent to which these problems can be met by international agreements and governance arrangements, or what international studies calls environmental "regimes". Two basic questions will be addressed. What factors facilitate the formation of international environmental regimes and can these regimes be effective while overcoming the "tragedy of the commons".

Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 480-3 Pacific Environment This is a seminar on international environmental problems of the Pacific region and efforts to solve them, with particular attention to the theory and practice of international environmental cooperation as applied to the Pacific region.
Prerequisite: INTS 205-3, 60 credit hours or permission of the instructor
Precluded: INTS 498-3-Pacific Environment

INTS 498-(3-6) Special Topics in International Studies Detailed examination and analysis of a contemporary issue in international studies, including the exploration of future policy options.

Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

## INTS 499-(3-6) Independent Study

Prerequisites: INTS 205-3 and 60 credit hours, or permission of the instructor

INTS 590-3 Honours Seminar This seminar will cover major theories and developments in international affairs, and the application of key theories, such as realism, idealism, constructivism, interdependence and globalization, etc. The precise content will vary from year to year depending on faculty and student interest. An effort will be made to cover topics of relevance to the students' honours theses.

Prerequisites: Admission to the Honours program, completion of INTS 409-3, and concurrent registration in INTS 591-3

INTS 591-3 Honours Thesis The honours thesis comprises a major specialized research project normally analyzing the applicability of an important concept, theory, issue or development in international studies. Each honours thesis requires the approval of the honours advisor, and has a supervisor and a second reader, and is defended. Prerequisites: Admission to the Honours program, completion of INTS 409-3, and concurrent registration in INTS 590-3

## Languages

International languages taught at UNBC include Japanese, Mandarin and Russian. For course listings, see entries under International Studies.

## Mathematics

Unless otherwise stated, a student may enrol in any Mathematics course with permission of the Program Chair.

Note that BC Introductory Mathematics 11, Applications of Mathematics 11 and Applications of Mathematics 12 are not considered prerequisites for any Mathematics courses as currently taught.

Students enrolling in any Mathematics course with prerequisites are required to have completed all prerequisite courses for that course with a C- or better, or have permission to enrol from the Program Chair.

MATH 100-3 Calculus I An introduction to the calculus of functions of one variable, primarily for majors and students in the sciences. Functions of one variable, inverses, limits and limit theorems, continuity, the difference quotient and derivatives, rules for differentiation, differentiability, the mean value theorem, the differential as a linear functional, definitions and derivatives of trigonometric functions, informal definitions of logarithmic and exponential functions and their derivatives, L'Hôpital's rule, higher derivatives, maxima and minima, curve sketching, Newton's method, antiderivatives, definite integrals, the fundamental theorem of calculus, integrals of elementary functions, area between curves, applications of integration. All sections of this course will be taught using the Maple software.

Prerequisites: Math 12 or Principles of Math 12 or MATH 115-3 Precluded: MATH 105-3 or MATH 152-3

MATH 101-3 Calculus II A continuation of MATH 100-3. Definition of the natural logarithm as an integral and of the exponential function as its inverse, integration by substitution and by parts, miscellaneous techniques of integration, improper integrals, volumes by slicing and by shell techniques, the trapezoidal rule and Simpson's rule, infinite sequences and series, Taylor series, curves given parametrically, polar co-ordinates, masses, volumes, moments, centres of mass, first order linear differential equations, definition of partial derivatives. All sections of this course will be taught using the Maple software.
Prerequisites: MATH 100-3 or MATH 105-3
MATH 105-3 Enriched Calculus A rigorous introduction to the calculus of functions of one variable. Core topics covered are similar to those of MATH 100-3, except that the focus is less on the mechanics of calculus and more on the development of the ideas in calculus and of calculus as a foundation of mathematical thought. Additional special topics will be added by the instructor. Maple labs will accompany this course.
Prerequisites: Math 12 or Principles of Math 12 or MATH 115-3 Precluded: MATH 100-3 or MATH 152-3

MATH 115-3 Precalculus Algebraic manipulation, solution of algebraic equations, functions, inverses, graphing, analytic geometry. Not normally open to students with credit in Grade 12 Math.
Prerequisites: Math 11 or Principles of Math 11 or permission of the Program Chair. Students with credit in Math 12 or Principles of Math 12 require permission of the Program Chair

## MATH 150-3 Finite Mathematics for Business and Economics

This course is offered primarily for students in the Faculty of Management and Administration. Review of functions, graphs, logarithms, exponents, and inverses, solution of linear systems of equations, matrix notation and properties, matrix inversion, Jacobians and Hessians, eigenvalues and eigenvectors, linear programming, and an introduction to actuarial mathematics.
This course may not be used for credit towards a major, or joint major, in Mathematics or Computer Science.
Prerequisites: Math 12 or Principles of Math 12 or Math 115-3
MATH 152-3 Calculus for Non-majors Limits, the derivative, techniques of differentiation, exponential functions and exponential growth, maxima and minima, curve sketching, first order linear differential equations, definite and indefinite integrals, partial derivatives, optimization of functions of several variables, Lagrange multipliers, with applications in the social and physical sciences. Applications may vary somewhat from section to section, depending on student's discipline. Not open to mathematics or computer science majors.
Prerequisites: Math 12 or Principles of Math 12 or MATH 115-3 Precluded: MATH 100-3 or MATH 105-3

MATH 200-3 Calculus III The final course in the calculus sequence, with an emphasis on the calculus of vector-valued functions of several variables. Vectors in two- and three-dimensional space, dot and cross products, lines and planes in space, cylindrical and spherical coordinates, curves given parametrically, surfaces and curves in space, directional derivatives, the gradient, tangent vectors and tangent planes, the chain rule, the topology of Euclidean space, optimization problems for functions of several variables, vector fields, line integrals, surface integrals, the theorems of Green, Gauss, and Stokes, potential functions, conservative fields.
Prerequisites: MATH 101-3
MATH 201-3 Introduction to Complex Analysis Complex numbers and topology of the complex plane, theory of analytic functions, precise definition of limit and continuity, harmonic functions, contour integration, Cauchy's integral theorem and integral formula, series representation for analytic functions, residue theory, the fundamental theorem of algebra.
Prerequisites: MATH 200-3
MATH 220-3 Linear Algebra Linear Algebra Systems of linear equations, matrix algebra, determinants, vector geometry, vector spaces, eigenvalues and diagonalization. Some use will be made of appropriate software, but previous computer experience is not required.
Prerequisites: Math 100-3 or MATH 105-3

MATH 221-3 Operations Research Linear programming and the simplex method, the modified simplex method, an introduction to convex analysis, duality theory, sensitivity analysis, applications of linear programming, non-linear programming including: fractional and quadratic programming, multivariable unconstrained optimization, the Karush-Kuhn-Tucker conditions, queuing theory. Supporting computer software may be used.
Prerequisites: MATH 220-3
Co-requisite: MATH 200-3
MATH 224-3 Foundations of Modern Mathematics This course develops the essential components of Zermelo-Fraenkel set theory and from these ideas constructs the standard number systems. Topics include basic logic and methods of proof, axioms of set theory, mathematical induction, the Axiom of Choice, ordinal and cardinal numbers, the natural numbers, elementary number theory, the integers, and the rational, real, and complex number systems.
Prerequisites: MATH 100-3 or MATH 105-3
Recommended: MATH 101-3
Precluded: MATH 222-3

MATH 226-3 Advanced Linear Algebra This is a second course in linear algebra. Topics include vector spaces, eigenvalues and diagonalization, linear transformations, inner product spaces.
Prerequisites: MATH 220-3

## MATH 230-3 Linear Differential Equations and Boundary Value

Problems This course is an introduction to differential equations. Topics include first order differential equations (separable, exact, and linear), basic Euler and Runge-Kutta numerical methods of solution, homogeneous and nonhomogeneous linear second order equations with classical methods of solution (variation of parameters and reduction of order), linear partial differential equations with examples (heat equation, Laplace's equation, wave equation), Fourier sine and cosine series with an application to boundary value problems.

Prerequisites: MATH 200-3
Corequisites: MATH 220-3
Precluded: MATH 332-3
MATH 242-3 Statistics for Social and Health Sciences This course provides an introduction to the principles of statistical inference for students in the social and health sciences.

Prerequisites: Math 11 or Principles of Math 11
Recommended: Math 12 or Principles of Math 12
Precluded: MATH 340-3
MATH 302-3 Theory of Metric Spaces This course develops the essential components of metric space topology and the related ideas of convergence including convergence of sequences and series of functions. Topics include open, closed, bounded and compact sets in a metric space, the Bolzano-Weierstrass and Heine-Borel Theorems, continuous and uniformly continuous functions, uniform convergence.

Prerequisites: MATH 200-3 and MATH 224-3
Strongly recommended: MATH 201-3
Precluded: MATH 223-3 and MATH 300-3

MATH 320-3 Survey of Algebra A first course in the standard algebraic structures, their properties and applications. Equivalence relations, elementary group theory, finite groups, cyclic groups, permutation groups, group homomorphisms, products, elementary ring theory, ring homomorphisms and products, construction of new algebraic structures from known structures.
Prerequisites: MATH 220-3
Recommended: MATH 224-3
MATH 321-3 Topology Open and closed sets, Hausdorff and other topologies, bases and sub-bases, continuous functions connectivity, product and quotient spaces, the Tychonoff and Urysohn lemmas, metrization, compact spaces.
Prerequisites: MATH 224-3
Recommended: MATH 302-3
MATH 333-3 Partial Differential Equations An introduction to the classical theory of partial differential equations. Topics to be examined include first-order partial differential equations and the method of characteristics, classification of second-order equations, initial boundary-value problems in bounded regions, the method of separation of variables and Fourier Series, inhomogeneous equations. Examples will be discussed for the wave equation, the heat equation, and Laplace's equation.
Prerequisites: MATH 201-3, MATH 230-3
Precluded: MATH 430-3

MATH 334-3 Ordinary Differential Equations A continuation of the theory of ordinary differential equations, with a more rigorous examination of some of the fundamental notions in addition to an exploration of more advanced concepts. Topics include series solution methods to second-order equations, singular points, Bessel's and Legendre's equations, systems of first-order linear equations and phase plane analysis, nonlinear differential equations with introductory concepts of stability, and boundary-value problems.
Prerequisites: MATH 201-3, MATH 230-3
Precluded: after September 1, 2003, credit cannot be obtained for both MATH 334-3 and MATH 332-3

MATH 335-3 Numerical Analysis I An introduction to the theory and application of numerical approximation techniques. Topics to be examined include number systems, error sources and analysis, solution of nonlinear equations, solution of systems of linear equations, interpolation and approximation, and numerical differentiation and integration. Programming exercises will be given, and there may be some use of commercial software. May be counted as a computer science course by computer science majors.
Prerequisites: MATH 101-3, MATH 220-3, CPSC 100-4 (or equivalent programming experience)
Precluded: MATH 330-3

MATH 340-3 Introduction to Probability The course will consider the following major topics in Probability Theory: Numerical characteristics of random data, axioms of probability space, additive and multiplicative laws, Bayes's formula, total probability, binomial, geometric, hypergeometric, Poisson, uniform, normal, exponential, gamma, beta distributions, Chebyshev inequality, multivariate, marginal and conditional distributions, functions of random variables and their numerical characteristics, covariance, coefficient of correlation, deMoivre-Laplace theorem, central limit theorem.
Prerequisites: MATH 101-3
Recommended: MATH 200-3
Precluded: MATH 242-3
MATH 341-3 Introduction to Statistics The course will consider the following major topics in Statistics: chi-square, Fisher, Student, large-and small-sample confidence intervals for mean(s), variance(s), point estimators and their properties: unbiasedness, efficiency, consistency, sufficiency, method of maximum likelihood, hypothesis testing, likelihood ratio test, chi-square test, goodness-of-fit test, contingency tables, analysis of variance, regression, sign test, Wilcoxon test.

Prerequisites: MATH 340-3
MATH 342-3 Biostatistics A calculus-based introduction to the theory and practice of statistical inference, with an emphasis on techniques and examples appropriate for students in the biological sciences. This course may not be used for credit towards any Mathematics or Computer Science major, minor, or joint major.
Prerequisites: MATH 100-3 or MATH 105-3 or MATH 152-3
MATH 370-3 Geometry I Geometry of curves and surfaces. The course will generally begin with a thorough investigation of the local theory of curves, and then proceed to the geometry of regular surfaces. Topics discussed will include: the first and second fundamental forms, orientability, and the Gauss map, and examples will include ruled and minimal surfaces. The course would conclude with the proof of the Gauss-Bonnet Theorem.

Prerequisites: MATH 201-3, 220-3 or permission of the instructor
MATH 389-3 Special Topics in Mathematics The topic of this course varies depending on student interest and faculty availability. May be taken any number of times provided all topics are distinct.

Prerequisites: permission of instructor
MATH 402-3 Topological and Normed Linear Spaces This course focuses on the properties of topological spaces and normed linear spaces, especially Banach spaces. Topics include inner product spaces, topological spaces, compact and locally compact spaces, classical Banach spaces, linear functionals and dual spaces, topological vector spaces, Hilbert space, orthogonal systems and Fourier series.

Prerequisites: MATH 226-3 and MATH 302-3 and MATH 321-3, or permission of the instructor

MATH 403-3 Measure Theory and Integration This course focuses on the development and properties of Lebesgue measure and the Lebesgue integral, with generalization to integration in abstract measurable spaces. Topics include outer measure, measurable sets and Lebesgue measure, measurable functions, differentiation of integrals, and the extension of these concepts to more general settings.
Prerequisites: MATH 302-3 or permission of the instructor
MATH 420-3 Structure of Groups and Rings Advanced course in group theory and ring theory. Homomorphism theorems for groups, rings and R -modules, Sylow theorems, short exact sequences, chain conditions.
Prerequisites: MATH 320-3
MATH 421-3 Field Theory Topics discussed will include: fields, field extensions, splitting fields, automorphism group, Galois Theory.
Prerequisites: MATH 320-3
MATH 425-3 Mathematical Logic Introduction of the theory of formal systems and to the theory of recursion. Topics to be chosen from formal proof systems, propositional logic, first-order predicate logic, semantics, and the completeness and compactness theorems.
Prerequisites: MATH 320-3 or CPSC 340-3
MATH 433-3 Topics in Partial Differential Equations An introduction to techniques of applied mathematics with an emphasis on partial differential equations and the modelling of continuous phenomena. Topics should include systems of first-order partial differential equations, systems of conservation laws and discontinuous solutions, variational methods of solution and Green's functions, integral equations and weak solutions, distribution theory, eigenvalue problems, singular perturbation methods.
Prerequisites: MATH 333-3
Precluded: MATH 430-3
MATH 434-3 Topics in Applied Mathematics An overview of several problems of applied mathematics, and some of the approximation techniques used. Topics may include perturbation theory, random processes and partial differential equations, asymptotic series and asymptotic solution methods, dimensional analysis and scaling, boundary layer theory. Equations in applied mathematics may include examples from continuum mechanics, fluid dynamics, potential theory, oceanography and meteorology.
Prerequisites: MATH 333-3
Precluded: MATH 431-3
MATH 435-3 Numerical Analysis II A continuation of MATH 3353 , with the focus mainly on the numerical solution of ordinary and partial differential equations. Topics include initial value problems for systems of ordinary differential equations, boundary value problems for ordinary differential equations, and an introduction to the numerical solution of canonical second-order partial differential equations via finite difference methods.
Prerequisites: MATH 230-3, MATH 335-3
Precluded: MATH 331-3

MATH 440-3 Advanced Probability and Statistics The course will consider the following advanced topics in Probability and Statistics: Limit theorems: laws of large numbers and CLT, Kolmogorov inequality, weak and strong convergence, large deviations, Markov chains with applications, ergodic theorems, martingales, and martingale methods, extreme value theory and order statistics, estimation of parameters.

Prerequisites: MATH 340-3 and/or 341-3
MATH 450-3 Combinatorics This course in an introduction to combinatorics. Topics include counting principles, principle of inclusion and exclusion, generating functions, graph theory and applications, combinatorial structures, combinatorial optimization and applications.
Prerequisites: MATH 101-3, MATH 220-3
Recommended: CPSC 141-3 or MATH 224-3

MATH 455-3 Graphs and Algorithms This course is an introduction to graphs and algorithms. Topics include basic graph concepts, flows and connectivity, trees, matchings and factors, graph colouring, scheduling, planar graphs, algorithms.

Prerequisites: MATH 222-3 or MATH 224-3 or CPSC 142-3 or CPSC 241-3

MATH 460-3 Mathematics Seminar Topic will vary from year to year. Offered in a seminar format with limited enrolment. Students will complete a substantial project under the supervision of the instructor.

Prerequisites: fourth year standing and permission of the instructor
MATH 480-3 Number Theory This course is an introduction to number theory. Topics include the integers, divisibility, Euclidean algorithm, primes, unique factorization, congruences, systems of linear congruences, Euler-Fermat Theorem, multiplicative functions, quadratic residues and reciprocity, nonlinear Diophantine equations.
Prerequisites: MATH 220-3 or MATH 224-3
MATH 499-3 Special Topics in Mathematics The topic for this course will vary, depending on student interest and faculty availability. May be taken any number of times provided all topics are distinct.
Prerequisites: permission of the instructor

## Natural Resources and Environmental Studies

NRES 100-3 Communications in Natural Resources and Environmental Studies This course will provide a basic understanding of human behavioural responses as well as develop learning skills in oral and written communications. Emphasis will be on determining the nature of an audience, accessing appropriate material, report writing, oral presentation and literature relevant to natural resources and environmental disciplines.

Prerequisites: none
NRES 421-1 Professional Writing This course provides a structured environment in which students learn and apply skills in professional report writing. Topics include development of a research question or problem statement, accessing and properly citing information and references, synthesis and organization of information, report structure and formatting.

Prerequisites: At least 90 credit hours or permission of instructor.
NRES 422-2 Undergraduate Report This course enables students to develop a professional report under the supervision of a faculty member. Students work independently, but are provided guidance on a one-on-one basis by the faculty member. The professional report requires definition of a problem statement or research question, and synthesis and integration of information from a multitude of sources.

Prerequisites: NRES 421-1 Professional Writing and permission of Faculty Supervisor and Program Chair.
Precluded: NRES 420-3 Undergraduate Report
NRES 430-6 Undergraduate Thesis Students must have completed at least 90 credit hours of study and be an NRES major. The thesis may be taken in one or two semesters of the senior year.

Prerequisites: 90 credit hours and permission of an Academic Supervisor

## Natural Resources Management

NREM 100-2* Natural Resources Management I This course is an introduction to basic field skills in the natural resources including field navigation, outdoor survival, plant and tree identification, and basic natural resource measurements. Extensive fieldwork is required.

Prerequisites: none
*Note: Applications for exemption from NREM 100-2 must be made within the first year of study in any Natural Resource Management major.

NREM 101-2 Natural Resources Management II Introduction to natural resource policies, issues and professional fields of natural resource management.

Prerequisites: none
NREM 203-3 Resource Inventories and Measurements
Introduction to measurement techniques and concepts used in natural resources fields including forest inventory. Extensive field work required.
Prerequisites: three credit hours of computer science, NREM 100-2

NREM 204-3 Introduction to Wildlife and Fisheries Introduction to principles of habitat and population biology and management, and human dimensions of wildlife management. Lectures will introduce the life requisites of individual species and compare aquatic and terrestrial systems, and provide an overview of the characteristics needed to estimate parameters of fish and wildlife populations. Labs will emphasize quantification of fish and wildlife habitats.

Prerequisites: BIOL 102-4, NREM 100-2
NREM 210-4 Integrated Resource Management An introductory course in the principles of management of forest resources including fisheries, recreation, range, and wildlife.
Prerequisites: none

NREM 303-3 First Nations' Approaches to Resource Management Cultural and operational components of resource management by First Nations peoples. Relationships to conventional forest management practices.

Prerequisites: 60 credit hours

NREM 306-3 Society, Policy and Administration Social views of natural resources and the management processes by which these views and policies are developed and expressed. Social conflict and its resolution over natural resource policies.

Prerequisites: none
NREM 333-3 Field Applications in Resource Management This field course applies principles of integrated resource management.

Prerequisites: none
Precluded: FSTY 333-3

NREM 400-4 Natural Resources Planning Natural resource management planning processes to include crown land and different lease arrangements as well as private land. Inventory, public involvement, implementation, monitoring, and assessing resource values.

Prerequisites: 90 credit hours and NREM 210-4 or permission of the instructor

NREM 410-3 Watershed Management Principles and practices of forest management for protection, maintenance and improvement of water resource values. Effects of land management on quality, quantity and timing of water flow. Field trips required.
Prerequisites: GEOG 210-3
NREM 411-3 Environmental and Professional Ethics Analysis of environmental and natural resource issues from an ethical perspective; viewpoints and value systems that determine management decisions.
Prerequisites: 90 credits required
Precluded: ENVS 414-3

## Northern Studies

NORS 101-3 Introduction to the Circumpolar North This course is an introduction to the physical, biological and human environments of the Arctic and Subarctic regions, and their interactions and relations to the global system. The course introduces northern environments, cultures, historical and economic development processes, political systems, and international cooperation.

Prerequisites: none

## NORS 311-3 Lands and Environments of the Circumpolar

North 1 This course provides an in-depth understanding of the lands and environments that define the circumpolar north, and the key issues arising from the relationships of humans and the environment.

Prerequisites: NORS 101-3 or permission of the instructor Precluded: ENVS 311-3 (UNBC) or ENPL 311-3

NORS 312-3 Lands and Environments of the Circumpolar
North 2 This course provides an in-depth understanding of the lands and environments that define the circumpolar north, its physical, biological and ecological processes.
Prerequisites: NORS 101-3; 60 credit hours or permission of the instructor
Precluded: ENSC 308-3 (UNBC) or ENVS 308-3 (UNBC)
NORS 321-3 Peoples and Cultures of the Circumpolar
World 1 This course provides and introduction to the traditional and contemporary peoples and cultures of the circumpolar north, with interdisciplinary exposure to anthropology, sociology, history, cultural studies, and literature.
Prerequisites: NORS 101-3;60 credit hours; or permission of the instructor
Precluded: ANTH 305-3

NORS 322-3 Peoples and Cultures of the Circumpolar
World 2 This is an interdisciplinary course looking at the relationships among primary, secondary and tertiary societies in the circumpolar north, as well as cultural change, Indigenous peoples' movements and international/intercultural cooperation and communications.

Prerequisites: NORS 321-3; and upper division standing
Precluded: ANTH 404-3

## NORS 331-3 Contemporary Issues of the Circumpolar

North 1 This course is an introduction to the important structures and forces affecting the sustainability of circumpolar communities, including population trends, natural resource use and economic development

Prerequisites: NORS 101-3; 60 credit hours; or permission of the instructor
Precluded: INTS 340-3

## NORS 332-3 Contemporary Issues of the Circumpolar

North 2 This course deals with questions relating to governance and politics, social issues, education and knowledge systems, and global issues in the circumpolar north.
Prerequisites: NORS 101-3; 60 credit hours; or permission of the instructor
Precluded: POLS 315-3

NORS 498-3 Special Topics in Northern Studies A special topic in northern studies selected by an instructor.
Prerequisites: NORS 101-3 and upper division standing
NORS 499-(3-6) Independent Research/Directed Reading in Northern Studies Concentration on a particular topic agreed upon by a member of the faculty and a student.

Prerequisites: NORS 101-3 and upper division standing

## Nursing

NURS 101-3 The Art and Science of Nursing Introduces the beginning student to the dimensions of nursing practice and to individuals accessing health care. Through group and individual learning activities the student is introduced to concepts, practices, issues and trends in nursing and health care. Observational experience with a health care practitioner is incorporated.

Prerequisites: none; admission for non-nursing students by permission of the instructor

NURS 102-3 Communication Theory and Practice Introduces the student to communication theory and concepts. The student has the opportunity to increase awareness of self and to explore perceptions, culture, language and non-verbal messages. Opportunities exist for the development of communication skills.
Prerequisites: none; admission for non-nursing students by permission of the instructor

NURS 201-4 Introduction to Health Assessment Provides the basis to gather a health history and to assess the functioning of individuals through the proper use of physical examination techniques. Psychosocial and cultural assessment is included. The emphasis is on recognition and identification of normal findings.

Prerequisites: all 100 level nursing courses; HHSC 111-3, 112-3 or BIO 111 and BIO 112 at CNC. Admission for non-nursing students by permission of the instructor.

NURS 202-3 Pathophysiological Concepts 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.
Prerequisites: HHSC 111-3, 112-3 and 110-3 or BIO 111 and 112 and BIO 105 at CNC. Admission for non-nursing students by permission of the instructor.
Precluded: NURS 301-3

NURS 203-3 Health Promotion in Families Introduces theory related to families across the lifespan within the context of primary health care in the north. Emphasis is on family assessment skills and working in partnership with families in the development of health promotion and illness and injury prevention strategies. Holistic care of families during transitions such as normal childbearing, child rearing, and caring for an elderly parent is included.

Pre- or co-requisites: NURS 101-3, HHSC 111-3, 112-3 at UNBC or BIO 111 and 112 at CNC. Admission for non-nursing students by permission of the instructor.

NURS 204-3 Healing Modalities Provides an overview of healing modalities currently used by nurses and other experts in practice in British Columbia. Principles of pharmacology and pharmacodynamics are addressed. Opportunity is provided for students to explore various complementary healing techniques.
Pre- or co-requisites: NURS 202-3. Admission for non-nursing students by permission of the instructor.

NURS 205-3 Introduction to First Nations Health 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 co-requisites: ANTH 101 or equivalent. Admission for nonnursing students by permission of the instructor.

NURS 206-3 Basic Nutrition 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.

Pre- or co-requisites: none; admission of non-nursing students by permission of the instructor

NURS 210-3 Nursing Practice with the Adult Examines principles and practices of nursing adults with health problems. Focus is on the application of knowledge in planning nursing care of clients requiring medical and surgical intervention. Holistic health care of individuals is highlighted.

Pre- or co-requisites: NURS 201-4, 202-3, 203-3, 204-3, 206-3. Restricted to students in the NCBNP.

NURS 211-5 Clinical Practicum: Adult Enables the student to apply previously learned theory and skills in practice and acquire basic psycho-motor skills needed to provide nursing care. This course provides the opportunity to care for the adult with health problems requiring hospitalization. The course includes laboratory instruction in psychomotor skills necessary to provide nursing care.
Pre- or co-requisites: NURS 210-3. Restricted to students in the NCBNP.

NURS 220-5 Extended Clinical Practicum I Provides the opportunity for consolidated clinical nursing practice with adults who have health problems. This course builds on previous clinical practice with the adult and will occur in various settings in northern BC .
Prerequisites: NURS 205-3, 211-5. Restricted to students in the NCBNP.

NURS 301-3 Advanced Pathophysiology Discusses the pathogenesis and pathophysiological mechanisms of select diseases and conditions, with an emphasis upon recent discoveries in genetics, immunology, and infection and includes conditions relevant to northern BC. Linkages between pathophysiological events and therapeutic modalities are made. This course presumes an understanding of anatomy, physiology, and basic pathophysiology.

Prerequisites: none; admission for non-nursing students by permission of the instructor
Precluded: NURS 202-3
NURS 302-3 Health Assessment Focuses upon the systematic collection and interpretation of a client's health history and health status. Emphasis is placed on the acquisition of clinical techniques with subsequent application in a variety of nursing settings.
Prerequisites: restricted to registered nurses
NURS 303-3 Nutrition This course reviews nutrient requirements across the life span and physiological connections of diet to health and disease. Therapeutic aspects of hyper alimentation and special diets in disease states are covered.
Prerequisites: none; admission for non-nursing students by permission of instructor
Precluded: HHSC 311-3
NURS 304-3 Introduction to Nursing Knowledge Provides an overview of the types of knowledge or theory in the profession, and how such knowledge is developed. Encourages a critical analysis of trends in knowledge development and highlights the crucial relationship of knowledge to practice.
Prerequisites: upper division standing in BScN program

NURS 306-3 Introduction to Epidemiology This course applies epidemiological principles in the examination of patterns of disease and disability among populations, particularly those in northern latitudes. It introduces students to the interpretation of vital statistics, the critique of cross-sectional, case-control and cohort design, and the principles of screening.
Prerequisites: upper division standing in the BScN program or permission of the instructor.
Precluded: HHSC 350-3
NURS 307-3 Health Education Introduces the role and process of health education within a health promotion framework.
Prerequisites: none; admission of non-nursing students by permission of the instructor

NURS 308-3 Ethics and Law in Nursing Examines ethical reasoning and the use of ethical theory in nursing practice decisions. Health care law as it relates to nursing practice is explored. Special focus is on the meaning and use of nursing practice acts, professional standards of practice and nursing codes of ethics.

Prerequisites: upper division standing in BScN program

## NURS 310-3 Nursing Practice with the Childbearing Family

 Nursing Practice with the Childbearing Family, the Child, and the Adolescent examines knowledge, skills, and attitudes required to provide holistic nursing care for pregnant women, infants, growing children, adolescents, and their families. Relevant theory needed to care for clients during the intrapartum as well as theory related to the care of clients with common complications during childbearing is addressed. The most frequent health and developmental problems encountered in children and adolescents in the north, including acute and chronic illnesses, are explored.Pre- or co-requisites: upper division standing in NCBNP
NURS 311-5 Clinical Practicum: Childbearing Family Clinical Practicum: Childbearing Family, Child and Adolescent integrates content from NURS 310-3 in the clinical setting. Opportunities are provided to manage nursing care for individuals and families in labour and delivery, including low risk childbearing and perinatal situations, and for a child or adolescent with acute or chronic health problems.
Pre- or co-requisites: NURS 310-3
NURS 312-3 Mental Health Nursing Practice Introduces the theory and concepts of mental health nursing and examines the role of the mental health nurse in northern nursing practice settings. Attention is given to historical, current and projected trends with a focus on the unique concerns of the north.
Prerequisites: upper division standing in NCBNP
NURS 313-3 Nursing Practice with the Elderly Adult Examines the knowledge, skills and attitudes required to provide holistic care to the older adult. The course focuses on the older adult's strengths and wisdom in adjusting to the aging process as well as acknowledging the effect of acute and chronic physical and psychological conditions.
Pre- or co-requisites: upper division standing in the NCBNP

NURS 315-2.5 Clinical Practicum: Mental Health This course provides opportunity for students to integrate concepts and theory related to mental health as they care for individual and family clients in a variety of acute and community settings. Working with families and groups that support individuals dealing with specific mental health conditions is highlighted.
Prerequisites: NURS 312-3
Co-requisites: NURS 312-3
Precluded: NURS 314-5
NURS 316-2.5 Clinical Practicum: Elderly Adult This course provides opportunity for students to integrate concepts and theory related to healthy aging as they care for individual and family clients in acute, long term care and/or community settings. Working with families and groups that support individuals and families dealing with specific conditions of aging is highlighted.

Prerequisites: NURS 313-3
Co-requisites: NURS 313-3
Precluded: NURS 314-5

NURS 320-5 Extended Clinical Practicum II Provides opportunity for consolidated clinical nursing practice with clients who have multiple health care needs. Previous clinical practice experience is considered when determining placement. The practicum occurs in various health care settings in northern BC .

Pre- or co-requisites: all 300 level required nursing courses in NCBNP

NURS 402-3 Health Promotion Examines health promotion theories, principles, and underlying philosophies within a primary health care framework. Students will identify and critique health promotion issues and explore strategies which promote well-being among individuals, groups, and communities.

Prerequisites: upper division standing, NCBNP students only by permission of instructor
Precluded: HHSC 473-3
NURS 403-3 Introduction to Nursing Research Covers the empirical approach to the development of nursing knowledge and reviews aspects of quantitative and qualitative methods.
Prerequisites: NURS 304-2, MATH 242-3 at UNBC or equivalent
NURS 408-3 Nursing Leadership Discusses nursing as a profession within the health care delivery system. Theory regarding organizational structure, leadership, change, power, accountability and decision-making processes is included and is related to a specific clinical setting.

Pre- or co-requisites: normally, this course will be taken in the final semester of study

NURS 409-3 Pharmacotherapeutics for Nurses Examines the clinical application of drug therapy, with an emphasis on drugs commonly used in primary care settings. Implications of selected pharmacotherapeutics for patients and professional nurses are analyzed. Emphasis is on clinical decision making for nurses working in rural or northern settings.
Prerequisites: upper division standing. For RNs only.

NURS 410-3 Transcultural Nursing Examines concepts and theories of transcultural nursing and their application to the care of culturally diverse clients and communities. Strategies for developing culturally sensitive nursing approaches are explored. Emphasis is on respecting and responding to clients in ways that acknowledge and incorporate cultural differences and similarities.
Prerequisites: upper division standing or by permission of the instructor

NURS 411-3 Medical Diagnostics for Nurses Provides information, interpretation and implications of commonly ordered diagnostic tests. Aspects of specimen collection and test performance are covered. Areas of study include serum chemistry, hematology, microbiology, radiological imaging, and electrography. Emphasis is upon problem solving and decision making for nurses in acute care settings and in remote and rural areas.
Prerequisites: upper division standing or by permission of the instructor

NURS 412-3 Women and Health Examines health issues of northern women within a holistic perspective. Students will explore general and specific health concerns of women using research literature, including epidemiology.
Prerequisites: upper division standing or by permission of the instructor

NURS 413-3 Oncology Nursing Incorporates an understanding of carcinogenesis into the study of current management and treatment modalities: surgery, radiation therapy, chemotherapy, biotherapy and bone marrow transplantation. Focus is upon nursing management of pain, administration of chemotherapeutic agents, palliative care, and assessment and prevention of complications.
Prerequisites: upper division standing or by permission of the instructor

NURS 414-3 Nursing Continuing Education and Staff Development Examines principles and practices of continuing education and staff development in the context of implementing organizational and practice changes within health care organizations and agencies. Particular attention will be paid to the special educational requirements of nurses in rural, remote and northern settings.

Prerequisites: upper division standing and by permission of the instructor

## NURS 415-3 Introduction to Community Health and Nursing

Provides an introduction to the concept of community and nursing in the community and builds upon previous experiences in community health nursing practice. Nursing theory and practice of working with individuals, families, and population groups in health and in illness are addressed. The trend to more community care in British Columbia is explored.

Prerequisites: all 300 level required nursing courses in NCBNP

NURS 416-4 Clinical Practicum: Community Nursing Promotes
the integration and application of community health nursing and primary health care theory in nursing practice in northern communities.

Pre- or co-requisites: NURS 415-3
NURS 417-4 Management of Emergent Situations Provides theoretical knowledge and practice skills required to manage patients with emergency health problems in northern, remote, or rural settings. Emphasis is on initial stabilization, management and transport of patients requiring emergency care.
Prerequisites: for RNs only. NURS 301-3, 302-3, and 409-3. Preference will be given to students enrolled in the Rural and Northern Nursing Certificate.

NURS 420-3 Community Health Nursing Focuses on theory, roles and practices required for community health nursing in a changing system in northern and isolated settings. Emphasis is placed on a population-focused approach to nursing care which includes the promotion of health and prevention of disease and disability.

Prerequisites: normally, this course will be taken in the final semester of study in the BScN program

NURS 422-3 First Nations Health and Nursing Examines historical and current social, political, and economic factors influencing the health of First Nations people in Canada. Current health issues and related nursing implications are emphasized. Topics include: the impact of colonization on health, effects of rapid cultural changes, nursing management of specific health issues, culturally sensitive approaches to nursing care, the health transfer process, and special topics related to health.

Prerequisites: normally this course will be taken in the final semester of study in the BScN program

NURS 424-3 Rural Nursing Provides content relevant to the practice of nursing in small, rural hospitals, clinics, and health centres in northern settings. The course focuses upon the nursing management of health problems frequently encountered in ambulatory and emergency settings, including mental health, and obstetrical considerations. Referral mechanisms and standards of practice are emphasized.
Prerequisites: normally this course will be taken in the final semester of study in the BScN program

NURS 426-3 Acute Care Nursing Explores the concepts and practices of acute care nursing with various client populations. Problem solving, complex client situations and expanding the professional role of the nurse are central themes of the course.
Prerequisites: normally this course will be taken in the final semester of study in the BScN program

NURS 428-3 Nursing Management Examines nursing management and leadership theory, issues and practice in hospitals, health care agencies and communities. Special focus is on firstline nursing management within rural and northern communities in a changing health care system. Discussion and explorations are grounded in current health care and nursing management practice and research knowledge.
Prerequisites: normally this course will be taken in the final semester of study in the BScN program

NURS 429-8 Nursing Management Practicum Permits the extension of skills and knowledge in the practice of nursing leadership and management. Normally, the practicums may be in hospitals or in community health care organizations /agencies.

Prerequisites: registration in or successful completion of NURS 428-3
NURS 430-3 Community Continuing Care Nursing Explores the role and responsibilities of nursing amongst a broad range of clients in home settings or long term care facilities. Concepts and applications of home health, such as gerontology, palliative care, mental health, rehabilitation, disability, family dynamics, and ethics are covered. Specific acute and chronic conditions, therapies in the home and community referral and liaison with institutions are addressed. Multidisciplinary team approach is emphasized.
Prerequisites: normally this course is taken in the final semester of study

## NURS 431-8 Community Continuing Care Nursing Practicum

 Enables the student to apply concepts and acquire skills of community continuing care professional practice. It integrates content obtained in NURS 430-3. The student will provide direct care in the home setting, apply critical thinking and competent problem-solving, and contribute to decision-making and referral. Students will have the opportunity to work alongside expert practitioners in community continuing care.Prerequisites: registration in or successful completion of NURS 430-3
NURS 432-3 Mental Health Nursing Examines mental health and mental illness in depth with particular attention to identified high-risk groups in the northern nursing practice setting. Cultural, developmental and treatment setting variables are examined using a mental health nursing framework.
Prerequisites: normally this course will be taken in the final semester of study

NURS 434-3 Maternal and Child Nursing Examines the theory and practice of maternal and child nursing in depth, with particular attention to northern nursing practice. Nursing management of clients at risk or with complex health and psychosocial problems is included. Ethical and cultural issues relevant to maternal and child nursing are addressed.
Prerequisites: normally this course will be taken in the final semester of study

NURS 440-8 Practicum: Community Health Nursing Facilitates the integration and application of concepts and models related to community health nursing. The opportunity for students to acquire skills needed to contribute to services and programs in the community is provided. Emphasis is on the nurse as a partner with the community.

Pre- or co-requisites: NURS 420-3 or equivalent. All courses in the NCBNP must be completed prior to or concurrently with NURS 440-8

## NURS 441-8 Practicum: First Nations Health and Nursing

Provides clinical experiences for nursing students interested in working with First Nations clients, families, and communities. Clinical experiences are in agencies within First Nations communities, or in agencies that primarily serve First Nations clients.
Pre- or co-requisites: NURS 422-3. All courses in the NCBNP must be taken prior to or concurrently with NURS 441-8

NURS 442-8 Practicum: Rural Nursing Facilitates the integration and application of knowledge and skills in rural nursing. Clinical experiences are located in rural hospitals, treatment and diagnostic centres, or community mental health agencies serving rural communities.

Pre- or co-requisites: NURS 424-3. All courses in the NCBNP must be taken prior to or concurrently with NURS 442-8

NURS 443-8 Practicum: Acute Care Nursing Enables the student to consolidate and extend knowledge and ability in acute care nursing practice. Clinical practice occurs with client populations requiring acute treatment and interventions.

Pre- or co-requisites: NURS 426-3 or equivalent; all courses in the NCBNP must be taken prior to or concurrently with NURS 443-8

NURS 444-8 Practicum: Mental Health Nursing This course provides the opportunity for students to integrate and apply relevant theoretical and clinical knowledge in a variety of mental health clinical settings. It provides the opportunity to work with clients with a range of mental health problems, such as substance use/misuse, acute mental health problems that necessitate hospitalization, long term mental health problems that are addressed through community mental health services.

Pre- or co-requisites: NURS 432-3 or equivalent. All courses in the NCBNP must be taken prior to or concurrently with NURS 444-8.

NURS 450-6 Rural and Northern Nursing Provides understanding of concepts pertinent to nursing practice in rural and northern environments. Focuses on decision-making in an extended practicum in selected rural and northern settings. Multiple roles assumed by the nurse in these health care settings are emphasized. Nursing care that meshes with communities' cultural values and preferences is addressed.

Prerequisites: restricted to Registered Nurses. NURS 301-3, 302-3, 401-4, 402-3, and 409-3
Co-requisites: NURS 411-3, NURS 460-4

NURS 460-4 Advanced Health Assessment Focuses on diagnostic reasoning and clinical decision-making applied to health history and physical assessment of clients across the life span. Emphasis is on clinical applications in rural and northern settings.

Prerequisites: NURS 301-3, 302-3, 401-4, 402-3, and 409-3

NURS 498-3 Special Topics in Nursing A course on a special topic in nursing. The topic will vary, depending on student interest and faculty availability. No more than six credit hours in Special Topics courses may be applied towards a BScN degree.

Prerequisites: upper division standing and permission of the instructor
NURS 499-3 Independent Study in Nursing A course on a selected topic based on readings and learning experiences directed by an instructor. The course format and requirements will be based on a formal contract with the instructor. No more than six credit hours in Independent Study courses may be applied towards a BScN degree.
Prerequisites: upper division standing and permission of the instructor

## Philosophy

PHIL 200-3 Critical Thinking This course introduces students to informal logic and critical thinking. Students will learn to identify standard errors in reasoning and apply these skills to contemporary readings and other forms of media representation.

## Prerequisites: none

PHIL 201-3 Philosophy of Science A service course intended to introduce students to the conceptual/logical foundations of sciences. Topics include the nature of logic, scientific explanation, law, theories, use of probability and statistics, role of ethics and politics in science.

## Prerequisites: none <br> Precluded: POLS 205-3

PHIL 202-3 Comparative Religion An introductory course exploring issues related to the religious traditions of the world, e.g., Native spirituality, Hinduism, Judaism, Buddhism, Christianity, Shintoism, Islam, Paganism and Atheism. Basic questions to be considered include the existence of God, freedom and immortality, nature of spirituality, religious experience and religious language in people's life and world view.

Prerequisites: none
PHIL 205-3 Introduction to the History of Philosophy This course is an introductory survey of western philosophy from the ancient Greeks to the early moderns, including such thinkers as Plato, Aristotle, Augustine, Aquinas, Hobbes, Descartes, Locke, Hume, Rousseau, Kant, Hegel, Mill and Nietzsche. The course provides an overview of philosophical topics including ethics, metaphysics and epistemology.
Prerequisites: none

## Physics

PHYS 100-4 Introduction to Physics I First part of an algebra based introductory physics course for majors in life and environmental sciences: physics and measurement, the laws of motion, applications of Newton's second law, work and energy, linear momentum and collisions, static equilibrium, elasticity, law of universal gravitation, laws of thermodynamics, fluid mechanics, sound waves.

Prerequisites: Physics 12 or PHYS 115-4
PHYS 101-4 Introduction to Physics II Second part of an algebra based introductory physics course for majors in life sciences. Covers: electric charge, electric field, electric potential, DC circuits, magnetic field, sources of magnetic fields, magnetic induction, electromagnetic waves, geometrical optics, elements of modern physics.
Prerequisites: PHYS 100-4 or PHYS 110-4
PHYS 110-4 Introductory Physics I: Mechanics First part of the calculus based introductory physics course for majors in physical and mathematical sciences. Covers: Vectors, measurement, motion in one and two dimensions, the laws of motion, application of Newton's laws, work and energy, potential energy, conservation of energy, linear momentum and collisions, rotation of rigid bodies, rolling motion, angular momentum, static equilibrium, elasticity, law of universal gravitation, elements of thermodynamics.
Prerequisites: Physics 12 or PHYS 115-4 and Principles of Math 12 or MATH 115-3
Co-requisites: MATH 100-3 or MATH 105-3

## PHYS 111-4 Introductory Physics II: Waves and Electricity

Second part of the calculus based introductory physics course for majors in physical and mathematical sciences, including oscillatory motion, wave motion, sound waves, superposition and standing waves, electric field, Gauss's law, electric potential, capacitance and dielectrics, current and resistance, DC circuits, magnetic fields, sources of magnetic fields.
Prerequisites: PHYS 110-4 or 100-4 with a grade of $B$ or better Co-requisites: MATH 101-3

PHYS 115-4 General Introduction to Physics Algebra based introductory physics course for students without grade 12 Physics. Covers: physics and measurement, the laws of motion, work and energy, linear momentum and collisions, static equilibrium, elasticity, laws of thermodynamics, fluid mechanics, sound waves, electric field, electric potential, DC circuits, magnetic field, electromagnetic waves, laws of geometrical optics, elements of modern physics.
Prerequisites: none

PHYS 120-3 Introduction to Astronomy I: The Solar System
A one-semester introductory course in Astronomy mainly for science students, but of general enough nature to accommodate nonscience majors with proper background in math. This course is a complementary course to PHYS 121-3. After a brief introduction to the fundamentals of astronomy, including the sky at night, this course focuses on our solar system. Topics will include the following: an overview of our solar system; the Sun; Earth and Moon; the inner planets: Mercury, Venus, Mars; the gas giants: Jupiter, Saturn, Uranus, Neptune; moons and ring structure of the gas giants; Pluto and Charon; asteroids, comets, meteors, and meteorites; the origin and evolution of our solar system; origin and evolution of the sun. This course is a self-contained course.
Prerequisites: Math 11

## PHYS 121-3 Introduction to Astronomy II: The Universe

A one-semester introductory course in Astronomy mainly for science students, but of general enough nature to accommodate nonscience majors with proper background in math. This course is a complementary course to PHYS 120-3. After a brief introduction to the fundamentals of astronomy, including the sky at night, and summary of the main features of our solar system, this course focuses on stars, galaxies, and the universe. Topics will include the following: the origins of stars and planetary systems; stars: the sun; properties and structures of stars; stellar interiors; the evolution of stars; stellar remnants; white dwarfs; neutron stars; blackholes, wormholes and warped spacetime; our galaxy: the Milky Way; the universe of galaxies; distance scales and indicators; active galaxies and quasars; cosmology: past, present, and future of the universe, "Is 'Anyone' Out There?" This course is a self-contained course.
Prerequisites: Math 11
PHYS 200-3 Thermal Physics Thermodynamics and introductory statistical mechanics, including temperature, reversible processes and work, first law of thermodynamics, second law of thermodynamics, entropy, thermodynamic potentials, change of phase, chemical potentials, third law of thermodynamics, kinetic theory of gases.
Prerequisites: PHYS 111-4
Co-requisites: MATH 200-3
PHYS 202-4 Electromagnetism and Optics Magnetic field, Ampere's law, Faraday's law, inductance, magnetism and matter, electromagnetic oscillations, alternating currents, Maxwell's equations, electromagnetic waves, geometrical optics, interference, diffraction.
Prerequisites: PHYS 111-4
Co-requisites: MATH 200-3
PHYS 205-3 Modern Physics I First part of a two-semester course in modern physics: introduction to the theories of relativity and quantum mechanics. Topics include: Lorentz transformations, relativistic kinematics, relativistic dynamics, roots of the quantum theory, quantum theory of light, particle and wave nature of matter, Schrodinger equation in one and three dimensions, tunneling phenomena, atomic structure.

Prerequisites: PHYS 111-4
Precluded: PHYS 203-3

PHYS 206-4 Modern Physics II Second part of a two-semester course in modern physics: applications of quantum physics and relativity. Topics include: statistical physics, molecular structure, the solid state of matter, structure of crystals, semiconductors and superconductors, lasers, nuclear structure, radioactivity, nuclear reactions, applications of nuclear physics, elementary particles, elements of cosmology.

Prerequisites: PHYS 205-3
Precluded: PHYS 204-4
PHYS 215-3 Energy, Physics and the Environment A onesemester course dealing with the question of energy in our society. Topics include fundamentals of energy (forms, conservation, sources and use), energy from fossil fuels, heat and the laws of thermodynamics, heat engines and electric power, pollution of the atmosphere, nuclear energy, environmental safety aspects of nuclear energy, solar energy, energy consumption in the world, alternative sources of energy.
Prerequisites: Math 11
PHYS 300-3 Classical Mechanics Analytical classical mechanics, including Newtonian mechanics, motion in non-inertial frames, Lagrangian dynamics, central-force motion, motion of rigid bodies, small oscillations, coupled oscillations, Hamiltonian dynamics.

Prerequisites: PHYS 111-4, MATH 220-3

PHYS 302-3 Quantum Mechanics I Breakdown of classical mechanics, wave packets, wave-particle duality, wave function and Schrodinger equation, eigenvalues and eigenfunctions, harmonic oscillator, potential wells, potential barriers, central force problems, hydrogen atom, spin and angular momentum, time dependence of quantum states.

Prerequisites: PHYS 205-3, MATH 230-3
Precluded: CHEM 303-3

PHYS 304-3 Biophysics Topics include the physics of biological systems, physical principles and techniques used to study the structure and dynamics of biological membranes.
Prerequisites: PHYS 101-4 or 111-4, BIOL 101-4
PHYS 305-4 Electronics Basics of electric and electronic circuits, including DC circuits, Kirchhoff's laws, Thevenin's and Norton's theorems, AC circuits, operational amplifiers, diodes, transistors, gates, combinational and sequential logic, filters, oscillators, control systems, digital circuits.

Prerequisites: PHYS 111-4 and PHYS 202-4 and PHYS 206-4, or permission of the instructor

PHYS 307-3 Selected Topics in Environmental Physics A survey of such topics as atmospheric cycles, thermal radiation and molecular absorption, pollution of the atmosphere, the Greenhouse effect, ozone depletion in the stratosphere, environmental aspects of nuclear energy and waste, the radon problem.

Pre- or co-requisites: PHYS 101-4 or PHYS 111-4

PHYS 310-3 Classical Electromagnetism - I First part of a two-semester course in electrodynamics: the electric field and the scalar potential; Coulomb's and Gauss's laws; Poisson's and Laplace's equations; boundary-value problems in electrostatics; electric multipoles; electric energy and forces; dielectric materials and continuity conditions; the magnetic field and the vector potential; Ampere's law; magnetic materials; magnetic energy and forces.

Prerequisites: MATH 201-3, PHYS 202-4
PHYS 351-3 Optics and Photonics I Geometrical and physical optics: mathematics of wave motion, electromagnetic theory of light, photons, laws of geometrical optics, aberrations in optical systems, optical instruments, superposition of waves, interference, polarization, diffraction, Fourier optics, holography.

Prerequisites: PHYS 202-4
Precluded: PHYS 301-3
PHYS 390-3 Advanced Physics Laboratory Advanced laboratory experiments in mechanics, thermodynamics, electromagnetism, solid state physics, and atomic and nuclear physics.

Prerequisites: PHYS 202-4, PHYS 206-4, PHYS 305-4
Precluded: PHYS 303-3

PHYS 400-3 Quantum Mechanics II Continuation of Quantum Mechanics I. Covers: matrix formulation, perturbation theory, approximation methods, scattering theory, many-particle problems, identical particles, spin and statistics, atomic and molecular systems.

Prerequisites: PHYS 302-3

## PHYS 401-3 Seminar on Contemporary Topics in Physics

Special topics from current areas of research in basic and applied physics.
Prerequisites: permission of the instructor
PHYS 402-3 Physics Research Project Experimental or theoretical research project conducted by the student under the supervision of a faculty member.
Prerequisites: permission of the instructor Students have completed at least one of the following courses: PHYS 390-3 for experimental research projects, or PHYS 302-3 for theoretical research projects, or PHYS 300-3 for theoretical research projects

PHYS 404-3 Solid State Physics Physics of the solid state of matter. Covers: theories of metals, crystal lattices, reciprocal lattice, periodic potentials, electron dynamics, band structures, conduction in metals, phonons in metals, semiconductors, diamagnetism and paramagnetism, superconductivity.
Prerequisites: PHYS 202-4, PHYS 206-4, PHYS 302-3
PHYS 406-3 Subatomic Physics Properties and structure of subatomic particles, symmetries and conservation laws, electromagnetic, weak, and hadronic interactions, beta decay, alpha decay, gamma decay, models of nuclear structure, nuclear reactions, fission, fusion, quarks and hadron spectroscopy.

Prerequisites: PHYS 206-4, PHYS 302-3

PHYS 407-3 Statistical Mechanics Kinetic theory of gases, laws of thermodynamics, probability theory, probability distributions, equilibrium statistical ensembles, ideal gases, phase transitions, critical phenomena, quantum statistics.

Prerequisites: PHYS 200-3, PHYS 302-3
PHYS 409-3 Mathematical Methods in Physics A survey of the methods and techniques involved in the formulation and solutions of physics problems. Topics include matrix algebra and group theory, eigenvalue problems, differential equations, functions of a complex variable, Green's functions, special functions, Fourier series, integral equations, calculus of variations, and tensor analysis.
Prerequisites: permission of the instructor
PHYS 410-3 Classical Electromagnetism - II Second part of a two-semester course in electrodynamics: Faraday's induction law; inductance; Maxwell's equations; generation and propagation of electromagnetic waves; plane waves; spherical waves; reflection and refraction; wave guides; electric dipole radiation; magnetic dipole radiation; antennas.

Prerequisites: PHYS 310-3, MATH 334-3
PHYS 451-3 Optics and Photonics II An examination of selected topics in modern optics, quantum optics and photonics. Topics will generally include: propagation of electromagnetic waves in waveguides, fibre optic transmission, laser oscillators, resonators and amplifiers, semiconductor photon sources and detectors, and nonlinear optical effects.
Prerequisites: PHYS 206-4, PHYS 310-3, PHYS 351-3
PHYS 499-3 Advanced Topics in Physics Topics include a selection of topics from contemporary Physics.
Prerequisites: permission of the instructor Precluded: this course may be taken more than once for credit provided that different topics are covered

## Political Science

POLS 100-3 Contemporary Political Issues An introduction to the basic concepts of political science through an examination of contemporary political issues: local, provincial, national and international.

Prerequisites: none
POLS 200-3 Canadian Government and Politics How Canadians organize their joint efforts to govern themselves at local, provincial, and federal levels. Attention is directed towards the political culture and its realization in constitutional rules of the game, in different institutions, and in the varied ways of influencing what governments do.
Prerequisites: none

POLS 202-3 Comparative Government and Politics Introduction to the comparative study of states and societies around the world.
Pre- or co-requisites: POLS 100-3 or permission of the instructor
POLS 205-3 Philosophy of Science A service course intended to introduce students to the conceptual/logical foundations of sciences. Topics include the nature of logic, scientific explanation, law, theories, use of probability and statistics, role of ethics and politics in science.

Prerequisites: none
Precluded: PHIL 201-3
POLS 220-3 Canadian Law and Aboriginal Peoples An examination of the constitution, Indian Act, treaties, court decisions, and laws as they relate to the government and politics of aboriginal peoples.
Prerequisites: POLS 100-3 or FNST 100-3, or permission of the instructor
Precluded: FNST 250-3
POLS 250-3 Law and Municipal Government Introduction to legislation, regulations, and court decisions relative to municipal governments in British Columbia.
Prerequisites: POLS 100-3
POLS 251-3 Local Services and Public Policy A study of the various local services and the challenges involved in the delivery to local communities, including public works, protective services, refuse collection, recreation and cultural services, health and social services and environmental protection.

Prerequisites: POLS 100-3
POLS 260-3 Politics of Public Finance Introduction to local budgeting, including assessment, taxation collection, the development of local budgets, provincial and federal government transfers and long-term financial planning.
Prerequisites: POLS 100-3
POLS 270-3 Political Philosophy: Plato to Locke A survey of political philosophy from the Greeks to the mid 17th century tracing the development of contending conceptions of political order.
Prerequisites: none
Precluded: POLS 204-3
POLS 302-3 Canadian Public Administration Businessgovernment relations, the making of budgetary policies, public enterprises, and the operations of regulatory authorities make up some of the most important factors that affect the way Canada works and constitute the core of Canadian public administration.

Prerequisites: upper division standing
POLS 303-3 Democracy and Dictatorship A comparative study of the struggle for democracy and its alternative through a survey of different approaches to political development.

Prerequisites: upper division standing

POLS 305-3 United States Politics Organization and function of the United States government. Examination of the constitution, political parties, electoral system, voting record, state's rights, checks and balances.

Prerequisites: upper division standing
POLS 311-3 Russian Politics and Society An examination of selected challenges in contemporary Russian politics from a comparative perspective including constitution, federalism, economic reform, political culture, national and social movements with a focus on the prospects for democracy.
Prerequisites: upper division standing
POLS 313-3 Women and Politics Women and contemporary politics, feminist theories and analyses.

Prerequisites: upper division standing or permission of instructor
POLS 314-3 European Politics and Government An examination of the politics and government of selected countries in Europe.

Prerequisites: upper division standing
POLS 315-3 Contemporary Issues in the Circumpolar World This course provides students with an in-depth understanding of a variety of topics such as governance and politics, Indigenous Peoples and self-government, education, the environment, gender, health and security in the Circumpolar North.
Prerequisites: upper division standing or NORS 101-3
Precluded: NORS 332-3
POLS 316-3 Community Government and Politics A survey of approaches to the study of local government, with special attention to citizens participation, and administrative efficiency in municipal politics.

Prerequisites: upper division standing
POLS 317-3 Ethics This course provides an overview of the theories of moral philosophy used to understand the major ethical problems of modern society.

Prerequisites: upper division standing
POLS 320-3 Canadian Politics and Policy This course provides an introduction to the concepts, goals and methods of policy analysis, with applications to current policy issues in Canada, British Columbia and the North. Topics include public opinion surveys and the statistical analysis of policy preferences.
Prerequisites: upper division standing and ECON 205-3
POLS 325-3 Canadian Politics and Identity An examination of the major issues surrounding "Identity politics" in Canada. Topics include regionalism, political culture, alienation, self-determination and nationalism.

Prerequisites: upper division standing

POLS 326-3 Canadian Constitution A study of the implications of the Canadian Constitution and the Charter of Rights and Freedom for Canadian politics.

Prerequisites: POLS 200-3
POLS 332-3 Community Development How can communities develop politically, economically and socially, in ways that serve their needs and are appropriate to their environment, culture and expectations? The nature and interpretations of community development will be explored, using experiences from Canada, the Circumpolar North and the Asia-Pacific region.
Prerequisites: upper division standing or permission of the instructor
POLS 333-3 Politics and Government of BC A survey of the many faces and challenges of BC politics, with specific attention to political culture and parties, the political economy, government and administration, and contemporary issues.
Prerequisites: upper division standing or permission of the instructor

## POLS 334-3 Society, Policy and Administration of Natural

Resources An examination of different ideological perspectives of natural resource and environmental management. The course explores how those views are expressed in the policy process and how conflicts are resolved within the policy process.

Prerequisites: upper division standing
Precluded: NREM 306-3

POLS 335-3 Community Politics Political questions dealing with citizen participation, liberal democracy and administrative efficiency in municipal and regional settings. Case studies including a diversity of issues such as community policing, sustainable economic development, downtown revitalization and local politics in the North.
Prerequisites: POLS 100-3 or upper division standing
POLS 338-3 Parties and Elections An introduction to the concepts, methods and empirical tools used to study political parties and elections in Canada.

Prerequisites: upper division standing
POLS 340-3 First Nations Self-Government and Administration An examination of government and administration of First Nations communities in Canada today and the implications of self-government for these communities. Some field study will normally be included in the course.

Prerequisites: POLS 100-3, 200-3
POLS 370-3 Political Philosophy: Locke to Marx A survey of political philosophy from the 17th to the late 19th century, tracing the development of contending Anglo-American and Continental European traditions of thought.

Prerequisites: POLS 204-3, POLS 270-3, or ECON 202-3 or permission of the instructor
Precluded: POLS 300-3

POLS 400-3 Classics in Political Theory A close analysis of a classic treatise in political theory from antiquity to the present. Texts will vary on a yearly basis.
Prerequisites: POLS 204-3, 300-3, or permission of instructor
POLS 401-3 Resource Politics An examination of the roles which natural resources and the environment have come to play within the contemporary political system. Emphasis on Canada and British Columbia.

Prerequisites: restricted to fourth year students or by permission of the instructor

POLS 403-3 Social and Health Policy and Administration The evolution of social and health services in Canada in a comparative context. The provision of public services, federal-provincial relations and the development of community health and social services.
Prerequisites: restricted to fourth year students or by permission of the instructor

POLS 405-3 Politics of Democratic Transition A comparative analysis of the challenges of political, economic and social transition in post Communist Europe.
Prerequisites: restricted to fourth year students or permission of the instructor

POLS 412-3 Comparative Aboriginal State Relations A comparative study of relations between modern states and aboriginal peoples, and the quest by aboriginal peoples for self-determination.

Prerequisites: POLS 202-3 and upper division standing or permission of the instructor

POLS 413-3 Democracy and Human Rights A comparative examination of political transformation with a focus on prospects for more democratic systems, links between economic change and political change and differing conceptions of human rights. Case studies will be drawn from various countries.
Prerequisites: restricted to fourth year students or by permission of the instructor

POLS 414-3 Comparative Federalism A comparative examination of the theories, development, and problems of federalism in countries such as Russia, Canada, Germany, United States, Australia and Switzerland.

Prerequisites: restricted to fourth year students or by permission of the instructor

POLS 415-3 Comparative Northern Development An examination of the strategies and challenges of northern development, including political administration, resource development, the environment and indigenous peoples in Russia, Scandinavia, Alaska and Canada.

Prerequisites: restricted to fourth year students or by permission of the instructor

POLS 434-3 Resource Communities in Transition An examination of issues facing rural, remote and northern resource communities across Canada. It compares issues across Canada's provincial norths as well as has a specific focus on northern British Columbia. Issues discussed include, among other things, the economic realities of globalization, the issues of identity for resource communities, and the issue of urban policy decision processes on rural, remote and northern regions.
Prerequisites: upper division standing
Precluded: POLS 401-3
POLS 440-3 Internship I Students with proposals relating to possible credit for an internship arrangement should consult the Program advisor well in advance.

Prerequisites: restricted to fourth year students and by permission of the Program Chair

## POLS 441-3 Internship II Continuing Internship

Prerequisites: restricted to fourth year students and by permission of the Program Chair

POLS 472-3 Contemporary Theories of Political Community A comparison of contemporary philosophical approaches to the basic questions of politics: Who are we and how should we live together? Prerequisites: upper division standing

POLS 498-3 Special Topics in Political Science Content of course will vary according to instructor and student requests.

Prerequisites: restricted to fourth year Political Science students and by permission of the Program Chair

POLS 499-3 Independent Study Content of course will vary according to instructor and student requests.

Prerequisites: restricted to fourth year and graduate students and by permission of the Program Chair

## Psychology

PSYC 101-3 Psychology as a science This course describes psychology as a basic science in two logical modules: psychology as a natural science and psychology as a social science.
Prerequisites: none

PSYC 102-3 Psychology and human problems This course describes how psychological science has been applied to understanding and dealing with many of the practical problems of human existence. Topics addressed include the promotion of healthy human development, health science applications of psychology, including the description and treatment of psychological disorders and the contribution of psychology to the understanding and modification of social problems.
Co-requisite: PSYC 101-3
PSYC 200-3 Contemporary Issues in Psychology This course deals with how concepts from psychology may be addressed to topics of current public interest. Examples of issues that may be included are psychological issues in the north, family violence, psychology and the justice system, modelling intelligent behaviour. The theme of the course will be updated each year and advertised in advance.

Prerequisites: PSYC 101-3, 102-3

## PSYC 215-3 Research Design and Methodology in

Psychology I In this course students will learn basic research design and the methods psychologists use to investigate behaviour and mental processes, with particular emphasis on empirical methodology. The course provides students with hands-on experience in research design, data collection and writing research reports in APA style.
Prerequisites: PSYC 101-3, 102-3

## PSYC 216-3 Research Design and Methodology in

Psychology II In this course students will continue to learn basic research design and the methods psychologists use to investigate behaviour and mental processes, with particular emphasis on empirical methodology. The course provides students with hands-on experience in research design, data collection and writing research reports in APA style.
Prerequisites: PSYC 101-3, 102-3 and 215-3
PSYC 220-3 Psychology of Gender and Gender Relations An introduction to contemporary issues related to differences in the experience and behaviour of males and females.
Prerequisites: PSYC 101-3, 102-3
PSYC 260-3 Psychological Foundations Detailed introduction to empirical and theoretical aspects of fundamental psychological processes (e.g. motivation, emotion, perception, cognition and learning).

Prerequisites: PSYC 101-3, 102-3

PSYC 301-3 Social psychology This course examines human behaviour in its social context. Specific topics covered include interpersonal interaction, social motivation and attitudes, prejudice, socialization and communication.

Prerequisites: PSYC 101-3, 102-3 and a total of 45 credit hours successfully completed

PSYC 303-3 Introduction to Abnormal Psychology An introduction to the study of abnormal behaviour. Topics include the history of psychopathology, definitions of abnormality, classification and assessment, models of psychopathology and an introduction to the specific syndromes of abnormal behaviour.
Prerequisites: PSYC 101-3, 102-3 and a total of 45 credit hours successfully completed

PSYC 306-3 Theories of Personality An introduction to the study of personality. Influential models of personality structure and function are examined as are techniques for personality assessment.
Prerequisites: PSYC 101-3, 102-3 and a total of 45 credit hours successfully completed

PSYC 307-3 Motivation and Emotion This course addresses the properties and determinants of motivated behaviour and emotional states. Topics include eating and drinking, defence, sexual behaviour and the nature, structure and mechanisms of emotion.

Prerequisites: PSYC 101-3, 102-3 and a total of 45 credit hours successfully completed

PSYC 309-3 Introduction to Health Psychology An introduction to behavioural health science.

Prerequisites: PSYC 101-3, 102-3 and a total of 45 credit hours successfully completed

## PSYC 315-4 Design and Analysis of Psychological

Research I This course addresses the design, description and analysis of psychological research. Principles of research design will be taught, along with common methods for analyzing data from descriptive statistics through correlational and non parametric techniques to analysis of variance. Multivariate methods will be introduced. Research design and analysis issues will be addressed in an integrated manner.
Prerequisites: PSYC 101-3, 102-3, 215-3
PSYC 316-4 Design and Analysis of Psychological Research II A continuation of Psychology 315-4, addressing the design, description and analysis of psychological research.
Prerequisites: PSYC 101-3, 102-3, 215-3, 216-3, 315-4
Co-requisite: PSYC 216-3
PSYC 317-3 Psychobiology An introduction to the study of the biological roots of behaviour. This course addresses the structure and function of the nervous system and its role in psychological processes, including perception, emotion, motivation, cognition, memory and overt behaviour.

Prerequisites: PSYC 101-3, 102-3 and a total of 45 credit hours successfully completed

PSYC 318-3 Sensation and Perception An introduction to the study of sensory processes. Topics include vision, audition, taste, olfaction and somesthetic senses. These will be taught within the context of the physiological and psychophysical methods that give rise to knowledge in this field.

Prerequisites: PSYC 101-3, 102-3 and a total of 45 credit hours successfully completed

PSYC 320-3 The Psychology of Learning An introduction to the study of learning. Topics covered include classical and operant processes, and cognitive models of response acquisition and change.
Prerequisites: PSYC 101-3, 102-3 and a total of 45 credit hours successfully completed

PSYC 330-3 Cognition This course provides an introduction to current research and theories of human mental processes and the methods used to study them. Topics may include attention, memory processes and systems, concept formation, language processing, problem solving, reasoning, and judgment and choice.
Prerequisites: PSYC 101-3, 102-3 and a total of 45 credit hours successfully completed

PSYC 345-3 Lifespan Development This course addresses the development of psychological abilities and characteristics and the mechanisms that subserve them. The full range of the human lifespan, from the prenatal period to the senior years, is examined.
Prerequisites: PSYC 101-3, 102-3
Precluded: SOCW 421-3
PSYC 401-3 Advanced Social Psychology Advanced issues in the examination of human behaviour in its social context.
Prerequisites: PSYC 101-3, 102-3, 215-3, 301-3

## PSYC 403-3 Patterns of Psychopathology and Their Treatment

This course addresses major syndromes of abnormal behaviour, introducing students to the major biological and experiential theories of their origins. Approaches to treatment are also addressed.
Prerequisites: PSYC 101-3, 102-3, 215-3, 260-3, 303-3
PSYC 405-3 Clinical Psychology This course deals with the contemporary practice of clinical psychology. Topics include the role of the clinical psychologist, psychological assessment, the conduct of psychological therapies and ethical issues.

Prerequisites: PSYC 101-3, 102-3, 215-3, 216-3, 260-3, 303-3
Co-requisites: PSYC 216-3, 403-3
PSYC 409-3 Advanced Health Psychology Advanced issues in the field of health psychology. Topics include psychosocial epidemiology, health behaviour and its determinants, stress and its management, the modification of health-related behaviour, disease prevention and health promotion.
Prerequisites: PSYC 101-3, 102-3, 215-3, 309-3

PSYC 415-3 Advanced Developmental Psychology This course deals with advanced issues in the field of developmental psychology. Topics may include development of the self, sex differences in interpersonal styles, adolescent problems such as drug and alcohol abuse, pregnancy and suicide, parenting, divorce, families, adulthood, death and bereavement, or successful aging.
Prerequisites: PSYC 101-3, 102-3, 215-3, 345-3
PSYC 417-3 Behaviour Modification The application of behavioural and social learning concepts to the change of problematic human behaviour.
Prerequisites: PSYC 101-3, 102-3, 215-3, 260-3
PSYC 418-3 Advanced Issues in Perception and Sensation This course provides a treatment of advanced questions in the study of perception. Building on an understanding of fundamental sensory mechanisms, this course provides further exploration of the mechanisms of perception and the manner in which perceptual processes are integrated with such other psychological processes as attention, learning, memory and cognition. Mechanisms will be highlighted by discussion of such specific topics as the perception of pain, emotion and speech.
Prerequisites: PSYC 101-3, 102-3, 215-3, 260-3, 318-3
PSYC 419-3 Neuropsychology An introduction to sensory, motor, cognitive and affective disorders resulting from brain damage and dysfunction.
Prerequisites: PSYC 101-3, 102-3, 215-3, 260-3, 317-3
PSYC 427-3 Cross-cultural Psychology This course deals with cultural differences in behaviour, with a special emphasis on intercultural issues in pluralistic societies.
Prerequisites: PSYC 101-3, 102-3, 215-3, 301-3
PSYC 430-3 Advanced Cognitive Psychology Advanced issues in the study of cognition. Topics may include models of memory, implicit learning, decision theory, computer simulation of thought and action.
Prerequisites: PSYC 101-3, 102-3, 215-3, 260-3, 330-3
Laboratories: Courses in the 442-495 series are restricted to Psychology majors only. Ordinarily, these will be restricted to students in their fourth year of studies.

PSYC 442-3 Methods in Developmental Psychology This course addresses experimental and observational methods used in developmental psychology.
Prerequisites: PSYC 101-3, 102-3, 215-3, 260-3, 315-4, 345-3
PSYC 445-3 Methods in Perception and Psychophysics This course provides exposure to the psychophysical techniques used in the study of human sensory systems and perception.
Prerequisites: PSYC 101-3, 102-3, 215-3, 315-4, 318-3

PSYC 450-3 Tests and Measures This course provides exposure to the design, conduct and interpretation of common techniques for describing human thoughts, feelings, and behaviours.

Prerequisites: PSYC 101-3, 102-3, 215-3, 260-3, 315-4

PSYC 455-3 Methods in Social Psychology This course addresses experimental and observational techniques commonly used to test hypotheses about human social behaviour.

Prerequisites: PSYC 101-3, 102-3, 215-3, 260-3, 301-3, 315-4

PSYC 460-3 Methods in Cognitive Psychology This seminar style course allows students to discuss, present and critically evaluate research on human mental processes, with particular emphasis on methodological issues.

Prerequisites: PSYC 101-3, 102-3, 215-3, 260-3, 315-4, 330-3
PSYC 470-3 Psychophysiology An introduction to the measurement of physiological responses to psychological conditions.

Prerequisites: PSYC 101-3, 102-3, 215-3, 260-3, 315-4 and one of 301-3, 306-3, 307-3, 309-3, 317-3

PSYC 475-3 The Evaluation of Social Programs An introduction to the methods and processes of program evaluation. Topics covered include needs assessment, the development of measures, formative and summative evaluation.

Prerequisites: PSYC 101-3, 102-3, 215-3, 260-3, 315-4, or permission of the instructor

## PSYC 480-3 Critical Analysis in Psychology and the Health

Sciences This course addresses the logic of drawing conclusions in psychology and the health sciences. Through an analysis of the requirements for conducting reviews of the literature on a particular topic, the process of summarizing findings, the conduct of clinical trials and their analysis, students will be exposed to common pitfalls in and prerequisites for the establishment of knowledge.

Prerequisites: PSYC 101-3, 102-3, 215-3, 260-3, 315-4, or permission of the instructor

PSYC 485-3 Current topics in psychological research This course provides exposure to advanced laboratory methods applied to areas of emerging interest in psychology.
Prerequisites: PSYC 101-3, 102-3, 215-3, 260-3, 315-4, and upper division standing and permission of the instructor

PSYC 490-3 Honours Thesis I An independent research project. Credit for PSYC 490-3 will be based on the introduction and proposed methodology for the project.
Prerequisites: PSYC 101-3, 102-3, 215-3, 260-3, 315-4, 316-4

PSYC 495-3 Honours Thesis II An independent research project. Credit for PSYC 495-3 will be based on a report of the results and implications of the project.

Prerequisites: PSYC 101-3, 102-3, 215-3, 260-3, 315-4, 316-4

PSYC 497-3 Senior Seminar An integrative seminar for advanced students. Restricted to fourth year Psychology students.
Prerequisites: PSYC 101-3, 102-3, 215-3, 260-3, registered in fourth year

PSYC 498-3 Special Topics in Psychology A course on a special topic, delivered in a lecture or seminar format. No more than three credit hours in Special Topics courses may be applied toward a major in Psychology.

Prerequisites: PSYC 101-3, 102-3, 215-3 and upper division standing and permission of the instructor

PSYC 499-(3-6) Independent Study A course on a selected topic based on readings directed by an instructor. The course format and requirements will be based on a formal contract with the instructor. No more than six credit hours in Independent Study courses may be applied toward a major in Psychology.
Prerequisites: PSYC 101-3, 102-3, 215-3 and upper division standing Psychology major and permission of the instructor

## Resource Recreation and Tourism

RRT 100-3 Leisure in Life This course introduces the foundations of Resource Recreation and Tourism from the perspective of both the natural and social sciences. Content includes the history and philosophy of the concept of leisure, the role of leisure, recreation and tourism in students' lives and Western culture, Resource Recreation and Tourism in integrated resource management, and current delivery systems.
Precluded: RRT 201-3 or RRT 203-3
RRT 200-3 Sustainable Resource Recreation and Tourism This course focuses on resource policy and planning for recreation and tourism as part of a sustainable resource management strategy. The course examines the management of the supply side aspects of sustainable resource management from agriculture to forestry to understand how to plan and manage for recreation and tourism. A broad array of sustainable recreation and tourism policies and planning tools in different political, geographical and economic contexts is reviewed, including the relationship of recreation and tourism to integrated land use planning and design.

RRT 202-3 Ecotourism and Adventure Tourism This course provides students with an understanding of ecotourism and adventure tourism along with other related types of tourism (e.g., nature-based, alternative, green tourism). The course covers the history and origins of ecotourism and adventure tourism; definitional debates surrounding the terms; principles of ecotourism; the application of ecotourism and adventure tourism in Northern BC, Canada and the world; and planning and management aspects of ecotourism and adventure tourism.

Precluded: RRT 404-3

RRT 204-3 Visitor Behaviour This course examines visitor's behavioural characteristics that underlie tourism and recreation demand. Topics include: tourist psychographics and demographics (i.e. motivations, learning, preferences, attitudes, expectations, benefits, activities, interests and opinions); host and guest behaviour; the typology of tourists; decision making behaviour and use patterns in outdoor recreation and tourism in BC. Canada and the world. The course focuses on the human dimensions of recreation and tourism and includes concepts from sociology, psychology, sport and leisure studies.

RRT 300-3 Recreation and Tourism Impacts This course review the identification, monitoring and mitigation of ecological, economic and socio-cultural impacts of resource recreation and tourism activities. Through labs, fieldwork and analysis of the literature, students examine the origin and management of impacts of resourcebased recreation and tourism.

Prerequisites: BIOL 110-3 or 201-3, RRT 100-3 and one 200 level RRT course.
Precluded: RRT 413-3
RRT 301-3 Environmental Interpretation This course introduces the principles and practice of environmental interpretation as a component of outdoor recreation and resource-based tourism. The utility and effectiveness of various interpretive techniques are also reviewed. This course builds skills in personal and self-guided interpretive techniques suited for settings as diverse as guided tourism operations and protected areas. Prerequisites: Any 200 level RRT course.

## RRT 305-3 Protected Area Planning and Management This

 course examines historical, social, cultural, and ecological considerations in the establishment, planning and management of protected areas. The focus of the course is generally on Canadian parks, though international examples are also included. Emphasis is placed on the historic and contemporary cultural roles of protected areas, understanding park legislation and policies, natural resource management issues, and current issues and trends facing contemporary protected areas.Prerequisites: Any 200 level RRT course.
Precluded: RRT 406-3
RRT 306-3 Indigenous Tourism and Recreation This course focuses on issues relating to indigenous perspectives on tourism and recreation, including indigenous tourism, cultural tourism and recreation, co-management of protected areas and conservation and tourism development opportunities in indigenous territories. Examples from northern British Columbia and other parts of the world are used.

Prerequisites: Any 200 level RRT course or FNST 100-3
Precluded: RRT 498-3 (2005) Aboriginal and Cultural Tourism

RRT 333-3 Field Experience This is an experiential course designed for RRT students to focus on theoretical and practical skills involved in the field. Each field experience is designed to incorporate the theories, models and other concepts introduced in the classroom and bring them into greater clarity by examining them in a real world setting. The course integrates outdoor recreation and resource-based tourism perspectives.
Prerequisites: Any 300 level RRT course and 60 credit hours.
RRT 400-3 Recreation and Tourism Ecology, Management and Design This course focuses on the theories, processes and techniques involved in ecological management and design of conservation and protected areas. Students develop skills in community-based involvement in conservation area design, GIS approaches and techniques for analysis, the concept of naturalness, capacity and suitability of the natural resource base for tourism and recreation such as commercial backcountry recreation and the evaluation of ecological values. Specific focus is given o policies, procedures and practices to protect and manage resource and tourism resources within an integrated management context.

Prerequisites: RRT 300 and RRT 305-3 or RRT 406-3

## RRT 403-3 International Dimensions of Resource Recreation

and Tourism The course discusses global dimensions and forces in resource recreation and tourism, particularly hose in developing nations. Typical topics include the role of the United Nations in protected area planning and management, poverty and protected areas, the effects of globalization on RRT, the impact of the concepts of sustainable development, and biodiversity in RRT, the risk society, the changing role of local communities in conservation, sex tourism, and enforcement issues in the developing world.
Prerequisites: RRT 300-3 or any 300 level INTS course.
Precluded: RRT 498-3 (2005-2006) International Dimensions of RRT
RRT 407-3 Recreation, Tourism and Communities This course assesses the relationship between tourism and recreation and local communities as well as collaborative techniques for involving communities in tourism consultation processes. It covers topics such as the concepts of communities and stakeholders, hosts and guests, the relationship between community involvement and tourism, community attitudes towards tourism development and emerging approaches towards collaboration and partnerships.
Prerequisites: RRT 204-3 and any 300 level RRT coures or any 200 level ENPL course.
Precluded: RRT 498-3 (2005-2006) Recreation, Tourism and Communities

RRT 408-3 Social and Behavioural Dimensions of Recreation and Tourism Examines individual and social factors that shape personal perception, experience and behaviours in a recreation and tourism setting.

Prerequisites: upper division standing

RRT 410-3 Research Methods and Analysis This course examines contemporary research approaches and methods using a variety of examples from the natural and social sciences focusing on resource recreation and tourism examples. Topics include the research process and quantitative and qualitative approaches to research. The class incorporates an applied project or projects for which data will be collected and analyzed in a mix of lab and lecture formats.
Prerequisites: RRT 300-3 and ECON 205-3 or MATH 242-3 or permission of the instructor.

RRT 412-3 Issues and Trends in Resource Recreation and Tourism This seminar examines current issues and problems in resource recreation and tourism, and explores philosophical, historical and contemporary trends and issues in resource recreation, parks and tourism. The future outlook for management, administration and utilization of recreation and tourism resources in BC will be examined.

Prerequisites: 90 credit hours or permission of the instructor

RRT 414-3 Polar Tourism and Recreation This course focuses on the unique aspects of tourism and recreation in the Polar Regions. Topics covered include issues of shared management, sovereignty, science vs. tourism, adventure and expeditionary tourism and recreation, the logistical challenges of operating in such remote environments, and the impacts tourism and recreation have in the Polar Regions.
Prerequisites: 90 credit hours
RRT 440-(2-6) Internship May be repeated for credit (maximum six credit hours).

RRT 498-(1-3) Special Topics May be repeated for credit (maximum three credits).

RRT 499-(1-6) Independent Study May be repeated for credit (maximum six credit hours).

## Social Work

SOCW 200-3 Introduction to Social Work Practice This course provides an overview of Social Work practice including the historical, political, philosophical and practical bases in Canadian society. It introduces students to the values, concepts and the relevant Social Work Codes of Ethics. There is also an overview of current social problems and related fields of practice.
Prerequisites: none
SOCW 201-3 Introduction to Social Welfare Introduces students to the welfare state in Canadian society. It examines historical, ideological and contemporary issues in the Canadian welfare state and reviews some of the major programs, policies and concerns confronting policy makers, social workers and client groups.
Prerequisites: none
Note: Social Work required courses at the 300 and 400 levels may be taken only by those students admitted into the program. Social work elective courses may be taken by other UNBC students depending on space and permission of the Program Chair. The elective courses may be of particular interest to students in Nursing, Education, Psychology, Political Science, Women's Studies and Public Administration. Priority is given to admitted Social Work students.

SOCW 300-3 Social Work Communication Skills Communication Skills in Social Work Practice is an introductory course that aims to increase skills and analysis in the diverse cultural settings that are appropriate to social work among First Nations and remote, northern and rural communities. Learning to recognize the contradictions in people's experiences and to maximize the possibilities, resources and strengths in their lives are critical aspects of a social worker's practice. Emphasis on integration of interpersonal and analytic skills in learning effective helping strategies within a structural framework that acknowledges the influence of class, race and gender in shaping personal and social well-being. This course includes a Skills Laboratory.
Prerequisites: enrolment limited to students admitted to the Social Work program

SOCW 301-3 Critical Social Work Practice This course critically examines the historical origins, values, methods and applications of various social work practice approaches. With an emphasis on structural, feminist, and First Nation social work strategies, the focus includes the application of these approaches to women, minority groups, First Nations, and residents of northern and remote communities. These will be contrasted with other models of social work practice including general systems theory, ecological theory, and case management.
Prerequisites: enrolment limited to students admitted to the Social Work program

SOCW 302-6 Social Work Field Education An initial three-day per week field placement is required of all students. Students will be involved in a wide range of practice roles and responsibilities at the individual, family, group and community levels. The course provides an initial opportunity for students to link social work concepts and theory with practice skills. It also introduces students to the structure, goals and operation of different human service agencies. Field practice objectives and details will be worked out among the student, the agency field supervisor and the faculty practicum advisor. The threeday per week placement includes a bi-weekly integrative seminar.

Prerequisites: SOCW 300-3, 301-3 and 320-3; enrolment limited to students admitted to the Social Work program

SOCW 320-3 Critical Social Policy This course examines the development of social policy in Canada, including current debates, from conventional and critical perspectives inviting students to consider the relationship between research, policy and social work practice. The course will review ideologies of social welfare policy, its formulation and implementation and consequences for people in need. Policy formulation will be analyzed from a critical perspective that examines the role of power and privilege in the construction of social policy. Alternative social arrangements and models of policy and practice will be explored.
Prerequisites: enrolment limited to students admitted to the Social Work program

SOCW 330-3 Social Work Research/Policy/Practice Social Work Research, Policy and Practice introduces research methods and analysis techniques that are used to examine issues in the policy and practice of social work and social welfare. It reviews qualitative and quantitative approaches with an emphasis on community needs research, participatory research and the development of interview schedules and questionnaires. The methods examined in this course will be linked to substantive policy and practice issues that reflect the economic, social and personal circumstances of people and communities in northern, remote and First Nation communities.
Prerequisites: enrolment limited to students admitted to the Social Work program

SOCW 336-3 Social Work Philosophy and Ethics This course critically assesses the ethical issues involved in carrying out the tasks of Social Work practice, policy and research. Using the relevant Social Work Codes of Ethics as a starting point, these practice, policy and research roles are considered in the context of northern and remote Social Work. The course reviews different theoretical approaches to Social Work.
Prerequisites: enrolment limited to students admitted to the Social Work program

SOCW 401-3 Northern/Remote Social Work Practice Northern and Remote Social Work Practice builds on the structural approach examined in SOCW 301-3. Critical generalist practice will be examined within the context of current and emerging client populations and practice issues. The course aims to develop a critical awareness/ analysis of the nature, cause and response of social workers to the social problems they are meant to deal with in the field practice aspects of their work in northern and remote communities.
Prerequisites: all 100, 200, and 300 level required courses in Social Work

SOCW 402-15 Social Work Field Education 2 This field placement requires students to perform in a social work role or organizational setting five days per week through the entire term. Field education will provide undergraduate students with an opportunity to enhance and refine their social work skills. As much as possible the assigned field education setting will broadly match the particular type of social work experience that the student wishes to pursue. The course includes four one-day seminars as part of the field education placement.
Prerequisites: all 100, 200, and 300 level requirements, SOCW 401-3, enrolment limited to students admitted to the Social Work program

SOCW 410-3 First Nations Social Work Issues First Nations Social Work Practice Issues examines methods of developing an antiracist social work practice in the context of First Nations experience. Particular emphasis is placed on understanding emerging models and structures within First Nations communities. The development of these models is explored within a context of analyzing the impact of the colonial experience. Students are introduced to alternative methods including some of the healing strategies and organizational structures in First Nations communities.

Prerequisites: enrolment limited to students admitted to the Social Work program

SOCW 420-3 Family/Child Welfare Policy Family and Child Welfare Policy focuses particularly on feminist and First Nations critiques of child welfare policy and social work intervention. It critically examines assumptions in family and child welfare policy including notions of family, substitute care, conceptions about violence and neglect, and the implications of child and welfare policy for social work practice in northern communities.
Prerequisites: enrolment limited to students admitted to the Social Work program

SOCW 421-3 Human Growth and Development Examines human growth and development with an emphasis on social processes from birth to death. The course follows a life cycle approach and addresses the influence of issues such as culture, class, gender and sexual orientation. Linkages are drawn between individual human development and health and social welfare policy, particularly as it effects residents of northern British Columbia. Note: students who have not taken a human growth and development course must take this course prior to graduating with a BSW.

Prerequisites: enrolment limited to students admitted to the Social Work program, or with permission of the Social Work Program Chair. Precluded: PSYC 345-3

SOCW 422-3 Child Welfare Practice This course examines child maltreatment from the perspective of social work practice in the field of child welfare. The course looks at various forms of child maltreatment including methods of assessing maltreatment and the cultural and structural factors that must be considered in assessing issues such as risk. Intervention strategies are also examined along with the legal procedures and responsibilities carried by child welfare social workers.
Prerequisites: SOCW 301-3
Precluded: students not admitted to the Social Work program
SOCW 424-3 Child Welf/Sites of Resistance Sites of Resistance: Race, Poverty and Sexuality in the Fields of Child Welfare focuses on contemporary child welfare policy and practice from the standpoints of racial and sexual minorities as well as from those on the economic margins of contemporary capitalist/patriarchal society.

## Prerequisites: SOCW 420-3

SOCW 426-3 Current Issues in Child Welfare Practice This course highlights topical child welfare issues, and current trends in child welfare practice, examines different methods of intervention and attempts to link changes in the economic circumstances of families to the social well being and healthy family functioning.
Prerequisites: upper division standing or permission of the Program Chair.

SOCW 432-3 Unemployment and Social Work Unemployment, Social Welfare and Social Work Practice examines the implications of unemployment and underemployment for social work practice and policy within a provincial, national and global context. In particular, the course will focus on the reframing of unemployment as a social work issue, explore the social consequences of joblessness, and identify models of policy and practice which are applicable in different environments: northern, rural, urban and single industry communities. Alternative policies will be explored.
Prerequisites: upper division standing; enrolment limited to students admitted to the Social Work program or permission of the Program Chair

SOCW 433-3 Women in the Human Services From a feminist and structural social work perspective, this course examines a range of women's issues in terms of socialization, work, health, sexuality, power and the state, legal issues, and the impact these have on the roles and positions of women in Canadian society, and in particular within human and social services.
Prerequisites: upper division standing or permission of the Program Chair.

SOCW 435-3 Community Social Policy This course represents a community practice project geared to integrating Social Work theory, policy, research and practice with specific community issues. Students prepare public briefs on actual areas of community concern in the light of Social Work and welfare theory, policy and practice. The brief focuses on proposed forms of action and the implementation of the strategies of change and intervention.
Prerequisites: upper division standing or permission of the Program Chair

SOCW 437-3 Social Work with Groups and Communities This course examines the historical evolution of group work and the role that Social Work has played within this context. Different types of group approaches and experiences are discussed, including professionally led groups and self-help groups. Students consider the operation of groups through analysis of group norms, roles, values, goals and decision making from a perspective that is both theoretical and experiential.
Prerequisites: upper division standing or permission of the Program Chair

SOCW 438-3 Comparative Welfare Analysis This course provides a critical introduction to Canadian and comparative social policy as it relates to evolving issues in Social Work practice. Its main theme is to show how the welfare systems of individual countries can only be understood through exploring the wider international context. Particular attention is paid to the interactions between family policies and issues of race and gender, and to the processes by which individuals or groups are given or denied access to full welfare citizenship. Topics include: principles of comparative studies; models of welfare; convergence versus divergence; the dynamics of welfarestate development; welfare regime analysis, crisis of the welfare states, and the impact of welfare states.
Prerequisites: upper division standing or permission of the Program Chair

SOCW 439-3 Social Work/Law and the Justice System This course examines various areas of the Canadian legal system: constitutional documents and conventions, the court system, the provincial legislative powers, rights of Aboriginal Peoples, the Charter of Rights and Freedoms, and provincial legislation (such as Adoption Act; Child, Family and Community Service Act; Child, Youth and Family Advocacy Act, Family Relations Act, etc). It also examines the practice of Social Work in court settings. Specifically, it provides a basic understanding of the rights and interests of children, rules of evidence, and the role of various interveners. Court writing skills will be introduced and court visits will be arranged.
Prerequisites: upper division standing or permission of the Program Chair

SOCW 440-3 Social Work In Mental Health This course examines policy and practice issues pertaining to the understanding and delivery of Social Work services to people with a psychiatric disability. Although the content will explore many ideas that are international and national in scope, the primary focus is on the policies and practices that are relevant to people in northern British Columbia. Students will examine assessment and intervention methods as well as analyze the impact of current trends and changes in the health and social welfare system pertaining to people who require mental health services. The nature and impact of psychiatric disability are viewed from both an individual level as well as a structural level of analysis. The major emphasis is on practice and policy issues relating to people who are sometimes described as "psychiatric survivors."
Prerequisites: upper division standing or permission of the Program Chair

SOCW 441-3 Social Work and Substance Abuse Social Work and Substance Abuse examines alcohol and other drugs in terms of their effects on individuals, families and society. It also looks at different roles of social workers and human service workers in helping people deal with and understand alcohol and drug abuse.

Prerequisites: upper division standing or permission of the Program Chair

SOCW 442-3 Social Work with Victims of Abuse Social Work with Victims of Abuse examines physical, emotional and sexual abuse and violence perpetrated on less powerful individuals. The roles played by the helping professions in this context are also examined.
Prerequisites: upper division standing or permission of the Program Chair

SOCW 443-3 Medical Social Work Focuses on the knowledge, attitudes and skills workers need to practice effectively in health care settings. Case studies will be used to demonstrate different methods of intervention in this context.

Prerequisites: upper division standing or permission of the Program Chair

SOCW 444-3 Social Work Critical Issues in Aging Critical Issues in Aging, Social Work Practice and Research examines the physical, social and psychological needs of the elderly. Adaptation of generic social work skills in effective intervention with and on behalf of the aged is also examined.
Prerequisites: upper division standing or permission of the Program Chair

SOCW 445-3 Social Work and Cross-Cultural Practice Social Work and Cross-Cultural Practice provides interdisciplinary approaches to understanding cultural and visible minority groups in relation to society and differential access to power are examined. The course will examine and critically evaluate different methods of assistance and intervention offered by social work to minority groups.

Prerequisites: upper division standing or permission of the Program Chair

SOCW 448-3 Inequality and Income Security Poverty, Inequality and Income Security examines the changing landscape of Canadian social policy and its implications for poverty, income inequality and income security. It reviews the evolution and devolution of major Canadian income security policies with a special focus on British Columbia. The implications of these changes on poverty and income inequality are examined for the people that live and work in northern British Columbia. This is done by looking at changes in poverty and income inequality for specific groups that include single mothers, First Nations, women, men, the unemployed and underemployed, the elderly, and those dependent on public assistance.
Prerequisites: upper division standing; enrolment limited to students admitted to the Social Work program or permission of the Program Chair

SOCW 449-3 Gender and Sexuality This course critically examines constructions of gender and sexuality that include cross-cultural and class analyses. It also focuses on the historical character of sexual relations and gender and begin to challenge what is taken for granted in contemporary society specifically as these notions affect social work policy and practice.
Prerequisites: upper division standing or permission of the Program Chair

SOCW 450-3 Social Work and Family Practice Social Work and Family Practice through the application of family systems theory, will examine current approaches to working with families in community counselling settings. Completion of a family assessment, as well as a critical examination of power dynamics in families, and their connection with the larger society will be undertaken. Issues of gender, race, age, class, sexual preference, and so on, will be analyzed in this context.

Prerequisites: upper division standing or permission of the Program Chair

SOCW 452-3 Social Work/Crisis Intervention Crisis Intervention in Social Work examines the historical development of crisis intervention practice and theory. Several models of crisis intervention are presented with an analysis of their application to particular areas and fields of social work practice. Included in the fields of practice are suicide assessment and intervention, child abuse, spousal assault, physical illness and disability, psychiatric emergency and grief resolution. Analysis and discussion will centre around crisis intervention as it applies to social work practice with minority groups in northern communities. In addition to lecture and discussion material, interview and process skills will be practised in this course.

Prerequisites: upper division standing or permission of the Program Chair

SOCW 453-3 Faith, Power and Practice The Impact of Religion and Spirituality on Human Service Work will provide a forum for the critical exploration of the impact and influence of religious thought and practices on human service work. The historical roots of this work are based in religious movements, aspects of which still affect today's practice/policy. In an increasingly multicultural environment, students must have a fundamental understanding of religion and spirituality in order to practice effectively.
Prerequisites: upper division standing or permission of the Program Chair

SOCW 454-3 Disability Issues This course involves students in an examination of perspectives on disability, as well as a critical analysis of current theories, policies, and practice. The course begins with an examination of common assumptions about disability and provides opportunities to challenge and critique interpretations of the nature and meaning of disability.
Prerequisites: upper division standing or permission of the Program Chair.

SOCW 455-3 First Nations Governance and Social Policy Family
values and standards of First Nations form the basis of the study on First Nations policy development and its relationship to selfgovernance for First Nations Communities. Topics explored include: self-determination from a First Nations perspective, its impact on Canadian Social Policy, along with the necessity to address Child and Family social needs into self-governance and planning. The course focuses one examples within British Columbia communities. Additionally, the course explores the importance of how social work practitioners need to become skilled advocates aimed at influencing policy and laws affecting First Nations and family systems.

Prerequisites: upper division standing or permission of the Program Chair.

SOCW 456-3 Family Caring Systems This course develops an understanding of family caring systems from an Aboriginal/First Nations perspective. Topics explored include Aboriginal/First Nations worldviews, traditional roles of family members, the role that historical events have played in the development and current social realities of First Nations and the role that social workers can play in family wellness. Contemporary Social Work practices with Aboriginal/First Nations children and families are also analyzed and critically reflected upon, with a particular emphasis on future directions in Aboriginal/First Nations child and family welfare.
Prerequisites: upper division standing or permission of the Program Chair.

SOCW 457-3 Individual and Community Wellness This course develops an understanding of the role that wellness plays in the life of Aboriginal/First Nations individuals and communities. Topics explored include the definition of healing and wellness, the role that historical events have played in the development and current socio-economic situation of First Nations and the role that social workers can play in the future development of health and wellness of First Nations individuals and communities. As well, the issue of self-care and selfmanagement for First Nations people and the social workers who may work in high stress situations is explored.

Prerequisites: upper division standing or permission of the Program Chair.

SOCW 498-(3-6) Special Topics Special topic courses may be offered from time to time. These courses are available to permit faculty to offer courses in areas that fall within their particular areas of research and expertise in Social Work practice and policy. With permission of the Chair of the Social Work Program, students may repeat the course for credit.
Prerequisites: upper division standing or permission of the Program Chair.

SOCW 499-3 Directed Readings Students can undertake a directed reading course in order to fulfill a particular learning need and area of interest. Directed readings are dependent upon the availability of faculty resources.

## University

UNIV 101-3 Introduction to Higher Education This course is most appropriate for students who are in their first year of study at a university. It offers an introduction to the university as an institution of higher learning, an explanation of the various methods of inquiry employed therein, and demonstrations of the study skills and learning strategies that are required for academic success. Students will be encouraged and assisted to apply the information presented in this course to other courses that they are completing concurrently.
Prerequisites: none

## Women's Studies

WMST 100-3 Introduction to Women's Studies A study of past and present women's positions in and contributions to society from a multidisciplinary perspective. Specific topics may include an historical overview of politics, law and the family, productive roles, health and illness, science, culture and philosophy.
Prerequisites: none
WMST 110-3 Women, Culture and Society This course examines the meaning and experience of women's lives in a variety of cultural media and culturally diverse contexts. Topics may include the historical representation of women, cross-cultural perspectives on images of women in film, women's health, sexuality and cultural representation, 'race' and gender on television, and women, diversity and the family.
Prerequisites: none
Precluded: WMST 101-3, WMST 102-3
WMST 207-3 Introduction to Feminist Ethics Providing an introduction to the contemporary literature on feminist ethics. An overview of the literature on the ethics of care, ecological feminism and the contemporary debate on maternal or essentialist feminism will be included. The theories of authors such as Gilligan, Noddings, Baier and Vandana Shiva will be discussed.

Prerequisites: WMST 100-3

## WMST 209-3 Gender and Cultural Studies: An Introduction

 This course introduces students to questions of gender, media representation, and technology in the twentieth century. Students will examine the construction of femininity and masculinity in such visual technologies as advertising, video, television, and film. Popular print media such as Harlequin romances and comic books and popular forms of visual display such as graffiti will also be discussed. The course will also consider cultural difference in the construction and interpretation of images of men and women, and the question of access to various technological media of expression.Prerequisites: none

WMST 210-3 Research Methods This course introduces students to a variety of research practices, including oral history, interviews, case studies, archival and library research, survey/content analysis, and field work. The course will enable students to think critically and to effectively collect, analyze and present information.

Prerequisites: none
WMST 211-3 Feminist Critical Thought This course introduces students to the philosophical, cultural, and political foundations in feminist critical thought. Students will learn about the varieties of feminist thinking such as liberal feminism, Marxist feminism, radical feminism, psychoanalytical feminism and postmodern feminism. We will discuss the significance of these various theories to applied areas of knowledge such as law, education, technology, culture and work.

Prerequisites: none
WMST 220-3 Gender and Literary Theory This course provides an introduction to critical analyses of gender and their implications for literature. Students gain an overview of some current topics in gender theory and apply these to contemporary texts.

Precluded: ENGL 200-3 (This is the same course as WMST 220-3)
WMST 221-3 Women and Literature: A Survey This course is a survey of works of poetry and fiction written by women in English from the Renaissance to the present. The course considers feminist theory and criticism in relation to these works.
Precluded: ENGL 210-3 (This is the same course as WMST 221-3)
WMST 302-3 Women and the Contemporary World This course examines the role of women in contemporary world through a comparative examination of different societies. Topics to be addressed will include such issues as legal status, health, family, work, sexuality and violence.

Prerequisites: WMST 100-3
Precluded: WMST 212-3
WMST 303-3 Lesbian and Bisexual Lives This course introduces students to lesbian and bisexual women studies from an historical perspective as well as focusing on contemporary contexts and issues. Students will study the diversity of political perspectives among lesbian and bisexual women and how sexuality intersects with race, class, ability and cultural differences.
Prerequisites: none
WMST 304-3 Contemporary Women's Writing in an International Frame This course covers a range of contemporary women writers in an international context. Writers will be examined in relation to developments in the women's movement and in light of recent feminist literary theoretical insights into narrative, genre, and representation.
Prerequisites: none

WMST 306-3 Indigenous Women: Perspectives The purpose of this course is twofold: first to understand how Indigenous women's lives have been shaped by colonialism and secondly, to delineate the global themes in their current political and social struggles to transcend the colonial legacy that continues to constrain them.

Prerequisites: FNST 215-3 or permission of the instructor
Precluded: FNST 306-3 and WMST 310-3

WMST 309-3 Gender and Film This course addresses the construction of gender in films made by women and men that focus explicitly on the question of gender in relation to class, race, sexuality, ethnicity, colonialism and nationalism. We will discuss various styles of film production such as documentary realism, avant-garde and postmodern cinema, and commercially successful Hollywood films. Students will also be introduced to a variety of interpretative methods including psychoanalytical, semiotic, Marxist, feminist, and aesthetics. Note: students who have completed WMST 206-3 prior to the 199697 academic year, may not take this course for credit.
Prerequisites: WMST 209-3, or permission of instructor
WMST 311-3 History of Feminism This course surveys the history of those various political, social and cultural movements, e.g. suffragism, women's liberation, etc., which have combined to create the phenomenon of feminism. Attention is also devoted to the diverse theories, ideas and values that underpin contemporary feminism.

Prerequisites: WMST 100-3 or permission of instructor Precluded: HIST 311-3

WMST 312-3 An Introduction to the History of Gender This course explores issues of gender in historical context using a case study approach.

Precluded: HIST 270-3, WMST 270-3, HIST 310-3, and HIST 312-3

WMST 314-3 First Nations' Women's Writings This course examines a range of genres in contemporary First Nations' women's writings in North America including autobiography, literature, poetry, drama and critical essays.
Prerequisites: WMST 100-3, WMST 110-3 or permission of the instructor

## WMST 401-3 Cultural Studies: Gender, Race and

Representation This course explores the visual expression of twentieth-century women artists, photographers, fashion designers and film makers while also examining feminist critical responses to these visual forms of expression. Examples of topics for discussion will include the role of the spectator, aspects of play and domination in visual display that shape our cultural ideas of the body, gender and the difference point of view makes in film production and consumption, fur fashions and the debate between aboriginal trappers and Greenpeace.
Prerequisites: WMST 209-3 and 304-3 or permission of the instructor

WMST 403-3 Science, Technology, and Women's Lives This course explores both historical trends and contemporary concerns regarding women, science and technology. It compares traditional First Nations knowledge and western science and investigates prevailing stereotypes of science and scientists, science as a social activity, women's role in early western science and in contemporary scientific communities, and the effects of science and technology on women's lives.
Prerequisites: WMST 210-3 or permission of the instructor
WMST 404-3 Advanced Feminist Ethics This course will provide an analysis and critique of both the historical and contemporary literature on feminist ethics. Feminist ethics will be discussed in terms of the similarity or diversity of feminist theories of moral decision making to traditional deontological and consequentialist approaches.

Prerequisites:WMST 207-3 or upper division standing and permission of the instructor

WMST 407-3 Gender and International Relations This course will examine in detail topics related to women and international relations as selected by the instructor.

Prerequisites: INTS 308-3 or upper division standing and permission of the instructor

WMST 408-3 Women, Power, and Environments This interdisciplinary course deals with gendered environmental histories, issues, and concerns across cultures. It looks at the far reaching impacts of human migrations, western expansion, and warfare as well as internal environments including "chilly climates" from feminist perspectives; introduces students to debates about the social and economic consequences for women of the uneven energy developments in various parts of the world; examines power relations and gendered adaptations and analyzes the roots of our current environmental problems. The course will also enable students to develop strategies to fight existing power relations that are detrimental to our present and our future.

Prerequisites: WMST 101-3, 210-3, 311-3 or permission of instructor
WMST 409-3 Advanced Feminist Social Science Methodology
The goal of this course is twofold: first to cover current debates in feminist methodology and second to develop appropriate research strategies for an independent research project.

Prerequisites: WMST 210- and 311-3 or permission of the instructor

WMST 410-3 Feminist Political Philosophy This course will provide an analysis and critique of both the historical and contemporary literature on feminist political philosophy from its enlightenment roots to its contemporary post-modernist critique on enlightenment notions of rationality. Students will study primary sources from the political writings of Wollstonecraft, Engels, Harriet Taylor Mill, de Beauvoir, Millett, Hartsock and Haraway.
Prerequisites: upper division standing and permission of the instructor
WMST 411-3 Contemporary Feminist Theories This course examines various themes and debates in recent feminist theories from an interdisciplinary perspective. Topics will vary from year to year.
Prerequisites: WMST 311-3 or permission of instructor

## WMST 412-3 Political Economy and First Nations Women

The purpose of this course is to understand how the political economy acts upon First Nations women's lives in and beyond their home communities as well as to offer comparative examples of similar processes from elsewhere in the new world and from Asia and Africa.

Prerequisites: upper division standing and permission of the instructor Precluded: FNST 412-3

WMST 420-3 Contemporary Women's Literature This course considers contemporary women writers and their work, emphasizing their cultural diversity and considering them in the context of feminist theory. Writers may include: Nadine Gordimer, Joy Kogawa, Amy Tan and Louise Erdrich.
Prerequisites: Two lower division English Courses excluding ENGL 170-3 or 45 credit hours or permission of instructor Precluded: ENGL 410-3 (This is the same course as WMST 420-3)

WMST 498-3 Selected Topics in Women's Studies The course will examine in detail topics selected by the instructor.
Prerequisites: permission of the instructor
WMST 499-3 Independent Study in Women's Studies This course enables students to read in depth in an area of women's studies not normally covered by established principal or ancillary courses in the Women's Studies program.

Prerequisites: permission of the Program Chair

## Awards and Financial Aid

Awards, Financial Aid and Student Employment Centre helps students to obtain the funds necessary to finance their UNBC education and to provide educational budgeting services. Funds may be obtained from a variety of sources, including government and bank loans, UNBC awards; and employment opportunities; and donor supported scholarships.

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BC Association of Social Workers, Northern Branch Bursary
BC Council of Garden Clubs Bursary
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Prince George Firefighters Local 1372 Bursary
Prince George Gyro Club Bursary
Prince George Medical Society Scholarship
PRT Scholarship
R. Williams/B. La Pointe Scholarship

Rix Family Foundation Endowed Health Sciences Bursary
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Ron Brown Memorial Bursary
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Shaw Cablesystems G.P. Endowed Bursary
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    Celena John Bursary
    Chris Winther Memorial Scholarship
    Cloverdale Paint Bursary
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    Cora Donald Bursary
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    Dr. Mary John Bursary
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    Husky Energy Varsity Basketball Awards
    Industrial Forestry Service Ltd. Bursary
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    Prince George Minor Basketball Association
    Pulp, Paper and Woodworkers of Canada, Local }9\mathrm{ Bursary
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## IV. Student Employment

 page 307Donors interested in establishing new awards are encouraged to contact the Office of University Development at 1-866-960-5750 or devoff@unbc.ca.

## Awards

The University of Northern British Columbia is committed to encouraging students from diverse backgrounds and experience to further their academic education through the establishment of scholarships, which promote academic excellence, and bursaries, which assist students in overcoming financial barriers to postsecondary education. All awards established at the University of Northern British Columbia are subject to acceptance by the University Senate.

## 1. Applications

Application forms for awards are available at the offices of high school guidance counsellors, other post-secondary institutions, and at UNBC Student Success Centres. An on-line application form is also available by accessing the UNBC website www.unbc.ca/finaid.

Individual applicants are responsible for knowing the application deadlines, providing complete information on the application form and for supplying any supporting documentation that is required. Students are advised to read information listed under Application Instructions to their UNBC awards application form.

Unless otherwise stated, the deadline for applying for awards is March 1, 2006.

Application forms are not carried over from one award period to the next. Applicants are required to submit a new application form, along with any supporting documentation required, for each award period.

## 2. Definitions

Unless otherwise stated these definitions apply to the Criteria listed on subsequent pages.

## Academic Excellence

Normally a minimum A- average, equivalent to or greater than a 3.67 GPA.

## Academic Proficiency

Normally a minimum B- average, equivalent or greater than a 2.67 GPA.

## Satisfactory Academic Standing

Normally a minimum C average, equivalent or greater than a 2.00 GPA.

## Minimum Standing

For the purpose of awards eligibility, minimum standing ("passing grades") shall be considered equivalent to satisfactory academic standing.

## Award Units

Calculated by multiplying the credit hours completed during the specified term by the grade points received for those hours.

## Full-time Student

For the purpose of awards eligibility, an undergraduate student who registers in and attempts nine or more credit hours per semester in an undergraduate degree program will be considered a full-time UNBC student.

## New Post-secondary Student

A student who has not previously attended a post-secondary institution such as a college or university.

## Resident of Northern BC

A person who resides in a northern community located within the regions established under the College and Institute Act for the College of New Caledonia, the Northern Lights College and the Northwest Community College.

A resident of northern British Columbia is defined as a person whose principal residence for twelve consecutive months immediately prior to admission to UNBC is within the defined region.

## Award Types

## Award

An award may be a fellowship, scholarship, bursary, prize or other monetary or nonmonetary recognition assigned to a student.

## Fellowship

Usually available only to graduate students, awarded on the basis of high academic achievement (academic excellence or academic proficiency) toward which secondary criteria may be applied.

## Scholarship

Awarded on the basis of high academic achievement (academic excellence or academic proficiency) toward which secondary criteria may be applied.

## Bursary

Awarded on the basis of demonstrable financial need, provided the student has met the requirement for satisfactory academic standing, toward which secondary criteria including academic achievement may be applied.

## Prize

The award's value may be nonmonetary, such as a book or other gift-in-kind, or if monetary, its value is normally less than $\$ 250$.

## Medal

The award is an academic medal, awarded on the basis of academic achievement, toward which secondary criteria may be applied.

## Annual GPA

Calculated on the basis of grade point averages for credit hours completed during the awards year, May 1 - April 30.

## Award Categories

## Admission

Available to students commencing an undergraduate course of studies at UNBC for the first time.

## In-course

Available to undergraduate students who have completed at least 18 credit hours (nine credit hours per semester) at UNBC during the current awards year and are continuing a course of studies at UNBC.

## Graduate

Available to students who are enrolled in a Master's or Doctoral program. A full-time graduate student is one who is enrolled in six credits or more per semester, or is enrolled in a thesis, project or comprehensive examination. Please consult the Graduate Calendar for a list of awards available to graduate students.

## Transfer

Certain awards are available to those students who are entering UNBC after having commenced degree studies at other institutions. In all circumstances a minimum of 18 transfer credit hours is required. Eligibility for awards is based on the Office of the Registrar's calculated transferable hours and grade point average.

## Part-time

Available to students who are registered in less than nine credit hours each semester.

## Open

These awards are available to all categories of undergraduate students, including new post-secondary, transfer, in-course and graduate students. Some awards may also be available to Faculty.

## Renewable

An award which was made upon the student's enrolment to UNBC and which has the possibility of being renewed annually subject to the renewal terms and conditions as defined in the award's criteria.

## External

Awards which are administered outside of UNBC but for which UNBC students are eligible. Separate application forms may be required.

## 3. Administrative Policies

Unless otherwise stated these policies apply to the criteria listed on subsequent pages.

## Admission Awards

Admission awards are open to students commencing an undergraduate degree program at the University of Northern British Columbia for the first time. To be considered for awards adjudicated on the basis of criteria such as leadership skills and community service, it is recommended that students submit a résumé or curriculum vitae along with a completed Application for Awards to the Awards and Financial Aid office.

New students will be evaluated on their admission average as calculated by the Office of the Registrar. Students who have prior postsecondary experience will be evaluated on the grade point average of their transferable courses as calculated by the Office of the Registrar.

## In-course Awards

Students continuing a course of studies at UNBC should apply for UNBC's scholarships and bursaries; to be considered as well for awards adjudicated on the basis of criteria such as leadership skills and community service, it is recommended that students submit a résumé or curriculum vitae along with a completed Application for Awards to the Awards, Financial Aid, and Student Employment Centre. Unless otherwise stated, in-course awards are available to undergraduate students who have completed a minimum of 18 credit hours (nine credit hours per semester) over the awards year (May 1 - April 30). Applicants are evaluated based on their annual GPA, their calculated grade point average for courses taken within the academic year. In case of a tie, preference will be given to students who have successfully completed a greater number of courses over the term under consideration.

Credit hours will be multiplied by grade point averages to determine any student's awards units:

| Example Student | A | B |
| :--- | ---: | ---: |
| Total credit hrs/3 sem | 27.0 | 30.0 |
| Annual GPA | 4.0 | 4.0 |
| Award units | 108.0 | 120.0 |

Student B, with higher award units, will be given preference in award selection. The cumulative GPA shall be used to break ties between identical award units.

Co-op students: for the purposes of awards eligibility, students enrolled in a co-op term will be considered to have met the minimum full-time credit equivalency for that term. Co-op applicants will be evaluated based on their cumulative GPA.

## Awards Ceiling

The University reserves the right to limit the amount of money awarded to any student and, if necessary, to reassign awards to other students by reversion. The Senate Committee on Scholarships and Bursaries will generally recommend that no individual student receive an award or combination of awards exceeding a determined value.

UNBC Merit Awards and UNBC In-course Scholarships are considered to be stand-alone awards, and will not be awarded to students who are in receipt of other academic awards of equal or greater value.

## Disbursement

It is generally understood that students will be enrolling in both the Fall and the Winter Semesters. Funds will be deposited directly into the students' UNBC accounts in two equal disbursements: the first on or about September 10 and the second on or about January 10.

Non-renewable awards may be deferred for a period of one semester only. Renewable awards may be deferred for up to one academic year at the discretion of the Awards Office. All requests for deferrals must be made in writing to the Awards, Financial Aid and Student

Employment Centre, and must outline the reasons the deferral is being sought.

The University reserves the right to apply awards proceeds against outstanding fees owing to the University. If the amount of the award or awards exceeds the unpaid fees for the semester, the student may apply for a refund of the excess balance once the add/drop deadline is past.

## Appeal of Eligibility Status for Renewable Awards

Students who hold renewable awards will be notified in writing of their renewal status at the end of the Winter semester each year, when final grades have been submitted.

Occasionally, circumstances may arise that are beyond a student's control that affect his/her academic work. Students who believe their renewal status is in jeopardy due to such circumstances must contact the awards office before the start of the final examination period for the semester in which the difficulty occurs.

Students may be required to submit the following information in support of their appeal:

- A letter from the student outlining the extenuating circumstances affecting his/her eligibility; and
- Supporting documentation from a professional third party (e.g. physician, counsellor, clergyman or instructor) who was aware of the student's situation during the semester.

All requests for a change in scholarship terms and conditions will be forwarded to the Senate Committee on Scholarships and Bursaries for consideration on a case-by-case basis. The Awards Office will notify the student in writing of the committee's decision. All decisions made by the committee are final and not subject to appeal.

## Liability

Any award may be withheld or cancelled for any of these reasons: lack of suitable candidates; failure to meet the terms and conditions of the award; withdrawal from the University or withdrawal of the award by the donor. Furthermore, the University assumes liability for the payment of scholarships, bursaries, prizes, and other awards only to the extent that expected gifts from donors or returns from particular investments of endowed funds are realized. The University also reserves the right to make whatever changes or corrections that are required, including cancellation of particular awards or changes to criteria or award values.

## Requirements

Unless otherwise stated, all awards are conditional upon confirmation of full-time registration at the University of Northern British Columbia in the Fall and Winter Semesters immediately following the granting of the award.

## Awards List

## 1. Early Admission Awards

These awards are for those students just leaving high school and who are attending a post-secondary institution for the first time.

## President's Scholarships

Donor The University of Northern British Columbia
Value $\$ 9,000$, renewable at $\$ 5,300$ per annum for up to three years.
Number Three
Eligibility Available to full-time students commencing a course of studies at UNBC for the first time.

Criteria Academic excellence, with consideration given to community involvement and leadership.

Application Instructions Applicants may wish to support their application by including two letters of reference attesting to their community involvement/leadership activities.

Note This award is renewable subject to the recipient maintaining an annual GPA of at least 3.33.

Established 1994

## Raven Scholarships

Donor The University of Northern British Columbia
Value \$6,500
Number Variable
Eligibility Available to full-time students commencing a course of studies at UNBC for the first time.

Criteria Academic excellence.
Established 1994

## Raven Bursaries

Donor The University of Northern British Columbia
Value \$2,000
Number Variable
Eligibility Available to full-time students commencing a course of studies at UNBC for the first time.

Criteria Satisfactory academic standing and demonstrated financial need.

Application Instructions Complete the financial need section on the award application form.

Established 1994

## UNBC Leadership Awards

As one of MacLean's magazine's 'Leaders of Tomorrow', UNBC is committed to rewarding those students who have made an effort to balance their academics with leadership activities-both within their school and their community.

Value \$2,000
Number Twenty
Eligibility Available to full-time students entering UNBC directly from high school.

Criteria Academic proficiency and demonstrated leadership/involvement.

Application Instructions Complete the UNBC Leadership Awards application form and attach the required documentation.

Note The deadline to apply for these awards is December 15 each year.

Established 2003

## UNBC Scholars

Value Tuition fees, renewable to a maximum of 120 credit hours Number Fifty-five

Eligibility These tuition remission scholarships are available each year to grade 11 students in northern British Columbia and Yukon high schools who have attained the highest academic average in their high school. The scholarship will take the form of a waiver of full tuition fees to a maximum of 120 credit hours (or the number of credit hours required for a Bachelor's degree). The recipients must meet UNBC admission requirements and be Canadian citizens or have landed immigrant status. The award is tenable upon registration in a full course load at UNBC, with minimum of 12 credit hours in both Fall and Winter semester. Students must complete a minimum of 30 credit hours each academic year (September-August) in order to retain this scholarship.
Criteria Academic excellence.
Application Instructions No application is required. Each high school in northern British Columbia will nominate the student with the highest GPA at the end of grade 11 ( minimum 80\%).
Note These scholarships are renewable annually subject to the recipients registering in a full course load ( 30 credit hours) each academic year at UNBC and attaining at least an annual GPA of 3.00 ("B" average) in the academic year.
Established 1998

## 2. Admission Awards for New Postsecondary Students

These awards are for students entering post-secondary education for the first time.

## BCR Group of Companies Entrance Scholarship

The BCR Group is dedicated to diversifying its revenue base and becoming a customer-focused, market-driven organization providing efficient and integrated services in transportation, real estate, telecommunications, and related services. The BCR Group of Companies' broad base of activities includes road and intermodal transportation, telecommunication marketing, real estate development, passenger services and transportation consulting, with rail freight its primary business enterprise.

## Donor BCR Group of Companies

Value $\$ 1,000$

## Number One

Eligibility Available to a student entering the first year of an undergraduate degree program at UNBC who is pursuing a course of study related to transportation, telecommunications, and/or business management.

Criteria Academic excellence.
Note The recipient of this award may be eligible to receive the BCR Incentive Scholarship (see In-course Awards listing).

Endowed 1994

## Brian and Jackie Brownridge Family Bursary

Established to assist the residents of the Prince George area in their pursuits of higher education. As longtime residents of the city, Brian and Jackie Brownridge remain committed to the community and in particular the growth of UNBC in serving the northern part of the province.

Donor Brian and Jackie Brownridge
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student entering first year who is pursuing a degree in Business Administration (BComm Program). Preference will be given to graduates of northern high schools as defined by School District 57.

Criteria Demonstrated financial need. Final selection will be made on the basis of greatest financial need.

Application Instructions Complete the financial need section of the awards application form.

Established 1998

## Chancellor Iona Campagnolo Scholarship

Iona Campagnolo, UNBC's Founding Chancellor, is a distinguished Canadian and British Columbian. She is an integral part of this University's vision, declaring that the University of Northern British Columbia will be a welcoming place for all students, not grudgingly, or in spite of their colour, race, gender or place of origin, but in frank celebration of it.

Donor Friends of Chancellor Campagnolo and UNBC
Value $\$ 1,250$
Number One
Eligibility Available to a new student who is a resident of northern British Columbia. The scholarship will be awarded in even years to a woman and in odd years to a man, and scholarships will be distributed evenly, when possible, amongst the differing sub-regions. Preference will be given to students in Health and Human Sciences, Political Science, International Studies, First Nations Studies, or Women's Studies.

Criteria Academic excellence, social excellence, community service.
Application Instructions Attach a letter outlining your community service to your application. Include two letters of recommendation/reference.

## Endowed 1992

## Dean's Entrance Scholarships in Environmental Engineering

This scholarship has been created in order to celebrate the establishment of the first joint degree offered between the University of British Columbia and the University of Northern British Columbia, and to welcome enterprising new students to the Bachelor of Applied Science in Environmental Engineering program.

Donor University of British Columbia, Office of the Dean of Applied Science

Value \$2,000
Number Five
Eligibility Available to a full-time students newly declaring a major in the Bachelor of Applied Science in Environmental Engineering degree program by entering either the first or second year of said program at the University of Northern British Columbia.
Criteria Academic proficiency
Note: Successful applicants cannot receive the award more than once.
Established 2004

## Dr. Alvin and Mrs. Janie Mooney Scholarship

Endowed by the Rotary Club of Vanderhoof in recognition of the outstanding contribution made by Dr. and Mrs. Mooney to the community of Vanderhoof and to northern British Columbia.

Donor The Rotary Club of Vanderhoof

Value \$1,000-\$1,250
Number One
Eligibility Available to a full-time student commencing an undergraduate program of studies at the University of Northern British Columbia after graduating from secondary schools located in Fort St. James, Vanderhoof, Fraser Lake and surrounding rural areas.

Criteria Academic proficiency with a minimum GPA of 3.33 or greater and demonstrated community service.
Application Instructions Attach a letter outlining your community service to your application form.

Endowed 1994

## FMC of Canada Limited Environmental Engineering Bursary

As a worldwide company with stake holdings in northern British Columbia. FMC wishes to ensure a strong northern employee base, and to protect the environment. At FMC, people from across operations work together in teams. Their shared perspectives spark innovation, identify opportunities, and generate exciting new products.

Donor FMC Canada Limited Peroxygen Chemicals Division
Value \$2,000
Number One
Eligibility Available to a full-time student who is entering the first year of the Environmental Engineering program.
Criteria Academic excellence.
Endowed 2003

## Fort St. James Scholarship

This scholarship was made possible through a grant from the District of Fort St. James and its residents.

Donor The Fort St. James Chamber of Commerce
Value $\$ 1000$
Number One
Eligibility Candidates must meet UNBC admission, enrolment and full-time attendance requirements. The student recipient shall be a resident of Canada and a graduate of Fort St. James Senior Secondary School, having been a student of Fort St. James Senior Secondary for one complete year.
Criteria Academic excellence.
Note The Scholarship is to be directed to a student entering the first year of an undergraduate program directly from Fort St. James Secondary. If these criteria cannot be met, the Scholarship may be directed to a student entering an undergraduate program from a Community College.
Endowed 1993

## Her Majesty Queen Elizabeth II - City of Prince George Bursary

A perpetual bursary has been established by the City of Prince George to commemorate the visit of Her Majesty Queen Elizabeth II on August 17, 1994.

Donor The City of Prince George
Value \$1,000
Number One
Eligibility Available to a student commencing a full-time course of undergraduate studies. The recipient must be a City of Prince George resident for at least five years immediately prior to attending UNBC.
Criteria Academic proficiency, outstanding citizenship as demonstrated by involvement in school, college, or community activities.

Application Instructions At least one and not more than three testimonial letters attesting to the candidate's civic involvement are required. Applicants are also required to submit a letter outlining the type and extent of their activities. Demonstrated financial need may be a consideration.
Established 1994

## Interim Governing Council Scholarship

The University of Northern British Columbia's Interim Governing Council, comprised of 21 members, was the decision-making body of the University until December 1993 when a Board of Governors and Senate replaced it.

Donor Members of the UNBC Interim Governing Council
Value $\$ 1,000$
Number Variable
Eligibility Available to new post-secondary students who are residents of northern and central British Columbia.
Criteria Academic excellence and collaborated community service.
Application Instructions Letters of specific recommendation must accompany applications.
Endowed 1992

## James A. Fowlie Memorial Bursary

James (Jim) A. Fowlie was easily one of Prince George's most respected and recognized individuals. He was a founding member of the Multiple Sclerosis Society of Canada - Prince George Chapter where he supported the goal to be a leader in finding a cure for MS and enabling local residents affected by MS in enhancing their quality of life. Being afflicted himself with MS for 40 years did not slow Mr. Fowlie who lived life to the fullest. He was regularly seen motoring down the streets of Prince George in his electric wheelchair with a clever saying pinned to his back.

Donor Multiple Sclerosis Society, Prince George Chapter
Value $\$ 1,000$

## Number One

Eligibility Available to a full-time student entering UNBC directly from high school. Preference will be given to an applicant indicating a parent with Multiple Sclerosis. In the event that there are no candidates with an MS association, the candidate will be one who is dealing with a disability or requires learning aids.
Preference will be given to a resident of northern British Columbia.
Criteria Demonstrated financial need.
Application Instructions include a letter outlining how you meet the eligibility stated above. Complete the financial need section of the awards application form.
Established 2002

## McGeachy Charitable Foundation - Vanderhoof Community Scholarship

The McGeachy Charitable Foundation was incorporated in 1974, and received one quarter of the estate of Mr. W.A. McGeachy, of Chatham, Ontario. In 1993 and 1994, the capital was more than doubled by donations from Mr. \& Mrs. D.D.C. McGeachy of London, Ontario.

This award recognizes the McGeachy family's ties to Vanderhoof and the Nechako Valley. Mr. And Mr. E.C. McGeachy were among the earliest pioneers, coming in ahead of the railway. Their daughter Jean (French) and their son Donald grew up in Vanderhoof, and both graduated from the Vanderhoof High School. This award honours the McGeachy's influence in the northern region and fits with the Foundation's history of supporting educational excellence.

Donor The McGeachy Charitable Foundation
Value $\$ 1,000$
Number One
Eligibility Available to graduates of Nechako Valley Secondary School in Vanderhoof, BC. who enroll as full-time students at UNBC.

Criteria Academic excellence
Note The school will nominate the recipient.
Endowed 2000

## Prince George Medical Society Bursary

This fund has been established by members of the Prince George Medical Society who wish to support undergraduate students of the University of Northern British Columbia to attain their full potential as productive members of society by the provision of annual scholarships and bursaries.

Donor Prince George Medical Society
Value $\$ 750$
Number Variable
Eligibility Available to new full-time students commencing a program of studies in preparation of applying to medical school, indicating a desire to pursue a career in medicine.
Criteria Demonstrated financial need.

Application Instructions Complete the financial need section of the awards application form. Attach a letter outlining your career goals.
Endowed 1993

## S.M. Blair Family Foundation Scholarship

Donor S.M. Blair Family Foundation
Value \$2,000
Number One
Eligibility The candidate must meet UNBC admission and full-time attendance requirements. The candidate will have demonstrated achievement at a high school science fair in northern BC.
Criteria Academic excellence
Application Instructions Applicants must fill out a nomination form that is available at northern BC secondary school counselling offices and at the Financial Aid office at UNBC. Two letters of recommendation, one from the student's school official and one from another source must accompany the nomination. Recommendations will attest to the fact that the student has achieved high ranking in northern BC secondary school science fairs.

Note: This scholarship is tenable upon full-time enrolment at UNBC.
Established 2000

## UNBC Faculty and Staff Bursary

Donor UNBC Faculty and Staff
Value $\$ 600$
Number Two
Eligibility Available to a new post-secondary student who is a resident of northern British Columbia.
Criteria Satisfactory academic standing and demonstrated financial need.

Endowed 1993
UNBC Faculty and Staff Scholarship
Donor UNBC Faculty and Staff
Value $\$ 700$
Number One
Eligibility Available to a new student who is a resident of northern British Columbia.

Criteria Academic excellence.
Application Instructions Complete the financial need section of the awards application form.

Endowed 1993

## Valerie Rose Schouwenburg Memorial Bursary

Valerie Rose Schouwenburg was a highly respected teacher in Prince George who was concerned that too many school students in northern British Columbia do not seek to realize their full individual potential by pursuing post-secondary education and professional qualifications. As a testament to Valerie Rose and her ideals, the Schouwenburg Family has established a memorial bursary in Valerie's name.

Donor William \& Ottilia Schouwenburg
Value $\$ 2,000$, renewable for four years

## Number One

Eligibility Available to a full-time student who has attended high school in School District \#57 for at least three consecutive years immediately prior to commencing studies at UNBC, and who is enrolled in the Bachelor of Education program.

Criteria Demonstrated financial need and academic excellence.
Application Instructions Attach a letter outlining your career goals to your application form. Complete the financial need section of the application form.
Note The bursary will be renewed a maximum of four times on the condition that the recipient maintain a minimum 2.00 cumulative GPA.

Endowed 1994

## 3. Admission Awards for Undergraduate Students New to UNBC

These awards are available to students as they first commence a course of studies at UNBC. Transfer students, mature students, and new post-secondary students may be eligible.

## Christopher Desjardins Memorial Bursary

Christopher Desjardins (January 23, 1983 - August 26, 2000) lived in Prince George as a child and has many close friends residing here. Chris was a vibrant 17 year-old who touched many lives in his short life. Chris highly valued the closeness of family and friends. With his zest for life, Chris was determined to achieve success over all obstacles and continue on with his education. He was a grade 12 student in Abbotsford, BC. It is the wish of Loreen and Larry Obst (Chris' aunt and uncle) to establish this bursary in Chris' memory to enable other young students to have the opportunity to achieve their dreams and goals.

Donor Family and Friends of Christopher Desjardins
Value $\$ 1,000$
Number One
Eligibility Available to a student entering into a full-time undergraduate program at UNBC. The recipient will be a resident of northern BC and have stated career goals toward a career path.

Criteria Academic proficiency and demonstrated financial need.

Application Instructions Complete the financial need section of the application form and attach a brief outline of your career goals.

## Established 2000

## Curt Merritt Bursary

In honour of Curt Merritt's passion for life, his family, friends and colleagues established this bursary. A lifelong Prince George resident, he attended CNC before receiving his degree from Memorial Chiropractic College. Curt will be remembered as an avid outdoorsman who loved flying and racing his sled dogs, and for his perseverance to finish the race and overcome his own Dyslexia.

Donor Family, Friends and Colleagues of Curt Merritt
Value $\$ 500$ per academic term, renewable up to three terms Number Two
Eligibility Available to a full-time student who has been diagnosed by a qualified professional for "Dyslexia" (any reading and/or writing learning disability). Preference will be given to a resident of northern British Columbia.

Criteria Demonstrated financial need.
Application Instructions Fill out the financial need section of the awards application form. Attach a letter from a qualified professional that confirms you meet the eligibility requirements for this award.
Note This bursary is renewable up to three semesters, subject to the original conditions and requirements, plus maintenance of satisfactory academic standing.
Endowed 1997

## Heather Sadler Jenkins Annual Scholarship

Heather Sadler Jenkins, Barristers and Solicitors, has served the Prince George area since 1971. The firm and in particular one of its partners, W. Murray Sadler, QC, was involved in a leadership role in the establishment of UNBC as the founding President of the Interior University Society, a member of the Implementation Planning Group and Chair of the Interim Governing Council. The first offices of UNBC were established in the chambers of Heather Sadler Jenkins. Heather Sadler Jenkins is proud to have been associated with the University of Northern British Columbia and establishes this scholarship for the purpose of encouraging and assisting students from the Prince George area to attend UNBC.

Donor Heather Sadler Jenkins
Value $\$ 2,000$
Number One
Eligibility Available to a full-time student who is a first time registrant in any year of study. Candidates will be resident of the Prince George area and must have graduated from high school in School District \#57. Preference will be given to candidates demonstrating leadership and community involvement, and to students who have not been chosen to receive other financial awards in the same academic year.

Criteria Academic excellence, with preference to students demonstrating financial need.
Application Instructions Complete the financial need section of the awards application form.
Established 1999

## Jim and Noreen Rustad Bursary

Jim and Noreen Rustad have deep roots in Prince George. Jim was the general manager and president of Rustad Bros. and Co. Ltd., a large sawmill and planermill that was started by his father and uncle in 1947. Noreen is the daughter of Garvin and Bea Dezell. Garvin was a former mayor of Prince George. In 1992, Noreen received the Governor General Award for her community volunteer activities. Jim and Noreen are pleased to be able to support qualifying Prince George students from first year to graduation at UNBC.

Donor Jim and Noreen Rustad
Value \$3,500
Number Two, renewable for up to three years
Eligibility Available to a full-time student who is enrolled in a Bachelor's degree program at UNBC. The candidate will be a resident of Prince George as defined by the boundaries of School District 57, by virtue of birth or four years uninterrupted residency immediately prior to receipt of the Bursary.
Criteria Demonstrated financial need, academic proficiency and community/volunteer service.
Application Instructions Complete the financial need section of the application form. Attach a letter outlining your community service.

Note The recipient may receive the bursary for up to three consecutive years, or until a Bachelor's Degree is obtained (whichever is the shorter period) subject to achieving satisfactory academic standing with a course load commensurate with attaining a Bachelor's degree within four years.

Endowed 1996

## McCarthy Tetrault Annual Scholarship

McCarthy Tetrault supports the First Nations people of British Columbia in their quest for higher education and all of the benefits that will entail. The firm has established this annual scholarship to recognize and congratulate those First Nations students who are enrolled in the Northern Advancement Program and are committed to obtaining a university degree.

Value $\$ 750$
Number One

Eligibility Available to a full-time student who is enrolled in the Northern Advancement Program. The recipient must be a resident of northern British Columbia by virtue of birth or uninterrupted residence for three years immediately prior to commencing current studies at UNBC. Preference will be given to a First Nations student.

Criteria Academic excellence.
Established 1997

## The Provincial Chapter of BC, IODE Entrance Bursary for Mature Students

Founded in Canada in 1900, IODE is a volunteer organization of women who participate in areas of citizenship (welcoming new Canadians at citizenship courts), education (providing scholarships and bursaries as well as loans at all levels) and service (providing equipment and supplies to areas of need or emergency). IODE is friends working together to make "good things" happen in their communities.

Donor The Provincial Chapter of BC IODE
Value $\$ 1,000$
Number Two
Eligibility Available to a Canadian citizen who has been accepted under the UNBC mature student policy and who is commencing a program of study towards a degree from the Faculty of Health and Human Sciences. Preference will be given to a northern resident by virtue of birth or by continuous dwelling for four years immediately prior to admission at UNBC.

Criteria Financial need and satisfactory academic standing.
Endowed 1992

## Rotary Club of Terrace Bursary

This fund was established by the members of the Rotary Club of Terrace to support graduates of Caledonia Senior Secondary School in their undergraduate studies at the University of Northern British Columbia to attain their full potential as productive members of society by the provision of an annual bursary.
Donor The Rotary Club of Terrace
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student who is a graduate of Caledonia Senior Secondary School, Terrace, BC. Preference will be given to a student who has demonstrated community service involvement in youth/elderly support. Preference will be given to a student enrolled in a Bachelor of Science program, working toward a degree in the fields of Forestry, Environmental Studies, Social Studies or Natural Resources Management.

Criteria Academic proficiency and financial need.

Application Instructions Complete the financial need section of the application form. Attach a letter outlining your community involvement with youth/elderly.

Note Students may not normally receive this bursary more than once. The recipient will be required to attend one Rotary Club of Terrace meeting to make a presentation of his/her studies, or in the event that the student no longer resides in Terrace, shall provide a report on his/her course of study.

## TELUS Scholarships

TELUS has a vision of becoming Canada's premier corporate citizen. Through this endowed scholarship, TELUS hopes to shape and influence access to learning for residents of Northern British Columbia.

Donor TELUS
Value $\$ 1,000$
Number Three
Eligibility Available to full-time students who are residents of northern British Columbia. One scholarship will be awarded to a student from the South Central Region, one to a student from the North East Region, and one to a student from the North West Region.
Criteria Academic excellence
Endowed 2000

## UNBC Merit Awards

Donor The University of Northern British Columbia
Value $\$ 1,100$
Number Variable
Eligibility Available to full-time students commencing a course of studies at UNBC for the first time.
Criteria Academic proficiency.
Conditions UNBC Merit Awards are stand-alone awards, and will not be awarded to recipients of other academic awards of equal or greater value.
Established 1994

## 4. In-course Undergraduate Awards

These awards are available to current UNBC students who have completed at least 18 credit hours at UNBC during the past award year.

## Aldyen Hamber Women's Studies Bursary

Value $\$ 750$
Number One
Eligibility Available to a full-time student enrolled in his or her third year, majoring in the Women's Studies program at UNBC.
Criteria Demonstrated financial need, demonstrated interest in community involvement, including activities inside and/or outside the university.
Application Instructions Complete the financial need section of the application form. Attach a letter outlining your community involvement.

Note The Faculty will review the applications and nominate the recipient.

Established 1998

## Alex C. Michalos Award

Dr. Alex C. Michalos F.R.S.C. was one of the early faculty members of UNBC, serving as the Chair of the Political Science program. Much of Dr. Michalos' scholarly work has been concerned with improving the quality of life through applications of science and technology. Dr. Michalos founded and edits the Journal of Business Ethics and Social Indicators.

Donor Dr. Alex C. Michalos
Value $\$ 1,000$
Number One
Eligibility Available to a student who has completed a minimum of 30 credit hours toward an undergraduate degree at UNBC.
Criteria Academic excellence and demonstrated community/volunteer service in the Prince George community.
Application Instructions Attach three letters of recommendation attesting to your community involvement to your application form.

Note Recipients of this award may receive it more than once.
Established 1998

## Analog Investments Ltd. Scholarship

Donor Analog Investments Ltd.
Value $\$ 500$
Number One
Eligibility Available to full-time students who are Canadian citizens and residents of northern British Columbia by virtue of birth or uninterrupted residence for five years immediately pror to commencing
current studies at UNBC. The recipient will have completed less than 60 credit hours towards qualifications in Forestry.
Criteria Academic proficiency.
Note No student may receive this award twice. The Faculty will review applications and nominate the recipient.
Endowed 1993

## Anita Caswell Memorial Bursary

Anita Caswell was a twenty-five year employee at the main office of the Central Interior Logging Association (CILA). She embraced the values of the organization and was committed to the people it served. As office manager, she kept the operations running smoothly, providing service and a 'family' environment to its membership. CILA represents almost 400 independent logging contractors in northern BC. Since 1966, the Association has worked to improve the business climate for loggers and truckers by making representation on issues of forest and log-hauling legislation at Federal, Provincial and Regional levels.

## Donor Central Interior Logging Association

Value $\$ 1,000$
Number One
Eligibility Available to a full-time student with a declared major in Forestry who has completed a minimum of 60 credit hours. The recipient will be a resident of northern British Columbia. Preference will be given to students within the service area of CILA which includes: the Yukon border in the north to 100 Mile House in the south, Hazelton in the west to the Alberta border in the east.

Criteria Academic proficiency and demonstrated financial need.
Application Instructions Complete the financial need and voluntary information sections of the undergraduate awards application form.

Established 2002

## Ann McQuaid Memorial Scholarship

The University of Northern British Columbia is honoured to establish this award in recognition of Ann McQuaid's outstanding contribution to the community of Prince George, to education, as a Member of UNBC's Senate and as Chair of the Senate Committee on Scholarships and Bursaries. The many committees on which she served will continue to benefit for generations to come from her keen analytical skills and strong set of values. These values and her integrity helped shape many decision-making standards and policies.

Value $\$ 1,000$
Number One
Eligibility Available to a student enrolled at UNBC who has completed at least 30 credit hours towards an undergraduate degree in the Faculty of Arts and Social Sciences. The recipient will have a demonstrable record of community service, involvement and leadership.
Criteria Academic excellence.

Application Instructions Attach a letter attesting to your community service, involvement and leadership to your application form.
Established 1998

## Anna Sorkomova Memorial Bursaries

These awards are in memory of Anna Sorkomova, a graduate exchange student at UNBC from Yakutsk in Siberia. The donor has established these awards to help alleviate some of the financial hardships that these students encounter in coming to Canada to study and participate in full-time studies and/or exchange programs. The donor is committed to personally assisting these students to overcome some of the cultural challenges they experience and to help us learn from their cultures.

Donor Charles A. Buchan, BComm., CA, Partner with Deloitte \& Touche LLP, Chartered Accountants

Value $\$ 1,500$
Number Two
Eligibility Available to full-time exchange students from Yakutsk State University or students from other parts of the Eastern World.
Criteria Demonstrated financial need.
Note Selection of the recipients will be made on the recommendation of the International Operations Director.
Established 2000

## Anthony Karpicius Scholarship

Anthony Karpicius worked for Northwood Inc. in the Prince George region for many years. Those who knew him say he was grateful for the higher standard of living he enjoyed here. This scholarship is a tribute to the generous and hard-working spirit of Mr. Karpicius.

Donor The Estate of Anthony Karpicius, as bequeathed to the Ministry of Forests
Value $\$ 1,000$
Number Variable
Eligibility Available to full-time students enrolled in the Natural Resources Management program with a declared major in Forestry.
Criteria Academic excellence.
Note The Faculty will nominate the recipients.
Endowed 1991

## Arne \& Lesley Carlson Scholarship

This award was established in honour of Arne and Lesley Carlson in celebration of their lives and of their life work in Archaeology. Arne and Lesley were friends of the Anthropology Program since UNBC opened, and Arne was instructing in the Program in the Fall of 1998. Together they brought great expertise to their business
"Traces Archaeological Research," gaining the respect of colleagues in academia, government and resource management, as well as that of
the First Nations with whom they worked. Their enthusiasm will remain both contagious and inspirational.
Donor Family and Friends
Value \$500
Number Two
Eligibility Available to a full-time student who has completed a minimum of 60 credit hours towards a degree. The recipient will have a declared major in Anthropology, focusing his/her studies on the archaeology of northern British Columbia.

## Criteria Academic Excellence

Application Instructions Attach a letter outlining your study plans to your application form.
Note The Anthropology Program will review applications and nominate a recipient.

Established 1998

## Associated Canadian Travellers and Auxiliary Bursary

The Associated Canadian Travellers - Prince George Club was established in 1956 as a fraternal organization consisting of commercial, travelling salespeople and an Auxiliary Club of members' spouses. In 1993 the Associated Canadian Travellers merged with the United Commercial Travelers of America to become A.C.T/UCT Council \#1007. A.C.T./UCT Council \#1007 ceased operations September 2002.

In their 46 years of service to the Prince George community, the A.C.T./UCT members provided financial support and volunteer help to hundreds of charitable causes. This bursary was established as a legacy to all their dedicated members to promote community involvement, and to provide financial assistance to a student pursuing a career in sales and marketing.

Donor Associated Canadian Travellers and Auxiliary
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student, preferably with a declared major in Commerce - Sales and/or Marketing. The recipient will be a Canadian citizen and a resident of northern BC for an uninterrupted period of 5 years prior to enrolment.
Criteria Academic proficiency, demonstrated financial need, and community service.

Application Instructions Complete the financial need and residency sections of the undergraduate awards application form. Attach three letters of reference from individuals who can confirm your record of community service.
Established 2003

## Association of BC Forest Professionals Bursaries

These bursaries are made possible by the participants and the sponsors of the 47th Annual General Meeting of the ABCPF, held in Prince George, BC February 1995 and the 52nd Annual General Meeting held in Prince George, BC March 2000.

Donor The Association of BC Forest Professionals
Value \$900 (1) and \$500 (1)
Number Two
Eligibility Available to a full-time student enrolled in third or fourth year with a declared major in Forestry. The course of study will be pursuant to meeting the certification requirements for eligibility as a BC Registered Professional Forester.

Criteria Financial need and satisfactory academic standing. In case of a tie, the award will be given to the candidate with superior academic achievement.

Application Instructions Complete the financial need section on your application form.

Note The Faculty will review the applications and nominate the recipient.

Endowed 1996

## Association of Former MLAs of British Columbia Award

The Association of Former MLA's of British Columbia through its Ned deBeck Foundation held annual university student assistance fundraising dinners. All funds raised at these events were forwarded to the four BC universities. The proceeds are directed to students who have shown an indication to enter public service and who may require some financial assistance to enable them to continue their studies.

Donor Ned deBeck Foundation
Value \$1,000
Number One
Eligibility Available to a full-time student, with satisfactory academic standing who is enrolled in Political Science, and who demonstrates an interest in future public service.

Application Instructions Letter indicating the student's desire to enter into politics through public service or legislative assembly.

Endowed 1995

## Auxiliary to the Prince George Regional Hospital Bursary

The Auxiliary is a volunteer group at the Prince George Regional Hospital committed to providing financial assistance to the hospital. Approximately 30,000 volunteer hours are performed each year in twenty-three service areas. The two main sources of funds are
derived from gift and thrift shops.
Donor The Auxiliary to the Prince George Regional Hospital
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student with a declared major in Nursing who has completed a minimum of 60 credit hours. The recipient will be a resident of northern British Columbia.
Eligibility Academic proficiency and demonstrated financial need.
Application Instructions Complete the financial need and residency section of the undergraduate awards application form.
Established 2002

## Auxiliary to the Prince George Regional Hospital Scholarship

The Auxiliary is a volunteer group at the Prince George Regional Hospital committed to providing financial assistance to the hospital. Approximately 30,000 volunteer hours are performed each year in twenty-three service areas. The two main sources of funds are derived from gift and thrift shops.

Donor The Auxiliary to the Prince George Regional Hospital
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student with a declared major in Nursing who has completed a minimum of 60 credit hours. The recipient will be a resident of northern British Columbia.

Eligibility Academic proficiency.
Application Instructions Complete the residency section of the undergraduate awards application form.

Established 2002

## BC Association of Social Workers, Northern Branch Bursary

Started by the BCASW members in the early 1980's to support students from northern BC pursuing their degree in Social Work, this bursary was transferred to UNBC in 1994. Fundraising efforts by many social workers continue to contribute to reducing financial barriers for students.

Donor BC Association of Social Workers - Northern Branch
Value $\$ 500$
Number Variable
Eligibility Available to full-time students who have completed at least 90 credit hours towards a degree in Social Work and who are residents of northern British Columbia.

Criteria Financial need. Preference will be given to a single parent. Should two or more students qualify, the Chair of the Social Work program will recommend a candidate on the basis of the student's
potential to contribute the most to the northern British Columbia social work field.

Application Instructions Complete the financial need section of the application form.

Note The recipients will be invited to address a meeting of the BC Association of Social Workers.

Endowed 1994

## BC Council of Garden Clubs Bursary

This bursary has been established by the BC Council of Garden Clubs to assist students furthering their education in the fields of horticulture/agriculture plant sciences. The BC Council of Garden Clubs is an umbrella organization for more than 100 garden clubs in the province.

Donor BC Council of Garden Clubs
Value $\$ 700$
Number One
Eligibility Available to a full-time student enrolled in the second year of a horticulture/plant science/agriculture/biology/forestry program.
The recipient will be a Canadian Citizen who shows promise in the horticulture field.

Criteria Academic proficiency and demonstrated financial need.
Application Instructions Submit a brief statement outlining your career plans. Complete the financial need section of the awards application form.
Established 2002

## BC Forest Professionals Award For Excellence

Forestrust is the charitable arm of the BC Forest Professionals established in 1984 to provide funding for scholarships and awards to further the advancement of forestry education in British Columbia and to focus public awareness and education activities on the management of forest resources in British Columbia.

Donor Forestrust
Value $\$ 1,300$
Number One
Eligibility Available to a full-time student continuing studies in a program offered by the Faculty of Natural Resources and Environmental Studies who is eligible to become a BC Registered Professional Forester and who has completed a minimum of 30 credit hours.

Criteria Academic excellence and student involvement.
Application Instructions Attach a letter outlining your student involvement to your application form.

Conditions Tenable upon confirmation of full-time enrolment in a Faculty of Natural Resources and Environmental Studies program at UNBC.

Note The Faculty will review the applications. Nominations for this award will be evenly split between recommendations by the Faculty of Natural Resources and Environmental Studies and joint recommendation by the Faculty of Natural Resources and Environmental Studies' student representatives.

Endowed 1993

## BC Medical Services Foundation Health Sciences Bursaries

The British Columbia Medical Services Foundation Scholarship Fund was established by John H.V. Gilbert, under the stewardship of the British Columbia Medical Services Foundation (BCMSF) administered by the Vancouver Foundation. The BCMSF actively promotes health education, explores solutions to health care issues and advances study in the health sciences. The BCMSF is pleased to recognize Health Science students pursuing undergraduate level studies in Health Sciences at UNBC with this annual bursary. This annual bursary fits in with the Foundation's support of health-related research in both academic and community setting in British Columbia and recognizes the financial need aggregated by students who have the potential to make a valuable contribution to health services and research in BC .

Donor BC Medical Services Foundation (administered by the Vancouver Foundation)

Value \$500 to a maximum of \$4,500
Number Variable
Eligibility Available to full-time students in the Health Sciences programs of Nursing, Psychology or Social Work who have completed at least 60 credit hours of post-secondary education. Students who express their intent to pursue a career in Clinical Psychology are also eligible to receive these bursaries. Recipients must be residents of northern British Columbia.

Criteria Demonstrated financial need.
Application Instructions Complete the financial need section of the awards application form.

Note: Students may apply for these bursaries more than once.
Established 1996

## BC Northern Real Estate Board Awards

The BC Northern Real Estate Board is a not-for-profit society comprised of Realtors who serve the real estate related needs of the people in the geographical areas from 70 Mile House to the Yukon border, and from the Alberta border to the Queen Charlotte Islands. The mission of the Board is to provide service to its members and to promote the highest standard of professionalism. Since 1995, BCNREB has provided four $\$ 1,000$ awards every year to undergraduate students enrolled at UNBC.
Donor The BC Northern Real Estate Board
Value $\$ 1000$
Number Four

Eligibility Available to full-time students who have completed at least 30 credit hours towards an undergraduate degree at UNBC. The student recipients' home town must be within the geographical boundaries defined by the Yukon border in the north, 70 Mile House in the south, Queen Charlotte Islands in the west, and the Alberta border in the east. with Dawson Creek, Chetwynd, and Tumbler Ridge excluded.

Criteria Satisfactory academic standing.
Application Instructions If you are a relative of a board member, attach a statement attesting to this fact to your awards application form.

Note In the event of two equal candidates for one award, the determining factor will be the highest academic standing. Recipients of these awards may apply for and receive this award more than once.
Established 1995

## BCR Group Incentive Scholarship

The BCR Group is dedicated to diversifying its revenue base and becoming a customer-focused, market-driven organization providing efficient and integrated services in transportation, real estate, telecommunications, and related services. The BCR Group of Companies' broad base of activities include road and intermodal transportation, telecommunication marketing, real estate development, passenger services and transportation consulting, with rail freight its primary business enterprise.

Donor BCR Group of Companies
Value $\$ 1,500$
Number One
Eligibility Available to a student who has successfully completed at least 90 credit hours in a UNBC undergraduate degree program while maintaining a $100 \%$ course load, and who is pursuing a course of study related to transportation, telecommunications, and/or business management.
Criteria Academic excellence. Preference will be given to a student who has previously been awarded the BCR Entrance Scholarship.

Application Instructions Submit a brief letter stating your career plans that reasonably demonstrates substantial interest in transportation, telecommunications or business management.

Note The Faculty will review the applications and nominate the recipient.
Endowed 1994

## BMO Bank of Montreal Aboriginal Scholarship

Donor BMO Bank of Montreal
Value $\$ 1,500$
Number One
Eligibility Available to a student who is a resident of northern British Columbia by virtue of birth or uninterrupted residence for three years prior to commencing current studies at UNBC. The candidates
will have completed at least 60 credit hours towards a Bachelor of Commerce degree, and will have attended UNBC during the first two years of study or will have transferred to the University from a regional community college in northern British Columbia. Preference will be given to a First Nations student.

Criteria Academic proficiency. Final selection will be made on the basis of superior academic achievement.

Endowed 1996

## British Columbia Association of Social Workers Prize

The British Columbia Association of Social Workers members work in a wide variety of fields including child welfare, mental health, hospitals, alcohol and drug programs, non-profit organizations, social planning, corrections, counselling centres and private practice. The Association assists in the development of guidelines for standards of practice in different fields of social work as well as providing benefits to their members in areas of providing current updates and advice on professional matters, job-finding services and professional development opportunities.

## Donor BC Association of Social Workers

Value $\$ 250$

## Number One

Criteria Available to a full-time student currently enrolled as a third year student in the Social Work (BSW) program who is a resident with continuous dwelling within the UNBC region for four years immediately prior to admission to the Social Work program at UNBC. The candidate must be a member of BCSAW in good standing. The prize will be awarded for study in the fourth year of the Social Work program.
Criteria Financial need and academic proficiency.
Application Instructions Complete the financial need section of the application form. Attach proof of membership in BCSAW.
Note The Chair of the Social Work program will review the applications and nominate a recipient.

Established 1996

## Canadian Federation of University Women (Prince George) Scholarship

Founded in 1919 as a national organization of women university graduates with members in 130 clubs across Canada, the Canadian Federation of University Women promotes education and actively participates in public affairs. The Prince George chapter provides opportunities for fellowship and support as well as holding meetings on educational, cultural and social issues.

Value $\$ 1,400$
Number One
Eligibility Available to a full-time student who has completed between 30 and 60 credit hours in a General Arts and Science program. Awarded to a mature student who will be 21 years or older at the commencement of the Fall Semester in the year the award is received.

Preference will be given to a female candidate.
Criteria Academic excellence.
Endowed 1994

## Canadian Institute of Forestry Bursary

This bursary is provided in celebration of the newly emerging University of Northern British Columbia and its Faculty of Natural Resources and Environmental Studies in the hopes that the institution will produce leaders who can tackle resource management issues with insight, knowledge, and vision.

Donor Canadian Institute of Forestry, Cariboo Section
Value $\$ 700$
Number One
Eligibility Available to a full-time student who has completed between 60 and 90 credit hours in a program offered by the Faculty of Natural Resources and Environmental Studies and is pursuing a course of study in Forestry, Biology, and/or Ecology.
Criteria Demonstrated interest in integrated wildlife/forest management, leadership skills, and academic proficiency.

Application Instructions Attach a letter outlining your interest in wildlife/forest management and leadership skills.
Note The Faculty will review the applications and nominate candidates.

Endowed 1993

## Canfor Annual First Nations Scholarship

Canfor Corporation is a leading integrated forest products company with strong roots in northern British Columbia. As the largest producer of softwood lumber and one of the largest market pulp producers in Canada, Canfor is committed to fostering growth and strengthening the communities that we call "home". The Canfor Annual Awards commemorate Canfor's support of the University of Northern British Columbia and its students. They are awarded to students in recognition of academic excellence. It is Canfor's hope that these students will put their talents to work in communities throughout northern British Columbia.

Donor Canfor Corporation
Value $\$ 1,500$
Number One
Eligibility Available to full-time students who have completed at least 30 credit hours and have declared a major in an undergraduate program in one of the following areas: Natural Resources Management, Business Administration, or Health Science. Preference will be given to First Nations students.
Criteria Academic excellence.
Note Recipient of this award is ineligible for receipt of the Canfor Legacy Endowed Scholarships and Bursaries and vice versa.

Established 2000

## Canfor Annual Undergraduate Bursaries

Canfor Corporation is a leading integrated forest products company with strong roots in northern British Columbia. As the largest producer of softwood lumber and one of the largest market pulp producers in Canada, Canfor is committed to fostering growth and strengthening the communities that we call "home". The Canfor Annual Awards commemorate Canfor's support of the University of Northern British Columbia and its students. They are awarded to students in recognition of academic excellence. It is Canfor's hope that these students will put their talents to work in communities throughout northern British Columbia.

Donor Canfor Corporation
Value $\$ 1,500$
Number Two
Eligibility Available to full-time students who have completed at least 30 credit hours. One bursary will be awarded to a student with a declared a major in Business Administration and one bursary will be awarded to a student with a declared major in Natural Resources Management.
Criteria Academic excellence and demonstrated financial need.
Application Instructions Complete the financial need section of the awards application form.

Note Recipients of these awards are ineligible for receipt of the Canfor Legacy Endowed Scholarships and Bursaries and vice versa.

Established 2000

## Canfor Annual Undergraduate Scholarships

Canfor Corporation is a leading integrated forest products company with strong roots in northern British Columbia. As the largest producer of softwood lumber and one of the largest market pulp producers in Canada, Canfor is committed to fostering growth and strengthening the communities that we call "home". The Canfor Annual Awards commemorate Canfor's support of the University of Northern British Columbia and its students. They are awarded to students in recognition of academic excellence. It is Canfor's hope that these students will put their talents to work in communities throughout northern British Columbia.

Donor Canfor Corporation
Value $\$ 1,500$
Number Four
Eligibility Available to full-time students who have completed at least 30 credit hours and have declared a major in Business Administration or Natural Resources Management. Preference for one scholarship in each of the program areas will be given to dependent relatives of active or retired Canfor employees or retired employees of the Northwood and Slocan Legacy Organizations.
Criteria Selection is based on academic proficiency.
Application Instructions If you are a relative of a Canfor employee, attach a statement attesting to this to your application form.

Note Recipients of these awards are ineligible for receipt of the Canfor Legacy Endowed Scholarships and Bursaries and vice versa.
Established 2000

## Canfor Legacy First Nations Scholarship

Canfor Corporation is a leading integrated forest products company with strong roots in northern British Columbia. As the largest producer of softwood lumber and one of the largest market pulp producers in Canada, Canfor is committed to fostering the growth of northern communities and creating opportunities for the people who live here. Canfor purchased Northwood Inc. in 1999 and the Canfor Legacy Awards commemorate Northwood's commitment to the University of Northern British Columbia and its students. They are awarded to students in recognition of academic excellence. It is Canfor's hope that these students will put their talents to work in communities throughout northern British Columbia.

Donor Canfor Corporation
Value $\$ 1,500$
Number One
Eligibility Available to a full-time student who has completed at least 30 credit hours and has declared a major in an undergraduate program in one of the following areas: Natural Started by the BCASW members in the early 1980's to support students from northern BC pursuing their degree in Social Resources Management, Business Administration, or Health; or, be enrolled in one of the following Graduate program areas: Natural Resources Management, Health, or Education. Preference will be given to a First Nations student.

Criteria Academic proficiency.
Note Recipient of this award is ineligible for receipt of the Canfor Annual Scholarships and Bursaries and vice versa.

Endowed 1993

## Canfor Legacy Undergraduate Bursaries

Canfor Corporation is a leading integrated forest products company with strong roots in northern British Columbia. As the largest producer of softwood lumber and one of the largest market pulp producers in Canada, Canfor is committed to fostering the growth of northern communities and creating opportunities for the people who live here. Canfor purchased Northwood Inc. in 1999 and the Canfor Legacy Awards commemorate Northwood's commitment to the University of Northern British Columbia and its students. They are awarded to student sin recognition of academic excellence. It is Canfor's hope that these students will put their talents to work in communities throughout northern British Columbia.

Donor Canfor Corporation
Value $\$ 1,500$
Number Two
Eligibility Available to full-time students who have completed at least 30 credit hours of study and have declared a major in Business Administration or Natural Resources Management.

Criteria Academic proficiency and demonstrated financial need.
Application Instructions Complete the financial need section of the application form.

Note Recipients of these awards are ineligible for receipt of the Canfor Annual Scholarships and Bursaries and vice versa.

Endowed 1993

## Canfor Legacy Undergraduate Scholarships

Canfor Corporation is a leading integrated forest products company with strong roots in northern British Columbia. As the largest producer of softwood lumber and one of the largest market pulp producers in Canada, Canfor is committed to fostering the growth of northern communities and creating opportunities for the people who live here. Canfor purchased Northwood Inc. in 1999 and the Canfor Legacy Awards commemorate Northwood's commitment to the University of Northern British Columbia and its students. They are awarded to students in recognition of academic excellence. It is Canfor's hope that these students will put their talents to work in communities throughout northern British Columbia.

Donor Canfor Corporation
Value $\$ 1,500$
Number Four
Eligibility Available to full-time students who have completed at least 30 credit hours and have declared a major in Business Administration or Natural Resources Management. Preference for one scholarship in each of the program areas will be given to dependent relatives of active or retired Canfor employees or retired employees of the Northwood and Slocan Legacy Organizations.
Criteria Selection is based on academic proficiency.
Application Instructions If you are a relative of a Canfor or Northwood employee, attach a letter to your application form confirming this fact.

Note Recipients of these awards are ineligible for receipt of the Canfor Annual Scholarships and Bursaries and vice versa. The Faculty will review the applications and nominate the recipients.
Endowed 1993

## Cariboo Bar Association Bursary

Donor The Cariboo Bar Association
Value \$750-\$1,000
Number Two
Eligibility Available to full-time students who reside within the Cariboo County. Preference will be given to students from rural areas or smaller communities outside the City of Prince George.

Criteria Satisfactory academic standing and financial need.
Application Instructions Complete the financial need section of the awards application form.

Endowed 1992

## Cariboo Woodlot Education Society Bursary

The Cariboo Woodlot Education Society is a non-profit organization centered in Williams Lake, whose mandate includes promoting the public awareness of forest management for both social and economic benefits. Encouraging and enabling youth or school programs is an important focus of their mandate. Financial support is provided for a variety of forest resource education programs and activities by revenues generated through management of a woodlot located in Williams Lake.

Donor Cariboo Woodlot Education Society
Value $\$ 1,000$
Number One
Eligibility Available to full-time student who is enrolled in second or third year with a declared major in Forestry or Natural Resources Management. The recipient will be a resident from the former Cariboo Forest Region Area (100 Mile House, Williams Lake, Quesnel and areas).

Criteria Satisfactory academic standing and demonstrated financial need.

Note: Students may apply for this award more than once.
Application Instructions Complete the financial need and residency section of the awards application form.

Established 2003

## CGA Academic Excellence Scholarship

Donor Certified General Accountants Association of British Columbia Value $\$ 500$

Number One
Eligibility Available to a full-time student who has completed at least 90 credit hours towards a Bachelor of Commerce (Accounting) degree at UNBC.

Criteria Academic excellence.
Note The Faculty of Business Administration will nominate the recipient. No student may receive this award more than one time.

Established 1996
CGA Continuing Education Tuition Scholarship
Donor The Certified General Accountants Association of British Columbia

Value $\$ 600$ credit towards CGA tuition fees
Number One
Eligibility Available to a full-time student graduating from the Bachelor of Commerce (Accounting) degree program who will be continuing their professional education on the CGA program.

Criteria Academic excellence.
Conditions Tenable upon confirmation of enrolment in the CGA program.

Note This award is awarded in the spring.
Application Instructions Attach a letter stating your intention to enrol in the CGA program to your application.

Note The Faculty of Business Administration will review applications and nominate the recipient.

Established 1996

## Chan Sisters Foundation Award

The Chan Sisters Foundation is dedicated to helping individuals overcome financial obstacles so they can excel in their chosen endeavours to their full potential. The Chan Sisters wish to support very bright students who demonstrate a strong obligation to contribute to their community and to give back to others the generosity that has been bestowed upon them.

Donor The Chan Sisters Foundation
Value $\$ 2,500$
Number One
Eligibility Available to a full-time student who has completed at least 60 credit hours towards their degree program.

Criteria Academic excellence, demonstrated community leadership/ involvement. Final selection will be made on the basis of greatest financial need.

Application Instructions Complete the financial need section of the awards application form.
Endowed 2000

## Chris Winther Memorial Scholarship

Chris Winther was a long-time Prince George resident supportive of the local forest industry and devoted to his family. His keen community spirit and positive attitude earned him the reputation of being a dependable, respected businessman and one of the pioneers of a very prosperous and prominent industry. A strong belief in the importance of education and individualism were cornerstones in Chris's way of thinking. He thoroughly enjoyed young people and had the utmost respect and encouragement for those willing to strike out on their own, just as he once had done. Chris demonstrated a true love of life and a unique entrepreneurial spirit to all who knew him. This legacy has been created to carry forward this spirit.

Donor Family and friends
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student who is a resident of Prince George by virtue of birth or continuous dwelling within the defined area for the four years prior to admission to UNBC. The recipient will indicate his/her desire to remain in the Prince George region after graduation and demonstrate an entrepreneurial spirit.
Criteria Academic proficiency
Application Instructions Submit a brief essay outlining your career plans that reasonably demonstrate your desire to stay in Prince

George following graduation and your entrepreneurial spirit. Complete the residency section of the awards application form.

## Endowed 2001

## CIBC Wood Gundy Endowed Scholarship

CIBC Wood Gundy is one of the world's leading international financial management and advisory companies, offering a full range of investment services to individual, corporate, government, and institutional clients. The CIBC Wood Gundy Endowed Scholarship was established on their business principles of recognition for individual respect, teamwork, responsible citizenship, and integrity. The CIBC Wood Gundy Endowed Scholarship provides recognition to committed achieving students, majoring in Finance with limited resources and unlimited potential.

Donor Established by CIBC Wood Gundy
Value $\$ 1,000$
Number One, renewable for up to two additional years.
Eligibility Available to a full or part-time student who has completed a minimum of 60 credit hours with a declared major in Finance. The recipient will be a resident of northern British Columbia.

Criteria Academic excellence.
Application Instructions Complete the question regarding northern BC residency on the awards application form.
Note This award is renewable for up to two additional years subject to the recipient maintaining a GPA of at least 3.67.
Endowed 1996

## Cliff-Marcel Bursary

Donor Mrs. Marceline Fairbairn
Value $\$ 1,500$
Number One
Eligibility Available to a Canadian First Nations student who has completed at least 30 credit hours towards a degree.

Criteria Academic proficiency and financial need.
Application Instructions Complete the financial need section of the awards application form.

Endowed 1993

## CMA Award

Scholarships are awarded annually by the Certified Management Accountants Society of BC honouring top business students from UNBC.
Donor The Certified Management Accountants Society of BC
Value $\$ 1,000$ credit towards CMA student fees
Number Up to five

Eligibility These continuing education tuition awards will be granted to graduating students who will continue their education in pursuit of the CMA professional accounting designation.

Criteria Applicants must possess all 15 prerequisite course credits as defined by CMA to be eligible to write the Society's Entrance Examination. The scholarships will be awarded to those students who have a final program GPA in the top quartile of the graduating group and have the highest GPA's in COMM 312/411.

Conditions Awarded upon enrolment in the Certified Management Accountant professional accounting program.
Application Instructions Attach a letter stating your intention of pursuing a CMA designation to your application form.

Note Awarded in the Spring. The Faculty will review the applications and nominate the recipient.

Established 1996

## CN Gold Medal Scholarship

Donor CN Rail
Value \$2,500
Number One
Eligibility Available to a full-time student who is a resident of northern British Columbia and is pursuing studies in management, transportation, marketing, and/or regional development. The recipient will have completed at least 60 credit hours towards a UNBC degree, either through attending UNBC or through transferring from a regional community college in northern British Columbia. Preference will be given to a First Nations student.
Criteria Academic excellence. Final selection will be made on the basis of superior academic achievement.
Endowed 1994

## CN Nationwide Scholarship

Donor CN Rail
Value $\$ 2,000$

## Number One

Eligibility Available to a full-time student from any region in Canada who is pursuing studies in management, transportation, marketing and/or regional development and who has completed at least 60 credit hours towards a UNBC degree.
Criteria Academic excellence. Final selection will be made on the basis of superior academic achievement.

Endowed 1994

## CN Regional Scholarships

Donor CN Rail
Value $\$ 1,500$
Number Two

Eligibility Available to full-time students who are residents of northern British Columbia, are pursuing studies in management, transportation, marketing, and/or regional development, and who have completed at least 60 credit hours towards a UNBC degree either through attending UNBC or through transferring from a regional community college in northern British Columbia. Recipients must be residents of northern British Columbia by virtue of birth or uninterrupted residence for three years immediately prior to commencing Criteria Financial need current studies at UNBC. First preference for one scholarship will be given to a student who is a direct relative of a CN employee.

Criteria Academic excellence. Final selection will be made on the basis of superior academic achievement.
Application Instructions If you are a relative of a CN employee, attach a letter attesting to this fact to your awards application.

Endowed 1994

## The Co-op Student of the Year Awards

Each year the UNBC Co-op office will award two Co-op Student of the Year Awards. In addition to the monetary award, the winners will be nominated for the Canadian Association for Co-operative Education's (CAFCE) Student of the Year Award. Students applying for the award will be considered on the basis of their academic merit, their job achievement and overall contribution to Co-op Education, the University and the external community.

Donor Co-operative Education
Value $\$ 1,000$
Number Two
Eligibility Available to qualified Co-op students, as defined in the Academic calendar, who have satisfactorily completed a Co-op work term within the previous calendar year (qualifying semesters include Winter, Summer and Fall). One award will be made to a Co-op student in the College of Science and Management (CSAM) and one award will be made to a Co-op student in the College of Arts, Social and Health Sciences (CASHS). Students who receive the award in one year will be eligible to be considered in future years.
Criteria Academic excellence, job achievement, contribution to cooperative education, contribution to extracurricular activities at school and/or community.
Conditions Should there be no qualified applicants who satisfactorily meet the established criteria for this award, no award will be given.

Note Students must apply directly to the Office of Co-operative Education. The application deadline is January 15 of each year.
Application Instructions Submit your full application package, including the following: application form, signed employer statement on company letterhead, signed Co-op Coordinator statement on University letterhead, signed personal statement, current academic transcript, resume and learning portfolio. Guidelines on application are available in the Office of Co-operative Education and online at www.unbc.ca/co-op.

Recipient Selection Senate Committee on Scholarships and Bursaries, on recommendation of the Director of Co-operative Education. A committee comprised of the Director of Co-operative

Education, faculty representative from CSAM, a faculty representative from CASHS and an employer representative will review the applications. This committee will recommend to the Senate Committee the successful candidates each year.

Established Date 2005

## Credit Union Foundation of BC - George Viereck Memorial Bursary

The Credit Union Foundation of BC offers bursaries from the George Viereck Memorial, which was established by BC Credit Unions in tribute to a pioneer that embodied the basic roots of the credit union and cooperative movement in Canada.

Value $\$ 1000$
Number One
Eligibility Available to full-time students enrolled at UNBC who are residents of British Columbia who may have difficulty completing their program of study due to financial hardship.
Criteria Demonstrated financial need.
Application Instructions Complete the financial need section on your award application form.
Established 1996

## Dave Johnson Memorial Bursary

David Lloyd Johnson was District Manager for the BC Ministry of Energy, Mines \& Petroleum Resources, based in Charlie Lake, BC for 36 years. Those who worked with Mr. Johnson came to respect him for his leadership in the oil and gas industry and his strong sense of fair play and integrity. The Dave Johnson Memorial Bursaries provide a legacy to a man who made a number of important contributions to the oil and gas industry in northern BC . The awards are available to students from that region, Alberta, or Western Canada enrolled in the Energy Specialization of the Environmental Studies program at UNBC.

Donor The Committee for the Dave Johnson Memorial Fund
Value $\$ 4,000$
Number One
Eligibility Available to a full-time student enrolled in the third or fourth year of post-secondary studies, having completed at least 60 credit hours towards a university degree. The candidate will be enrolled in a Bachelor of Science degree in the Environmental Studies program, Energy Specialization. Preference will be given to residents of British Columbia, particularly the Peace River/Liard Region of British Columbia, by virtue of birth or uninterrupted residence of a minimum of four years immediately prior to beginning studies at UNBC. Should no candidate meet the above requirements, second preference will be given to candidates who are residents of Alberta and then western Canada.

Criteria Demonstrated financial need and satisfactory academic standing.

Application Instructions Complete the financial need section of the awards application form. Attach two letters of reference from two professors.

Note The Faculty will review the applications and nominate the recipient.
Established 1999

## Deloitte and Touche Endowed Bursary

This fund was established in 1997. Donations totalling approximately \$30,000 have been contributed to the endowment, with partial matching funds provided by the provincial government. The Endowed Fund recognizes and supports students enrolled in the CommerceAccounting Major who demonstrate financial need.

Donor Deloitte \& Touche Chartered Accountants
Value $\$ 1,000$
Number Two
Eligibility Available to full-time students who have completed a minimum of 30 credit hours towards a Bachelor of Commerce degree with a declared major in Accounting.

Criteria Demonstrated financial need and satisfactory academic standing.
Application Instructions Complete the financial need section of your application form.

Endowed 1997

## Deloitte and Touche Scholarship

By March 1995, Deloitte \& Touche Chartered Accountants contributed a total of \$30,000 towards the Deloitte \& Touche Endowed Scholarship fund. With matching funds provided by the provincial government, the value of the endowment will double to $\$ 60,000$. The endowed fund recognizes and supports undergraduate students enrolled in the Commerce program with declared majors in Accounting who demonstrate superior academic achievement

Donor Deloitte and Touche Chartered Accountants
Value $\$ 1,000$
Number Three
Eligibility Available to a full-time student who has completed at least 30 credit hours towards a degree in Business Administration with a declared major in Accounting.
Criteria Academic excellence.
Endowed 1993

## Doug Little Scholarships

J D (Doug) Little, former Senior Vice President at Northwood Inc., was a strong advocate for the founding of UNBC. He was widely regarded as the father of the private tree nursery in BC , championing many of the silviculture and forest management methods used today. Mr. Little received the Association of British Columbia Professional Foresters Distinguished Statesman Award for his outstanding efforts to assure better care of the forest.

Donor Sheila Little and family; in memoriam gifts from colleagues, friends, and business associates.

Value \$2,500
Number Two (one for a student in third-year studies, one for a student in fourth-year studies), subject to the availability of funds.

Eligibility Available to full-time students who have completed at least 60 credit hours towards a degree program offered by the Faculty of Natural Resources and Environmental Studies and who have declared a major in Forestry.
Criteria Academic proficiency with a minimum 3.0 grade point average, demonstrated leadership in the classroom and in the field, and a superior work ethic.
Application Instructions Attach a brief description of your views of current and future forest management activities to your application form.

Note: The Faculty of Natural Resources and Environmental Studies will review applications and, in discussion with Mrs. Little and/or designate, nominate the recipients.

Endowed 1993

## Dr. Patrick Carson Bursary

Arriving in Prince George in 1956, Patrick Carson held offices in the Medical Society and the Regional Hospital throughout his career. To help facilitate patient care, Dr. Carson and his colleagues built the Victoria Medical Building and established an on-site lab, the Prince George Medical Laboratory.

Donor Prince George Medical Laboratory
Value \$2,000
Number Variable
Eligibility Available to a student who is a resident of northern British Columbia by virtue of birth or five years uninterrupted residence immediately prior to the granting of the award, who has completed at least 60 credit hours in a Health Sciences program.
Criteria Demonstrated financial need and academic proficiency.
Application Instructions Complete the financial need section of the awards application form.
Note No student shall receive this Bursary more than once.
Endowed 1994

## Duke Energy Bursary

Donor Duke Energy (formerly Westcoast Energy Inc.)
Value $\$ 1,250$
Number Two
Eligibility Available to a full-time student who has completed between 60 and 90 credit hours towards a degree program who is a resident of northern British Columbia. Preference will be given to a candidate who has attended UNBC for the first two or three years or who has transferred to the University from a regional community college in northern British Columbia. Preference will be given to a First Nations student.

Criteria Demonstrated financial need.
Application Instructions Complete the financial need section of the application form and answer the questions regarding northern BC residency.

Endowed 1995

## Duke Energy Scholarship

Donor Duke Energy (formerly Westcoast Energy Inc.)
Value \$2,500
Number Two
Eligibility Available to a full-time student who has completed between 60 and 90 credit hours towards a degree program who is a resident of northern British Columbia. Preference will be given to a candidate who has attended UNBC during the first two or three years or who has transferred to the University from a regional college in northern British Columbia. Preference will be given to a student enrolled within the Faculty of Management.
Criteria Academic Excellence.
Endowed 1994

## Dunkley Lumber Ltd. Bursary

Donor Dunkley Lumber Ltd.
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student who is a resident of British Columbia by virtue of birth or five years uninterrupted residence immediately prior to receipt of the award. The student will have completed less than 90 credit hours in a program offered by the Faculty of Natural Resources and Environmental Studies. Preference will be given to a student who is a family member of Dunkley Lumber employees.

Criteria Demonstrated financial need and satisfactory academic standing.
Application Instructions Complete the financial need section of the awards application form.

Note: No student shall receive the Dunkley Lumber Ltd. Bursary more than once. The Faculty will review the applications and nominate the recipient.

Endowed 1992

## Dunkley Lumber Ltd. Scholarship

Donor Dunkley Lumber Ltd.
Value \$2,000
Number One
Eligibility Available to a full-time student who is a resident of British Columbia by virtue of birth or five years uninterrupted residence immediately prior to receipt of the award. The student will have completed less than 90 credit hours in a program offered by the Faculty of Natural Resources and Environmental Studies. Preference will be given to a student who is a family member of Dunkley Lumber employees.

Criteria Academic excellence. Final selection will be made on the basis of superior academic achievement.
Application Instructions If you are a relative of a Dunkley employee, attach a statement attesting to this fact to your application form.
Note: No student shall receive the Dunkley Lumber Ltd. Scholarship more than once. The Faculty will review the applications and nominate the recipient.

Endowed 1992

## Dwight Gregory Hickey Memorial Bursary

Dwight Hickey was founding President and Senior Fisheries Biologist for Environmental Dynamics Inc., a natural resource consulting company, established in 1994. Dwight participated as a guest lecturer in the Natural Resource and Environmental Studies program at UNBC and recognized that the university provided an excellent source of qualified, capable graduates to join his staff and provided summer students with practical experience in natural resources fieldwork. This bursary is to assist a student in the Natural Resource and Environmental Studies program committed to the protection of the environment.

Donor Connie Giles Hickey
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student enrolled in third or fourth year Natural Resources Management with a declared major in Fisheries. Candidates must submit a short essay on innovation and the interdisciplinary focus of Natural Resource Management.
Criteria Demonstrated financial need and academic proficiency.
Application Instructions Attach a short essay on innovation and the interdisciplinary focus of NRM to your application form.
Note The Faculty of Natural Resources and Environmental Studies will review the applications and nominate the recipient.
Endowed 1999

## Earl B Finning Scholarship

Donor Finning Ltd.
Value $\$ 1,000$
Number One
Eligibility Available to a resident of British Columbia, Alberta, the Yukon, or the Northwest Territories by virtue of birth or uninterrupted residence for three years immediately prior to commencing current undergraduate studies in the Faculty of Management at UNBC. Preference will be given to a resident of northern British Columbia.
Criteria Academic proficiency, with a minimum 3.33 GPA achieved in the most recent year of full-time study.

Endowed 1994

## Fasken Martineau DuMoulin Annual Scholarship

Fasken Martineau DuMoulin understands the importance and value to the community of maintaining and enhancing environmental standards. This is accomplished through the work of Fasken Martineau DuMoulin's legal professionals on behalf of its clients, and also by the firm's participation in the education of future environmental studies by providing financial support and the opportunity to obtain work experience related to environmental law and regulation.

Donor Fasken Martineau DuMoulin
Value $\$ 3,000$
Number One
Eligibility Available to a full-time student who has completed at least 60 credit hours towards a degree in Environmental Studies and has completed the following specific courses: ENVS 203 (Environmental Policy) and/or ENPL 401 (Environmental Law). The candidate must demonstrate an interest in the area of environmental law and/or policy.
Criteria Academic excellence.
Application Instructions Attach a 200 word essay in the area of environmental law/policy to your application form. The College will review the applications and nominate the recipient.
Established 1999

## Father Thomas General Assembly \#1321 Bursaries

The Knights of Columbus are a Catholic family, fraternal service organization that operates under the basic principles of Charity, Unity, Fraternity and Patriotism. They are an organization with over 1.6 million members throughout North America, Puerto Rico and the Philippines, who excel in charitable contributions and volunteer service with the communities they serve. The Father Thomas General Assembly \#1321 are Fourth Degree Knights of Columbus in the Prince George, BC area, who focus on the orders' principle of patriotism. They are keen to promote community as well as education of potential community leaders.

Donor Father Thomas General Assembly \#1321, Fourth Degree Knights of Columbus, BC and Yukon jurisdiction, located in Prince George, BC.

Value $\$ 500$
Number Four
Eligibility Available to a full-time student who is a resident of northern British Columbia who has completed at least 30 credit hours towards a UNBC degree.
Criteria Satisfactory academic standing and financial need.
Application Instructions Complete the financial need section of the awards application form.
Established 2001

## FMC of Canada Limited Scholarship

As a worldwide company with stakeholdings in northern British Columbia, FMC wishes to ensure a strong northern employee base, and to protect the environment. At FMC, people from across operations work together in teams. Their shared perspectives spark innovation, identify opportunities, and generate exciting new products.

Donor FMC Canada Limited Peroxygen Chemicals Division
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student who is a resident of northern British Columbia and who has completed a minimum of 60 credit hours and declared a major in Chemistry and/or Biochemistry. Second preference will be given to a student who has completed between 30 and 60 credit hours with a Chemistry and/or Biochemistry focus.
Criteria Academic excellence with a minimum 3.67 annual GPA; demonstrated leadership in the classroom and in the field; and a superior work ethic.
Application Instructions Attach a letter of reference from two of your professors attesting to your leadership in the classroom/field and work ethic to your application form.

Note The Chemistry Chair and the Faculty of Science will review the applications and nominate the recipient.
Endowed 1993

## Frank Oberle Scholarship

Frank Oberle was first elected to Parliament in 1972, and was re-elected in his riding of Prince George-Peace River in the six consecutive elections that followed. In November 1985, he was appointed Minister of State (Science and Technology), and in 1989 he became Minister of State (Forestry).

Donor Friends of Frank Oberle and UNBC
Value $\$ 400$
Number One
Eligibility Available to a full-time student who has completed between 60 and 90 credit hours in the Forestry and Natural Resource Management program.

Criteria Academic proficiency, community service and demonstrated commitment to forestry and natural resource management.

Application Instructions Submit two letters of recommendation from faculty or peers with your application that support your nomination for this award.

Note The Faculty will review the applications and nominate the recipient.

Endowed 1993

## Fred Garnett Memorial Scholarship

Fred Garnett was respected in the Prince George community for his professional expertise in the accountancy field and his dedication to community service. He was a founding member of the University of Northern British Columbia, having served as Treasurer for the Interior University Society.

Donor The Garnett Family, Friends and Colleagues
Value \$1,300
Number One
Eligibility Available to a full-time student enrolled at the undergraduate level in a degree program within the Faculty of Management who is a resident of northern British Columbia.

Criteria Academic proficiency with a minimum GPA of 3.00 and demonstrated community service and extracurricular activities.

Application Instructions Attach a letter outlining your community service/extracurricular activities to your application form.

## Endowed

## Gary Johnson Memorial Bursary

Gary Johnson was the proud owner of Lovell Logging Ltd. and a long-time logging contractor in the Lovell Cove (Takla Lake) and Prince George area. Gary started in business in the mid-1970's logging for Pinette \& Therrien Mills located in Williams Lake. Gary was sent to Silvacan (Lovell Cove) where he built logging roads and logged for Silvacan Resources (Pinette \& Therrien Mills). He remained in this area until the early 1980's at which time Gary was moved to the Prince George area. He built the road from 38 kilometres on the driftwood road (north of Fort St. James) into Lovell Cove. He logged in Lovell Cove until the Fall of 1998. One of his final requests was to establish an award at UNBC that would help students of this region have the opportunity to attain a university education in Forestry and move on to play a role in the industry that Gary cared so much about. The Gary Johnson Endowed Memorial Bursary will be a legacy of this respected businessman and will support many students in financial need for years to come.

Donor The Gary Johnson Family
Value $\$ 1,500$
Number One
Eligibility Available to a full-time student enrolled and majoring in the Forestry program. The candidate will be a resident of the Prince George area (School District \#57) for four years prior to enrolling at UNBC.

Application Instructions Answer the question regarding northern residency on your application form.
Endowed 1995

## Geoffrey R. Weller Scholarship

Geoffrey R. Weller was the Founding President of the University of Northern British Columbia from 1990 to 1995. He capably and successfully guided the University through the planning stages into its first year of full operation. He remained dedicated to UNBC, where he continued to teach and publish as a professor of International Studies. Dr. Weller passed away in 2000.

Value $\$ 1,100$
Number One
Eligibility Available to a full-time student enrolled in third or fourth year with a declared major in International Studies. The recipient must be a resident of northern British Columbia by virtue of birth or five years uninterrupted residence immediately prior to the receipt of the award. Preference will be given to a candidate who is enrolled in a foreign exchange or study abroad program.
Criteria Academic excellence.
Endowed 1995

## Gertrude Bryant and Family Endowed Bursary

Gertrude Bryant, realtor and artist, believed the opportunities in Prince George were unlimited for those with a vision. Following the Northern Health Care Rally in 2000, Mrs. Bryant and her family designated their original 1998 gift to what was to become the Northern Medical Program, and then further enhanced the endowment with a bequest. It was her desire that Prince George had access to outstanding health care and physicians, and her belief that the NMP would, in time, provide that excellence.

Donor Mrs. Gertrude (Trudy) Bryant and Family
Value maximum of $\$ 1,000$
Number One
Eligibility Available to a full-time student, who is a resident of British Columbia (north of 100 Mile House) and is enrolled in their second year of the UBC undergraduate program in Medicine and resident in the Northern Medical Program.

Criteria Demonstrated financial need.
Recipient Selection Committee: Committee chaired by the Assistant Dean of Student Affairs, NMP (UBC) and/or the Associate Vice President, Medicine, UNBC.

Note: Preference will be given to a student who completed high school in Prince George.
Endowed 1998

## Gordon S. Brownridge Memorial Bursary

A prominent lumberman and businessman in Prince George from his arrival in 1955, Gordon Brownridge felt the opportunities and lifestyle of the Central Interior to be unequalled. He played an active role in the growth and advancement of the area. Always one to enjoy the company of young people, it would give him a great deal of pleasure to assist in their education and pursuit of their goals.

Donor Brian and Jackie Brownridge
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student entering second year who is pursuing a BSc in Natural Resources Management Forestry major. Preference will be given to graduates of northern high schools as defined by School District 57.
Criteria Demonstrated financial need. Final selection will be made on the basis of greatest financial need.

Application Instructions Complete the financial need section of your application form.
Established 1998

## Gordon Bryant Family Scholarship

Long time Prince George residents Gordon and Trudy Bryant were instrumental in establishing many major land developments and urban renewal projects, Mr. Bryant, a life long learner, earned two degrees in his 50's from UBC, both focusing on land use. Mr. and Mrs. Bryant still believe that northern British Columbia holds many opportunities and through proper planning and development, these opportunities will be realized and secured for generations to come.

Donor Mr. and Mrs. Gordon Bryant and Family
Value $\$ 1,000$
Number Two
Eligibility Available to a full-time student who is a resident of northern British Columbia (as defined in the Awards and Financial Aid Section of the UNBC Calendar) who has completed a minimum of 60 credit hours towards his/her degree. The student must be enrolled in the Northern, Rural and Community Planning stream of the Planning Program.

Criteria Academic proficiency with a minimum GPA of 3.00, demonstrated leadership, and superior work ethic.

Application Instructions Attach a letter outlining your leadership skills and work ethic to your application.

Note: No student may receive this award twice.
Endowed 1992

## Gordon Ternowetsky Memorial Bursary

Gordon Ternowetsky (1946-1999) was one of the founding faculty members of UNBC, hired as the first professor in the Social Work program. Teacher, author, and family man, Gordon was instrumental in establishing the Child Welfare Research Centre at UNBC. This bursary was established by UNBC students, collegagues and friends as a tribute to his memory.

Donor Family and others
Value $\$ 500$
Number One
Eligibility Available to a full- or part-time student enrolled in the Bachelor of Social Work program.
Criteria Demonstrated financial need and satisfactory academic standing.
Application Instructions Complete the financial need section of the awards application form.

Note Selection of the recipient is based on the recommendation of the Faculty of Social Work.
Endowed 1999

## Gorton Family Scholarship

Louise Gorton established the Gorton Family Scholarship in honour of her grandmother, Doris Gorton, and father, Ron Gorton. The family believes that financial barriers should not stand in the way of achieving a university degree. This awards honours outstanding UNBC students pursuing careers in the fields of education or nursing.

Donor Louise Gorton
Value $\$ 1,000$
Number One
Eligibility Available to a full time student who has completed at least 30 credit hours. Preference will be given to a resident of northern British Columbia and who has graduated from School District \#57. Preference will be given to a student who has expressed a desire to enroll in the Bachelor of Education program, second preference will be given to a student enrolled in the Nursing program. Should no candidates from the above programs be eligible, the award will be open to students enrolled in other UNBC programs.

Criteria Academic excellence.
Endowed 2001

## Governor General's Silver Medal

Donor The Governor General of Canada
Value Silver Medal
Number One
Eligibility Awarded in the final year to the undergraduate student who has the highest academic standing in the last two semesters of his/her first Bachelor degree program.

Selection Criteria The Silver Medal will be awarded on the basis of the highest GPA over the student's program.

Note The Faculties will nominate candidates. This award may rotate between UNBC faculties.

Established 1996

## Hans Langner Junior Chamber of Commerce Scholarship

As a memorial to Hans Langner, the Junior Chamber of Commerce of Prince George intends to promote and encourage excellence of scholarship and citizenship among the student residents of Prince George.

Donor Prince George Jaycees
Value \$800
Number Variable
Eligibility Available to residents of Prince George by virtue of birth or four years uninterrupted residence immediately preceding application and who have completed at least 60 credit hours but not more than 89 credit hours in a degree program within the Faculty of Management.

The recipient(s) will be less than 40 years old at the time of the award.
Criteria Academic excellence demonstrated community service.
Application Instructions Attach a letter outlining your community service to your application form.

Endowed 1993

## H.B. (Herb) Osen Endowed Bursary

This Bursary has been established by Brian and Jackie Brownridge to recognize a great businessman and friend. Herb Osen was a founding partner of the TOS Insurance Group, based in Burnaby, BC, which he built into one of the premier insurance brokerage firms in Canada. Recognized by colleagues and employees alike as an industry leader, he provided opportunities to all those that worked with him. He established a standard for business ethics that we would all be proud to follow. Following the establishment of the award, Herb Osen and his family, as well as a number of colleagues in the insurance industry, have chosen to enhance this bursary which was endowed in 2000.

Donor Brian and Jackie Brownridge
Value $\$ 500$, plus interest accrued on the endowment.
Number One

Eligibility Available to a full-time student enrolled in the Bachelor of Commerce Program, having at least 60 credit hours towards their university degree. Preference will be given to students demonstrating leadership and community involvement.

Criteria Academic proficiency with preference to students demonstrating financial need.
Application Instructions Attach a letter outlining your community service/leadership skills to your application.

Established 1999
Endowed 2000

## Ian McTaggart Cowan Wildlife Management Scholarship

Dr. McTaggart Cowan, a professor emeritus at the University of British Columbia, has dedicated a lifetime to studying, teaching, and conserving the natural resources of British Columbia. Recognized throughout the world as the Dean of Canadian Zoology, this scholarship in Wildlife Management is a fitting testament to his ideals and distinguished service to the people and resources of this province. Donor Friends and colleagues of Dr. McTaggart Cowan and UNBC including Environment Canada and Ministry of Environment, Lands, and Parks.

Value $\$ 1,000$
Number Variable
Eligibility Available to full-time students who have completed at least 60 credit hours in a program offered by the Faculty of Natural Resources and Environmental Studies. Preference will be given to students pursuing studies in wildlife biology and management.
Criteria Academic excellence. Financial need may be a consideration.
Application Instructions Complete the financial need section of your application form.
Note The Faculty will review the applications and nominate the recipients.

Endowed 1993

## The Husky Energy Varsity Basketball Awards

Husky Energy is proud to support UNBC Athletics in the pursuit of excellence on and off the court. Husky Energy recognizes the commitment and dedication required to be a student athlete, leader and role model in our community.

Donor Husky Energy
Value $\$ 1,000$
Number Two
Eligibility Available to a full-time undergraduate student who is a member of the UNBC Men's or Women's Varsity Basketball Team. Preference will be given to a resident of Northern British Columbia. One award will be awarded to a male student athlete and one award will be awarded to a female student athlete.

Criteria Academic Proficiency.

Conditions Students must be a member of the Men's or Women's Varsity Basketball Teams.
Note Successful applicants may receive this award more than once.
Recipient Selection Senate Committee on Scholarships and Bursaries, on the recommendation of the respective coaches of the Men's and Women's Varsity Basketball Teams.
Established 2005

## Industrial Forestry Service Ltd. Scholarship

Established in 1952, based in Prince George, BC, the employee-owned Industrial Forestry Service Ltd. has grown with the forest industry to become a leading forestry consulting firm. IFS recognizes the benefits of providing motivated individuals with opportunities and challenges, and hopes to participate in the development of future skilled and innovative leaders through the awarding of this scholarship.

Donor Industrial Forestry Service
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student who is a resident of northern British Columbia and has completed at least 60 credit hours towards a degree program with a declared major leading to certification with the BC Forest Professionals.

Criteria Academic excellence.
Application Instructions Complete the question regarding northern residency on your application form.
Note The Faculty will review the applications and nominate the recipient.
Established 1997

## Initiatives Prince George (Tourism Prince George) Bursary

Initiatives Prince George is a not-for-profit society, which is mandated to encourage, promote, and market tourism for the Prince George area. With the enormous growth potential of recreational tourism in the area, Tourism Prince George recognizes the future demand for tourism professionals to lead the industry and encourages programs to prepare these individuals. Through fund-raising initiatives, Tourism Prince George supports this bursary fund at UNBC.

Donor Tourism Prince George
Value $\$ 500$
Number One
Eligibility Available to a full-time student enrolled at UNBC with a declared major in Resource-Based Tourism who has completed a minimum of 60 credit hours. The recipient must be a resident of northern British Columbia by virtue of birth or uninterrupted residence for three years immediately prior to commencing current studies at UNBC. Preference will be given to a passport member of the BC Association of Tourism Professionals.

Criteria Financial need and satisfactory academic standing.
Application Instructions Complete the financial need section of the application form and answer the question regarding northern BC residency.

Established 1997

## Insurance Corporation of British Columbia Bursary

The Insurance Corporation of British Columbia (ICBC) is a provincial Crown Corporation established in 1973 to provide universal auto insurance to BC motorists. In addition, the Corporation is responsible for all driver and vehicle-related services, including commercial vehicle compliance. ICBC's mission is to "help British Columbians take the risk out of road transportation." ICBC works towards that goal by providing effective and reliable auto insurance to all BC motorists and developing and implementing a wide range of road safety and auto crime programs.

Donor Insurance Corporation of British Columbia
Value $\$ 2,500$
Number One
Eligibility Available to full-time students who have completed at least 30 credit hours of study and have declared a major in Business Administration. Preference will be given to First Nations students.
Criteria Academic proficiency and demonstrated financial need.
Application Instructions Attach a letter confirming that you have a safe driving record to your application form. Complete the financial need section of the form.
Note Candidates must have and maintain a safe driving record. Recipients will receive consideration for appropriate summer work opportunities where available.
Established 2000

## Integris Credit Union Bursary

Integris Credit Union is a local, autonomous provider of financial and related services based on principles of quality, professionalism, and ethics, with regard for its members' needs. This award was established in commemoration of the Integris Credit Union 50th anniversary.

Value $\$ 1,500$
Number Two
Eligibility Available to a student who has completed at least 30 credit hours towards a degree program within the Faculty of Management and is a resident of northern British Columbia. Preference will be given to a dependent relative of an Integris Credit Union member.
Criteria Demonstrated financial need.
Application Instructions Complete the financial need section of the application form and answer the question regarding northern residency. If you are a member of Integris Credit Union, include a statement confirming this on your application.

Endowed 1996

## Integris Credit Union Scholarship

Integris Credit Union is a local, autonomous provider of financial and related services based on principles of quality, professionalism, and ethics, with regard for its members' needs. This award was established in commemoration of the Integris Credit Union 50th anniversary.

Value \$2,250
Number One
Eligibility Available to a student who has completed at least 30 credit hours towards a degree program within the Faculty of Management, and is a resident of northern British Columbia. The candidate will have been a first year UNBC student or a university transfer student from a northern college. Preference will be given to a dependent relative of an Integris Credit Union member.

Criteria Academic excellence.
Application Instructions Answer the question regarding northern residency. If you are a member of Integris Credit Union, include a statement confirming this on your application.

Endowed 1996

## IODE - Elsie Gerdes Bursary for Nursing

Founded in Canada in 1900, IODE is a volunteer organization of women who participate in areas of citizenship (welcoming new Canadians at citizenship courts), education (providing scholarships and bursaries as well as loans at all levels) and service (providing equipment and supplies to areas of need or emergency). IODE is friends working together to make "good things" happen in their communities. Elsie Gerdes was a founding member of the Interior University Society and the Implementation Planning Group working to establish UNBC.

Donor The Provincial Chapter of BC, IODE
Value $\$ 1,000$
Number Two
Eligibility Available to a full-time student who is a Canadian citizen and enrolled in the Bachelor of Science in Nursing (Collaborative) program. Preference will be given to a graduate from a college within northern British Columbia.
Criteria Financial need and satisfactory academic standing.
Application Instructions Complete the financial need section of the application form.
Endowed 1992

## Ivor Killy Co-op Scholarship

Ivor Killy was a leader in innovation in the forest sector and a highly respected member of the business and social community of Prince George and northern British Columbia.

Donor Family, Friends and Colleagues

Value \$1,000 first two academic terms, \$2,000 second two academic terms

## Number One

Eligibility Available to a full-time co-op student who has completed the first two years of a degree program with a declared major in Natural Resources and Environmental Studies. The recipient must be a resident of northern British Columbia by virtue of birth or continuous dwelling immediately prior to the first receipt of the award.

Criteria Demonstrated community service and academic excellence.
Application Instructions Attach a letter outlining your community service to your application form, and complete the question regarding northern residency.

Conditions Tenable for up to four academic terms upon maintaining a minimum average grade of $B(3.00 \mathrm{GPA})$.

Endowed 1994

## Ivor Killy Scholarship

Ivor Killy was a leader in innovation in the forest sector and a highly respected member of the business and social community of Prince George and northern British Columbia.

## Donor Family, Friends and Colleagues

Value First year of the award \$2,200 per annum; second year of the award $\$ 3,300$ per annum

Number One
Eligibility Available to a full-time student who has completed at least 60 credit hours towards their program with a declared major in Natural Resources and Environmental Studies or Management or Administration. The recipient must be a resident of northern British Columbia by virtue of birth or five years continuous residence immediately prior to first receipt of the award.

Criteria Demonstrated community service and academic excellence.
Application Instructions Attach a letter outlining your community service to your application form, and complete the question regarding northern residency.

Conditions Tenable for up to two years upon confirmation of the recipient receiving a minimum GPA of 3.00 in the first year of the award.

Endowed 1994

## Jack and May Fon Lee Memorial Scholarship

Jack Lee resided in Prince George from 1947 to 1980. In 1967, in his fifties, Mr. Lee established the Outrigger Polynesian restaurant and brought a unique dining experience to the city. The Lee family operated the business until 1976. The enterprise attracted attention from prominent visitors and earned mention in national publications. Mr. Lee believed in education, and as an entrepreneur always set high goals for himself and his family.

Donor Mrs. May Fon Lee and Family
Value $\$ 1,000$

## Number One

Eligibility Available to a full-time student who has completed at least 60 credit hours toward a Bachelor of Commerce degree focusing on Asia and Pacific studies. The recipient must be a resident of British Columbia by virtue of birth or five years uninterrupted domicile immediately prior to receipt of the scholarship.
Criteria Academic proficiency with a minimum GPA of 3.33, demonstrated leadership abilities and work ethic. Preference will be given to a student who wishes to participate in an exchange program by studying at an accredited institution within the Pacific Rim.
Application Instructions Attach a letter outlining your career goals, study plans and leadership abilities to your application form.

Note No student may receive this award twice. The recipient will be encouraged to report to the benefactor and to give a formal academic presentation upon completion of the exchange.

Endowed 1993

## Jane Layhew Nursing Bursary

Jane Layhew graduated as a Registered Nurse from the Prince Rupert and District Hospital in 1935. Jane spent 35 years at the Prince George Regional Hospital in various positions, including Head Nurse and Nursing Supervisor. Jane was well respected by her peers and is fondly remembered by those with whom she came in contact.

Donor Peter Layhew and Friends of Jane Layhew.
Value \$1,000
Number Two
Eligibility Available to a full-time student enrolled in the Collaborative BScN Program. The recipient will be a resident of BC , by virtue of birth or four years uninterrupted residence immediately prior to acceptance at UNBC, with preference given to a resident of northern BC.
Criteria Demonstrated financial need and satisfactory academic standing.

Application Instructions Complete the financial need section of the application form.
Note A student may be considered for this award more than once. Endowed 1995

## The Jerry Deere Memorial Forestry Scholarship

Jerry Deere, RPF, MBA, graduate of UBC, was the President and part owner of East Fraser Fibre Company and a former 25-year Canfor executive. His strong sense of fair play and integrity helped shape many standards and policies in the forest industry. In addition to his business pursuits, Jerry was a strong advocate of this community. He was a COFI board member and past president, Prince George Regional Airport Committee Member, a founder of the Provincial 4-H Foundation and sat on numerous UNBC committees. Colleagues and employees respected Jerry as a leader in the business world. His ethics both in business and personal life were such that we would all be proud to follow.

Donor Family And Friends Of Jerry Deere
Value $\$ 1,000$
Number One
Eligibility Available to full time undergraduate students who has completed a minimum of 60 credit hours at UNBC and is enrolled in the Natural Resources Management program with a declared major in Forestry. Preference will be given to a resident of Northern British Columbia.

Criteria Academic Excellence and Community Involvement.
Note Recipients may receive this award more than once.
Application Instructions Fill out all sections of the Awards application form and attach a letter outlining your community involvement.

Recipient Selection The Senate Committee on Scholarships and Bursaries, on recommendation by the Awards Officer with the endorsement of the Family of Jerry Deere.
Endowed 2005

## John and Eileen Bryan and Family Bursary

In 1970, John and Eileen Bryan adopted Prince George as their new home. They were fully aware of the struggle of many students to fulfill a dream of advanced education. "We are proud to have the opportunity to assist worthy youths to attain their goals."

Value $\$ 1,000$
Number Two
Eligibility Available to a full-time student who has completed at least 30 credit hours towards a major within the Faculty of Natural Resources and Environmental Studies. Preference will be given to candidates who are residents of northern British Columbia.

Criteria Demonstrated financial need and satisfactory academic standing.
Application Instructions Complete the financial need section of the application form and answer the question regarding northern residency.

Endowed 1997

## Keith Gordon and Ted Williams Scholarship

Ted Williams was an ardent collector of local history, a long-time board member of the Fraser-Fort George Museum; one of the founders of the Prince George Public Library's local history committee; and served on the Community Heritage Commission, formerly the City's Heritage Advisory Committee. He played a key role in establishing the City's LC Gunn Park and was an important resource person in every historic event that took place in the City. He received numerous awards and honours for his participation in many clubs, groups and causes. He was deeply committed to telling and preserving the stories of the Prince George Pioneers.

Keith Gordon was an outstanding teacher of History and Geography for 32 years in School District \#57. Over that time he touched the
lives of thousands of students and inspired hundreds to pursue the fields of History and Geography in their post-secondary education and in their careers. Keith was also an exemplary citizen of Prince George. He was involved in the Prince George Theatre Workshop, the Prince George Public Library and the College of New Caledonia. One of Keith's greatest passions was local history. As a past president and avid member of the Local History Committee, he worked tirelessly to bring the history of the community alive for Prince George residents.

This scholarship was established as a legacy to these two individuals who played such an important role in the development of Prince George and the region.

Value $\$ 750$
Number One
Eligibility Available to a full-time student enrolled and majoring in the History program. Candidates will have achieved at least a 3.67 GPA or A- average in their last semester of course work.
Criteria Academic excellence.
Endowed 1999

## Kenneth Wong Memorial Scholarships

Jeanie Honour, a long time Prince George resident has established the Kenneth Wong Memorial Scholarships in memory of her brother Kenneth Wong (also a long-time Prince George resident). The Kenneth Wong Memorial Scholarships provide opportunities to post secondary education once unavailable to Ms. Honour and her brother.

Donor Jeanie Wong
Value $\$ 1,000$
Number Five
Eligibility Available to full-time students who are residents of northern British Columbia, who have completed at least 30 credit hours towards a UNBC degree, and who have a declared major.
Criteria Academic excellence
Application Instructions Complete the residency section of the awards application form will be given to a resident of northern British Columbia.

Endowed 2001

## KPMG Scholarship

Donor KPMG
Value $\$ 1000$
Number Variable
Eligibility Available to a full-time student who is a Canadian citizen and a resident of northern British Columbia, who has completed between 60 and 90 credit hours in the Bachelor of Commerce degree program and who has declared a major in Accounting.

Criteria Academic excellence.

Application Instructions Answer the question regarding northern residency on the application form.
Endowed 1993

## L. A. LeFebvre and Associates Scholarship

Born in Legal, Alberta in 1917, L. A. LeFebvre was a jack of all trades working in the lumber industry for most of his career until his retirement in 1983 from Prince George Pulp and Paper Mills. A resident of the Prince George area from 1949 to 1983, he was a founding member of the Knights of Columbus Council and a community supporter.

Donor L. A. LeFebvre and Associates
Value $\$ 1000$
Number One
Eligibility Available to a full-time student who has completed 90 credit hours towards a degree in Computer Science and is enrolled in the Faculty of Science. The recipient must be a Canadian citizen and cannot have previously won this scholarship.

Criteria Demonstrated community service or athletic involvement and academic proficiency. Preference will be given to a student with a minimum 3.33 annual GPA.

Application Instructions Attach a letter outlining your community service/athletic involvement to your application form.
Endowed 1994

## Lakeland Mills Ltd. Bursary

Lakeland Mills Ltd. recognizes that the cost of attending University can sometimes be an insurmountable obstacle for students who hope to pursue careers that require a University education. It is Lakeland's intention with this bursary to provide some financial assistance to a deserving student each year that will help to reduce that financial burden.

Donor Lakeland Mills Ltd.
Value $\$ 1,000$
Number One
Eligibility Available to a child of an employee of Lakeland Mills who is enrolled (full time/part time) in any degree program at the University of Northern British Columbia. Should no applicant with a parent employed at Lakeland Mills apply, then the award will be awarded to any student who has demonstrated financial need in the pursuit of their university education.

Criteria: Demonstrated Financial Need.
Application Instructions Complete the financial need sections of the awards application form and if you are a relative of a Lakeland Mills employee, attach a statement attesting to this fact with your application form..
Established 2004

## Lakeland Mills Ltd. Scholarship

Lakeland Mills Ltd. believes that the future of our country will depend to a large degree on the skills and abilities of our present generation of University students. In order to foster excellence in scholastic achievement, Lakeland offers this annual scholarship.

Donor Lakeland Mills Ltd.
Value $\$ 1,000$
Number One
Eligibility Available to an undergraduate student in any program.
Criteria: Academic Excellence
Established 2004

## Lou and Coby Veeken Bursary

The Veeken family has been in Prince George for 50 years. The community has been very good to the Veeken Family and they wish to acknowledge their community pride with this award.

Donor Lou and Coby Veeken
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student enrolled in the Natural Resources Management, Biology or Forestry program who has completed a minimum of 30 credit hours. The recipient must be resident of Prince George or Fraser Fort George Regional District.

Criteria: Demonstrated Financial Need.
Application Instructions Complete the financial need and residency sections of the awards application form.
Note: Students may not receive this award more than once.
Established 2003

## Marjorie W. Poff Scholarship

Dr. Deborah Poff was one of the earliest administrators and faculty members of UNBC, serving as Dean of Arts and Sciences and moving into the position of Vice President Academic. Dr. Poff established this award in memory of her mother Marjorie Poff. Marjorie Poff believed strongly in education and the ability to expand your world with that knowledge. A life-long learner, she cared strongly about the justice and equality of women.

Donor Dr. Deborah Poff
Value $\$ 1,000$
Number One
Eligibility Available to a female student who has completed at least 30 credit hours towards a UNBC degree. The successful candidate will have demonstrated community/volunteer service in areas such as: justice, equality, women's shelters and like types of service.

Application Instructions Attach a letter outlining your community involvement in the areas described above to your application form.
Established 2000

## Marumi Scholarships

The Marumi Sangyo Group, based in Nagoya, Japan, dates back to 1948 when they established a small lumber company dealing just in domestic lumber and finally moving into building and land development. Since 1990, Marumi has been a major importer of forest products from northern BC , with which it is building close ties. The scholarships are a fitting way of helping express these ties as the company moves into its 50th anniversary year.
Donor The Marumi Sangyo Company
Value $\$ 2,500$, renewable for up to one year
Number Two
Eligibility Available to students who have completed at least 30 credit hours towards a Bachelor of Science degree program, majoring in the fields of either Forestry, Environmental Science or Natural Resources Management.
Criteria Academic excellence.
Note: These scholarships are renewable for up to one year, subject to the recipients maintaining a minimum 3.00 GPA.
Endowed 1996

## Mary Fallis Scholarship

Mary Fallis arrived in Prince George in 1969 to become a founding member of the English Department at the College of New Caledonia. After her retirement she remained in Prince George sharing her passions: learning, photography, mountain climbing and conservation of the natural world. She received an Award of Merit in Recreation from the city of Prince George, and in 1994, was made a Friend of the University of Northern British Columbia. She had a keen interest in the lives of her twelve nieces and nephews. They, with her friends in the community and across the country, have established this scholarship in her name. It is to be an on-going tribute to Mary Fallis - educator, naturalist and photographer.

Donor Family and friends of Mary Fallis
Value $\$ 1,000$
Number One
Eligibility Available to a full-time or part-time student who has completed at least 60 credit hours towards a degree with a declared major in English. The recipient will be a resident of northern BC.

Criteria Academic excellence
Application Instructions Complete the residency section of the awards application form.

Endowed 2000

## Mathematics and Computing Science Undergraduate Prizes

The Mathematics Undergraduate Prize and the Computer Science Undergraduate Prize were established by the Faculty members of Mathematics and Computer Science. These prizes will recognize student excellence in these programs.

Donor Faculty of Mathematics and Computer Science
Value $\$ 100$ prize for a Mathematics undergraduate $\$ 100$ prize for a Computer Science undergraduate
Number One in each of Mathematics and Computer Science
Eligibility Available to full-time students with a declared major in Mathematics or joint major in Mathematics and a second discipline, and students with a declared major in Computer Science or joint major in Computer Science and a second discipline. The recipients will have completed all requirements for their degree by the end of the preceding fall or winter semester.

Criteria Primary criteria will be the GPA in relevant Mathematics/ Computing Science courses and overall GPA. Additional criteria may include GPA in the last four semesters, involvement with the Mathematics/Computer Science Program, performance in contests, and performance in undergraduate research projects.

Conditions Students are not eligible to receive these prizes more than once.

Note: The Faculty will nominate the recipients. The prizes will be awarded annually in May during a program event organized by the Faculty.

Endowed 2002

## Matthew Halpin Memorial Bursary

This award was established in memory of Matthew Halpin, one of the pioneering students at UNBC. May the recipient of this award enjoy the outdoors as much as Matt did!

Value $\$ 1,000$
Number One
Eligibility Available to a full-time student enrolled in third or fourth year majoring in either Resource Recreation (BSc. program) or Resource-Based Tourism (BA program)

Criteria Financial need. Final selection will be made on the basis of greatest financial need.

Application Instructions Complete the financial need section of the application form.
Endowed 1998

## Mel and Vera La Pointe Memorial Scholarship

The eight children of Mel and Vera La Pointe jointly endowed this scholarship in the year 2000. Mel was the son of a pioneering family who arrived in Giscome in 1925. The family wishes to commemorate Mel's life-long interest in, and stewardship of, the natural resources. Mel worked with and enjoyed forestry, fish and wildlife, geology and farming. The family also wishes to recognize Vera's commitment to the value of education. This scholarship is to encourage others to share the appreciation and contribution of the natural resources where we live.
Donor The children of Mel and Vera La Pointe
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student who has completed at least 60 credit hours towards a declared major in a Natural Resources and Environmental Studies program.
Criteria Academic proficiency, with preference to a student demonstrating financial need.

Application Instructions Complete the financial need section of the application form.

Endowed 2000

## Mitsui Home Co. Ltd. Scholarship

Donor The Mitsui Home Co. Ltd.
Value Variable
Number One
Eligibility Available to a full-time student who has completed at least 30 credit hours in the Bachelor of Commerce degree program and has declared a major in International Business. Administration majoring in the General Business program, and have completed a minimum of 60 credit hours towards his/her Preference will be given to students who can demonstrate an interest in international trade between northern British Columbia and Japan.

Criteria Academic excellence.
Application Instructions Attach a letter outlining your interest in Japan-BC trade to your application form.

Endowed 1994

## Multiple Sclerosis Scholarship, Prince George Chapter

The Prince George Chapter of the Multiple Sclerosis Society of Canada's mission is to be a leader in finding a cure for MS and enable MS people to enhance their quality of life. Donor Multiple Sclerosis Society, Prince George Chapter
Value $\$ 500$
Number One

Eligibility Available to full-time students who are residents of northern British Columbia and who have completed less than 30 credit hours in a Health and Human Sciences degree program. Preference will be given to students demonstrating an intention to work in the Prince George region after graduation.

Criteria Academic proficiency.
Application Instructions Attach a letter outlining your career plans to your application form.
Endowed 1993

## Nancy Anne Tarrant Memorial Bursary

The Nancy Anne Tarrant Memorial Bursary establishes a lasting legacy to Nancy's dedication and enthusiasm of post-secondary education in northern British Columbia. Nancy was a faculty member in the Dental Studies Department of the College of New Caledonia for 25 years, where she was a Board member from 1995-1997. This bursary is a fitting and lasting testament to Nancy's ambitions and accomplishments and one that will benefit students in the Health and Human Sciences Faculty of the University of Northern British Columbia for many years.

Donors Raymond W. and Helen A. Hatch
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student enrolled in the Northern Collaborative Baccalaureate Nursing Program and who has completed a minimum of 60 credit hours towards this degree. The recipient will be a resident of northern British Columbia.
Criteria Satisfactory academic standing and demonstrated financial need.

Application Instructions Complete the financial need section and answer the question regarding northern residency on your application form.

Endowed 2000

## Nechako Chapter No. 40 - Order of the Eastern Star Bursary

The Order of the Eastern Star is the largest fraternal organization for men and women in the world. Started in the mid-1800s, there are well over two million members worldwide today, with approximately 9,500 members in British Columbia and the Yukon. The moral and social purposes of the Order are to build character, to promote friendship and harmony among members, and to practice charity.
Donor Nechako Chapter No. 40 Order of the Eastern Star
Value $\$ 750$
Number One
Eligibility Available to a full-time student who has completed at least 30 credit hours who is either a member in good standing of the Order of the Eastern Star, or is directly related to a member in good standing.

Criteria Satisfactory academic standing and financial need.
Application Instructions Attach a membership confirmation letter bearing the seal of an Easter Star chapter to your application form. Include a letter outlining why you should receive this bursary.

Endowed 1994

## Northern Interior Cruising Committee Scholarship

The Northern Interior Cruising Committee (NICC) has members from Industry, Ministry of Forests and Forestry Consultants. Their mandate is to promote a level of standards which is imperative to the proper collection and processing of timber cruise data. This data is used to determine the quality and quantity of the timber within a stand and provide key information for use in the timber appraisal process.

Donor The Northern Interior Cruising Committee
Value $\$ 500$

## Number One

Eligibility Available to a full-time student who has achieved strong academic and practical achievement in Natural Resource Management 203. The candidate must submit a brief essay demonstrating his/her commitment to forest mensuration by providing evidence of practical proficiency in cruising or related work (e.g. summer employment).

## Criteria Academic excellence.

Application Instructions Attach a brief essay demonstrating your commitment to forest mensuration to your application form.

Note The Faculty will review the applications and nominate the recipient.

Established 1997

## Northern Society of Oilfield Contractors and Service Firms Bursary

The Northern Society of Oilfield Contractors and Service Firms is an association of member individuals, firms, or corporations who maintain high standards of operations in the oilfield contracting and service businesses.

Donor Northern Society of Oilfield Contractors and Service Firms
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student enrolled at the Fort St. John campus enrolled in the Bachelor of Science Environmental Planning - Energy Specialization program. The student will have completed at least 60 credit hours towards this degree. In the event that no third or fourth year student meets the criteria, preference will be given to a second year student, then a first year student. The student must be from the following geographical area by virtue of birth or continuous residence for four years prior to enrolment: a) first preference will be given to a student residing in northeastern British Columbia, as defined by the geographic height of land of the Rocky Mountains and
the Yukon, NWT and Alberta borders and b) second preference will be given to a student residing in BC or Alberta north of the 54th parallel. Special consideration will be given to mature students.

Criteria Academic proficiency and demonstrated financial need.
Application Instructions Complete the financial need section of the application form.

Note A student may not normally receive this award more than once. Endowed 1999

## Northern Undergraduate Student Society Bursaries

This fund was established by the members of the Northern Undergraduate Student Society who wish to support undergraduate students of the University of Northern British Columbia to attain their full potential as educated and productive members of society by the provision of annual bursaries.

Donor Northern Undergraduate Student Society
Value $\$ 500$
Number Variable
Eligibility Available to an undergraduate student who has demonstrated exceptional University community service.
Criteria Academic proficiency, demonstrated financial need and exceptional University community service.

Application Instructions Submit three letters of reference demonstrating community service with your application. Complete the financial need section of the application form.

Note No candidate may receive this award more than once.
Endowed 2000

## Novak Bros. Contracting Ltd. Scholarship

Donor Novak Bros. Contracting Ltd.
Value $\$ 2,000$
Number One
Eligibility Available to a full-time student who is a resident of British Columbia by virtue of birth or five years uninterrupted residence immediately prior to receipt of the award and who has completed less than 90 credit hours in a degree program.

Criteria Academic excellence.
Application Instructions Complete the question regarding BC residency on the application form.

Note No student may receive the Novak Bros. Contracting Ltd. Scholarship more than once.

Endowed 1992

## Novak Bros. Contracting Ltd. Bursary

Donor Novak Bros. Contracting Ltd.
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student who is a resident of British Columbia by virtue of birth or five years uninterrupted residence immediately prior to receipt of the award and who has completed less than 90 credit hours in a degree program.
Criteria Academic proficiency and demonstrable financial need.
Application Instructions Complete the financial need section of the application form and answer the question regarding BC residency.

Note No student may receive the Novak Bros. Contracting Ltd. Bursary more than once.

Endowed 1992

## The Pacific Blue Cross Bursary for Northern Medical Students

Pacific Blue Cross is British Columbia's largest provider of medical and dental benefits. Today, almost two million British Columbians have benefit coverage through Pacific Blue Cross. Pacific Blue Cross has established this award at UNBC to support the future providers of healthcare.

Donor Pacific Blue Cross
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student enrolled in the Northern Medical Program, who is commencing the portion of their medical studies which takes place at the University of Northern British Columbia.

Criteria Financial need and academic excellence.
Established 2004

## The Patrick Walsh Memorial Scholarship

Patrick Walsh was a Founder and Governor of UNBC. He arrived in Fort St. John in 1960 to practice law. His legacy of public service included hospital trustee, school trustee and Chairman, President of the British Columbia Trustee Association, Mayor of Fort St. John and Commissioner of Tumbler Ridge. He served his professional association and the Union of BC Municipalities at the executive level.

Value $\$ 1,000$
Number One
Eligibility Available to a full-time student enrolled at UNBC who has completed at least 60 credit hours towards a program with a declared major. The recipient must be a resident of the Peace River-Liard Region by virtue of birth or uninterrupted residence of at least four years prior to beginning current studies at UNBC.

Criteria Demonstrated community service, student leadership and academic proficiency.
Application Instructions Attach a letter outlining your community service/leadership to your application form, along with a statement regarding how you meet the residency requirement for this award.
Endowed 1996

## Peter Bloodoff Memorial Scholarship

In recognition of Peter Bloodoff, Director of Development Services for the City of Prince George, outstanding contribution to the planning profession, the communities in which he lived, and to UNBC, this scholarship was established by his family, friends and colleagues. Peter believed in personal preparedness and balance-"In short, to be a good planner, you first have to be a good person-one who has emotional, physical, intellectual and spiritual harmony within."

Donor Family, friends and colleagues of Peter Bloodoff
Value $\$ 1,600$
Number One
Eligibility Available to a full-time student who has completed at least 90 credit hours towards a degree in the Environmental Science program, majoring in Environmental Planning. Preference will be given to a resident of northern British Columbia who has a demonstrable record of community service, involvement and leadership.
Criteria Academic excellence and community service, involvement or leadership.

Application Instructions Attach a letter outlining your community service to your application form, and complete the question regarding northern BC residency.

Note The faculty will review the applications and nominate the recipient.
Endowed 1997

## Petro-Canada Undergraduate Bursary in Environmental Study

Petro-Canada's social vision focuses on the development of Canadian talent, expertise and innovation through education. A healthy environment is of central importance; it is essential for Canada's continued well-being. Petro-Canada is proud to support students in the study of the environment.

Donor Petro-Canada
Value \$2,000
Number Three (3)
Eligibility Available to a full-time student who has completed a minimum of 30 credits and has declared a major in one of the approved programs* of environmental study.
Criteria Demonstrated financial need
*The approved programs of environmental study are:
Bachelor of Arts, Environmental Science
Bachelor of Science, Environmental Science
Bachelor of Arts or Bachelor of Science, Geography
Bachelor of Applied Science, Environmental Engineering Bachelor of Science, Biology
Bachelor of Science, Biology/Chemistry Joint Major
Bachelor of Science, Chemistry
Bachelor of Science, Natural Resources Management (Forestry, Wildlife \& Fisheries Streams)

Note: Given all other aspects being equal, preference will be given to an Aboriginal student.
Established 2003

## Planning Institute of British Columbia Scholarship and Annual Book Prize

The Planning Institute of British Columbia has been dedicated to the advancement of the planning profession of British Columbia and the Yukon since 1958. Members of the Planning Institute serve the interests of the public in providing full, clear and accurate information on public planning matters.

Donor Planning Institute of British Columbia
Value $\quad \$ 1,000$ Scholarship
\$100 Annual Book Prize
Number One scholarship and one prize
Eligibility Available to full-time students with a declared major in Environmental Planning who have completed at least 90 credit hours.
Criteria Academic excellence. Preference will be given to students who have participated in on or more of the following planning related activities: in class projects, the UNBC Planning Club, within the University Community and/or the larger region served by UNBC.

Note The College will nominate the recipient.
Established 2002

## Prince George Chapter IODE Bursary

The IODE is a Canadian women's charitable organization dedicated to improving the quality of life for children, youth and those in need, through educational, social service and citizenship programs.

Donor The Prince George Chapter IODE
Value $\$ 1,000$
Number One
Eligibility Available to a student who has completed at least 90 credit hours towards an undergraduate degree in the Social Science program who has indicated a desire to enter the health care field upon graduation.

Criteria Demonstrated financial need.
Application Instructions Attach a letter to your application form which outlines your career goals.

Established 1998

## Prince George District Teachers' Association Scholarship

This annual award was established by the members of the Prince George District Teachers' Association who wish to support undergraduate students of the University of Northern British Columbia who are enrolling in the Bachelor of Education program leading to a teaching career in the public school system.

Donor Prince George District Teacher's Association
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student who has completed at least 30 credit hours in the Bachelor of Education Program. The recipient will have graduated from a public secondary school in School District \#57.

Criteria Demonstrated academic proficiency.
Note: The recipient may apply for this award more than once.
Established 2003

## Prince George Firefighters Local 1372 Bursary

"As career firefighters we are grateful to the City of Prince George for enabling us to pursue our mission of saving lives and protecting property, and to the residents for their continued support towards all the various fund-raisers we spend countless hours on each year. We would like to show our participation by offering this bursary to a student attending our local university." - Prince George Firefighters Local 1372

Donor Prince George Firefighters Local 1372
Value $\$ 500$
Number One
Eligibility Available to a full-time student who has completed a minimum of 30 credit hours. The recipient will be a graduate of a Prince George High School.

Criteria Academic proficiency, demonstrated financial need and community involvement.

Application Instructions Attach a letter outlining your community service to your awards application form and complete the financial need section of your application.

Established 2002

## Prince George Gyro Club Bursary

One of the objectives of Gyro and the Constitution of Gyro is the awakening and maintenance of interest in public affairs, citizenship, good government, and civic and community affairs. This objective is our reason to be of assistance to a UNBC student.

Donor The Prince George Gyro Club
Value \$500
Number Two
Eligibility Available to full-time students who are Canadian citizens, residents of northern British Columbia by virtue of birth or five years uninterrupted residence immediately prior to the granting of the award who have completed between 30 and 60 credit hours in a Natural Resources Management program.

Criteria Demonstrated financial need.
Application Instructions Complete the financial need section on your application form as well as the question regarding northern residency.

Endowed 1992

## Prince George Medical Society Scholarship

This fund has been established by the members of the Prince George Medical Society who wish to support undergraduate students of the University of Northern British Columbia to attain their full potential as productive members of society by the provision of annual scholarships and bursaries.

Donor Prince George Medical Society
Value $\$ 1,250$
Number Variable
Eligibility Available to full-time students undertaking a program of studies in preparation of applying to medical school, who indicate a desire to pursue a career in medicine. Recipients must have completed at least 30 credit hours towards their degree program.
Criteria Academic excellence.
Application Instructions Attach a letter to your application form which outlines your career goals.

Endowed 1993

## PRT Scholarship

Established in 1988 in British Columbia, PRT is currently the largest seedling producer in Canada. Committed to providing the highest quality service and to be innovative within a competitive price structure, the company recognizes that its success rests with the employees' achievement and personal satisfaction.

Donor Pacific Regeneration Technologies Inc.
Value \$1,000
Number One

Eligibility Available to a full-time student who has completed at least 60 credit hours in a Natural Resources Management degree program with a declared Forestry major and who intends to pursue a career in silviculture or forest nursery.

Criteria Academic excellence.
Application Instructions Attached a letter outlining your intention to pursue a career in silviculture or forest nursery to your application form.

Note: The Faculty of Natural Resources and Environmental Studies will review the applications and nominate the recipient.

Established 1994

## R. Williams/B. La Pointe Scholarship

R. Williams/B. La Pointe has established this scholarship of its close association with the BC Ministry of Forests and the Quesnel River Enhancement Society. The scholarship is supported through funds received from their woodlot located near Likely, BC. This award recognizes the collective efforts to establish the Landscape Ecology Chair at UNBC and at the Quesnel River Hatchery at Likely.

Donor R. Williams/B. La Pointe
Value \$1,200
Number One
Eligibility Available to a full-time student enrolled in second or third year with a declared major in Natural Resources Management or Forestry. The recipient must be a resident from the former Cariboo Forest Region Area ( 100 Mile House, Williams Lake, Quesnel, and areas). If no Cariboo residents are identified, the award may be allocated to other students doing studies related to issues of importance to Cariboo resource management.

Criteria Academic excellence with preference to students demonstrating financial need.

Application Instructions Complete the financial need and northern British Columbia.
Criteria Demonstrated financial need and satisfactory residency sections of the awards application form.

Note Students may apply for this award more than once.
Established 2003

## Rix Family Foundation Endowed Health Sciences Bursary

The Rix Family Foundation is pleased to recognize Health Science students pursuing undergraduate level studies in Health Sciences at UNBC with this annual bursary. This annual bursary reflects the Foundation's commitment to support health-related education and research in both academic and community settings in British Columbia and recognizes the financial need of students who have the potential to make a valuable contribution to health services and research in $B C$.

Donor The Rix Family Foundation
Value $\$ 1,250$ (approximate)

## Number One

Eligibility Available to a full-time student who has completed at least 30 credit hours towards a degree with a declared major in Health Sciences (Nursing, Psychology, Social Work, or other degree programs to be established in the future). The recipient must be a resident of northern $B C$.

Criteria Demonstrated financial need and academic proficiency.
Application Instructions Complete the financial need and residency sections of the awards application form.
Note: Students may apply for this award more than once.
Endowed 2003

## Robin Fisher Prize in History

This award honors a senior undergraduate History student for writing the outstanding essay in a calendar year on the subject of BC or Native (not limited to BC or Canada) History.

Donor History Program
Value $\$ 400$ value in history books
Number One
Eligibility Available to a senior History student
Criteria Selection is based on the outstanding essay on BC or Native History.

Note Student may not receive this award more than once. The Faculty will nominate the recipient.

Established 2002

## Ron Brown Memorial Bursary

Ron Brown Served UNBC as Chair of Chemistry and Dean of the College of Science and Management. He was an outstanding leader, a man that many respected and admired. He was also a scholar interested in understanding macromolecules and the role that these compounds could play in mitigating high cholesterol levels.

Donor Todd Whitcombe and others interested in supporting the bursary.
Value $\$ 500$ minimum
Eligibility Available to a full-time student with a declared major in science (chemistry preferred).

Criteria Academic proficiency and demonstrated financial need.
Application Instructions Complete the financial need section of the Awards application form.

Established 2003
Sandwell Scholarship
Donor Sandwell Inc.
Value $\$ 1,500$
Number One

Eligibility Available to a full-time student who has completed at least 60 credit hours towards a degree in the Natural Resources Management program, having attended UNBC for the first two or three years or having transferred from a community college in northern BC . Preference will be given to a resident of northern British Columbia.
Criteria Academic excellence.
Application Instructions Complete the question regarding northern residency on your application form.

Note The Faculty will review the applications and nominate the recipient.

Endowed 1996

## Seniors Festival Bursary

The now disbanded Seniors Festival Committee organized the Seniors Festival at the Pacific National Exhibition for a number of years. The PNE has now taken over operations for the Festival. The Seniors Festival Committee wanted their remaining funds to support a deserving UNBC student.

Donor The Seniors Festival Committee
Value $\$ 1,000$
Number Variable
Eligibility Available to a full-time student enrolled in the Faculty of Arts and Sciences who has completed a minimum of 60 credit hours.

Criteria Demonstrated financial need.
Application Instructions Complete the financial need section of the application form.

Note The recipient of this award may be considered for selection for one additional year only.
Endowed 1996

## Shaw Cablesystems G.P. Endowed Bursary

Reflecting on its origins as a family-run business, Shaw endeavours to respect and support the interests and values of the communities it serves. Shaw is committed to being a leader in the telecommunications industry, and they are proud to support a northern student in the field of Computer Science. With their broadband fiber optic network and their high speed internet service they could not think of a better idea to support.

Donor Shaw Cablesystems G.P.
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student who has a declared major in Computer Science. The recipient will be a resident of northern British Columbia.

Criteria Academic proficiency, financial need, and written submission.
Application Instructions Candidates must complete the financial need and residency sections of the awards application form and include a one page written summary on why he/she is deserving of
the Shaw Cablesystems G.P. Endowed Bursary.
Note Recipients will be given preference for summer or co-operative education work terms with Shaw Cablesystems G.P.

Endowed 2001

## Sheila Bitschy BSW Memorial Bursary

The intent of this endowment is to support undergraduate students of UNBC who are enrolled in the Social Work program.

Donor Family, friends, and colleagues of Sheila Bitschy
Value $\$ 750$
Number One
Eligibility Available for a full-time student who has completed at least 60 credit hours towards a degree in the Social Work program. Preference will be given to a First Nations student.

Criteria Satisfactory academic standing and financial need.
Application Instructions Complete the financial need section of the application form.

Endowed 1996
Simons Foundation International Education Scholarship
Value $\$ 750$ (one semester)
Number One (renewable for up to one additional semester)
Eligibility Available to full-time students who are enrolled in an international exchange program, preferably the Canada-European Student Mobility Program, who have completed at least 30 credit hours of relevant course work.

Criteria Academic proficiency.
Application Instructions Complete the "study abroad" question on the application form.
Note Should the recipient remain in the international education program for an additional semester, the scholarship may be renewed, subject to the recipient maintaining at least a 3.00 GPA.
Endowed 1996

## Society for Canadian Women in Science and Technology (SCWIST) Michael Smith Scholarship

Dr. Michael Smith, 1993 winner of the Nobel Prize in Chemistry, gifted one-quarter of his award to SCWIST. In recognition of his outstanding achievement and generosity SCWIST established this award to provide support and encouragement for women pursuing educational programs in science and related fields.

Donor The Society for Canadian Women in Science and Technology (SCWIST)
Value $\$ 500$, plus one year SCWIST membership
Number One
Eligibility Available to a female student who has completed at least 60 credit hours towards a Bachelor of Science degree program.

Criteria Academic excellence with consideration given to career aspirations, community service and personal challenges.
Application Instructions Attach a letter outlining your career goals to your application form.

Note The Faculty will review the applications and nominate the recipient.

Endowed 1995

## Sophie Thomas Bursary

Sophie Thomas is a respected elder, teacher and traditional healer from the Saik'uz First Nation who has provided healing plant medicines to people in many parts of the world. Sophie believes that if we take care of the land, it will take care of us. It is Sophie's desire to protect the forest from activities that could threaten water supplies, traditional plants and wildlife. This bursary is intended for students that have a desire to study and protect the natural environment and/or promote the use of traditional medicines. Students should have an interest in the protection of traditional plant species found in the forests of BC.

Donor Sophie Thomas Foundation, Carrier Sekani Family Services and the Saik'uz First Nation
Value $\$ 1,000$
Number One
Eligibility Available to a full or part-time student who has completed at least 30 credit hours with an identified major in one of the following areas: Biology, Planning, Environmental Sciences, First Nations Studies or Natural Resources Management (Forestry, Wildlife \& Fisheries).
Criteria Demonstrated financial need and academic proficiency.
Application Instructions Attach a letter outlining your career goals and how they relate to the protection, use and study of traditional plants. Complete the financial need section of the awards application form.

Note A committee consisting of representatives from the Sophie Thomas family, Saik'uz First Nation, UNBC, Carrier Sekani Family Services and the Carrier Sekani Tribal Council will recommend the recipient.

Endowed 2002

## Spruce Credit Union - Denie Bachand Memorial Bursary

Denie Bachand was a long-standing Director of the Spruce Credit Union, Prince George. The Spruce Credit Union Board established this student bursary in honour and in recognition of Mr. Bachand's contributions to the Credit Union.

Donor Spruce Credit Union
Value $\$ 1,000$
Number One

Eligibility Available to a full-time student with a declared major in Forestry. Preference will be given to a member of the Spruce Credit Union.

Criteria Academic proficiency and demonstrated financial need.
Application Instructions Complete the financial need section of the awards application form. If you are a member of the Spruce Credit Union, attach a statement confirming your membership.

Note: Student may apply for this bursary more than once.
Established 2002

## Suncor Energy Foundation Environmental Engineering Scholarship

The Suncor Energy Foundation is a private charitable foundation fully funded by Suncor Energy Inc. to manage the company's community investments to Canadian charities. The Foundation is pleased to support education in scientific and technological fields, including the Environmental Engineering program at UNBC.

## Donor Suncor Energy Foundation

Value $\$ 2,500$
Number One
Eligibility Available to a full-time first or second year student who is a resident of northern British Columbia enrolled in the Environmental Engineering program. Preference will be given to a First Nations student.

Criteria Academic excellence.
Established 2003

## TD Canada Trust Bursary

TD Canada Trust is recognized for its contribution to the Canadian environment through project funding provided by the Canada Trust Friends of the Environment Foundation, established in 1990. In keeping with the company's focus on the protection and preservation of the environment, Canada Trust recognized the importance of the Environmental Studies program at UNBC and established the Canada Trust Bursary Fund in support of students pursuing a course of study in this program.

Donor TD Canada Trust
Value $\$ 1,000$
Number Two
Eligibility Available to a full-time student who has completed at least 60 credit hours towards a Bachelor of Science or Bachelor of Arts degree with a declared major in Environmental Studies.
Criteria Satisfactory academic standing and demonstrable financial need.

Application Instructions Complete the financial aid section of the application form.
Established 1999

## UNBC In-Course Bursaries

Value $\$ 1,200$
Number Varies
Eligibility Available to full-time students enrolled in a degree program at UNBC.

Criteria Demonstrated financial need and satisfactory academic standing.

Application Instructions Complete the financial need section of the awards application form.

## UNBC In-Course Scholarships

Value $\$ 1,200$
Number Varies
Eligibility Available to full-time students enrolled in a degree program at UNBC.

Criteria Academic excellence
Note: Recipients may not normally be in receipt of another UNBC scholarship.

## van Adrichem Undergraduate Summer Research Bursary

The intent of the van Adrichem Undergraduate Summer Research Bursary is to provide financial support to a third or fourth year undergraduate student pursuing summer research projects. Mr. van Adrichem believes that giving the students the opportunity to experience research at the undergraduate level will enhance their education and spark a lifetime interest in research, increasing the likelihood of continuing on with research at the graduate level.

Michael van Adrichem was an active horticultural researcher in northern British Columbia. He spent fifteen years in the Prince George research branch of the Federal Department of Agriculture, where his main emphasis was on the winter hardiness of raspberries. This award, the first endowed undergraduate research bursary at UNBC, will assist in the enhancement of knowledge about plant biological processes in the north.

Value TBA
Number One
Eligibility Available to a full-time student who is enrolled in third or fourth year in a program within the Faculty of Natural Resources and Environmental Studies. Preference will be given to students doing applied research with a focus on northern plants during the summer immediately following the granting of the award, or by demonstrating a strong case for alternative timing.

Criteria Academic proficiency with a minimum GPA of 3.00, financial need.

Application Instructions Attach a copy of your research abstract to your application form and complete the financial need section of the form.

Note: Selection of the recipient will be made on the recommendation of the Faculty of Natural Resources and Environmental Studies, inclusive of the Chair of Biology and chaired by the Associate Vice President Research.

Established 1999

## Vancouver International Airport Authority Annual Scholarship

The Authority has established this annual scholarship to reward those students from British Columbia who have achieved academic excellence. Through the establishment of this scholarship, the Authority offers its support to British Columbia students.

Donor The Vancouver International Airport Authority
Value $\$ 2,000$
Number One
Eligibility Available to a student who has completed at least 60 credit hours towards a declared major in one of the following programs of study: International Business, Marketing, Environmental Planning, Geography, International Studies, Resource Recreation Tourism, or Resource-Based Tourism. Preference will be given to residents of British Columbia by virtue of birth or uninterrupted residence for four years immediately preceding the commencement of current studies at UNBC. The candidate will be a Canadian citizen.

Criteria Academic excellence, demonstrated community involvement through voluntary or other activities. In case of a tie, the scholarship will be awarded to the candidate with superior academic achievement.
Application Instructions Submit two letters of references: one from an individual who is familiar with your academic background and one from an individual who is familiar with your work or volunteer background. You must also submit a short essay (not more than 500 words) stating the your academic goals, career aspirations and interest in the Authority Scholarship.
Established 1998

## Vancouver Port Authority Annual Scholarship

The Vancouver Port Authority has supported an annual scholarship program aimed at secondary and post secondary levels for many years. This program is VPA's investment in today's youth and tomorrow's knowledgeable and professional work force.

Donor The Vancouver Port Authority
Value $\$ 2,500$
Number One
Eligibility Available to a full-time student who has completed at least 60 credit hours in one of the following: A Bachelor of Planning, a Bachelor of Science with a declared major in Environmental Sciences, or a Bachelor of Arts with a declared major in Environmental Studies.
Criteria Academic excellence
Established 1998

## Vernon C Brink Scholarship for the Study of Biological Diversity

Bert Brink has devoted his life to conserving and promoting our natural environment. As both a university professor and a professional, Dr. Brink's dedication in the study and understanding of biodiversity and sustainable development has taught many about the need for sound management of our renewable resources. A professor emeritus, Faculty of Agriculture Science, University of British Columbia, he is a recipient of numerous awards from wildlife, nature and conservation groups in recognition of his outstanding accomplishments as a teacher, scientist, and naturalist.
Donor Friends and colleagues of Dr. Brink and supporters of UNBC, including Environment Canada and the Ministry of Environments, Lands and Parks.

Value \$1,250
Number Variable
Eligibility Available to a full-time student who has completed at least 60 credit hours in a degree program offered by the Faculty of Natural Resources and Environmental Studies.

Criteria Academic excellence and demonstrated interest in the study of biological diversity, environmental conservation, and sustainable use of natural resources. Demonstrated financial need may be a consideration.

Application Instructions Attach a brief essay demonstrating your interest in the above subject area to your application and complete the financial need section of the application form.
Note The Faculty will review the applications and nominate the recipients.

Endowed 1993

## Weldwood Bursary

Weldwood of Canada is committed to responsible and progressive forest practices, natural resource management and excellence in business management. Weldwood relies on the efforts of people in many communities in BC and Alberta to achieve its goals. Accordingly, the intent of the Weldwood Bursary is to support students in the communities where the company has operations and who have an interest in studies in Natural Resources, Science or Business.

Donor Weldwood of Canada Limited
Value $\$ 2,500$
Number Two
Eligibility Available to full-time students who are residents of Mountain House, Alberta or communities adjacent to those named. Candidates will be majoring in a Science, Natural Resources or Business program.

Criteria Satisfactory academic standing and financial need.
Application Instructions Complete the financial need section of the application form.

Endowed 1999

## Weldwood Scholarship

Donor Weldwood of Canada Limited

Value $\$ 2,500$
Number One, renewable for one year
Eligibility Available each year to full-time students who have completed at least 60 credit hours towards a degree in the Natural Resources Management program and who, in the opinion of the Faculty, show aptitude for a career within the Natural Resources Management field. Preference for one scholarship will be given to a student with a declared major in Forestry.
Criteria Academic proficiency.
Application Instructions Attach a letter outlining your career goals to your application form.
Conditions Renewable for up to one year on the condition that the recipients maintain a minimum GPA of 2.67 in the previous year. Should additional scholarship(s) become available due to the recipient(s) failure to meet the renewal conditions, the additional scholarship(s) will be made available to fourth year students who meet the eligibility requirements and criteria outlined above.

Note The Faculty of Natural Resources and Environmental Studies will review the applications and nominate the recipients.

## Endowed 1995

## Weyerhaeuser Scholarship

Donor Weyerhaeuser Company Limited
Value $\$ 1,000$

## Number One

Eligibility Available to a resident of British Columbia, by virtue of birth or uninterrupted residence for three years, pursuing an undergraduate degree in a Natural Resources Management program.

## Criteria Academic excellence.

Application Instructions Complete the question regarding $B C$ residency on the application form.
Note The Faculty will review the applications and nominate the recipient.

Endowed 1994

## William Dow Ferry Scholarship

William Ferry, whose family moved to Prince George when he was six, was the Founding President, in 1938, of Prince George's Junior Chamber of Commerce. He served on the Hospital Board from 1949 to 1961, and was elected to City Council four times between 1950 and 1955, at the head of the poll. Judge Ferry practiced law in Prince George from 1949—he was junior council to John Diefenbaker in a celebrated 1951 trial—until 1961, when he was appointed Judge of the County Court of Cariboo, requiring a move to Williams Lake. In 1983 he retired in north Vancouver with his wife, Geraldine.

Donor Judge William Dow Ferry
Value $\$ 2,000$
Number Two, renewable at $\$ 1,500$
Eligibility Available to a full-time student who has completed between 60 and 90 credit hours, with a declared major in Political Science. Preference will be given to a resident of northern British Columbia.
Criteria Academic proficiency and community involvement. Final selection will be made on the basis of superior academic achievement.

Application Instructions Complete the northern BC residency question on your application form, and submit a letter outlining your community involvement.

Note This scholarship is renewable at $\$ 1,500$ for up to one year, subject to the recipient maintaining satisfactory academic progress.
Endowed 1997

## Wilson, King, and Company Annual Scholarships

Donor Wilson King and Co.
Value $\$ 1,000$
Number One
Eligibility Available to full-time undergraduate students who are residents of northern British Columbia by virtue of birth or three years uninterrupted residence immediately prior to the granting of the award.

Criteria Academic excellence.
Application Instructions Complete the question regarding northern BC residency on your application form.

Established 1994

## 5. Open Awards

These awards may be available to all categories of students including: new post-secondary, transfer, in-course, and graduate.

## The BC Hydro Bursary

BC Hydro is proud to support UNBC students in their commitment to and pursuit of postsecondary education. As part of their community outreach programs, BC Hydro focuses on the key areas of: environmental sustainability and stewardship, involvement in education, scholarships, aboriginal relations, and arts, cultural and community organizations.

Donor BC Hydro
Value $\$ 500$
Number One
Eligibility Available to a full or part time undergraduate student with a declared major in Planning (BPI). Preference will be given to a First Nations Student.
Criteria Demonstrated financial need and academic proficiency.
Conditions No one is able to receive this award more than once.
Recipient Selection Senate Committee on Scholarships and Bursaries, on recommendation by the Awards Officer.

Endowed 2005

## Beta Sigma Phi Bursary

Beta Sigma Phi City Council, Prince George Chapter, invited all BC Chapters under the Beta Sigma Phi umbrella to establish a student award with UNBC. Following the association's motto of life, learning, friendship, several BC Chapters continue to support this initiative.

Donor BC Chapters of Beta Sigma Phi
Value $\$ 1,500$
Number One
Eligibility Available to a student enrolled in a minimum six credit hours per semester at UNBC. The recipient will be a member of a Beta Sigma Phi Chapter or the immediate family member of such a sorority member. Recipient will be a Canadian citizen with preference given to a permanent resident of $B C$.
Criteria Demonstrated financial need and academic proficiency.
Application Instructions Provide name of active sorority member, sorority chapter and location and complete the financial need section of the application form.
Endowed 1995

## Bill Reid Award

Bill Reid has been described as the individual who has "singlehandedly revived the art of the Haida people." For many years, Bill Reid has dreamed of helping the northwest coast return to the glory of its artistic past. To bring reality to this vision, friends have established this award.

Donor Supporters of northwestern arts
Value TBA
Number One
Eligibility Available to a full-time student, teacher or professor at or associated with the University of Northern British Columbia.

Criteria Demonstrated high level of academic and social excellence. A project or program proposal must be submitted to the University and fund directors. Evaluations will be based on the potential to promote, preserve, or present the performing, verbal or visual arts of the northwest coast aboriginal peoples of British Columbia.

Application Instructions Attach your project or program proposal to your application form.
Note The awards shall, as and where appropriate, alternate
each year in support of a performing, verbal or visual arts project or program. The first award was made in 1995. The recipient may reapply for the award for up to a maximum of three years. The deadline to apply for this award is April 1.

Endowed 1993

## Birks Family Foundation Annual Bursary

The Birks Family Foundation was formed in 1961 by Henry Birks \& Sons Limited and several members of the Birks Family. One of its goals is to provide bursaries to needy and deserving students pursuing post-secondary studies. This bursary is available to full-time students pursuing an academic degree in any faculty. The Foundation wishes to lend its support to students who will make positive contributions to society if given the opportunity to complete their studies.

Donor The Birks Family Foundation
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student enrolled in any degree program at UNBC.
Criteria Demonstrated financial need.
Application Instructions Complete the financial need section of the application form.
Established 1999

## Bruce and Pat Murdoch Bursary

Pat (born and raised in Prince George) and Bruce (resident since 1950) Murdoch raised four girls, all of whom graduated from PGSS. All four girls continued on to post-secondary challenges with the assistance of scholarships and bursaries for academic and athletic achievements. Pat \& Bruce feel strongly that academics and athletics are both instrumental in developing well rounded citizens and have established two bursaries to recognize female athletes accepting that challenge at UNBC.
Donor Bruce and Pat Murdoch
Value \$500
Number Two
Eligibility Available to a female varsity basketball player at UNBC. Criteria Academic proficiency and demonstrated financial need.
Application Instructions The varsity women's basketball coach nominates the recipients for these awards.
Established 2002

## Bruno Raeber Student Award

Bruno Raeber was UNBC's premier Receptionist from 1992-2004. His sense of humour and good natured character touched the lives of everyone at UNBC. This award has been established by the University community as a tribute to Bruno.

Donor University community, Chaired by Bethany Haffner
Value $\$ 500$
Number One
Eligibility Available to a full or part-time student enrolled in any program of study at UNBC who is a resident of Northern British Columbia. Preference will be given to a student with a disability.
Criteria Satisfactory Academic Standing and community involvement
Application Requirements Candidates must submit a one-page letter outlining their community involvement.
Conditions Student unable to receive more than once
Established 2004

## Can West Global Communications Scholarship

Can West Global Communications Corp. is an international media company. Can West, Canada's largest publisher of daily newspapers, owns, operates and/or holds substantial interests in newspapers, conventional television, out of home advertising, specialty cable channels, radio networks and Internet portals in Canada, New Zealand, Australia, Ireland and the United Kingdom. Fireworks, the company's program production and distribution division, operates in several countries throughout the world.

In addition to its corporate success, Can West has developed a reputation for outstanding community support. Funding provided to create the new Can West Global Communications Scholarship and Bursary at the University of Northern British Columbia demonstrates the company's commitment to the advancement of communications studies in BC institutions.

Donor Can West Global Foundation
Value $\$ 2,500$
Number One
Eligibility Available to a full-time student with a declared major in northern-specific social science programs (Anthropology, Economics, First Nations Studies, History, International Studies, Northern Studies, Political Science, Women's Studies, Psychology). Preference will be given to First Nations Students and students expressing interest in careers, or pursuing further studies in broadcasting or electronic communications.

Criteria Financial need and satisfactory academic standing
Endowed 2001

## Celena John Bursary

Celena John, a respected Elder of the Saik'uz First Nation, was a founding member of Carrier Sekani Family Services, and Elder advisor for the Carrier Sekani Tribal council and elected member of Chief and Council at Saik'uz First Nations. Her commitment to social justice for Aboriginal people was outstanding and recognized across Canada, including the Royal Commission on Aboriginal People. This bursary is intended for students that are pursuing their studies with a view to addressing social justice for Aboriginal people.

Donor Carrier Sekani Family Services, Saik'uz First Nation, University of Northern British Columbia.

Value $\$ 1,000$
Number One
Eligibility Available to a full or part-time student, with preference to full-time aboriginal and/or Carrier students.

Criteria Demonstrated financial need and satisfactory academic standing.
Application Instructions Attach a letter outlining your career goals and how they relate to social justice for Aboriginal peoples in Canada, North America or worldwide. Complete the financial need section of the awards application form.
Note: The recipient will be recommended by a committee consisting of representatives from family, Saik-'uz First Nation, UNBC, Carrier Sekani Family Services, and the Carrier Tribal Council.

Endowed 2002

## Chris Winther Memorial Scholarship

Chris Winther was a long-time Prince George resident supportive of the local forest industry and devoted to his family. His keen community spirit and positive attitude earned him the reputation of being a dependable, respected businessman and one of the pioneers of a very prosperous and prominent industry. A strong belief in the importance of education and individualism were cornerstones in Chris' way of thinking. He thoroughly enjoyed young people and had the utmost respect and encouragement for those willing to strike out on their own, just as he once had done. Chris demonstrated a true love of life and a unique entrepreneurial spirit to all who knew him. This legacy has been created to carry forward his spirit.

Donor Family and Friends
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student who is a resident of Prince George by virtue of birth or continuous dwelling within the defined area for the fours years immediately prior to admission at UNBC.

## Criteria Academic proficiency

Application Instructions Complete the residency section of the awards application for and submit a brief essay outlining your career plans that reasonably demonstrate your desire to stay in Prince George following graduation and your entrepreneurial spirit.

Endowed 2001

## Cloverdale Paint Bursary

Cloverdale Paint is a private western Canadian company that started in Surrey, BC in 1933. The company has grown steadily, opening branches and their Prince George location in 1986. They now operate from Manitoba, Saskatchewan, Alberta, BC and Washington State. The owners and employees are proud to support scholarships in many universities and colleges in western Canada.

Donor Cloverdale Paint Inc.
Value $\$ 600$
Number One
Eligibility Available to a full-time student who is a resident of British Columbia or Alberta. Preference will be given to students related to employees of Cloverdale Paint.

Criteria Satisfactory academic standing, demonstrated financial need and commitment to community service, and career and/or entrepreneurial objectives.
Application Instructions Complete the financial need and residency sections of the awards application form. Attach a letter outlining your commitment to community service or career objectives. If you are related to a Cloverdale Paint employee, attach a statement indicating the name of the employee and his/her relationship to you.

Established 2001

## The Computer Science Entrance Award

This award has been established to encourage and support talented students entering or transferring to undergraduate studies in Computer Science at UNBC.

Donor UNBC Computer Science Program
Value \$1,000
Number Up to Ten
Eligibility Available to full or part time undergraduate students entering their first or second year level of studies in Computer Science at UNBC, or transferring from another post-secondary institution into Computer Science at UNBC at any level of undergraduate studies.

Criteria Academic Proficiency and with courses in mathematics and/or computer science
Conditions The student must officially declare Computer Science as major. Course enrolment for the year in which the award is held must be approved by the Chair of Computer Science or designate. The award can be held only once.

Application Instructions Attach a letter outlining your experience, interest and performance in mathematics and/or computer science to the Awards Application. Photocopies of any awards achieved may be attached.

Recipient Selection The Senate Committee on Scholarships and Bursaries, on recommendation of the Computer Science Program. Subject to Available Funding.

Established 2006

## Cora Donald Bursary

The BC Tel Pioneers are a non-profit organization of active and retired employees in the telecommunications industry. This bursary has been established in memory of the first Prince George chief telephone operator.
Donor The BC Tel Pioneers
Value $\$ 1,000$
Number One
Eligibility Available to a full-time undergraduate or graduate student. Preference will be given to a candidate who indicates a career path in the telecommunications field.

Criteria Academic proficiency and demonstrated community/ volunteer service in the Prince George Community.
Application Instructions Attach a letter outlining your community/ volunteer service in the Prince George community to your application form.
Note Subject to passing grades, the same student may apply for this award more than once.

Endowed 1999

## CUPE Local 3799 Annual Bursary

CUPE Local 3799 represents the majority of non-faculty employees at the University of Northern British Columbia. CUPE is pleased to establish this bursary to assist in supporting the educational goals of a student.

Donor CUPE Local 3799
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student who is a resident of northern British Columbia. Preference will be given to a relative of a CUPE member (e.g. son, daughter, spouse, sister, brother, parent, niece, nephew). In the event that there is no suitable candidate who is a relative of a CUPE member, the applicant will be a relative of any other unionized member.
Criteria Demonstrated financial need and academic proficiency.
Application Instructions Applicants must provide a letter signed by the CUPE Local or other registered Union President noting the relationship of their member to the applicant, and complete the financial need section of the awards application communications.

## Daphne Anderson Memorial Prize

Daphne Anderson (1939-1977) was the first teacher of Sm'algyax (Coast Tsimshian) in a public school. This was one of the first examples of the education system's involvement in the revitalization of First Nations languages. This prize will provide the opportunity to develop new initiatives in the area pioneered by Mrs. Anderson.

Donor Established by Mrs. Anderson's extended family and friends.
Value $\$ 250.00$
Number One
Eligibility Available upon application or nomination to individuals or groups who have contributed to the well being of one of the First Nations languages within the UNBC region served by the College of New Caledonia, the Northern Lights Community College and the Northwest Community College.
Criteria This prize will be based on individual achievement, community activities, and/or published studies or curriculum materials that contribute to a First Nations language well being. Selection will be based on the committee's assessment of the degree to which each submission demonstrates originality, excellence, and impact on one or more languages of the region.
Application Instructions Attach a letter to your application form which addresses the above criteria.

Note The selection committee will consist of a UNBC First Nations program faculty member, a member of the Senate Committee on First Nations and Aboriginal Peoples, and a designate of the extended family of the late Daphne Anderson.
Endowed 1998

## David Hoy Memorial Annual Scholarship

David Hoy began his career as a logger in the Fort St. James area when at the age of twenty he started his operations under the company name Tsayta Contracting Ltd. From there the number of companies has grown to sixteen or more. He was a very dynamic individual who was far ahead of his years. He died in a crash on August 5, 1998 while flying his helicopter and cruising timber in the Fort St. James area. He leaves behind three children, two sons and one daughter. His two sons are currently studying to be Registered Professional Foresters and they will likely follow their Dad's footsteps. The companies David was involved with along with his two partners, Ken Rasmussen and Keith Playfair, employed the largest number of individuals in the area except for the mills. David was an excellent businessman with a big heart who helped almost everyone he touched in some manner or other. He was highly respected by his business associates and loved very much by his family.

Donor K \& D Logging Ltd., Tsayta Contracting Ltd., and Deloitte \& Touche LLP, Chartered Accountants

Value $\$ 1,000$
Number One
Eligibility Available to a full-time student from the Fort St. James area who is enrolled in the Forestry program.. Second preference will be given to a student enrolled in the Forestry Program who has indicated she/he will continue to pursue studies to become a Registered Professional Forester.

Criteria Academic proficiency.
Application Instructions Complete the questions regarding residency/home town on the awards application form.

Note In the event that there are no applicants from the Fort St. James area, the award may be given to a student who is from an outlying community e.g. Vanderhoof, Fort Fraser, Fraser Lake, Burns Lake.

Established 2000

## David Hoy Memorial Scholarships

David Hoy began his career as a logger in the Fort St. James area when at the age of twenty he started his operations under the company name Tsayta Contracting Ltd. From there the number of companies has grown to sixteen or more. He was a very dynamic individual who was far ahead of his years. He died in a crash on August 5, 1998 while flying his helicopter and cruising timber in the Fort St. James area. He leaves behind three children, two sons and one daughter. His two sons are currently studying to be Registered Professional Foresters and they will likely follow their Dad's footsteps. The companies David was involved with along with his two partners, Ken Rasmussen and Keith Playfair, employed the largest number of individuals in the area except for the mills. David was an excellent businessman with a big heart who helped almost everyone he touched in some manner or other. He was highly respected by his business associates and loved very much by his family.

Donor Mrs. Lori Hoy
Value $\$ 1,000$
Number Two
Eligibility Available to a full-time student. One scholarship will be awarded to a student from the Fort St. James area who is enrolled in the Forestry program. The second scholarship will be awarded to any student enrolled in the Forestry program who has indicated that she/he will continue to pursue her/his studies to become a registered Professional Forester.
Criteria Satisfactory academic standing.
Application Instructions Attach a letter outlining your career goals to your application form.
Note In the event that there are no applicants from the Fort St. James area, the award will be given, at the discretion of the University, to a student who is from an outlying community (e.g. Vanderhoof, Fort Fraser, Burns Lake).
Endowed 2000

## Doug Floyd Memorial Scholarships

Harold Douglas Floyd was born in 1932 in Meadow Lake, Saskatchewan and began his career with West Fraser in 1952. Throughout his career he worked in nearly every area of the company employing a unique mix of humility, leadership, and respect for employees, traits which have defined West Fraser's culture since Doug retired in 1987 in the role of Chief Operating Officer. Until his sudden death at the age of 59, Doug remained close with the community of Quesnel. With a strong personal code of ethics, which included the values of honor, fair play and loyalty, Doug became an inspiring leader who made work and life more fun for everyone around him. In memory of Doug's tremendous contribution to the company and his close friendship with the shareholders and employees, West Fraser is proud to establish a UNBC scholarship fund in his name.

Donor West Fraser Timber Co. Ltd.
Value $\$ 2,500$
Number Two
Eligibility Available to full-time students enrolled in an undergraduate degree program at UNBC. Preference will be given to students who are residents of Quesnel School District \#28. Second preference will be given to students who are residents of northern British Columbia.
Criteria Academic proficiency.
Application Instructions Answer the question regarding northern BC residency on your application form.
Endowed 1993

## Dr. Mary John Bursary

Dr. Mary John is a highly regarded and respected Carrier Elder and leader. The great granddaughter of Mary Quaw (six Mile Mary), Dr. Mary John has been instrumental in revitalizing Carrier culture and language as an instructor and member of the Yinka Dene Language Institute. Her achievements toward pursuing social and economic justice for Aboriginal people as and advisor and advocate have spanned issues related to policing, child welfare, education and forestry. She is a founding member of the Saik'uz Elders Society and a significant contributor to the publications Stoney Creek Women (a work about her life) and Judgement at Stoney Creek. This award is intended to be a tribute to the tireless contributions that Dr. Mary John has made toward the advancement of Aboriginal peoples.

Dr. Mary John is also the recipient of an honorary degree from the University of Northern British Columbia.
Donor Carrier Sekani Family Services, Carrier Sekani Tribal Council, Saik'uz First Nation, UNBC.

Value $\$ 1,000$
Number One
Eligibility Available to a full or part-time student enrolled in the College of Arts, Social and Health Sciences. The recipient will be a resident of northern British Columbia. Preference will be given to a Carrier First Nations student.

Criteria Demonstrated financial need and academic proficiency.
Application Instructions Attach a letter explaining your reasons for applying and articulate your education and career goals.
Note A committee consisting of representatives from family, UNBC, and Carrier Sekani First Nations will recommend the recipient.
Endowed 2002

## Eileen Williston Bursary

This Bursary has been established by Ray Williston and the Quintessential Literary Group to which Eileen belonged for many years. The Bursary will be awarded to a mature woman student planning or furthering a career in creative writing or journalism.

Donor Ray Williston and the Quintessential Literary Group
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student enrolled and majoring in the English program or other programs related to careers in creative writing or journalism. Preference will be given to mature women students.

Criteria Demonstrated financial need and satisfactory academic standing.
Application Instructions Attach a letter outlining your career goals and complete the financial need section of the application form.

Endowed 1999

## Elizabeth Kellie Chapter, IODE - Josephine Swann Bursary

Mrs. Carrie Crawley established this tribute in memory of her mother, Mrs. Josephine Swann. Mrs. Swann was a life-long member of IODE who, along with Mary Martin, established the Elizabeth Kellie Chapter and upheld the mission statement of IODE to improve the quality of life for her children, youth and those in need, through educational, social service and citizenship programs.

Donor Mrs. Carrie Crawley
Value $\$ 1,500$
Number One
Eligibility Available to a full-time student who is a Canadian citizen and enrolled in an Arts and Science or Health and Human Science program. Preference will be given to a graduate of a northern BC high school.

Criteria Satisfactory academic standing and financial need. Demonstrated leadership qualities by participation in activities such as Canadian heritage, volunteering, sports, and community service.

Application Instructions Attach a letter outlining your leadership/ community service experience and complete the financial need section of the application form.
Endowed 1995

## Industrial Forestry Service Ltd. Bursary

Established in 1952, based in Prince George, BC, the employee-owned Industrial Forestry Service Ltd. has grown with the forest industry to become a leading forestry consulting firm. IFS recognizes the benefits of providing motivated individuals with opportunities and challenges, and hopes to participate in the development of future skilled and innovative leaders through the awarding of this bursary.
Donor Industrial Forestry Service Ltd.
Value $\$ 500$
Number One
Eligibility Available to a full-time student who is a resident of northern British Columbia who is enrolled in the Faculty of Natural Resources and Environmental Studies, focusing on Forestry.
Criteria Financial need and academic proficiency.
Application Instructions Complete the financial need section of the application form and answer the question regarding northern BC residency.
Established 1997

## Jessie Craig Bursary

Jessie Craig was pleased with the government's decision to establish the University of Northern British Columbia. A member of IODE for many years, she advocated IODE's decision to establish a bursary for UNBC.

Donor Mrs. Linda Naismith and Mr. Richard Craig in memoriam to their mother, Mrs. Jessie Craig, and the Martlet Chapter IODE.
Value $\$ 500$
Number One
Eligibility Available to a female student enrolled in a program of Women's Studies with a demonstrated interest in women's issues.

Criteria Demonstrated financial need and community involvement through volunteering.
Application Instructions Attach a letter outlining your community involvement and complete the financial need section of the application form.

Conditions Tenable upon confirmation of enrolment in the Women's Studies program at UNBC in the semester immediately following the granting of the award.

Endowed 1993

## Knights of Columbus Council \#8927 Bursary

The Knights of Columbus Council \#8927 annually donate one \$500 bursary to a full-time University student in any program of study.

Donor Knights of Columbus Council \#8927 Sacred Heart
Value $\$ 500$
Number One
Eligibility Available to a full-time student enrolled in a UNBC program.
Criteria Satisfactory academic standing and demonstrated financial need.

Application Instructions Complete the financial need section of the awards application form.
Established 2001

## Louis \& Irene Monasch and Family Bursary

Louis B. had many interests-foremost among them were electrical engineering, education and music. He worked with several youth groups, Scouts, Job's Daughters and DeMolay. The idea of a university in northern BC came up in a campfire discussion while tenting north of Prince George, 35 years ago. As an instructor and administrator, he felt it was necessary to have colleges and a university in the north, in a populated area with employment opportunities, thereby making education more accessible for northern students. The family motto: "As long as you are learning, you are living."

Donor Mrs. Irene Monasch
Value 1,000
Number One

Eligibility Available to a full-time student pursuing a degree program at UNBC.

Criteria Demonstrated financial need.
Application Instructions Complete the financial need section of the application form.

## Mary E. Affleck Memorial Award

Mary Affleck was a mother, schoolteacher, and church and volunteer worker in Prince George in the 1960's, 1970's and early 1980's. She strongly believed that a good education is a wise investment which gives one knowledge, tolerance, self-confidence, the opportunity for a successful and interesting career, and most important, makes one better able to contribute to the betterment of society overall.

Donor Robert E. Affleck, Robert A.N. Affleck, Susan E. Affleck, C. Lynne Affleck
Value $\$ 2,000$
Number One
Eligibility Available to a full-time female undergraduate student who is working towards a degree in teaching or library science. If there are no candidates who indicate a career choice in teaching or library science, preference will be given to a student working toward a Bachelor of Arts degree.
Criteria Academic proficiency, demonstrated financial need, and documented community involvement as a volunteer.

Application Instructions Attach a letter outlining your career goals and volunteer service. Complete the financial need section of the application form.
Endowed 2000

## Marion and Lawrence deGrace Scholarship

Marion deGrace, along with her late husband Lawrence deGrace of Prince George, has held a tradition of community involvement in Prince George. Lawrence's commitment to Prince George extends from his founding of Industrial Forestry Services (IFS) in 1952, an entirely Canadian-owned forestry company, currently employing approximately 70 employees. IFS's growth has paralleled that or the British Columbia interior forest industry. Clientele consist of forest industry companies, federal, provincial and municipal governments, other resource industries, First Nations bands and private landowners.

Donor Marion deGrace
Value $\$ 1,000$
Number One

Eligibility Available to a full-time student who is a resident of northern British Columbia. The recipient will be enrolled in the Bachelor of Education program. Second preference will be given to a candidate enrolled in the Nursing program who has expressed a desire to go in to Public Health.

Criteria Academic proficiency
Application Instructions Attach a letter outlining your academic and career plans.

Note: No student may receive this award more than once.
Endowed 2000

## Max and Violet Enemark Bursary

Mr. Max Enemark's life and work ethics are captured by the following excerpt from The Second Mile by David Schellenberg:
"Whosoever shall compel you that you walk with him one mile Duty turns to pleasure when you walk the second mile They are proven words of wisdom that have stood the acid test By not skimping in your efforts but by doing your level best You will learn the joy of doing and that life can be worthwhile Doing more than was expected as you walk the second mile." To commemorate their life together, Mrs. Violet Enemark established this award. The bursary also recognizes Mr. Enemark's dream of going to university and the help it may provide others to realize that dream.

Donor Mrs. Violet Enemark
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student enrolled in the Faculty of Health and Human Sciences. The recipient will be a resident of British Columbia by virtue of birth or four years of consecutive residency immediately prior to receiving the award. Preference will be given to students who can demonstrate community/volunteer involvement.
Criteria Academic proficiency
Application Instructions Attach a letter outlining your community service to you application form.
Endowed 1999

## Michael Strel Memorial Bursary

This bursary has been established in celebration of the life of Michael (Mike) Richard Strel. Mike's three years at UNBC, pursuing a double major in Mathematics and Physics, were a time of personal growth and fulfillment. His fascination with these subjects blossomed and he was excited about the possibility of a related career in teaching and research. In his personal life, of 21 years, Mike was known for his big smile and unique sense of humour, his deep love of family and close friends, his passion for mountaineering, his appreciation of classical music and his enthusiasm for learning to fly. This award is intended to carry forward the spirit of quiet determination and joy with which he lived his life.

Donor The Strel Family

Value $\$ 3,000$
Number One
Eligibility Available to a full-time undergraduate or graduate student with a declared major in Math and/or Physics. Preference will be given to an undergraduate student.
Criteria Demonstrated financial need and satisfactory academic standing.

Application Instructions Complete the financial need and voluntary information sections of the application form and atttach a brief outline of your extracurricular activities..

Note Recipients are eligible to receive this award more than once.
Recipient Selection Senate Committee on Scholarships and Bursaries, on recommendation by the Awards Officer.

Established 2005

## Minerva Foundation Award

The Minerva Foundation for BC Women creates opportunities for women throughout BC to realize their economic and leadership potential through innovative donor and community partnerships and entrepreneurial strategies that stimulate philanthropy. The purpose of the Minerva Foundation Award is: to assist single mothers in advancing their education, to retrain mature women returning to the workforce after a long absence, to advance women in non-traditional fields of study, and to assist immigrant and aboriginal women and women with disabilities to overcome educational barriers.

Donor The Minerva Foundation
Value \$10,000
Number One
Eligibility Available to a full-time undergraduate or graduate student enrolled in any program at the University of Northern British Columbia. Preference will be given to: a single mother, a woman with disabilities, a First Nations Woman, a woman who is an immigrant to Canada and/ or a mature woman returning to the workforce after a long absence.
Criteria Demonstrated financial need and academic proficiency.
Application Instructions Complete the financial need and voluntary information sections of the awards application and attach a letter outlining how you meet the eligibility requirements for this award.
Note: In the event that two or more applicants are equally qualified, preference will be given to the candidate with the highest academic standing.
Established 2001 (renewed 2005)

## Mr. and Mrs. Jagir Grewal Athletic Bursary

Mr. And Mrs. Jagir Grewal came to Prince George from India in 1977. Ever since, the Grewal family have been strong supporters in the local community and appreciate the value of varsity sports as part of a university education. Mr. and Mrs. Grewal are proud to help UNBC athletes pursue their academic and athletic goals.

Donor Mr. and Mrs. Grewal
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student. Preference will be given to a resident of northern British Columbia who is a varsity athlete.

Criteria Academic proficiency and demonstrated financial need.
Note: The recipient will be nominated by his/her coach.
Established 2002

## Multicultural Heritage Society of Prince George Endowed Bursary

The Multicultural Heritage Society of Prince George was formed in 1974 as an umbrella organization for multicultural groups in Prince George and surrounding areas. With this endowment we hope to promote cross cultural awareness and an understanding of heritage and identity through education.

Donor The Multicultural Heritage Society of Prince George
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student. This award is open to students currently enrolled in School District \#57, the College of New Caledonia, or UNBC. Preference will be given to students who demonstrate involvement in school, community or non-profit societies through volunteer work.

Criteria Satisfactory academic standing.
Conditions The award must be used within one year of acceptance to UNBC.

Application Instructions Submit a 500 word essay on one of the following topics: a) how are the many cultures in this society of value to our community?; b) What should society do to counter racism?; c) How can you as an individual contribute? Submit at least one letter of reference outlining your community involvement and complete the financial need section of the awards application form.
Note Endowed November 2002

## Neil \& Amelia Peterson Bursary

Neil and Amelia Peterson, long time residents of Prince George, have always been aware of the high cost of education, and are proud to be able to reduce the financial burden of northern British Columbia students.

Donor Neil and Amelia Peterson
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student enrolled in an undergraduate degree program at UNBC. Preference will be given to a resident of northern British Columbia.

Criteria Demonstrated financial need. Final selection will be made on the basis of greatest financial need.

Application Instructions Complete the financial need section of the application form and answer the question regarding northern $B C$ residency.

Endowed 1998

## Nora Jean Garland Bursary

Nora Jean Garland is a long time resident of Prince George, graduating from Prince George Senior Secondary. She is a strong supporter of female athletes striving to combine academic success with athletic success. This bursary has been established to help a female student athlete succeed with an academic/athletic workload.

Donor Nora Jean Garland
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student, preferably a female varsity basketball player..
Criteria Academic proficiency and demonstrated financial need.
Note: The UNBC varsity women's basketball coach will nominate the recipient.

## Established 2002

## Pepsi Annual Athletic Awards

The Pepsi Bottling Group is the world's largest manufacturer, seller and distributor of Pepsi-cola beverages-some of the world's most recognized consumer brands. PBG is a publicly traded company that generates nearly $\$ 8$ billion in annual sales. It operates in the US, Canada, Spain, Greece, and Russia, accounting for about one third of the Pepsi-cola volume in the world, and employs 38,700 people worldwide. As part of PBG's continuing support of UNBC, support has been directed toward the Athletics Department.

Donor Pepsi Bottling Group
Value 1,750
Number Two
Eligibility Available to full-time students enrolled in any degree
program at UNBC who are active participants in the varsity athletic program. One award will be given to a female student and one to a male student each year.

Criteria Academic proficiency
Application Instructions Candidates will be nominated by their coach.

Established 2000

## Phillips, Hager and North Investment Management Ltd. Bursary

Established in 1965, Phillips, Hager and North Investment Management Ltd. is one of Canada's oldest and largest independent investment management firms. Based in Vancouver, with institutional office in Toronto, Phillips, Hager and North Investment Management Ltd. has a strong affiliation with British Columbia, its communities and educational institutions.

Donor Phillips, Hager and North Investment Management Ltd.
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student enrolled in an undergraduate degree program at UNBC.

Criteria Demonstrated financial need. Final selection will be made on the basis of greatest financial need.
Application Instructions Complete the financial need section of the application form.
Endowed 1998

## Prince George and District Dental Society Bursary

Donor Prince George and District Dental Society
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student who was born in and/or has lived continuously for four years, immediately prior to attending UNBC, within the Prince George and District Dental Society's region, as defined by the 1995 boundaries of Alberta border west to Burns Lake, south from Mackenzie to 100 Mile House.

Criteria Satisfactory academic standing and demonstrated financial need.

Note Students may receive this award more than once.
Endowed 1995

## Prince George Elks Lodge \#122 and the Order of the Royal Purple \#48 Bursaries

Established as the very first full award (scholarship or bursary) with UNBC, the memberships of these two orders showed considerable insight and were pro-active on behalf of future students at UNBC.

Donor Prince George Elks Lodge \#122 and the Order of the Royal Purple \#48

Value $\$ 1,500$, renewable for three years
Number Two
Eligibility First preference will be given to hearing impaired students. In the absence of eligible candidates, preference will be given to speech impaired or sight impaired students who will receive the award until graduation or until a hearing impaired student is admitted. Should no sensory impaired students be eligible, physically challenged students will be considered until graduation or until a hearing impaired student is admitted. If no students are eligible, the monies to have been awarded will be utilized to purchase specialized equipment to facilitate the education of hearing impaired students.
Criteria Satisfactory academic standing.
Application Instructions Complete the financial need section of the application form and supply a letter outlining how you meet the other criteria for this award.

Note This bursary is renewable subject to the recipients earning a 2.0 grade in all courses.

Endowed 1992

## Prince George Filipino Canadian Association Scholarship

The Prince George Filipino Canadian Association is a socio-civic association established to uphold multiculturalism through active promotion of Filipino cultural values and heritage. The scholarship recognizes the academic excellence of a UNBC student of Filipino descent.

Donor Prince George Filipino Canadian Association Scholarship
Value $\$ 500$
Number One
Eligibility Available to a full time student enrolled in any program (incoming or registered) who is of Filipino descent.
Criteria Academic Proficiency and demonstrated community leadership.

Conditions Students unable to receive more than once.
Recipient Selection Criteria Senate Committee on Scholarships and Bursaries, on recommendation by the Awards Officer.

Established 2005

## Prince George Minor Basketball Association Bursaries

The Prince George Minor Basketball Association established these bursaries in order to encourage youth, reward hard work, and celebrate the role that athletics has in student life.

Donor Prince George Minor Basketball Association
Value $\$ 500$
Number Two
Eligibility Available to a full time undergraduate or graduate student. Preference will be given to a resident of Northern British Columbia and to any former participants in the Prince George Minor Basketball Association.

Criteria Demonstrated Financial Need, Satisfactory Academic Standing and Demonstrated Community Leadership

Conditions The recipients of these bursaries must be members of the Men's or Women's Varsity Basketball Teams.

Application Instructions: Fill out all the financial need section of the Awards Application form and attach a letter outlining your community leadership and any proof of previous membership in the Prince George Minor Basketball Association.

Recipient Selection Senate Committee on Scholarships and Bursaries, on recommendation of the respective Coaches of the UNBC Men's and Women's Varsity Basketball Teams.

## Established 2005

## Pulp, Paper and Woodworkers of Canada, Local 9 Bursary

The members of PPWC Local 9 established two bursaries to encourage its members and their families to further their academic education in the north and to assist them in overcoming financial barriers to post secondary education.

Donor Members of the Pulp, Paper and Woodworkers of Canada Local 9

Value $\$ 1,500$
Number Two
Eligibility Available to a full-time or part-time student in any program of study. Must be given to a member, the spouse of a member, a child, grandchild, or legal ward of a member or deceased member of the Pulp, Paper and Woodworkers of Canada, Local 9. Proof of membership must be supplied at time of application.

Criteria Demonstrated financial need
Conditions Student able to receive the bursary once.
Established 2004

## Rogers Sugar Bursary

Rogers Sugar maintains that all qualified individuals should have the opportunity to pursue university educational opportunities. The intent of the fund is to encourage and financially support ambitious students, showing leadership and/or initiative within their community, in their pursuit of a UNBC degree program.
Value \$2,500
Number One
Eligibility Available to a full-time student pursuing an undergraduate degree at UNBC.

Criteria Demonstrated financial need and community involvement.
Application Instructions Complete the financial aid section of the application form and attach a letter outlining your community involvement.

## Rotary Clubs of BC Scholarship

The Prince George Rotary and the Prince George-Nechako Rotary Clubs got behind their slogan "Real Happiness is Helping Others" and established an endowment to financially assist students attending UNBC. These two then challenged other BC Rotary Clubs to support this worthy appeal and each year this fund continues to grow as clubs respond.

Donor BC Rotary Clubs
Value $\$ 1,500$ per annum, renewable for three consecutive years Number Varies

Eligibility Available to a full-time student pursuing an undergraduate degree who is a resident of British Columbia by virtue of birth or five years consecutive residence immediately prior to first receipt of the award. Preference will be given to a resident of northern British Columbia.

Criteria Demonstrated community service and academic excellence.
Application Instructions Attach a letter outlining your community service to your application form and answer the question regarding northern BC residency.

Note This scholarship is renewable subject to the recipient earning a 2.0 grade in all courses. The recipient is required to attend one Rotary meeting.

Endowed 1993

## Rotary Clubs of BC Bursary

The Prince George Rotary and the Prince George-Nechako Rotary Clubs got behind their slogan "Real Happiness is Helping Others" and established an endowment to financially assist students attending UNBC. These two then challenged other BC Rotary Clubs to support this worthy appeal and each year this fund continues to grow as clubs respond.

## Donor BC Rotary Clubs

Value $\$ 1,000$ per annum, renewable for three consecutive years.

## Number Varies

Eligibility Available to a full-time student pursuing an undergraduate degree who is a resident of British Columbia by virtue of birth or five years consecutive residence immediately prior to first receipt of the award. Preference will be given to a resident of northern British Columbia.

Criteria Demonstrated community service, financial need, and academic proficiency.

Application Instructions Attach a letter outlining your community involvement to your application form, complete the section on financial need, and answer the question regarding northern BC residency.

Note This bursary is renewable subject to the recipient earning a 2.0 grade in all courses. The recipient is required to attend one Rotary meeting.

Endowed 1993

## Scholefield Family Bursary

The Scholefield family values the kind of people who choose to come to Prince George and who are passionate about this wonderful community they call home. They strongly believe that an education in natural resources at UNBC can provide excellent opportunities to make your dreams come true. Enjoy your time here, get involved with something that interests you, meet as many people as you can, and tap into your potential to be the best you can be.

Donor Scott and Heather Scholefield
Value \$300
Number One
Eligibility Available to a full-time undergraduate student with a declared major in Natural Resource Management.
Criteria Academic proficiency, demonstrated financial need, by application (stating reasons for coming to UNBC and how doing so contributes to their career aspirations) and/or Faculty Nomination.

Conditions Eligible for other awards, student unable to receive more than once.

Recipient Selection Criteria Senate Committee on Scholarships and Bursaries, on recommendation by the Awards Officer

Established 2004

## Scotiabank Bursary

Donor Scotiabank
Value $\$ 1,000$
Number One
Eligibility Available to students who are residents of one of the following northern British Columbia communities: Prince George, Prince Rupert. Terrace, Smithers, Quesnel, Fort St. John, Fort Nelson, Mackenzie, and Dawson Creek, by virtue of birth or uninterrupted residency for four years immediately prior to commencing current studies at UNBC. Preference will be given to non-traditional or special needs students (i.e., single parents, mature students, part-time students, physically challenged or learning disabled).

Criteria Demonstrated financial need.
Application Instructions Complete the financial need section of the application form and answer the question regarding northern $B C$ residency.

Endowed 1997
Scotiabank Scholarship
Value \$1,500
Number One
Eligibility Available to a full-time student who is a resident of one of the northern British Columbia communities of Prince George, Prince Rupert, Terrace, Smithers, Quesnel, Fort St. John, Fort Nelson, Mackenzie or Dawson Creek, by virtue of birth or uninterrupted residency for four years immediately prior to commencing current studies at UNBC. The scholarship will be awarded to a student enrolled within the Faculty of Management.
Criteria Academic excellence.
Endowed 1996

## ScotiaMcLeod Matching Grant

ScotiaMcLeod has worked with Canadians for more than 75 years to help them achieve their financial security. Building on a heritage of integrity and innovation, the company has earned its clients' confidence and trust. ScotiaMcLeod is one of Canada's leading full-service investment dealers, serving clients through more than 70 branches across the country.

Donor ScotiaMcLeod Inc.
Value Up to $50 \%$ of tuition and books
Number Variable
Eligibility Available to full-time students who reasonably demonstrate that they have personally earned the monies being applied towards their tuition and books. Preference will be given to candidates who have earned and contributed the most money and still have the greatest financial need. Preference will be given to candidates who are residents of northern British Columbia.

Criteria Academic proficiency and financial need.

Application Instructions Complete the financial need section of the application form and supply a letter outlining how you have earned the money you plan to use for your education.
Note: Students may apply for and receive this award more than once.
Endowed 1999

## Shoppers Drug Mart/Imasco Bursary

Shoppers Drug Mart/Imasco recognizes that our companies' successes are directly linked to community viability. Imasco believes the most constructive way to show appreciation is by supporting initiatives that strengthen these communities. We are pleased to recognize northern students for their commitment to their communities by offering this bursary.
Donor Shoppers Drug Mart/Imasco
Value $\$ 1,000$
Number Varies
Eligibility Available to a full-time student enrolled at UNBC.
Criteria Satisfactory academic standing and demonstrated financial need.

Application Instructions Complete the financial need section of the application form.

Endowed 1999

## Shoppers Drug Mart/Imasco Community Involvement Bursary

Shoppers Drug Mart/Imasco recognizes that our companies' successes are directly linked to community viability. Imasco believes the most constructive way to show appreciation is by supporting initiatives that strengthen these communities. We are pleased to recognize northern students for their commitment to their communities by offering this bursary.

## Donor Shoppers Drug Mart/Imasco

Value $\$ 2,500$
Number One
Eligibility Available to a full-time student at UNBC. Preference will be given to candidates who are graduates of northern high schools (as defined in the University Act) who can reasonably demonstrate a record of community service, involvement and leadership. Should more than one student satisfy the above criteria, final selection will be made on the basis of greatest financial need.

Criteria Academic proficiency and demonstrated financial need.
Application Instructions Complete the financial need section of the application form and submit a letter outlining your community involvement.

Endowed 1999

## Simons Foundation Bursaries for Single Mothers

The intent of the Simons Foundation Bursary Fund is to recognize and financially support promising and ambitious single mothers determined to pursue university educational opportunities. Single mothers and their children form the largest group living in poverty and it is the intent of the Foundation to provide opportunities for them to complete their education and raise their standards of living.

Donor The Simons Foundation
Value $\$ 750$
Number Variable
Eligibility Available to full-time female single parents, whose children are enrolled in the UNBC Daycare.

Criteria Demonstrated financial need.
Application Instructions Complete the financial aid section of the application form and provide a statement confirming that your child(ren) are enrolled in the UNBC Daycare.

Endowed 1996

## The Steadman Family Matching Grant

This bursary was established by Tom and Linda Steadmanentrepreneurial partners in Prince George business-to help those whose personal efforts, like their own, contributed towards their success. Tom Steadman was a founding advocate of the University, a Founder of the Interior University Society, Member of the Implementation Planning Group and the Interim Governing Council. He also chaired UNBC's North to the Future Campaign and the University of Northern British Columbia Foundation.

Value Up to $50 \%$ of tuition and books
Number Variable
Eligibility Available to full-time students enrolled in an undergraduate degree program at UNBC. Candidates must reasonably demonstrate that they have personally earned the monies being applied towards their tuition and books for the upcoming academic year. Preference will be given to residents of northern British Columbia.

Criteria Demonstrated financial need and academic proficiency.
Application Instructions Complete the financial need section of the application form and supply a letter outlining how you have earned the money you plan to use for your education.

Note Students may apply for and receive this award more than once.
Endowed 1993

## TD Bank Financial Group Bursary

Donor TD Canada Trust
Value Up to $50 \%$ of tuition per term
Number Variable
Eligibility Available to full or part-time students who qualify to the Canadian Resident Tuition Fee Structure.

Criteria Academic proficiency and demonstrated financial need.
Application Instructions Complete the financial need section of the application form.

Note Recipients may receive this award more than once.
Endowed 1998

## UNBC Alumni Association Athletics Award

The UNBC Alumni Association is proud of our members, who are emerging as leaders in our communities. The Alumni Association recognizes the role of competitive athletics in creating a positive public profile for the University, as well as providing a valuable learning experience for student athletes. These bursaries have been established by the Alumni Association to assist student athletes in pursuing their academic and athletic goals.

Donor UNBC Alumni Association
Value $\$ 1,000$
Number Two
Eligibility Available to full-time student. Preference will be given to a returning student with a minimum completion of 15 credit hours, and to varsity athletes.

## Criteria Academic proficiency

Application Instructions Candidates must be nominated by the coaches of their respective teams to the UNBC Alumni Association Board of Directors.
Note: The recipient must be willing to contact the Alumni Association to participate in any promotional activities relating to the bursary.

Established 2004

## UNBC Athletic Awards

Value $\$ 500$
Number Ten
Eligibility Available to full-time students enrolled in a degree program at UNBC participating on a varsity team.

Criteria Recipients must meet UNBC admission, enrolment and fulltime attendance requirements. Final selection will be based on the student's contribution to the athletic team.

Note No application is required. The Athletic Coordinator and coaching staff will select the recipients.
Established 1998

## UNBC Founders Bursary

In 1988, almost 16,000 individuals signed a historical document, the petition submitted to the Provincial Government requesting the establishment of a university in northern BC . To commemorate the support of the petition signors, this bursary will act as a legacy to the ambition and foresight of those founding supporters of UNBC.

Donor Petition signers
Value $\$ 1,000$
Number TBA
Eligibility Available to full-time students who are residents of northern British Columbia.
Criteria Demonstrated financial need, academic proficiency, and community service/volunteerism.

Application Instructions Provide at least one but not more that three testimonial letters attesting to your keen spirit and personal initiative as a current volunteer in a community social service group. You must also provide a letter outlining the type and extent of your volunteer activities. Complete the financial need section of the application form.

Endowed 1998

## UNBC Men's Basketball Alumni Bursary

Four of the founding members of the UNBC Men's Basketball team have gone on to successful careers in the Prince George community. In appreciation of the inherent value of the athletics program for the University and the students, the donors are proud to help UNBC student-athletes pursue their academic and athletic goals.
Donor Nick Cheveldave, Mike Davis, Greg Sale, Zane Robison
Value $\$ 1,000$
Number One
Eligibility Available to a full-time student. Preference will be given to a male varsity basketball player at UNBC.
Criteria Demonstrated academic proficiency and financial need.
Recipient Selection Criteria Coach's nomination referred to the Coordinator of Financial Awards with final approval of the Senate Committee on Scholarships and Bursaries.
Established 2004

## Vancouver Foundation First Nations Bursary

The Vancouver Foundation has created a First Nations Bursary program available in recognition of the extraordinary challenges faced by First Nations students in accessing post-secondary education, and the efforts that the universities are making to welcome and support the success of First Nations students on their campuses.

Donor The Vancouver Foundation
Value $\$ 1,000$

## Number Four

Eligibility Available to an undergraduate student of First Nations heritage who is a resident of British Columbia and enrolled at the University of Northern British Columbia.

Criteria Demonstrated financial need.
Application Instructions Complete the financial need section of the application form.

Established 2004

## van Adrichem Family Bursary

The van Adrichem family came to Prince George in 1962. Their eight children graduated from O'Grady Catholic High School. Mr. van Adrichem has been actively involved in education for some 25 years.

Donor Mr. and Mrs. Michael van Adrichem and Family
Value $\$ 500$

## Number One

Eligibility Available to a graduating high school student admitted to the Plant Biology Program at UNBC. If no suitable candidate from this program is identified, the award will be given to a declared Biology major.
Criteria Satisfactory academic standing and demonstrated financial need.

Endowed 1994

## The Western Chartered Financial Athletic Scholarship

Western Chartered Financial supports the efforts of exceptional student athletes so that they may be more successful in all their endeavors. Investing in students' scholarships with UNBC is one way that WCF gives back to the community it serves. Through these scholarships, WCF is supporting well-balanced students. In financial services and in life, being balanced is the key to success.

Donor Western Chartered Financial
Value $\$ 1,000$
Number Two
Eligibility Available to a full time undergraduate student who has completed at least 24 credit hours. Preference will be given to a resident of Northern British Columbia.

Criteria Academic Proficiency and Demonstrated Community Leadership.

Conditions Students must be a member of the Men's or Women's Varsity Basketball Teams.

Note Students cannot receive this award more than once.
Established 2005

## 6. Part-time Student Awards

Students who are registered in and attempt less that nine credit hours per semester are eligible for these awards.

## CIBC Wood Gundy Endowed Scholarship

CIBC Wood Gundy is one of the world's leading international financial management and advisory companies, offering a full range of investment services to individual, corporate, government, and institutional clients. The CIBC Wood Gundy Endowed Scholarship was established on their business principles of recognition for individual respect, teamwork, responsible citizenship, and integrity. The CIBC Wood Gundy Endowed Scholarship provides recognition to committed achieving students, majoring in Finance with limited resources and unlimited potential.

Donor Established by CIBC Wood Gundy
Value $\$ 1,000$
Number One, renewable for up to two additional years.
Eligibility Available to a full or part-time student who has completed a minimum of 60 credit hours with a declared major in Finance. The recipient will be a resident of northern British Columbia.

Criteria Academic excellence.
Application Instructions Complete the question regarding northern BC residency on the awards application form.

Note This award is renewable for up to two additional years subject to the recipient maintaining a GPA of at least 3.67.
Endowed 1996

## Gordon Ternowetsky Memorial Bursary

Gordon Ternowetsky (1946-1999) was one of the founding faculty members of UNBC, hired as the first professor in the Social Work program. Teacher, author, and family man, Gordon was instrumental in establishing the Child Welfare Research Centre at UNBC. This bursary was established by UNBC students, colleagues and friends as a tribute to his memory.

Donor Family and others
Value \$500
Number One
Eligibility Available to a full or part-time student enrolled in the Bachelor of Social Work program.

Criteria Demonstrated financial need and satisfactory academic standing.
Application Instructions Complete the financial need section of the awards application form.

Note: Selection of the recipient is based on the recommendation of the Faculty of Social Work.

Endowed 1999

## Mary Fallis Scholarship

Mary Fallis arrived in Prince George in 1969 to become a founding member of the English Department at the College of New Caledonia. After her retirement she remained in Prince George sharing her passions: learning, photography, mountain climbing and conservation of the natural world. She received an Award of Merit in Recreation from the city of Prince George, and in 1994, was made a Friend of the University of Northern British Columbia. She had a keen interest in the lives of her twelve nieces and nephews. They, with her friends in the community and across the country, have established this scholarship in her name. It is to be an on-going tribute to Mary Fallis - educator, naturalist and photographer.

Donor Family and friends of Mary Fallis
Value $\$ 1,000$
Number One
Eligibility Available to a full-time or part-time student who has completed at least 60 credit hours towards a degree with a declared major in English. The recipient will be a resident of northern BC.

Criteria Academic excellence
Application Instructions Complete the residency section of the awards application form.

Endowed 2000

## Northern Undergraduate Student Society Bursaries

This fund was established my the members of the Northern Undergraduate Student Society who wish to support undergraduate students of the University of Northern British Columbia to attain their full potential as educated and productive members of society by the provision of annual bursaries.
Donor Northern Undergraduate Student Society
Value \$500
Number Variable
Eligibility Available to an undergraduate student who has demonstrated exceptional University community service.
Criteria Academic proficiency, demonstrated financial need and exceptional University community service.
Application Instructions Submit three letters of reference demonstrating community service and complete the financial aid section of the application form.
Note No candidate may receive this award more than once.
Endowed 2000

## Political Science Student Association Annual Scholarship

The Political Science Student Association is a student club within the University that was formed to promote political discussion on campus. Their aim is to facilitate political discussion and to encourage participation in campus life. They have established this scholarship to encourage and support those interested in Political Science to continue their academic careers.

Donor The Political Science Student Association
Value \$500

## Number One

Eligibility Available to a full or part-time student enrolled who has completed at least 60 credit hours towards a degree in Political Science.
Criteria Satisfactory academic standing and active involvement in the community or in campus life.
Application Instructions Candidates must include two letters of reference demonstrating involvement in the community or in campus life.
Note The Political Science Student Association Executive are not eligible to apply for this award. No candidate may receive this award more than once.

Established 2001

## Pulp, Paper and Woodworkers of Canada, Local 9 Bursary

The members of PPWC Local 9 established two bursaries to encourage its members and their families to further their academic education in the north and to assist them in overcoming financial barriers to post secondary education.
Donor Members of the Pulp, Paper and Woodworkers of Canada Local 9

Value $\$ 1,500.00$
Number Two
Eligibility Available to a full-time or part-time student in any program of study. Must be given to a member, the spouse of a member, a child, grandchild, or legal ward of a member or deceased member of the Pulp, Paper and Woodworkers of Canada, Local 9. Proof of membership must be supplied at time of application.
Criteria Demonstrated financial need
Conditions Student able to receive the bursary once and can not renew bursary.
Established 2004

## Scotiabank Bursary

## Donor Scotiabank

Value $\$ 1,000$
Number One
Eligibility Available to students who are residents of one of the following northern British Columbia communities: Prince George, Prince Rupert. Terrace, Smithers, Quesnel, Fort St. John, Fort Nelson, Mackenzie, and Dawson Creek, by virtue of birth or uninterrupted residency for four years immediately prior to commencing current studies at UNBC. Preference will be given to non-traditional or special needs students (i.e., single parents, mature students, part-time students, physically challenged or learning disabled).
Criteria Demonstrated financial need.
Application Instructions Complete the financial need section of the application form and answer the question regarding northern $B C$ residency.

Endowed 1996

## TD Bank Financial Group Bursary

Donor TD Canada Trust
Value Up to 50\% of tuition per term
Number Variable
Eligibility Available to full or part-time students who qualify to the Canadian Resident Tuition Fee Structure.

Criteria Academic proficiency and demonstrated financial need.
Application Instructions Complete the financial need section of the application form.

Note Recipients may receive this award more than once.
Endowed 1998

## UNBC Part-time Undergraduate Scholarships

Donor The University of Northern British Columbia
Value $\$ 500$
Number Variable
Eligibility Available to part-time students who have enrolled in less than nine credit hours each semester. Part-time students will be considered for this scholarship at 15 credit hour intervals. Thus, upon completion of 15 credit hours, 30 credit hours, 45 credit hours, etc., the students' GPA on the most recently completed 15 credit hour block will be tabulated. These part-time scholarships will be offered at the beginning of each semester.

Criteria Academic excellence.
Conditions Tenable upon confirmation of part-time enrolment at the University of Northern British Columbia in the semester immediately following the granting of the award.
Established 1994

## 7. Externally Administered Awards

Selection for these awards is made independent of the UNBC Awards office. Separate application forms may be required.

## BC Hydro Scholarships

Donor BC Hydro
Value $\$ 1,000$
Number Four
Eligibility Available to full-time students continuing programs of study relevant to BC Hydro's business.
Criteria Academic proficiency with a minimum 2.67 annual GPA, good written communication skills, demonstrated innovation, and commitment to the protection of the environment and the efficient and safe use of electricity.

Application Instructions Applications, including transcripts and reference letters, should be sent directly to BC Hydro by January 13 each year.

First Award 1994

## Credit Union - Forest Renewal BC Bursary Program

Donor Forest Renewal BC and Credit Union Central of British Columbia

Value $\$ 1,000$
Number Varies
Eligibility Available to a graduating grade 12 student or first, second, or third year post-secondary student studying forestry or a forestryrelated subject at a post-secondary institution in BC .

Criteria Selection will be based on the submission of a typewritten essay, approximately 500 to 1000 words in length, explaining innovative ideas for BC's forest management and sustainability. Topics may include: silviculture; restoration and protection of the forest environment; forest production; value-added processes to create more jobs from each tree cut; and ways to preserve forest resources while enhancing their contribution to the economies of communities throughout British Columbia. Essays will be judged on originality of ideas, analysis of issues, knowledge of Forest Renewal BC mandate and forest sustainability issues, and ability to communicate ideas.
Application Instructions Application forms may be obtained from any credit union or Forest Renewal BC Regional Office. Applications must be sent directly to Forest Renewal BC no later than April 2.

## Fort St. John Friendship Society - UNBC Bursary

Bursaries will be awarded by the Fort St. John Friendship Society to First Nations Students attending the UNBC-Fort St. John Campus.
Donor The Fort St. John Friendship Society
Value up to \$500
Number Variable

Eligibility The bursary(ies) will be awarded to First Nations adult learners. Applicants must be 19 years or older and be a member of the Fort St. John Friendship Society, currently enrolled at the UNBCFort St. John campus.

Criteria Applicants will provide background on their community involvement. Selection will be based on need rather than academic standing.
Application Instructions Applications will be sent directly to the Fort St. John Friendship Society no later than April 1. Amount and value of the award(s) will be determined on a yearly basis.
Established 1997
Helen Thurwell Scholarship
Donor Mr. and Mrs. Vernon Forster
Value $\$ 5,000$ per annum, renewable for up to three years.
Number Two
Eligibility Available to a full-time female student who is a graduate of any secondary school on the "Sunshine Coast".

Criteria Academic excellence and involvement in the school and/or community.

Note: Nominations will be made by the faculty of any secondary school on the "Sunshine Coast" in consultation with the School District.

This scholarship may be renewed for three years subject to the recipient maintaining satisfactory academic standing.

Endowed 1992

## Houston Scholarship

The Houston Scholarship has been generated by the citizens of Houston, BC through fundraising efforts under the leadership of the Houston and District Chamber of Commerce. The intent of this fund is to assist Houston students in their pursuit of a post-secondary education at UNBC.

Donor Citizens of Houston and District
Value Variable
Number One
Eligibility Available to a full-time student entering first year of a degree program at UNBC who is a permanent resident of Canada, a graduate of a Houston Secondary School, and who has been a resident of Houston for at least two consecutive years immediately prior to commencing study at UNBC.

Criteria Academic proficiency demonstrated record of community involvement and/or volunteerism in clubs and organizations and sporting activities.
Application Instructions Applications should be made directly to the Houston and District Chamber of Commerce.

Endowed 1995

## Rotary Club of Gibsons Jim Ling and Michael Cruise Scholarships

These awards were established through the support of the Rotary Club of Gibsons and Mr. \& Mrs. Michael Cruise. Jim Ling: a dedicated Rotarian who was instrumental in establishing a strong Rotary Youth base in Gibsons as well as initiating Interact Clubs in District 5040 during 1996. Michael Cruise: District Governor of the Rotary District 5040 in 1995-1996 who extended Rotary ideals to the family and to young people during his term in office.

Donor The Rotary Club of Gibsons and Mr. \& Mrs. Michael Cruise
Value \$2,000-\$2,500
Number Two, with the possibility of being renewable for one year Eligibility One award with preference given to a Rotaract member from Gibsons area and one award with preference given to a former Interact member from Elphinstone High School going directly to UNBC. Preference will also be given to a student enrolled in a Bachelor of Science program working toward a degree in Forestry, Environmental Studies, Social Studies or Natural Resources Management. In the event that none of the above criteria can be met, preference will be given to students from Elphinstone High School.

Criteria Academic excellence.
Application Instructions Applications are made directly to the Rotary Club of Gibsons Scholarship committee who, along with teaching staff from Elphinstone High School, will make the selections and inform UNBC of those choices. UNBC will make the final selection in conformity with UNBC admission policy and academic requirements. The awards recipients are expected to attend three Rotary Club meetings each year of the scholarship award.
Note: These scholarships may be renewable for one additional year subject to the recipients earning a 3.00 GPA. To be considered for a renewed scholarship, the recipient must reapply for the award.

## Endowed 1996

## Financial Aid

## British Columbia Student Assistance Program (full-time students)

Students may borrow money in the form of a government student loan on a promise to repay the loan at a specified time in the future. Government student loans are available to students who can demonstrate financial need. Therefore, funds are only loaned to students whose financial resources from parents, summer employment, part-time work and other sources do not cover the estimated cost of their education.
Canada Student Loans, a federal program, and British Columbia Student Loans, a provincial program, both provide interest-free loans for full-time students who are Canadian citizens or permanent residents.

## Grants

Students may receive grants from the Canadian Millennium Scholarship Foundation (CMS Grant). To be eligible for grants, students must be enrolled in their first four years of full-time undergraduate studies and have assessed financial need in excess of $\$ 125$ per week of study. Because CMS grant funding is an integrated part of the British Columbia Student Assistance Program, CMS Grant may replace loans. Students will be assessed for grant eligibility when they apply for BC funding.

## Eligibility

To be eligible for BC funding, students must be residents of British Columbia as defined by established governmental criteria. Assistance will be provided to eligible students who will be enrolled in a minimum $60 \%$ or nine credit hours of a full program of studies each semester, or be enrolled as full-time graduate students.

## Application

Application for loans and grants as described above is made through a single application form, available from the Ministry of Advanced Education, Training and Technology (1-800-561-1818) or from any college or university. Students may also apply on line at: www.bcsap. bc.ca.

Students may apply for loans before they have been accepted at the educational institution of their choice. In order for funding to be in place at the onset of Fall classes, it is advisable for students to submit their Ioan application before June 30. Students who apply after that date may not receive their loans until well into the semester and may not qualify for tuition deferments.

## Students From Other Provinces

Students from other provinces are required to seek information from their respective provincial student assistance branches.

## Government Part-time Loans and Grants

Federal loans are also available for part-time students. These loans fund only direct educational expenses such as tuition, books, supplies, and childcare while the parent is at school.

Canada Study Grants for High-need Part-time Students assist students who are unable to meet the eligibility requirements of the full-time loans program and whose income falls below a prescribed threshold. Students with dependants who receive a high-need part-time grant may also qualify for additional assistance in the form of a Canada Study Grant for Students with Dependants.

## Eligibility

Students must be Canadian citizens residing in a province that issues Canada Student Loans, and be taking between 20 and 59\% (less than nine credit hours per semester) of a full course load.

## Application

To be eligible for part-time federal or provincial grants, students must apply for a federal part-time loan, as grant eligibility is determined using the federal loan criteria. A single application form for the parttime Canada Loan and/or Canada Study Grants must be submitted to the UNBC Awards, Financial Aid and Student Employment office for consideration.

If applicable, grant monies will be awarded first, and any remaining unmet need will be met through a federal part-time loan document. Further information on part-time loans and grants is available from the Awards, Financial Aid and Student Employment office.

## Assistance for Students with Permanent Disabilities

As part of the Canada and Provincial Student Loans Program, three assistance options are available for full-time or part-time students with permanent disabilities: Canada and Provincial Student Loan Assistance, Special Opportunity Grants, and Permanent Disability Benefits.

## Canada and Provincial Student Loan Assistance

Relaxed eligibility criteria for Canada Student Loan Assistance are designed to encourage full-time or part-time students with permanent disabilities to participate in post-secondary education. For example, a full-time student with a permanent disability may be eligible for full-time loan assistance if he or she is enrolled in a minimum 40\% or six credit hours of a full program of study. To be eligible for federal grants, students must first apply for loan funding to cover their direct educational costs.

## Canada Study Grants for Students with Disabilities

Federal Canada Study Grants are designed to assist students with disabilities with exceptional education-related costs associated with certain permanent disabilities. The grants are to be used for the purchase of goods and services which will help the students to access post-secondary education. Technical aids, computer technology, and tutors are examples of eligible goods and services; tuition and books will not be funded under this program.

For more information on how to apply for a Canada Study Grant for Students with Disabilities, please contact the UNBC Disabilities Advisor.

## Permanent Disability Benefit

The Permanent Disability Benefit is designed to assist students who, because of their disability, are unable to meet the repayment obligations for a Canada Student loan without exceptional hardship. A separate application form must be completed for students who wish to apply for the Permanent Disability Benefit.

## Information

Additional information and application forms for federal and provincial student assistance programs as described above are available in the Awards, Financial Aid and Student Employment Centre at UNBC, at any other post-secondary institution in BC , or by contacting the Ministry of Advanced Education , Training and Technology toll-free at 1-800-5611818. Information can also be obtained by accessing the Ministry's web site at http://www.bcsap.bc.ca.

## Student Employment

The Awards, Financial Aid and Student Employment Centre provides students with information on a variety of employment opportunities which include part-time, full-time, and seasonal or summer work positions.

Employment opportunities are posted on the Job Board located outside the Registrar's Office. Students may also view job postings on the web site at www.workopoliscampus.com.

Resume writing and interview skills workshops are held throughout the year to assist students in preparing and submitting applications for employment. An annual Career Fair is held in March each year to provide students with the opportunity to explore career options and gather information on the kinds of employment opportunities available to university students.

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## 2006

| January |  |  |  |  |  |  | February |  |  |  |  |  |  | March |  |  |  |  |  |  | April |  |  |  |  |  |  |
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| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 | 29 | 30 | 31 |  |  |  |  | 26 | 27 | 28 | 29 | 30 |  |  | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 31 |  |  |  |  |  |  |

## 2007

| January |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{S}$ | $\mathbf{M}$ | T | W | T | F | S |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 |  |  |  |

February

| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{S}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{4}$ | 5 | 6 | 7 | 1 | 2 | 3 |
| 11 | 12 | 13 | 14 | 8 | 9 | 10 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 |  |  |  |

March

| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{S}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{4}$ | $\mathbf{5}$ | 6 | 7 | 1 | 2 | 3 |
| 11 | 12 | 13 | 14 | 15 | 9 | 10 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |

April

| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{S}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 |  |  |  |  |  |

May

| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{S}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 |  |  |

June

| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | T | $\mathbf{F}$ | $\mathbf{S}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{3}$ | 4 | 5 | 6 | 7 | 1 | 2 |
| 10 | 11 | 12 | 13 | 14 | 15 | 9 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |

July

| S | M | T | W | T | F | S |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 |  |  |  |  |

August

| $\mathbf{S}$ | $\mathbf{M}$ | $\mathbf{T}$ | $\mathbf{W}$ | $\mathbf{T}$ | $\mathbf{F}$ | $\mathbf{S}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 |  |


| September |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| S | M | T | W | T | F | S |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 |  |  |  |  |  |  |

October
$\begin{array}{rrrrrrr}\mathbf{S} & \mathbf{M} & \text { T } & \text { W } & \text { T } & \text { F } & \mathbf{S} \\ & 1 & 2 & 3 & 4 & 5 & 6 \\ 7 & 8 & 9 & 10 & 11 & 12 & 13 \\ 14 & 15 & 16 & 17 & 18 & 19 & 20 \\ 21 & 22 & 23 & 24 & 25 & 26 & 27 \\ 28 & 29 & 30 & 31 & & & \end{array}$

November
$\begin{array}{rrrrrrr}\mathbf{S} & \mathbf{M} & \mathbf{T} & \mathbf{W} & \mathbf{T} & \mathrm{F} & \mathbf{S} \\ & & & & 1 & 2 & 3 \\ 4 & 5 & 6 & 7 & 8 & 9 & 10 \\ 11 & 12 & 13 & 14 & 15 & 16 & 17 \\ 18 & 19 & 20 & 21 & 22 & 23 & 24 \\ 25 & 26 & 27 & 28 & 29 & 30 & \end{array}$

December
S M T W T F S
$\begin{array}{lllllll}2 & 3 & 4 & 5 & 6 & 7 & 8\end{array}$
$\begin{array}{rrrrrrr}9 & 10 & 11 & 12 & 13 & 14 & 15 \\ 16 & 17 & 18 & 19 & 20 & 21 & 22\end{array}$
$\begin{array}{lllllll}23 & 24 & 25 & 26 & 27 & 28 & 29 \\ 30 & 31 & & & & & \end{array}$


[^0]:    * Co-op Education Programs

[^1]:    **Students wishing to pursue additional Math courses as electives are advised to choose MATH 100-3 (Calculus I) and MATH 220-3 (Linear Algebra).

[^2]:    *For purposes of Canadian content, upper level/division is defined by the British Columbia College of Teachers as senior level credit. For further clarification, please contact the Education Advising Office.

[^3]:    *For purposes of Canadian content, upper level/division is defined by the British Columbia College of Teachers as senior level credit. For further clarification, please contact the Education Advising Office.

[^4]:    Prerequisites: none

[^5]:    Prerequisites: none

[^6]:    Prerequisites: none
    Precluded: ENVS 100-3

