



# 2014 – 2015 Graduate Calendar

**Effective date of information, unless otherwise noted:  
July 1, 2014.**

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The 2014 - 2015 *University of Northern British Columbia Graduate Calendar* was prepared by the Office of the Registrar.

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# Faculty

- Aldiabat, Khalidoun, Assistant Professor, Nursing—BSc (Jordan) Msn (Jordan) PhD (Calgary)
- Anderson, Margaret, Professor Emerita, First Nations—BA MA PhD (Michigan)
- Aravind, Alex, Professor, Mathematical, Computer, Physical and Molecular Sciences (Computer Science)—BSc, MSc (India) MTech (Indian Institute of Technology) PhD (Indian Institute of Science)
- Arocena, Joselito M., Professor Mathematical, Computer, Physical and Molecular Sciences (Chemistry) and Natural Resources and Environmental Studies—BSc MSc (Philippines, Los Banos) PhD (Alberta)
- Aukema, Brian, Adjunct Professor, Ecosystem Science and Management – BCS/Bsc (Redeemer) MS (Wisconsin-Madison) PhD (Wisconsin-Madison)
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- Baillies, Janet, Adjunct Professor, Nursing—BScN MSc (McGill) MSc (British Columbia)
- Banks, Kathryn, Assistant Professor, Nursing—BN (Dalhousie) MSN (British Columbia) PhD (Alberta)
- Banner-Lukaris, Davina, Assistant Professor, Nursing—BSN (Wales) PhD (West England)
- Baraybar, Jose Pablo, Adjunct Professor, Anthropology – BSS (Peru) MSc (London) PhD (Illinois)
- Beaumont, Sherry, Professor, Gender Studies, Psychology—BA Hons (St Thomas) MA PhD (Waterloo)
- Beaveridge, Jennifer, Adjunct Professor, Nursing—BScN (Victoria) MSN (British Columbia)
- Beeler, Karin, Professor, English, Gender Studies—BA Hons (British Columbia) MA PhD (Alberta)
- Beeler, Stan, Professor, English—BA Hons MA (Dalhousie) PhD (Alberta)
- Bidgood, Bruce, Associate Professor, Social Work—BA (Brock) MA PhD (Wilfred Laurier)
- Binnema, Theodore, Professor, History—BA (Calvin College) MA PhD (Alberta)
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- Brown, Charles, Adjunct Professor, Mathematical, Computer, Physical, and Molecular Sciences (Computer Science)— BAsc (British Columbia) MAsc (British Columbia) PhD (Simon Fraser)
- Brown, Willow, Associate Professor, Education—BEd (Saskatchewan) MEd (U of Alaska SE) PhD (Saskatchewan)
- Bryce, Benjamin, Assistant Professor, History—BA (British Columbia) MA PhD (York)
- Budde, Robert, Professor, English—BEd BA MA (Manitoba) PhD (Calgary)
- Burton, Philip, Associate Professor, Ecosystem Science and Management—BSc (Hons) (Saskatchewan) MS (Hawaii) PhD (Illinois)
- Callaghan, Russell, Associate Professor, Northern Medical Program—BA MA (British Columbia) PhD (Toronto)
- Carroll, Allan, Adjunct Professor, Ecosystem Science and Management – BSc (Simon Fraser) PhD (New Brunswick)
- Casperson, David, Associate Professor, Mathematical, Computer Physical, and Molecular Sciences (Computer Science, Mathematics)—BSc Hons (Simon Fraser) MA PhD (Waterloo)
- Chen, Jing, Assistant Professor, Business Administration—BSc (Shanghai) MS (Beijing) PhD (Michigan)
- Chen, Liang, Professor, Mathematical, Computer, Physical, and Molecular Sciences (Computer Science)—BSc (Huazhong) PhD (Institute of Software, Academia Sinica)
- Chisholm, Anne, Adjunct Professor, Nursing – BScN (St. Francis Xavier) MSc (Boston)
- Choi, Sungchul, Associate Professor, Business Administration—BBA MBA (Pusan) PhD (Alberta)
- Clague, John, Adjunct Professor, Natural Resources and Environmental Studies—BSc (Occidental) MSc (Berkeley) PhD (British Columbia)
- Clements, Gerritt, Adjunct Professor, Nursing—BA (Calgary) LLB (Alberta)
- Clough, Philip, Lecturer, Business Administration—MA (Royal Roads)
- Connell, David J. Associate Professor, Natural Resources and Environmental Studies—BA (Toronto) BCom MBA (Windsor) PhD (Guelph)
- Costello, Allan, Assistant Professor, Ecosystem Science & Management – BSc (Memorial) PhD (British Columbia)

## Faculty

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- Cousineau, Stephanie, Adjunct Professor, History—BA Hons (Calgary) MA (New Brunswick) PhD (Calgary)
- Coxson, Darwyn, Professor, Natural Resources and Environmental Studies—BSc (Lethbridge) PhD (McMaster)
- Croft, Elizabeth, Assistant Professor, Business Administration—BA (British Columbia) MBA (York and Laval) PhD (British Columbia)
- Cronshaw, Steven, Professor, Business Administration and Psychology—BA BComm (Saskatchewan) MA PhD (Akron)
- Curry, John, Associate Professor, Natural Resources and Environmental Studies—BSc Hons (McGill) MA (Waterloo) PhD (British Columbia) MCIP PAg
- Dale, Mark, Professor, Natural Resources and Environmental Studies—BSc MSc (Toronto), PhD (Dalhousie)
- Dawson, Russell, Professor, Natural Resources and Environmental Studies, and Canada Research Chair, Avian Ecology—BSc PhD (Saskatchewan)
- Dayanandan, Ajit, Associate Professor, Business Administration, Development Economics, International Studies—MA MPhil (Kerala) PhD (Sydney)
- de Leeuw, Sarah, Associate Professor, Northern Medical Program, Community Health Sciences—BA (Victoria) MA (Northern British Columbia) PhD (Queen's)
- DeLong, Craig, Adjunct Professor, Ecosystem Science and Management—BSc (Victoria) MSc (Northern British Columbia)
- Deo, Balbinder, Associate Professor, Business Administration, Natural Resources and Environmental Studies—BSc MSc (Armrtsar) MBA (Shimla) PhD (Ludhiana and Manitoba)
- Déry, Stephen, Associate Professor and Canada Research Chair, Northern Hydrometeorology, Natural Resources and Environmental Studies—BSc MSc (York) PhD (McGill)
- DeWiel, Boris, Associate Professor, Political Science—BA (Athabasca) MA PhD (Calgary)
- Dickson, Lisa, Associate Professor, English, Gender Studies—BA (Guelph) PhD (McMaster)
- Dobrowolski, Edward, Assistant Professor, Mathematical, Computer, Physical, and Molecular Sciences (Mathematics)—MS PhD (Wroław)
- Egger, Keith, Professor, Ecosystem Science and Management—BSc (Calgary) PhD (Victoria)
- Fondahl, Gail, Professor, Gender Studies, Natural Resources and Environmental Studies—BA (Dartmouth College) MA PhD (California, Berkeley)
- Fraser, Tina, Associate Professor, Education, and Adjunct Professor, First Nations Studies and Nursing—BSc (Alameda) MEd (Simon Fraser) PhD (British Columbia)
- Fredeen, Arthur, Professor, Natural Resources and Environmental Studies—BSA Hons (Saskatchewan) PhD (California, Berkeley)
- Fredj, Karima, Associate Professor, Development Economics, International Studies—BA (Tunisia) MSc (Montreal) PhD (McGill)
- Garcia, Oscar, Professor and Forest Renewal BC Endowed Chair in Forest Growth and Yield, Natural Resources and Environmental Studies—MSc (Chile) PhD (Georgia)
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- Gillingham, Michael, Professor, Natural Resources and Environmental Studies—BSc (McGill) PhD (British Columbia)
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- Hawkes, Brad, Adjunct Professor, Ecosystem Science and Management – BSF (British Columbia) MSc (Alberta) PhD (Montana)
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## Faculty

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- Lindgren, Staffan, Professor, Natural Resources and Environmental Studies—MPM PhD (Simon Fraser)
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- Mandy, Margot, Professor, Mathematical, Computer, Physical, and Molecular Sciences (Chemistry, Physics)—BSc Hons (Acadia) MSc PhD (Toronto)
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- Manson, Donald, Adjunct Professor, Geography—BA (Dalhousie) MA (Northern British Columbia)
- Margolin, Indrani, Associate Professor, Social Work—BA Hons (Guelph) MSW (Wilfrid Laurier) PhD (Toronto)
- Margulis, Matias, Assistant Professor, International Studies—BA MA (Toronto) PhD (McMaster)
- Martel, Gordon, Professor Emeritus—BA Hons (Simon Fraser) MA (Tufts and Harvard) PhD (Toronto)
- Massicotte, Hugues, Professor, Natural Resources and Environmental Studies—BScA (Laval) MSc PhD (Guelph)
- McDonald, Jim, Professor, First Nations Studies—BA Hons (Manitoba) MA (Alberta) PhD (British Columbia)
- McDonald, VernaLynn, Assistant Professor, Education—BA (Alberta) MEd (British Columbia) MA EdD (US International, San Diego)
- McGill, William, Professor, Natural Resources and Environmental Studies—BSA Hons MSc (Manitoba) PhD (Saskatchewan)
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- Menounos, Brian, Professor, Natural Resources and Environmental Studies and Canada Research Chair Glacier Change—BA MA (Colorado) PhD (British Columbia)
- Michalos, Alex, Professor Emeritus—BA (Western Reserve) MA BD PhD (Chicago)
- Michel, Paul, Adjunct Professor, First Nations—BA MEd (Simon Fraser)
- Mills, Antonia, Professor, First Nations Studies, Gender Studies, Interdisciplinary Studies—BA Hons PhD (Harvard)
- Morrison, William, Professor Emeritus—BA Hons MA (McMaster) PhD (Western)
- Mullins, Philip, Assistant Professor, Outdoor Recreation & Tourism Management—BA (Lakehead) MA (Alberta)
- Murphy, Michael, Associate Professor and Canada Research Chair, Comparative Indigenous-State Relations, Natural Resource and Environmental Studies, Political Science—BA MA (Western Ontario) PhD (McGill)
- Murray, Brent, Associate Professor, Natural Resources and Environmental Studies—BSc MSc (Alberta) PhD (McMaster)
- Nixon, Gregory, Assistant Professor, Education—BA (Alberta) MEd (Lethbridge) PhD (Louisiana State)
- Nolin, Catherine, Associate Professor, Gender Studies, International Studies, Natural Resources and Environmental Studies—BA (Calgary) MA PhD (Queen's)
- Northrop, Jeffrey, Adjunct Professor, Mathematical, Computer, Physical, and Molecular Sciences (Biochemistry, Chemistry)—BS (Maryland) PhD MD (Stanford)
- Nyce, Deanna, Adjunct Professor, First Nations—BEd MEd (British Columbia)
- O'Neill, Linda, Associate Professor, Education—BA MEd (Victoria) PhD (Victoria)
- Opio, Chris, Associate Professor, International Studies, Natural Resources and Environmental Studies—BScF (New Brunswick) MEDes (Calgary) PhD (Alberta)
- Otter, Ken A., Professor, Natural Resources and Environmental Studies—BSc (British Columbia) MSc PhD (Queen's)
- Owen, William, Associate Professor, Psychology—BSc Hons (Augustana University College) MA PhD (Saskatchewan)

- Owens, Philip, Professor, Natural Resources and Environmental Studies, and Forest Renewal BC Endowed Chair in Landscape Ecology—BSc (Coventry) MSc (British Columbia) PhD (Exeter)
- Parker, Katherine, Professor, and Ian McTaggart Cowan Muskwa Kechika Research Professor, Natural Resources, Environmental Studies—BA MA PhD (Washington State)
- Parkes, Margot, Associate Professor and Canada Research Chair in Health, Ecosystem and Society, Natural Resources and Environmental Studies, Community Health Science—MBChB (Otago) MAS (Brussel) PhD (Otago)
- Pawlowska-Mainville, Agnieszka, Assistant Professor, First Nations—BA (McGill) MA (Manitoba) PhD (Manitoba)
- Payne, Geoffrey W., Associate Professor, Mathematical, Computer, Physical, and Molecular Sciences (Biochemistry) and Northern Medical Program—BSc, MSc PhD (Memorial)
- Peters, Heather, Associate Professor, Social Work—BA (Saskatchewan) BSW (British Columbia) MSW (Carleton) PhD (British Columbia)
- Petticrew, Ellen, Professor and Forest Renewal BC Endowed Chair in Landscape Ecology, Natural Resources and Environmental Studies—BSc Hons (Queen's) MSc (British Columbia) PhD (McGill)
- Pierce, Joanna, Associate Professor, Social Work—BSW MSW (Northern British Columbia)
- Plourde, Guy, Professor, Mathematical, Computer, Physical, and Molecular Sciences (Chemistry)—BSc (Quebec) MSc PhD (Manitoba)
- Poirier, Lisa, Assistant Professor, Natural Resources and Environmental Studies—BSc (Guelph) MPM PhD (SFU)
- Polajnar, Desanka, Adjunct Professor, Mathematical, Computer, Physical, and Molecular Sciences (Computer Science)—Dipl Ing (Belgrade) MSc (Southern California)
- Polajnar, Jernej, Associate Professor, Mathematical, Computer, Physical, and Molecular Sciences (Computer Science)—BSc MSc (Belgrade) PhD (Southern California)
- Prkachin, Glenda, Associate Professor, Psychology—BA Hons MA (Carleton) PhD (British Columbia)
- Prkachin, Kenneth, Professor, Community Health Science, Psychology—BA MA PhD (British Columbia) R. Psych
- Procter, Dennis, Assistant Professor, Education—BSc Hons (Canterbury) BEd (Calgary) Ed. Cert. MSc (British Columbia) PhD (Alberta)
- Rader, Stephen, Professor, Mathematical, Computer, Physical, and Molecular Sciences (Biochemistry, Chemistry)—BA (Swarthmore College) PhD (California, San Francisco)
- Rahemtulla, Farid, Assistant Professor—BA (Alberta) MA (Toronto) PhD (Simon Fraser)
- Regehr, Colleen, Adjunct Professor, Nursing—BScN (British Columbia) MSN (Athabasca)
- Reid, Matthew, Associate Professor, Mathematical, Computer, Physical, and Molecular Sciences (Physics)—BSc (Northern British Columbia) MSc PhD (Alberta)
- Reimer, Kerry, Professor, Mathematical, Computer, Physical, and Molecular Sciences (Biochemistry, Chemistry)—BSc (British Columbia) MSc PhD (Simon Fraser)
- Rex, John, Adjunct Professor, Geography—BSc (Memorial) MSc PhD (Northern British Columbia)
- Romanets, Maryna, Associate Professor, English, Gender Studies—MA (Chernivtsi) PhD (Ukrainian) National Academy of Arts and Sciences) PhD (Saskatchewan)
- Rutherford, Michael, Professor, Natural Resources and Environmental Studies—BSc Hons (British Columbia) PhD (Alberta)
- Ryan, Daniel, Associate Professor, Mathematical, Computer, Physical, and Molecular Sciences (Mathematics)—BSc, MSc PhD (Guelph)
- Safaei Boroojeny, Jalil, Associate Professor, Business Administration, Development Economics, International Studies—BA MA (Shiraz, Iran) PhD (Manitoba)
- Sanborn, Paul, Associate Professor, Natural Resources and Environmental Studies—BA (Western) MSc (Alberta) PhD (British Columbia)
- Sanchez-Fortun Stoker, Jamie, Adjunct Professor, Physics – MPhys PhD (Newcastle)
- Sangha, Dave, Assistant Professor, Social Work—BA BSW MSW (British Columbia)
- Schiller, Catharine, Assistant Professor, Nursing-BScN (Ryerson) MSc (Toronto) Juris Doctor (Western Ontario)
- Schmidt, Glen, Professor, Social Work—BA BSW (Manitoba) MSW (British Columbia) PhD (Memorial)
- Schorcht, Blanca, Associate Professor, English, First Nations—BA MA PhD (British Columbia)
- Scott, Charles, Lecturer, Business Administration—BA (British Columbia) MA (Waterloo)
- Seidel, Andrew D., Professor, Natural Resources and Environmental Studies—BArch (Pratt) MCP (Harvard) PhD (Michigan)
- Sharp, Karyn, Adjunct Professor, Anthropology—BA Hons (Radford) MA (Utah)
- Shegelski, Mark, Professor, Mathematical, Computer, Physical, and Molecular Sciences (Physics)—BSc Hons (Calgary) MSc PhD (British Columbia)
- Sherry, John, Assistant Professor, Education—BA (San Diego) MS PhD (Fordham)
- Shrimpton, Mark, Professor, Natural Resources and Environmental Studies—BSc (Victoria) MSc PhD (British Columbia)
- Shubair, Mamdouh, Assistant Professor, Community Health Science, Disability Management—BSc MSc PhD (Waterloo)

## Faculty

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- Shultis, John, Associate Professor, Natural Resources and Environmental Studies—BSc Hons (Trent) PhD (Otago)
- Siakaluk, Paul D., Associate Professor, Psychology—BA Hons MSc (Calgary) PhD (Alberta)
- Sinclair, Finlay, Adjunct Professor, Environmental Planning—BA (Simon Fraser)
- Skeates, Sue, Assistant Professor, Nursing—BHS (Open Learning) MAEd (St. Francis Xavier) MA (California College)
- Smith, Angèle, Associate Professor, Gender Studies—BA (Toronto) MA (McMaster) PhD (Massachusetts)
- Smith, Heather, Professor, Gender Studies, International Studies—BA (Alberta) MA PhD (Queen's)
- Smith, Kevin, Associate Professor Community Health – BSc (First Class Hons) (The Napier Polytechnic of Edinburgh) PhD (MRC Clinical Research Centre, Harrow)
- Smith, Nathan, Adjunct Professor, History—BA Hons (York) MA (Toronto), PhD (Toronto)
- Stark, Martha, Adjunct Professor, Mathematical, Computer, Physical, and Molecular Sciences (Biochemistry, Chemistry)-BA (Swarthmore) PhD (California)
- Stevenson, Susan, Adjunct Professor, Ecosystem Science and Management—BA (Swarthmore) MSc (British Columbia)
- Strong, Willard, Adjunct Professor, Ecosystem Science & Management – BSc (British Columbia) MSc (Simon Fraser) PhD (Oregon State)
- Stubley, Tammy, Assistant Professor, Social Work—BA (Cape Breton) BSW (Victoria) MSW (British Columbia)
- Sui, Jueyi, Professor, Natural Resources and Environmental Studies—BEng MEng (Hefei) DrInu (Germany)
- Summerville, Tracy, Associate Professor Political Science, Natural Resources and Environmental Studies—BA Hons MA (Western) PhD (Laval)
- Swainger, Jonathan, Professor, History—BA (Lethbridge) MA (Calgary) PhD (Western)
- Tait, Robert, Professor, Psychology—BA MA (Queen's) PhD (Iowa)
- Tallman, Rick, Associate Professor, Business Administration—BSc (Manitoba) MBA (Toronto) PhD (Manitoba)
- Tang, Youmin, Professor and Canada Research Chair, Climate Prediction and Predictability, Natural Resources and Environmental Studies—BSc MSc (Nanjing) PhD (British Columbia)
- Thien, Deborah, Adjunct Professor, Geography – BA (Victoria) MA (Northern British Columbia) PhD (Edinburgh)
- Thomas-Reilly, R. Gregory, Nursing—BA (Toronto) BSc (McMaster) MSc (Royal Roads) PhD (London) PGDip (London)
- Thring, Ron, Professor, Mathematical, Computer, Physical, and Molecular Sciences (Chemistry), Natural Resources and Environmental Studies—BSc (Botswana and Swaziland) MASC (Bradford UK) MSc (Saskatchewan) PhD (Sherbrooke)
- Tippett, William, Adjunct Professor, Community Health—BA (Trent) MSc (Essex) PhD (York)
- Transten, Si Chava, Associate Professor, Gender Studies, Social Work—BA BSW (Laurentian) MA PhD (Toronto)
- Ulrich, Cathy, Adjunct Professor, Nursing—BScN (Alberta) MSc (Northern British Columbia)
- Usman, Lantana, Associate Professor, Education—Ed. Cert. BEd MBA MEd (Ahmadu Bello) PhD (Alberta)
- Van Pelt, Linda, Assistant Professor, Nursing—Nursing Diploma (BCIT) BSN (Open University) BHS (TRU) MScN-FNP (Northern British Columbia)
- Wagner, Shannon, Professor, Community Health Science, Disability Management—BA MSc PhD (Northern British Columbia)
- Walters, Samuel, Professor, Mathematical, Computer, Physical, and Molecular Sciences (Mathematics)—MA PhD (Dalhousie)
- Wang, Baotai, Professor, Business Administration, Development Economics, International Studies—BA MA (People's University of China) MA (Windsor) PhD (Dalhousie)
- Ward, Arlene, Adjunct Professor, Disability Management—BSc (British Columbia) MSc (Calgary)
- Wessell Lightfoot, Dana, Associate Professor, Gender Studies, History—BA MA PhD (Toronto)
- Whalen, Catherine, Assistant Professor, Education—BEd (New Brunswick) MA (Royal Roads) PhD (Calgary)
- Wheate, Roger, Associate Professor, Mathematical, Computer, Physical, and Molecular Sciences (Computer Science), Natural Resources and Environmental Studies—BSc Hons (St Andrews) MA (Queen's) PhD (St Andrews)
- Whitcombe, Todd, Associate Professor, Mathematical, Computer, Physical, and Molecular Sciences (Chemistry), Natural Resources and Environmental Studies—BSc Hons PhD (Victoria)
- Wilkening, Ken, Associate Professor, International Studies, Natural Resource and Environmental Studies—BA MS PhD (Wisconsin Madison)
- Wilson, Erin, Assistant Professor, Nursing—BSc (Manitoba) MSc (British Columbia)
- Wilson, Gary, Associate Professor, Political Science—BA (Carleton) MA PhD (Toronto)
- Wimmers, Guido, Associate Professor, Integrated Wood Engineering and Design— PhD (Innsbruck)
- Winwood, Paul John, Associate Professor, Northern Medical Program—BSc (London) MB BS (London)
- Wright, Pamela, Associate Professor, Natural Resources and Environmental Studies—BSc, HBOR (Lakehead) MSc PhD (Ohio State)
- Young, Jane, Assistant Professor, Natural Resources and Environmental Studies—BSc (York) MSc (Guelph) PhD (Toronto)



Young, John, Associate Professor and Chair, Political Science—BA  
Hons (Alberta) MA (Carleton) PhD (Toronto)

Zahir, Saif, Professor, Mathematical, Computer, Physical, and  
Molecular Sciences (Computer Science)—ME (Wisconsin) PhD  
(Pittsburgh)

Zimmer, Lela, Associate Professor, Community Health Science,  
Nursing—Dipl. Nursing (BCIT) BSN (Northern British Columbia)  
PhD (Alberta)

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# Officers of the University

## UNBC Board of Governors

Dr. Mark Dale (Interim)	President and Vice-Chancellor	Dr. Jonathan Swainger	Elected Faculty Member
Dr. John MacDonald	Chancellor	Mr. Harry Nyce, Sr.	Order-in-Council Appointment (First Nations)
Ms. Louise Burgart	Order-in-Council Appointment (College of New Caledonia Region)	Mr. Ryan Matheson	Order-in-Council Appointment (Alumni)
Mr. Don Prior	Board Vice Chair—Order-in-Council Appointment	Mr. Stephen Bennett	Elected Graduate Student Member
Dr. Kathy Lewis	Elected Faculty Member	Ms. Carolee Clyne	Elected Staff Member
Mr. Simon Yu	Order-in-Council Appointment (Member at Large)	Mr. John Turner	Board Chair—Order-in-Council Appointment (Northern Lights College Region)
Ms. Shannon Norum	Elected Undergraduate Student Member	Mr. Andy Clough	Order-in-Council Appointment
Ms. Judy Mason	Order-in-Council Appointment (Alumni)		

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## Senate

Dr. John MacDonald	Chancellor
Dr. Mark Dale (Interim)	President and Vice Chancellor, and Chair of Senate
Dr. John Young (Acting)	Provost
Dr. Blanca Schorcht	Dean, College of Arts, Social, and Health Sciences
Dr. Daniel Ryan	Dean, College of Science and Management
Dr. Kevin Smith	Dean, Graduate Programs
Dr. Ranjana Bird	Vice President, Research
Mr. Aaron LeBlanc	Director, Ancillary and Continuing Studies
Mr. Allan Wilson	University Librarian
Mr. Troy Hanschen	Registrar and Secretary of Senate (non-voting)

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

Ms. Eleanor Annis  
Dr. Lisa Dickson  
Dr. R. Luke Harris  
Dr. Kuo-Hsing Kuo  
Dr. Jalil Safaei Boroojeny  
Dr. Paul Siakaluk  
Dr. Shannon Wagner  
Dr. Baotai Wang

## College of Science and Management Faculty Members

Dr. Daniel Erasmus  
Dr. Scott Green  
Dr. Elie Korkmaz  
Dr. Kevin Keen  
Dr. Catherine Nolin (Vice Chair)  
Dr. Kerry reimer  
Dr. Todd Whitcombe  
Dr. Saif Zahir

## Faculty Members at Large

Dr. Balbinder Deo  
Dr. Rick Tallman

## Students – Undergraduate

Mr. Julian Brown  
Mr. Daniel Burke  
Mr. Linda Horianopoulos  
Ms. Kirsten Reimer  
Mr. Wendel Schwab

## Students – Graduate

Mr. Robert Giardino  
Mr. Jeff Kormos  
Mr. Kirk Walker

## Lay Senators

Ms. Chantal Carriere  
Ms. Lisa Handfield  
Ms. Rheanna Robinson  
Mr. Allan Stroet

## WWN Representative

Ms. Deanna Nyce

## Regional Senators

vacant (South-Central Region)  
Mr. Rick Brouwer (Northwest Region)  
Ms. Moira Green (Peace River-Liard Region)  
vacant (Aboriginal/First Nations Communities)

## University Administrative Officers

### Academic Administration

*President and Vice Chancellor*—Mark Dale (Interim), BSc  
MSc (Toronto) PhD (Dalhousie)

*Provost and Vice President, Academic*—John Young (Acting),  
BA Hons (Alberta) MA (Carleton) PhD (Toronto)

*Vice Provost Medicine*—Paul John Winwood, Northern Medical  
Program, BSc (London) MB BS (London)

*Vice President Research*—Ranjana Bird, BSc (Waterloo) MSc PhD  
(Guelph)

*Vice Provost, Student Engagement*—William Owen, BSc Hons  
(Augustana University College) MA PhD (Saskatchewan)

*Dean of the College of Arts, Social and Health Sciences*—  
Blanca Schorcht, BA Hons (Alberta) MA (Carleton) PhD (Toronto)

*Dean of the College of Science and Management*—Daniel Ryan,  
BSc MSc PhD (Guelph)

*Dean of Graduate Programs*—Dr. Kevin Smith, BSc (Hons)  
(The Napier Polytechnic of Edinburgh) PhD (MRC Clinical  
Research Centre, Harrow)

*Dean of Regional Programs*—vacant

*Registrar and Secretary to Senate*—Troy Hanschen, BA  
(Simon Fraser)

### Ancillary Services and Continuing Studies

*Director*—Aaron LeBlanc, BHK (British Columbia), MBA (Thompson  
Rivers)

### Athletics

*Athletic and Recreation Director*—Loralyn Murdoch, BPE (Alberta)  
MEd (Victoria)

### Awards and Financial Aid

*Co-ordinator*—Linda Fehr

### Bookstore

*Manager*—Mardeana Berg

### External Relations

*Vice-President of External Relations*—Rob van Adrichem, BA MA  
(Northern British Columbia)

### Facilities

*Director of Facilities Management*—Shelley Rennick, BComm  
MNRES (Northern British Columbia)

### Finance

*Vice President, Administration and Finance*—Eileen Bray,  
MBA (Edinburgh) CMA

*Director, Finance and Budgets*—Colleen Smith, BComm Hons  
(Co-op) (Memorial) CA

*Financial Services and Systems Manager*—Leanne Murphy,  
BBA (Thompson Rivers University) CMA

*Treasury Services Manager*—William Chew, BA, Lic. Acct.  
(British Columbia), CIM CMA

### First Nations Centre

*Director*—Paul Michel, MEd (Simon Fraser)

### Health and Safety Office

*Risk & Safety Coordinator*—Teresa Chernowski

### Human Resources

*Director*—Sheila Page, BA (British Columbia), CHRP

### Information Technology Services

*Chief Information Officer*—Gregory Condon, BA BSc (Dalhousie)

### Purchasing, Contract and Risk Management

*Director*—Sheila Keith

### Office of Regional Operations

*Dean of Regional Programs*—vacant

*Regional Chair, Northwest*—Philip Burton, BSc (Hons)  
(Saskatchewan) MS (Hawaii) PhD (Illinois)

*Regional Chair, Peace River—Liard*—vacant

*Regional Chair, South Central*—vacant

### Office of the Registrar

*Registrar and Secretary to the Senate*—Troy Hanschen,  
BA (Simon Fraser)

*Associate Registrar—Enrolment Services* — Pamela Flagel,  
BA MA (Northern British Columbia)

*Associate Registrar—Registration Services* — Shelley McKenzie,  
BComm MBA (Northern British Columbia)

### Security and Parking Office

*Director, Purchasing, Contract and Risk Management*—Sheila Keith  
*Manager, Security & Risk*—Sarah Elliott

# Officers of the University

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## Student Career Centre

*Co-ordinator*—Maria Trujillo, Career Development Practice  
BComm (Northern British Columbia) Graduate Cert. (Royal Roads)

## Student Success

*Vice Provost, Student Engagement* — William Owen, BSc Hons  
(Augustana University College) MA PhD (Saskatchewan)  
*Director, International Education*— Sylvester Chen, BA Hons (Jilin  
Normal) BA MEd (Brock)  
*Manager, Wellness Centre*—Sarah Hanson  
*Manager, Residence and Student Life*—Robert Giardino  
*Academic Success Coordinator*—Vivian Fayowksi, BSc (Victoria)  
MEd (Northern British Columbia)  
*Access Resource Centre Coordinator*—Brenda Christensen, BSc  
(Northern British Columbia)

## University Library

*University Librarian*—Allan Wilson, BA Hons (Brock) MLSc (Toronto)  
*Instructor/Data Librarian*—Gail Curry, BSc Hons (McGill) MLS  
(British Columbia)  
*Catalogue Librarian*—Eleanor Annis, BA (Lethbridge) MLIS  
(Western Ontario) MA (Leicester)  
*Digital Initiatives Librarian*—Caitlin Bakker, BA (British Columbia)  
MLIS (McGill)  
*Head, Archives and Special Collections*—Ramona Rose, BA  
(Memorial) MMSt (Toronto) MA (British Columbia)  
*Acquisitions Librarian*—Heather Empey, BA (Augustana) MLIS  
(Alberta)  
*Northern Health Sciences Librarian*—Trina Fyfe, BA (Waterloo)  
MIS (Toronto)  
*Research and Learning Services Librarian*—Kealin McCabe,  
BA (Wilfred Laurier) MLIS (Western Ontario)  
*Archivist, Access & Digital Initiatives Librarian*—Kimberley Stathers,  
BA (British Columbia) MALIS (British Columbia)  
*Records Management Coordinator*—Erica Hernandez-Read,  
BA MA (British Columbia)  
*Liaison Librarian*—Jennifer Rempel, BA MA MLIS (British Columbia)  
BA MA (British Columbia)  
*Web Services Librarian*—James MacDonald, BA (Lethbridge)  
MLIS (Alberta)

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# Fees

## Graduate

Graduate Tuition Fee Units are established by the Board of Governors of the University of Northern British Columbia at its March meeting. Tuition changes take effect at the beginning of the September Term. In the event of a discrepancy between the present information and official documentation from the Board, the official documentation from the Board will take precedence. The fees presented here are for 2013-2014.

Note: Students who complete their graduation requirements early are required to pay the minimum tuition fee units.

### Tuition Fee Units for Full-Time Master's Students

The full-time Basic Tuition Fee Unit is \$1,523.02 per semester for Canadian Citizens, permanent residents, and international students, with the following exceptions:

PROGRAM	BASIC TUITION FEE UNIT
Master of Arts in Disability Management	\$1,932.01
Master of Education	\$2,080.63
Master of Science in Community Health Science	\$1,932.01
Master of Science in Nursing	\$1,932.01
Master of Social Work	\$1,783.39

The minimum fee for the Master's degree is six full-time tuition fee units.

### Tuition Fee Units for Part-Time Master's Students

The part-time Basic Tuition Fee Unit is \$805.02 per semester for Canadian citizens, permanent residents, and international students, with the following exceptions:

PROGRAM	BASIC TUITION FEE UNIT
Master of Arts in Disability Management	\$1,014.29
Master of Education	\$1,092.33
Master of Science in Community Health Science	\$1,014.29
Master of Science in Nursing	\$1,014.29
Master of Social Work	\$ 936.28

The minimum fee for the Master's degree is twelve part-time tuition fee units.

## Program Fees for Full-Time MBA

### Program Fees

Year One of the MBA	<b>\$21,089.88</b> *payable in 3 installments: \$7,029.96 within 30 days of offer of admission & \$7,029.96 per subsequent semester payable on the first day of classes.
Year Two of the MBA	<b>\$14,059.92</b> *payable over 2 semesters @ \$7,029.96 per semester payable the first day of classes.

**The program fees do not include UNBC student fees, costs of textbooks, accommodation and transportation.** Please refer to the UNBC Graduate Studies website ([www.unbc.ca/graduateprograms/](http://www.unbc.ca/graduateprograms/)) for more information on student fees.

A student who withdraws from the MBA Program after the one-week off-campus session in August will have \$2,000 withheld to cover the costs of that session.

For information regarding continuation fees, please see "Tuition Fee Units for Continuing Students".

### Tuition Fee Units for Full-Time PhD Students

The full-time Basic Tuition Fee Unit is \$1,523.02 per semester for Canadian citizens, permanent residents, and international students. All PhD students entering a doctoral program for the first time are eligible for a Doctoral Tuition Scholarship for up to four years.

The minimum fee for the Doctoral degree is nine full-time tuition fee units. Doctoral programs are not available on a part-time basis. See Section 7.1.6

## Fees for Undergraduate Courses

Graduate students taking undergraduate courses will be charged on a per credit hour basis for those courses. The Tuition Fee Unit Payment Schedule noted above does not include graduate or undergraduate courses taken as extra to the degree.

## Tuition Fee Units for Continuing Students

Master's students who extend their studies beyond two years (or beyond four years if enrolled part-time) or Doctoral students who extend their studies beyond three years must pay a continuing registration fee of \$536.37 per semester.

For graduate students enrolled in the MBA program, a \$1,148.68 continuation fee will be charged according to the regulations for graduate programs should the period of study extend beyond five semesters.

## Fee for Time Extensions

Students permitted to register on a time extension beyond the maximum specified in the General Regulations of the Calendar are required to pay the full-time Tuition Fee Unit applicable to their Program for each semester of registration.

## Non-Degree Graduate Students

Non-degree graduate students are charged \$847.12 for each course attempted.

## Audit Fees for Degree and Non-Degree Graduate Students

Full-time and part-time graduate (degree) students auditing undergraduate courses will be charged the same per-credit-hour fee as part-time undergraduate students.

Graduate (degree) students who audit courses at the graduate or undergraduate level are responsible for all applicable course fees (e.g. field trip fees). Ancillary fees are included in the student's full- or part-time graduate program tuition fee units.

Non-degree students as defined in Section 1.5 will be charged \$423.56 (half of the cost of taking one course as a non-degree student) for auditing any three-credit hour course. They are responsible for all applicable ancillary and individual course fees.

## Additional Semester Fees

Student Service fee	\$40.00 per semester
Student Society fee	\$33.33 per semester
Student ID Card fee	\$2.00 per semester
Intramural Recreation & Fitness fee (Prince George students only)	\$55.00 per semester
PGPIRG fee	\$4.00 per semester
Late Registration fee (if applicable)	\$100.00 per semester
NBCGSS Health & Dental Plan fee (Prince George campus only)	\$315.00 per semester
UPASS (PG only)	\$54.00 per semester

## Miscellaneous Fees

Application fee-domestic transcripts	\$76.50*
*to accompany application for admission if all post secondary transcripts come from institutions within Canada (non-refundable)	
Application fee-international transcripts	\$153.00*
*to accompany application for admission (non-refundable)	
Re-Application fee	\$100.00
Medical Insurance for International Students	\$160.00*
*per 3-month period (please refer to the following section on Medical Insurance for International Students)	
Graduation fee	\$40.80*
*per application for all graduating students (non-refundable)	
Student ID Card Replacement	\$15.00 per lost card
Thesis/Dissertation Registration fee	\$48.00*
*(Library and Archives Canada fee for inclusion in LAC Database and Dissertation Abstracts-per thesis submitted)	
Thesis Bookbinding fee	\$34.00*
*per bound copy (tax included)	
Official Transcript fee	\$10.20*
*per official transcript	
NSF charge	\$15.00*
*on returned cheques	
Graduate Admission Deferral Deposit	\$250.00
Office of Graduate Programs Administrative Fee	\$250.00

## Fees

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### Parking Fees

Daily	\$0.50 per 1.5 hours
Semester Permit * plus taxes	\$180.00*
Annual Permit * plus taxes	\$540.00*
Carpool permit * per month plus taxes (for details see Parking Services)	\$31.50*

### Residence Fees\*\*

Application fee	\$25.00 (non-refundable)
Confirmation fee	\$400.00 (as outlined in the UNBC Residence License Agreement)
Residence life fees	\$30.00 per semester
Residence infrastructure fees	\$25.00 per semester
Two bedroom units	\$2,472.31 per semester, per occupant
Four bedroom units	\$2,163.74 per semester, per occupant
Residence parking	\$161.68 per semester, plus taxes

Housing fees include: telephone services with voice mail, high-speed internet connection, and cablevision services.

Outstanding accounts are subject to a monthly service charge of 2% on the outstanding principal (26.82% per annum).

### 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 of tuition. Please note that in those areas where there is a limited number of spaces available or when programs/courses are deemed to be cost-recovery, students under this category of registration may not receive priority or be eligible for the waiver. Students are responsible for all fees.

#### Student Services Fee

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

#### NBCGSS Health & Dental Plan Fee

All NBCGSS members registered in the Fall semester and paying NBCGSS fees are automatically covered by the NBCGSS Health & Dental Plan. This includes full-time and part-time students, and international students (Prince George campus only).

Your student Plan provides you with health and dental coverage for 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 3 weeks of classes--for exact deadlines visit [www.ihaveaplan.ca](http://www.ihaveaplan.ca)). Your Plan also gives you the option to enroll your family (spouse and/or dependents) by paying an additional fee. Most members that are not automatically covered, but who wish to have coverage, are able to enroll themselves for an additional fee. Students starting in January may enroll at a pro-rated rate for 8 months of coverage (January 1 to August 31). For more information, contact [www.ihaveaplan.ca](http://www.ihaveaplan.ca) or 1-866-358-4431.

#### 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.

#### Payment Due Date

All student accounts are payable in full by the first day of the semester.

#### 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 will 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 units 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, wire transfer, 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 or money orders should be made payable to the University of Northern British Columbia and must reach UNBC by the due date. Cheques or money orders are requested in Canadian funds drawn on a Canadian bank. The University is not responsible for payments lost in the mail.
- by wire transfer: bank-to-bank wire transfers can be arranged through your financial institution. Wire transfer instructions can be found on our web site at: [www.unbc.ca/finance\\_dept/accounts\\_receivable/payment\\_options.html](http://www.unbc.ca/finance_dept/accounts_receivable/payment_options.html).
- in person: at the Cashier's Office located next to Student Services during hours of operation. Tuition payments are also accepted at UNBC's regional offices in Terrace, Fort St. John and Quesnel.
- in payment drop box: located by the Security Office. All payments must be enclosed in an envelope. Do not drop cash in box.
- by American Express, MasterCard, Visa, or Debit Card: will be accepted in person by the Cashier.
- by internet: American Express, Mastercard, Visa credit card and Interac debit online payments will be accepted using the website for students.

Any questions regarding making payments may be directed to the Cashiers Office by telephone at (250) 960-5631 or by fax at (250) 960-5251.

Payment inquiries can be addressed to [cashier@unbc.ca](mailto:cashier@unbc.ca). Do not e-mail credit card or banking information.

## Refund Policy Note

Due to the semester fee payment schedule (see Fees), there is normally no refund of fees for graduate students who withdraw from courses. If no course registration exists, registration must be maintained by registering in either the thesis or project.

## Fee Reduction Schedule for Course Revision Period: For Non-Degree Graduate Students

The Fee Reduction Schedule will apply to non-degree graduate students who withdraw from courses. Refunds can be applied for at the Cashier's office after the revision 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.

### September Semester (September 3 to December 17)

September 17, 2014	Last day to add/drop without financial penalty
October 17, 2013	Last day to withdraw without academic penalty 50% tuition refund

### January Semester (January 5 to April 30)

January 20, 2014	Last day to add/drop without financial penalty
February 18, 2014	Last day to withdraw without academic penalty 50% tuition refund

### May Semester (May 11 to August 21)

May 26, 2015	Last day to add/drop without financial penalty
June 23, 2015	Last day to withdraw without academic penalty, 50% tuition refund

### Spring Intersession (May 11 to June 26)

May 15, 2015	Last day to add/drop without financial penalty
May 29, 2015	Last day to withdraw without academic penalty, 50% tuition refund

### Summer Intersession (July 6 to August 21)

July 10, 2015	Last day to add/drop without financial penalty
July 24, 2015	Last day to withdraw without academic penalty, 50% tuition refund

NOTE: Exceptions to the refund may apply, subject to approval by the UNBC Board of Governors.

For condensed courses, the last day to revise registration is indicated in the course-specific documentation.



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## 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 \$160.00 will be assessed 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 enroll in a university-sponsored plan which costs \$160.00 for three months of coverage.

Students must contact the International Centre to enroll in the private insurance plan or to receive a waiver of the medical insurance fee. Please note that simply paying the \$160.00 fee does not fulfill 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 website at [www.unbc.ca/policy](http://www.unbc.ca/policy) under FINANCE. For further information, please see the Student Accounts Receivable website at [www.unbc.ca/finance](http://www.unbc.ca/finance).**

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# Academic Dates

## Academic Year

The academic year extends from September 1 to August 31. Most of the University course offerings are delivered during the day, and courses are available in the evening and/or on alternative schedules. Each 12-month academic year begins in September and is composed of the following semesters:

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

## 2014 – 2015 Semester Dates

### 2014 September Semester

#### September

1	Monday	Labour Day, University closed
2	Tuesday	Orientation Day
3	Wednesday	First day of classes, September Semester All September Semester fees due
17	Wednesday	Last day to register or revise registration for the September Semester Last day to withdraw from program without financial penalty Last day to change September Semester courses from audit to credit and credit to audit

#### October

13	Monday	Thanksgiving Day, University closed
16	Thursday	*Last day to withdraw from September Semester courses without academic penalty

#### November

11	Tuesday	Remembrance Day, University closed
28	Friday	Last day of classes

#### December

3	Wednesday	First day of exam period
17	Wednesday	Last day of exam period
20	Saturday	Maintenance Shutdown, Prince George Campus closed
24-31	Wed. to Wed.	University closed

### 2015 January Semester

#### January

1	Thursday	New Year's Day, University closed
2	Friday	University closed
5	Monday	First day of classes, January Semester All January Semester fees due
19	Monday	Last day to register or revise registration for the January Semester Last day to withdraw from program without financial penalty Last day to change January Semester courses from audit to credit and credit to audit

#### February

9	Monday	Family Day, University Closed
16-27	Mon. to Fri.	Mid-Semester Break (no classes February 16-27)
17	Tuesday	*Last day to withdraw from January Semester courses without academic penalty

#### April

3	Friday	Good Friday, University closed
6	Monday	Easter Monday, University closed
17	Friday	Last day of classes
20	Monday	First day of exam period
30	Thursday	Last day of exam period

## Semester Dates

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### 2015 May Semester

#### May

11	Monday	First day of classes, May Semester All May Semester fees due
18	Monday	Victoria Day, University closed
26	Tuesday	Last day to register or revise registration for the May Semester Last day to withdraw from program without financial penalty Last day to change May Semester courses from audit to credit and credit to audit
29	Friday	Convocation

#### June

23	Tuesday	*Last day to withdraw from May Semester courses without academic penalty
27	Saturday	Maintenance Shutdown, Prince George Campus closed

June 29 -

July 3 Mon. to Fri. Summer break

#### July

1	Wednesday	Canada Day, University closed
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#### August

3	Monday	BC Day, University closed
14	Friday	Last day of classes
17	Monday	First day of exam period
21	Friday	Last day of exam period

For condensed courses, the last day to revise registration is indicated in the course-specific documentation.

\*Graduate Students must have permission of their supervisor to alter their registration and must maintain continuous enrolment in order to maintain their position in Graduate Studies.

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## 2014 – 2015 Senate Dates

September 24, 2014

October 22, 2014

November 26, 2014

December 10, 2014

January 28, 2015

February 26, 2015

March 25, 2015

April 22, 2015

May 27, 2015

June 24, 2015

July 22, 2015

August 26, 2015

# 2014– 2015 Graduate Student Deadline Dates

## 2014 September Semester

### Course Registration Deadlines

September 17	Last day to register or revise registration for the September Semester Last day to withdraw from the program without financial penalty Last day to change September Semester courses from audit to credit and credit to audit status
October 16	Last day to withdraw from September Semester courses without academic penalty

### Fee Deadline

September 3	All September Semester tuition & student fees due
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### Application Deadline (Program Application Deadlines are listed in the table on Page 35)

November 15	Deadline to apply for non-degree status for January Semester courses
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## 2015 January Semester

### Course Registration Deadlines

January 19	Last day to register or revise registration for the January Semester Last day to withdraw from the program without financial penalty Last day to change January Semester courses from audit to credit and credit to audit status
February 17	Last day to withdraw from January Semester courses without academic penalty

### Fee Deadline

January 5	All January Semester tuition & student fees due
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### Application Deadlines (Program Application Deadlines are listed in the table on Page 35)

April 15	Deadline to apply for non-degree status for May Semester courses
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### Graduation & Convocation Deadline

January 15	Deadline for Graduate Students to apply to graduate & attend Convocation
April 30	Deadline to complete all requirements for Master's and PhD programs for graduation

### Scholarship & Bursary Deadline

February 15	Deadline to apply for UNBC administered Graduate Awards
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## 2015 May Semester

### Course Registration Deadlines

May 26	Last day to register or revise registration for the May Semester Last day to withdraw from the program without financial penalty Last day to change May Semester courses from audit to credit and credit to audit status
June 23	Last day to withdraw from May Semester courses without academic penalty

### Fee Deadline

May 11	All May Semester tuition & student fees due
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### Application Deadlines (Program Application Deadlines are listed in the table on Page 35)

August 15	Deadline to apply for non-degree status for September Semester courses
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### Student Loans Deadline

June 30	Recommended deadline to apply for the BC Student Assistance Program (BC Student Loans)
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\*For condensed courses, the last day to revise registration is indicated in the course-specific documentation.

\*\*Graduate Student must have permission of their supervisor to alter their registration and must maintain continuous enrolment in order to maintain their position in Graduate Studies.

# Graduate Programs Admissions and Regulations

## 1.0 General Admission

Application information is available from the website, at [www.unbc.ca/apply/graduate](http://www.unbc.ca/apply/graduate) or from the Office of the Registrar. The requirements for admissibility include, but are not limited to, an acceptable academic standing (see 1.3.2), acceptable letters of reference, the availability of a supervisor within the program concerned, and the availability of adequate space and facilities.

All documents submitted to the Office of the Registrar must be in the original language in which they were produced. Documents not produced in the English language must be accompanied by a notarized translation into English. Documents submitted in support

of an application become the property of the University of Northern British Columbia and will not subsequently be released.

Admission to a Graduate Program is valid only for the semester indicated in the letter of offer of admission.

The University of Northern British Columbia specifically reserves the right to exercise its sole, absolute, and unfettered discretion in admitting individuals to the University, its programs, or courses.

Applicants who have been offered admission to a graduate program must indicate, in writing, their intention to accept or decline the offer of admission within 30 days. Failure to notify the University may result in cancellation of the offer of admission.

## Application for Admission Deadline\* Dates Refer to [www.unbc.ca/apply/graduate](http://www.unbc.ca/apply/graduate) for updates or changes

### Application Deadline According to Preferred Semester of Entry

Degree (Alphabetical by subject)	September	January	May
Business Administration (MBA)	February 01	no intake	no intake
Business Administration (MScBA)	February 15	no intake	no intake
Community Health Science (MSc)	February 15	no intake	no intake
Development Economics (MA)	February 15	September 15	no intake
Disability Management (MA)	February 15	no intake	no intake
Education (MEd – Counselling Specialization)	December 15	no intake	no intake
Education (MEd – Multidisciplinary Leadership Specialization)	February 15**	no intake***	February 15**
Education (MEd – Special Education Specialization)	February 15	no intake	no intake
English (MA)	January 15	no intake	no intake
First Nations Studies (MA) - <i>biennial intake</i>	February 15	September 15	no intake
Gender Studies (MA)	February 15	September 15	no intake
Health Sciences (PhD)	February 15	no intake	no intake
History (MA)	February 15	September 15	no intake
Interdisciplinary Studies (MA and MSc)	February 15**	September 15	February 15**
International Studies (MA)	February 15	September 15	no intake
Mathematical, Computer, Physical, & Molecular Sciences (MSc)	February 15	September 15	no intake
Natural Resources and Environmental Studies (MA)	February 15**	September 15	February 15**
Natural Resources and Environmental Studies (MNRES)	February 15**	September 15	February 15**
Natural Resources and Environmental Studies (MSc)	February 15**	September 15	February 15**
Natural Resources and Environmental Studies (PhD)	February 15**	September 15	February 15**
Nursing (MScN)	February 15	September 15	no intake
Nursing (MScN(FNP))	February 15	no intake	no intake
Political Science (MA)	February 15	September 15	no intake
Psychology (MSc)	January 15	no intake	no intake
Psychology (PhD)	January 15	no intake	no intake
Social Work (MSW)	February 15	no intake	no intake

\*Applications for admission should be submitted as early as possible to the Office of the Registrar. Incomplete applications and applications received after the deadlines will be considered late and may not be processed in time to permit admission.

\*\*Applications for admission are accepted for one semester only. Applicants must indicate whether they are applying to the May or September Semester.

\*\*\*Applications for a May or September entry with a delay to January on a case by case basis for selected individuals based on approval due to extenuating circumstances by the School of Education.

The School of Education may consider any other applications for a January start on a case by case basis again with the recommendation to the Dean of Graduate Programs for approval due to extenuating circumstances as determined by the School of Education.

# Graduate Programs Admissions and Regulations

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In order to be considered for admission to Graduate Programs, all applicants must provide the following to the Office of the Registrar by the deadlines noted:

1. An application for admission to Graduate Programs.
2. Respective application fee(s).
3. Three assessment reports (letters of reference) submitted directly to UNBC from the referees.
4. Official transcripts (one copy) from all post-secondary institutions attended.
5. Statement of Academic Interests (letter of intent).
6. Official English Language Test Scores (Required for applicants whose first language is NOT English) sent directly to UNBC from the testing agencies.

Individual programs may require the submission of additional application material in order for an application to be considered for application.

## 1.1 English Language Requirements

English is the primary language of instruction and communication at UNBC. Consequently, it is expected that an applicant be able to demonstrate an acceptable level of proficiency in the use of English in order to receive and participate in classroom instruction and discussion as well as to 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. French-speaking Canadians and Canadian First Nations language speakers are exempted from this requirement. Students who completed five consecutive years of instruction and examination entirely in the English language immediately before admission are exempted from this requirement.

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

- TOEFL (Test of English as a Foreign Language) score of 88 or higher in the internet-based test, with not less than 20 in any of the Reading, Listening, Writing or Speaking components; or equivalent other TOEFL score. UNBC's institutional TOEFL code is 0320.
- IELTS (International English Language Testing System) score of at least 6.5 overall, with not less than 6.0 in any of the four modules.
- LPI (Language Proficiency Index) score of at least 5.
- Comparable results in any other internationally recognized English Language Assessment test considered as equivalent to TOEFL or IELTS.
- A final grade of 2.00 (C) or better in the UNBC English Language Studies 50 Component 1 and 2, obtained prior to application for Graduate admission.

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

## 1.2 GRE Requirement for Graduate Programs

The Graduate Record Examination (GRE) is prepared and scored by the GRE Board and Educational Testing Service. Applications are available from: Graduate Record Examinations, Box 6000, Princeton, NJ 08541-6000, USA, or from the University's Counselling Services. UNBC's institution code is 0320. The GRE is used widely by universities to supplement undergraduate records and other qualifications for admission to graduate study.

GRE requirements are prescribed by individual programs. For some programs, completion of the examination is mandatory. Applicants are advised to check program listings for detailed information. However, the Office of Graduate Programs reserves the right to require a GRE score (on Subject and General Tests) for any applicant. Voluntary submission of a GRE score may facilitate the admission process.

## 1.3 Admission to Master's Degrees

**1.3.1** In general, an acceptable academic standing will be a four-year (120 credit hours) Baccalaureate degree (or equivalent) from a recognized institution.

**1.3.2** Grade point average of at least 3.00 (B) in the work of the last 60 credit hours (approximately the last two years) leading to the Baccalaureate degree is required for entry. **Note: Higher entrance standards than those outlined in this section may be set by individual programs.**

Courses used in the calculation of the admission grade point average cannot be used as credit toward a graduate degree program.

**1.3.3** A faculty member who wishes to supervise an applicant to a Graduate Program who has a four-year (120 credit hours) Baccalaureate degree (or equivalent) which does not meet the grade point average requirements stated above and who obtains the recommendation of the appropriate program may seek approval from the Dean of Graduate Programs to admit the applicant. The applicant must have significant formal training and relevant professional experience to offset such grade point average deficiencies.

**1.3.4** Evidence is required, in the form of three letters of reference that are submitted directly to the Office of the Registrar from qualified referees, of the student's ability to undertake advanced work in the area of interest.

## 1.4 Admission to the Master's Degree as a Conditionally Admitted Mature Student

Five years after completion of a Baccalaureate degree as defined in 1.3.1, applicants whose academic record is such that they would not be admissible to a Master's program may be admitted conditionally as mature students, provided they are recommended by the appropriate Program. Such recommendations must be made in writing by the Program and approved by the Dean of Graduate Programs.

# Graduate Programs Admissions and Regulations

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The minimum grade point average for admission to a Master's program as a conditionally admitted mature student is 2.67 ("B-").

A student conditionally admitted to a graduate program must earn a grade point average of at least 3.00 (B) in each of the first two 3 credit hour graduate courses taken. The first two courses will be determined by the Program and approved by the Dean of Graduate Programs. If this condition is successfully met, the student's status will be changed to regular graduate student status. If it is not, the student will be required to withdraw from the program.

Students admitted in this category normally will not receive transfer credit for any courses completed prior to enrolling in their Graduate Program.

## 1.5 Admission to Non-degree Coursework

Non-degree graduate students are those taking graduate courses, but not for credit toward a degree at the University of Northern British Columbia. Such students are admitted under one of three categories defined in 1.5.1, 1.5.2 and 1.5.3.

**1.5.1 Visiting graduate students** are those on a Letter of Permission which specifies courses allowed for credit toward a graduate degree at another university. Applicants in this category must complete the Application for Admission to Graduate Programs and provide a letter of permission from their home institution. No other supporting documentation is required. Students must request that an official transcript be sent directly to their home institution upon completion of course work.

**1.5.2 Exchange graduate students** are those covered by the Western Deans' Agreement (see 2.7 for the Western Deans' Agreement) or other formal exchange agreement. If a student is admitted under the Western Deans' Agreement or other formal exchange agreement, all tuition fees at UNBC will be waived; however, ancillary student fees will be charged. Applicants in this category must submit a completed Application for Admission to Graduate Programs and the completed and duly signed Western Deans' Agreement form from the Dean of Graduate Programs at their home institution (if applicable) certifying the applicant as an exchange student, under the provisions of the Agreement. Courses to be taken toward their degree must be specified in the documentation. No other supporting material is required. Students must request that an official transcript be sent directly to their home institution upon completion of course work.

**1.5.3 Non-degree students** are normally those who wish to improve their academic background. Applicants under this category who **do not** hold a Master's degree must normally meet the same entrance requirements and follow the same application procedure as outlined in section 1.3, with the exception of 1.3.4 (letters of reference). Holders of a Master's degree (or equivalent) from a recognized institution in the same discipline as the course work applied for must complete an application form for admission to Graduate Programs, and provide proof of conferral of the Master's degree.

A maximum of three graduate courses may be taken under this category. Individual programs may impose further restrictions.

International Students studying in Canada may be eligible to complete courses as non-degree students. Please see Graduate Programs homepage, [www.unbc.ca/graduateprograms/](http://www.unbc.ca/graduateprograms/) for further information.

**1.5.4** If a student admitted as a non-degree student is later admitted to a graduate degree program, course work taken as a non-degree student may be applied to the graduate program subject to the recommendation of the supervisory committee and the approval of the Dean of Graduate Programs.

## 1.6 Auditing Graduate Courses

An individual who is either a graduate student in a UNBC Graduate Program or a non-degree graduate student as defined in Section 1.5 may be permitted to audit up to three credit hours of graduate courses in a semester. A continuing student should add the audit course to his or her Graduate Registration Form. A new applicant auditing a course should submit a Graduate Registration Form to the Office of the Registrar clearly indicating the course name and number with an Application for Admission to Graduate Programs together with proof of degree conferral.

Neither full-time nor part-time graduate students in a UNBC Graduate Program will be charged for auditing graduate-level courses as long as auditing the course is required by the graduate supervisor/supervisory committee. If any course audit is not already included as part of a student's approved graduate program, then a Graduate Program Revision Form must be completed. The supervisor must provide a rationale for the course audit, explaining how the course is related to the student's research. The appropriate signatures must also be included on the Graduate Registration Form and/or the Add/Drop Form.

Registration as an auditor is subject to the following conditions:

**1.6.1** Admittance to the class is dependent on the class size and other factors that the Instructor and the Program establish.

**1.6.2** The degree of participation in the course is at the discretion of the Instructor.

**1.6.3** Attendance and participation shall grant no entitlement to an academic record of such attendance and shall not be considered as meeting admission, prerequisite or course requirements for any graduate program.

## 1.7 Upgrading for Admission to Graduate Programs

Individuals wishing to apply to graduate programs may not meet the normal requirements for admission. Such cases normally fall into either of the following categories:

**1.7.1 Admission requirements satisfied but course background inappropriate or prerequisites lacking** Upon the recommendation of the Program concerned, the Dean of Graduate Programs may approve the inclusion of the missing background or prerequisites as part of the requirements for the Master's degree.

# Graduate Programs Admissions and Regulations

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**1.7.2 Pre-Entry Program** When admission requirements are not satisfied and upon the recommendation of the Program concerned, the Dean of Graduate Programs may approve a pre-entry program of undergraduate course work totalling at least 12 credit hours of upper division courses. An average of not less than 3.33 (B+) must be achieved in the course work, and no course must be completed at a level below 2.67 (B-). Courses taken for a pre-entry program may not be used for credit towards a graduate degree. Students approved by the Dean of Graduate Programs for a pre-entry program are guaranteed admission to the appropriate Graduate Program upon successful completion of the recommended courses.

**1.7.3** Graduate course challenge is not permitted.

## 1.8 Integrated Delivery Graduate and Undergraduate Courses

**1.8.1** An “integrated delivery” course is one in which a graduate course is co-taught with a 400-level undergraduate course which in turn is indicated as being offered at an advanced level. At the graduate level, normally learning experiences qualitatively and quantitatively distinctive from the undergraduate experience normally build upon the undergraduate course content. Nevertheless, courses taken specifically to meet the registration requirements of professional bodies may have the same content at each level.

**1.8.2** All courses which are integrated on a continuing basis are so indicated in the Graduate Calendar by way of stated preclusions.

**1.8.3** Integrated delivery courses are taught by faculty members who are approved to teach graduate level courses.

## 1.9 Permission for Undergraduates to Take Graduate Coursework

**1.9.1** 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 (B+) in the last 30 credit hours of course work attempted and have completed all required lower-division course work may be permitted to register in a maximum of 6 credit hours of graduate courses at the Master’s level with the permission of the Instructor and the Graduate Program concerned and with the approval of the Dean of Graduate Programs. If a student is subsequently admitted to a Graduate Program, graduate courses used for credit toward an undergraduate program cannot be used for credit toward a 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 see the Office of the Registrar for further information.

**1.9.2** Simultaneous enrolment in a graduate program and an undergraduate or certificate program is not permitted.

## 1.10 Admission as a Visiting Research Student

Admission to this category is restricted to graduate students covered by the Canadian Graduate Student Research Mobility Agreement or other approved research agreements. A Visiting Research Student must register in the course GRAD 950-0 Visiting Research Student for each semester covered by the Agreement. Visiting Research Students are not permitted to take other courses at UNBC.

## 1.11 Misrepresentation of Application Information

Misrepresentation of application information constitutes fraud or misconduct and may result in acceptance and registration being cancelled. The applicant may also be disqualified from consideration, not only in the year of application, but in all subsequent years. If discovered in a subsequent semester such representation may result in expulsion from the university.

Application fraud or misconduct includes the following:

- a. Failure to declare attendance at another post-secondary institution;
- b. Presenting falsified academic documentation or causing or encouraging another person to falsify records through translation or data changes;
- c. Presenting falsified personal documentation (e.g., using a false name, date of birth, country of origin, etc.);
- d. Presenting falsified or fictitious reference documentation;
- e. Cheating on or having another person write a standardized entry exam such as TOEFL or GRE;
- f. Presenting another person’s standardized test score as one’s own to falsify a test result; and
- g. Failure to report suspensions from another post-secondary institution.

## 2.0 Registration Procedures and Status

### 2.1 Initial Registration

All students admitted to a Graduate Program must normally register during the dates specified for such registration. All letters of admission that are not used to register in the semester to which they apply are automatically cancelled. Students who are issued a letter of admission for the September Semester may not use this document for entry in the January Semester. Any requests for deferral of admission to a graduate program must be made in writing to the UNBC Graduate Admissions in the Office of the Registrar, along with payment of the Admission Deferral Fee.



## 2.2 Enrolment and Re-enrolment

**2.2.1 Continuity of Registration** All students are required to either register in every semester (September, January, May) from the time of admission until the requirements of the degree have been met, or formally withdraw in accordance with regulation 2.5 below. Students are required to pay minimum tuition fees (see Fees section).

**2.2.2 Re-registration** Students who are missing one semester or more of registration and who have not been withdrawn from their graduate program must:

- a. Pay any outstanding fees
- b. Register for those semesters not previously registered in
- c. Pay any new tuition fee units.

Students who have registered at another university or college since last in attendance at the University of Northern British Columbia are required to state the names of all educational institutions of post-secondary level attended and to submit an official transcript of their academic records at these institutions to the Office of the Registrar.

**2.2.3 Reinstatement** Students who have withdrawn with permission from their graduate program and later wish to return can only do so if, inclusive of their time away from their graduate program, they have not exceeded the time limit applicable to their graduate program (See Regulation 4.2 and 7.7), and have supervisory support for reinstatement.

Students who have not exceeded the time limit must do the following:

- a. Submit a new Application for Admission to Graduate Programs Form and pay the reapplication fee
- b. Provide a letter to UNBC Graduate Admissions in the Office of the Registrar stating their rationale for wishing to return to their graduate program
- c. Provide proof of supervisory support for their reinstatement

Students who have registered at another university or college since last in attendance at the University of Northern British Columbia are required to state the names of all educational institutions of post-secondary level attended and to submit an official transcript of their academic records at these institutions to the Office of the Registrar.

Students who have exceeded the time limit period or who have been withdrawn without permission please see section 2.2.4 (Reapplication).

**2.2.4 Reapplication** Students who have either a) been withdrawn without permission or b) whose time limit has expired must re-apply to UNBC as new applicants and pay the reapplication fee. If admitted, students must start anew: normal program requirements apply, including time limitations regardless of previously completed coursework accepted (see 4.2.1) and minimum tuition fee units.

## 2.3 Definition of Full-Time and Part-Time Status

A full-time graduate student is one who is either:

- a. enrolled in courses totalling a minimum of six credit hours during a single semester, or
- b. registered in a thesis, project, dissertation or other scholarly work during a semester.

A part-time student is any student who does not meet either criteria above.

**Note:** This definition does not necessarily govern the fee structure, which is determined at the time of admission.

## 2.4 Maximum Academic Load

**2.4.1** The maximum academic load in a Graduate Program during any semester is 18 credit hours of course work or 15 credit hours of course work plus thesis, project, or dissertation. Programs may limit students to fewer credit hours.

**2.4.2** Simultaneous enrolment in a graduate program and an undergraduate or certificate program is not permitted.

## 2.5 Withdrawal from the University

Students in degree programs who wish to withdraw, either temporarily or permanently, must do so formally in accordance to the following procedures.

**2.5.1** Students who wish to request a leave of absence must apply using the Leave of Absence Form to the Dean of Graduate Programs, with supporting documentation from their supervisor, and with detailed documentation (e.g., a doctor's note) explaining the need for such a leave. A student may normally have a leave of absence for no more than one year in a graduate degree program. Under exceptional circumstances and only as recommended by the supervisor and approved by the Dean of Graduate Programs, a further leave of absence may be granted. Students cannot undertake academic or research work nor use any of the University's facilities during the period of leave. After the leave of absence is completed, students must register for the next semester. The transcript will record the notation: "Leave of Absence".

**2.5.2** Time spent on an approved leave of absence (see Regulation 2.5.1) is not counted as part of the total time allowed for completion of the degree program (see Regulation 4.2).

**2.5.3** Students who wish to withdraw from their Graduate Program and have their transcript indicate that they were in good standing when they withdrew, must apply using the Request to Withdraw Form to the Dean of Graduate Programs, with supporting documentation from their supervisor. The transcript will record the notation: "Withdrawn with Permission".

# Graduate Programs Admissions and Regulations

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**2.5.4** The transcript of students who fail to notify the University of their intention to withdraw from their Graduate Program or who have not maintained continuity of registration in accordance with Regulation 2.2.1 will record the notation "Withdrawn without Permission".

## 2.6 Letter of Permission for Studies Elsewhere

Students currently registered in a Graduate Program who wish to undertake studies at another institution for transfer credit toward their graduate degree at the University of Northern British Columbia must apply in writing to the Dean of Graduate Programs, specifying the host institution, the courses to be taken, and their credit values. The application must be supported by the supervisor. Students must request that an official transcript be sent directly to the Office of the Registrar at UNBC from the host institution upon completion of the course work.

**Note: Students are required to maintain continuous registration and pay the fees for the semester at the University of Northern British Columbia while studying elsewhere.**

## 2.7 Western Deans' Agreement

Students currently registered in a graduate program who wish to undertake studies at a western Canadian university for transfer credit toward their graduate degree at the University of Northern British Columbia may be eligible for exchange status under the provision of the Western Deans' Agreement. Information and forms for this purpose are available from the Graduate Programs website, [www.unbc.ca/graduateprograms](http://www.unbc.ca/graduateprograms), or at the Office of Graduate Programs. Students must include an outline of the course work that they propose to take when submitting their Western Deans' Agreement Form to their supervisor. If the application is approved by the Dean of Graduate Programs, the university concerned will be notified by the Office of Graduate Programs. All applicable tuition fees will be waived by the host institution. However, ancillary student fees are still applied. All students attending other institutions under the provisions of the Western Deans' Agreement must register concurrently at the University of Northern British Columbia in their thesis or project, and pay the semester fee.

## 3.0 Student Responsibilities

- a. Students are responsible for familiarizing themselves with the Graduate Regulations. If students are unsure about any aspect of the Graduate Regulations, they should contact the Office of the Registrar or the Office of Graduate Programs.
- b. Students are responsible for familiarizing themselves with the program requirements and deadlines. If students are unsure about any aspect of the program regulations, they should contact the Graduate Program Chair.
- c. Students are responsible for ensuring the completeness and accuracy of their registration. If students are unsure about any aspect of their record, they should contact the Office of the Registrar.

- d. Students are responsible for familiarizing themselves with their fee obligations as outlined in the Fees Section of the calendar. If students are unsure about any aspect of the fee regulations, they should contact the Office of the Registrar.
- e. Students are equally responsible for maintaining open communication with their supervisor, supervisory committee, and Graduate Program Chair through mutually agreed upon regular meetings. Any problems, real or potential, should be brought to the attention of the supervisor, supervisory committee and Graduate Program Chair promptly. Students should be aware that formal routes of appeal exist in the form of the Appeals Procedure of the Office of the Registrar (see Appeals Section).
- f. A letter mailed to a student's address as it appears on record in the Office of the Registrar will be deemed adequate notification to the student for all matters concerning the student's record.  
**Changes in address and telephone number must be reported promptly to the Office of the Registrar.**

## 4.0 Regulations Governing Master's Programs

### 4.1 Course and Program Requirements

**4.1.1 Graduate Programs** Within the first semester of attendance in a graduate degree program, a completed Graduate Program Approval Form will be forwarded to the Office of Graduate Programs by the Supervisor on behalf of each student.

**4.1.2 Graduate supervision** Unless otherwise specified, the supervisory committee will be nominated by the graduate supervisor and names forwarded to the Office of Graduate Programs by the Program, normally within one semester of the first registration in the thesis, project, practicum, comprehensive examination or dissertation.

**4.1.3 Coursework and research** Considerable variation is permitted in the balance between research and the coursework required for the Master's degree, although most programs include a thesis based on research (see 4.1.7).

Before the thesis, project, or practicum is written, the student should contact the Office of Graduate Programs for a copy of the *Formatting Guidelines For Graduate Dissertations, Theses, Projects & Practicum Reports*, which specifies academic and technical requirements to ensure acceptability of the document by the University and the National Library of Canada.

**4.1.4 Integrated courses** Normally, Master's students enrolled in thesis programs should complete at least six credit hours of graduate course work in addition to any integrated delivery courses that may be taken.

**4.1.5 Language requirements** Some Master's programs may require a reading knowledge of one or more languages other than English. Language requirements will be prescribed for individual students by the supervisory committee according to program regulations. Such requirements are considered part of the student's program. When a language requirement is imposed, it must be met prior to taking the oral examination or, in the case of non-thesis Master's programs, before the completion of the comprehensive examination and/or the project oral.

**4.1.6 UNBC course requirements and applicability of transfer of credit** At least half of the course work taken must be completed as a degree candidate in a Graduate Program at the University of Northern British Columbia and be UNBC courses. On the recommendation of the Program concerned, the Dean of Graduate Programs may accept courses taken at other institutions for credit toward a UNBC graduate degree.

Courses taken at the University of Northern British Columbia as a non-degree student in a Graduate Program may be considered for transfer to a graduate degree (see 1.5.4).

In order to qualify for transfer of credit, courses must meet all of the following conditions:

- a. must be a graduate level course;
- b. must be completed with a grade of at least B (or equivalent);
- c. must not be used to meet the minimum admission requirements for Graduate Programs; and
- d. must not have been used to obtain any degree, diploma, certificate or other credential unless otherwise noted.

The grades from courses allowed for transfer of credit will not appear on the transcript, and they will not be used in determining sessional or cumulative grade point averages. Credit granted at another institution on the basis of life or work experience is not acceptable for transfer of credit. For students admitted as mature students (see 1.4), transfer of credit will not normally be granted for courses taken before enrolling in Graduate Programs at the University of Northern British Columbia.

**4.1.7 Master's degree without a thesis** Not all programs offer the option of a Master's degree without a thesis. The following regulations apply:

- a. a program of study must be approved as for all other graduate degrees;
- b. a supervisory committee shall be formed according to 4.4.2;
- c. there must be evidence of independent scholarly work which may be in the form of a project, extended paper(s), work report, etc. The credit value for this work may range from three to twelve credit hours; and
- d. normally there shall be an oral examination, in accordance with regulation 4.5.

## 4.2 Time Limit

The maximum time for completion given below is not intended to be the normal time for completion. It is intended to take into account a wide variety of extraordinary circumstances and events that may delay completion.

**4.2.1** Normally, a student proceeding toward a Master's degree will be required to complete all degree requirements within five years (60 consecutive months) from the date of the first registration in the Master's degree. In no case will a degree be awarded in less than 12 consecutive months from the time of the first registration. However, it is expected that a full-time student will complete a Master's degree within 36 consecutive months from the date of first registration.

**4.2.2** Variances to the time limits specified in 4.2.1 are as follows:

- Master of Education (Part time) seven years (84 consecutive months),

**4.2.3** If a degree is not awarded within the specified period following the first registration, the student will be withdrawn from the program. Under exceptional circumstances, time extensions may be granted by the Dean of Graduate Programs. Such requests for time extension must be made in writing to the Dean of Graduate Programs prior to the end of the semester in which the student's time limit expires.

**4.2.4** Variances to the time limits specified in 4.2.3 are as follows:

- Master of Education (Part time) seven years (84 consecutive months).

## 4.3 Academic Performance

A student who fails to meet academic standards, or whose thesis, project, practicum, or comprehensive examination is not progressing satisfactorily, may be required to withdraw by the Dean of Graduate Programs on the advice of the supervisor and supervisory committee.

**4.3.1** Students must attain a semester grade point average of at least 3.00 ("B") for every semester in which they are registered. Individual programs may set higher standards. Any student with a semester grade point average below 3.00 may be allowed to register in the next semester while their academic performance is reviewed by their supervisory committee and continuation in their Graduate Program is recommended by the supervisory committee and approved by the Dean of Graduate Programs.

Students who were registered in one course in a semester that resulted in a semester grade point average less than 3.00 based on a B- grade may be allowed to continue in their graduate program. However, if the student's cumulative grade point average is lower than a 3.00, a continuance review is needed.

# Graduate Programs Admissions and Regulations

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**4.3.2** A grade of F in a course taken for credit in a Graduate Program must be reviewed by the supervisory committee and a recommendation must be made to the Dean of Graduate Programs concerning continuance of the student in the program. Such students will not be allowed to register in the next semester until approved to do so by the Dean of Graduate Programs.

**4.3.3** Graduate students may not repeat graduate courses except under exceptional circumstances if recommended by the supervisory committee and approved by the Dean of Graduate Programs.

**4.3.4** Students registered in a thesis, project, practicum or comprehensive examination will have their progress evaluated through progress reports completed by their supervisor in consultation with the supervisory committee (if applicable) and the student, and submitted to the Dean of Graduate Programs. If the progress report indicates a second Needs Improvement or Unsatisfactory progress, the student's continuation is reviewed by their supervisory committee with the Graduate Program Chair. Recommendations are submitted to the Dean of Graduate Programs for final decision.

**4.3.5** Conditions may be imposed by the Dean of Graduate Programs for continuation in the program. The conditions normally must be met within the next semester or the student will be required to withdraw.

## 4.4 Academic Supervision

**4.4.1 Supervisor** Each graduate student shall have a member of the faculty assigned as a supervisor to counsel the student in academic matters. The supervisor is nominated by the Program and approved by the Dean of Graduate Programs.

In particular, the supervisor must be aware of the nature and progress of research, the standards expected, the adequacy of progress, and the quality of work.

The supervisor and student must maintain contact through mutually agreed upon regular meetings, and be accessible to the student to give advice and constructive criticism. Supervisors who expect to be absent from the University for an extended period of time are responsible for making suitable arrangements with the student and the Graduate Program Chair for the continued supervision of the student or for requesting the Program to nominate another supervisor.

**4.4.2 Supervisory Committee** Each student shall have a supervisory committee nominated by the Program and approved by the Dean of Graduate Programs. The chair of this committee shall be the supervisor. The duties of the committee include: recommending a program of study chosen in conformity with Program regulations; meeting periodically to facilitate appropriate supervision of the thesis, project, or practicum; participating in a final oral examination when the Program prescribes such an examination.

The committee consists of at least three members including the supervisor. One member must be from outside the Program.

## 4.5 Final Examinations and Examining Committees

### 4.5.1 General Regulations

- a. Master's degrees require a final examination.
- b. Degrees that have a final examination by project, comprehensive exam, major paper, etc., may be examined in a manner agreed upon by the Program and the Dean of Graduate Programs; otherwise, the examination shall be as for theses.
- c. For all theses, students may proceed to an oral examination when the supervisory committee is satisfied that the scholarly work represents an examinable document for the degree requirements. The supervisory committee and student confirm this by signing the Request for Oral Examination and Appointment of an External Examiner form. This form must be submitted to the Dean of Graduate Programs at least six weeks before the anticipated date of oral examination. Two copies of the document are required by the Office of Graduate Programs upon submission of the Request for Oral Examination and Appointment of an External Examiner form. One copy of the document is forwarded to the External Examiner by the Office of Graduate Programs.
- d. Before proceeding to the final examination, all courses taken for credit in Graduate Programs must be completed with a cumulative grade point average of not less than 3.00 (B) and with no grade in any course less than B- (or the higher standard set by the individual program). Any language requirement must be met before the student proceeds to the examination.
- e. The Dean of Graduate Programs (or designate) acts as Chair at the oral examination. Any tenured member of the faculty at the Associate Professor level or higher with extensive experience in Graduate Programs is eligible to serve as the Dean's designate.
- f. Normally, the oral examinations are open to the University community. Copies of the thesis abstract shall be made available to all those attending the examination. The Dean of Graduate Programs or designate shall have the right to attend all phases of the examination. In rare circumstances where a public examination would be detrimental to the student or the sponsor of the research to have it made public, the author of the thesis, project or dissertation may request a closed oral examination. The request for a closed oral examination must be made in writing to the Dean of Graduate Programs for review and approval when the Request for Oral Examination is made.
- g. The MBA Program schedules its project defences in the final semester concurrent with course work.

**4.5.2 Examining Committees** The role of the examining committee is to assess the thesis, project or practicum, and to conduct an oral examination, if applicable, based on that scholarly work. The examining committee will consist of the supervisory committee and at least one other examiner, called the external examiner, who must be from outside the program area and who has had no previous involvement with the student or the thesis research.

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External examiners should have established reputations in the area of the thesis research, and should be able to judge whether a thesis is acceptable at a university comparable to UNBC. Ideally, they should be at associate or full professor rank if they are at a university or be of comparable stature if they are not at a university.

To ensure that arm's length, independent review is possible, the external examiner should not have participated directly in supervising the student or directing the work. Please refer to the Policy on the Appointment of an External Examiner available from the Office of Graduate Programs, or from the website at [www.unbc.ca/graduateprograms](http://www.unbc.ca/graduateprograms).

For Master's degrees without a thesis, the membership of the final oral examining committee and procedure shall be determined and approved by the Program and the Dean of Graduate Programs (see 4.5.1a).

**4.5.3 Format of the Thesis Examination** The first part of the oral examination shall consist of an oral presentation by the candidate to include a summary of the salient points of the research normally within a time span of 20 to 25 minutes. This is followed by the questioning and examination of the candidate by the examining committee. The oral defence is normally about two hours in duration.

It is the responsibility of the Chair of the oral examination to pose questions raised by the external examiner (if not in attendance). The Chair of the oral examination may exercise discretion in allowing questions from guests following completion of the formal examination.

**4.5.4 Results of Oral Examinations** The decision of the examining committee shall be based on the content of the scholarly work or thesis as well as the candidate's ability to defend it. After the examination, the committee shall recommend to the Dean of Graduate Programs one of the following results:

**a. Clear Pass**

That the thesis, project, or practicum is acceptable as presented and the oral defence is acceptable.

In this case, all members of the examining committee shall sign the approval pages. A "pass" grade is submitted to the Office of the Registrar for the student's thesis, project or practicum.

**b. Pass with Minor Revision**

That the thesis, project, or practicum is acceptable subject to minor revision and the oral defence is acceptable.

In this case, all members of the examining committee except the supervisor shall sign the approval pages.

The supervisor shall sign the approval pages when the thesis, project, or practicum has been amended to include the changes that were requested by the examining committee. A "pass" grade is submitted to the Office of the Registrar for the student's thesis, project or practicum.

The Office of Graduate Programs must receive confirmation that the thesis, project or practicum has been amended to include the changes that were requested by the examining committee by the last day of the semester in which the oral examination took place. If this deadline is not met, registration for the subsequent semester is required in order to maintain continuous registration (See 2.2.1).

**c. Pass with Major Revision**

That the thesis, project, or practicum is acceptable subject to major revision and the oral defence is acceptable.

In this case, none of the members of the examining committee shall sign the approval pages. The supervisor shall supervise the revision of the thesis, project, or practicum. When the revisions have been completed and have been approved by the supervisor, the supervisor shall distribute the revised thesis, project, or practicum to the rest of the examining committee. If it is acceptable to the examining committee, the supervisor shall ensure that the approval pages are signed by each member of the examining committee. A "pass" grade is submitted to the Office of the Registrar for the student's thesis, project, or practicum.

The Office of Graduate Programs must receive confirmation that the thesis, project or practicum has been amended to include the changes that were requested by the examining committee by the last day of the semester in which the oral examination took place. If this deadline is not met, registration for the subsequent semester is required in order to maintain continuous registration (See 2.2.1).

**d. Adjournment of the Examination**

That the examination be adjourned.

Reasons to adjourn the examination include but are not limited to: further research or experimentation is required; the thesis is acceptable but the student has failed the oral defence; the external examiner casts the lone dissenting vote. In the case of an adjourned examination the candidate shall not be passed and no member shall sign the approval pages.

When an examination is adjourned, each member of the examining committee shall make a written report to the Dean of Graduate Programs within 14 calendar days of the date of the oral examination. After reviewing these reports the Dean sets a date for reconvening the examination. The Dean shall also determine whether or not the composition of the original committee is appropriate for the reconvened examination. The date for reconvening shall be no later than six months from the date of the first examination. If the date for reconvening fall outside the last day of the semester in which the adjourned oral examination took place, registration for the subsequent semester is required in order to maintain continuous registration (See 2.2.1).

## e. Failure

That the thesis, project or practicum is unacceptable and the oral defence is unacceptable.

If two or more members of the examining committee are opposed to passing the student, the student will not be recommended for the degree. In this case, the examining committee shall make a written report to the Dean of Graduate Programs within 14 calendar days from the date of the oral examination outlining the reasons for this decision. A student who fails the oral examination has the right to appeal, and should consult with the Office of the Registrar regarding the appropriate procedures.

**4.5.5 Consequence of Failed Examination** A student who fails the oral examination twice shall be required to withdraw from his or her Graduate Program.

## 4.6 Degree Completion and Graduation

**4.6.1** The University Senate grants degrees in May each year. Each candidate for a degree must complete an Application for Graduation form and must pay the graduation fee (see Fees Section). Application for Graduation forms are available in the Office of the Registrar or from the website at [www.unbc.ca/graduateprograms](http://www.unbc.ca/graduateprograms).

**4.6.2** The deadline for completing all requirements for the degree is the final business day in April for Spring graduation.

**4.6.3** Students can be considered for the awarding of a degree only when all of the following requirements have been satisfied:

- a. Completion of the program of study and meeting the grade point average requirements for the degree;
- b. Submission of three final copies of the thesis, or two final copies of the project, or practicum report. Regulations governing proper submission are set out in the *Formatting Guidelines For Graduate Dissertations, Theses, Projects & Practicum Reports*. Only the latest version of these instructions is valid. Students should obtain a copy from the Office of Graduate Programs or from the Graduate Programs website at [www.unbc.ca/graduateprograms](http://www.unbc.ca/graduateprograms);
- c. Signing of the approval pages for the student's thesis, project or other scholarly work by the supervisor;
- d. Submission of an Application for Graduation form to the Office of the Registrar and an official degree audit completed by the University;
- e. Payment of all outstanding fees. Those students who have outstanding accounts will not receive their degree parchment or be issued transcripts. Students should be aware of the semester fee payment schedule for graduate degrees (see Fees Section).

## 5.0 Appeals

Appeals are heard by the Senate Committee on Academic Appeals and are not subject to further appeal. Further information may be obtained from the Office of the Registrar. See also the Academic Appeals Policy and Procedures section under the General Regulations and Policies section of the Graduate Calendar.

## 6.0 Research Services

All matters concerning the administration of research grants and contracts are handled by the Office of Research, to which inquiries concerning research policies and procedures should be directed. Students whose research falls within the University definition of research involving human and non-human subjects and other ethical and safety issues must receive prior approval from the appropriate screening committee. Regulations on these issues may be obtained from the Office of Research. The Office of Research should be contacted for further details concerning research-oriented services offered to graduate students.

## 7.0 Regulations Governing Doctoral Programs

The Calendar regulations listed below, apply to Doctoral students as well as to Master's students:

- General Admission;
- GRE requirements;
- Admission to non-degree coursework;
- Auditing graduate courses;
- English requirements for international students;
- Registration procedures and status; and
- Student responsibilities;
- Academic performance.

In addition, Doctoral students are subject to the regulations that follow:

### 7.1 Admission

**7.1.1** Admission to a Doctoral program normally requires a Master's degree or equivalent from a recognized institution. Admission to a Doctoral degree program requires evidence that the applicant is capable of undertaking substantial original research. Such capability will be judged partly by means of three external assessment reports sent directly to the Office of the Registrar by qualified referees.

**7.1.2** Admission to a Doctoral program will require a cumulative grade point average of 3.33 (B+) from the Baccalaureate and Master's degree, to be calculated over the last 30 credit hours of graded academic coursework.

**7.1.3** Admission to a Doctoral program without a Master's degree normally requires a Baccalaureate degree from a recognized institution with a cumulative grade point average of at least 3.67 (A-) and the completion of at least two semesters of a Master's degree program at the University of Northern British Columbia with a cumulative grade point average of at least 3.67 (A-).

**7.1.4 Continuation to a Doctoral Program** Students enrolled in a Master's program at the University of Northern British Columbia may continue to a Doctoral program prior to completion of the Master's degree. Students may apply to be transferred to Doctoral status no sooner than two semesters after initial registration in the Master's program at the University of Northern British Columbia. After a review, which must include an evaluation by the student's supervisory committee, the Program will recommend to the Dean of Graduate Programs one of the following:

- a. admission to the Doctoral program without completion of a Master's program;
- b. admission to the Doctoral program but with concurrent completion of all requirements for a Master's degree within one semester from the date of transfer;
- c. admission to the Doctoral program following completion of the requirements for the Master's degree; and
- d. refusal of admission to the Doctoral program.

Students admitted to a Doctoral program under 7.1.4.a must complete courses from the Master's and Doctoral programs as recommended by the existing Supervisory Committee and approved by the Dean of Graduate Programs.

Students admitted under 7.1.4.b who do not complete the requirements for the Master's degree within the one semester limit will lose their status in the Doctoral program and be returned to Master's status.

Students admitted to a Doctoral program under 7.1.4a, but who are not continuing in the Doctoral program, may re-register as a candidate for the Master's degree, provided that work to date has met the standards of the Master's program and the candidacy examination has not been attempted.

**7.1.5** No more than four full-time tuition fee units or the equivalent for part-time students will be credited in such cases towards the fees for the Doctoral program.

**7.1.6** Part-time doctoral work is not feasible in some areas because of the divergent nature of academic disciplines. Accordingly, no Program is obligated to offer part-time doctoral work.

## 7.2 Minimum Requirements

The minimum requirement for a Doctoral degree is 24 credit hours of coursework beyond the Master's level, or 36 credit hours of coursework beyond the Bachelor's level, and satisfactory completion of the prescribed program. Individual programs may require more credit hours of coursework.

## 7.3 The Dissertation

A Doctoral program requires a broad and comprehensive knowledge of the field or fields of study, such knowledge to be demonstrated through a candidacy examination. It also requires the completion of a research project culminating in a dissertation which meets the requirements and standards of Graduate Programs. This dissertation must contain original work, and must be a significant and original contribution to knowledge in the candidate's field(s) of study. It must contain evidence of broad knowledge of the relevant literature, and must demonstrate a critical understanding of the works of scholars eminent in the field(s) related to the dissertation. The dissertation should, in the opinion of scholars in the field(s), merit publication, in whole or in part.

The general style and form of dissertations may differ from program to program, but all dissertations must be presented in a form which constitutes a connected and continuous text. The dissertation may contain material previously published by the candidate, whether alone or in conjunction with others. Such previously published material must be fully integrated into the dissertation. In such cases, the candidate's own work must be clearly distinguished from that of other researchers. The candidate is responsible at the final oral examination for defense of the entire contents of the dissertation.

Before beginning to write the dissertation, the candidate should obtain a copy of the *Formatting Guidelines For Graduate Dissertations, Theses, Projects & Practicum Reports* from the Office of Graduate Programs; this document specifies the academic and technical requirements necessary to ensure that the work is acceptable to the University and to the National Library of Canada.

## 7.4 Language Requirements

A Doctoral program may require a reading knowledge of one or more languages other than English. Language requirements will be set for individual students by their supervisory committees according to the regulations of the Programs and shall as a rule be geared to the individual research requirements of each candidate. Where language requirements are set, they shall be considered part of the student's program, and must be met at the latest before the student defends the dissertation.

## 7.5 Course Transfer

On the recommendation of the Program concerned, the Dean of Graduate Programs may accept courses taken at other recognized universities for credit towards a Doctoral program. However, at least half of the courses taken for the degree must be taken as a graduate student at the University of Northern British Columbia.

## 7.6 Integrated Courses

Doctoral students will not receive degree credit for more than six credit hours of integrated delivery course work (see Section 1.8.1).

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## 7.7 Time Limit

The maximum time for completion given below is not intended to be the normal time for completion. It is intended to take into account a wide variety of extraordinary circumstances and events that may delay completion.

**7.7.1** Normally, a student proceeding to a Doctoral degree must complete all the degree requirements within seven consecutive years (84 consecutive months) from the date of first registration in the program. If the student has transferred from a Master's program, completion is required within seven years of the date of the first registration in the Master's program.

**7.7.2** If a degree is not awarded within seven years of the first registration, the student will be withdrawn from the program. Under exceptional circumstances, time extensions may be granted by the Dean of Graduate Programs. Such requests for time extension must be made in writing to the Dean of Graduate Programs prior to the end of the semester in which the student's time limit expires. The request must include a timeline for the completion of the degree, accompanied by supporting documentation from the student's supervisor.

**7.7.3 Residency Requirement** A student with a Master's degree registering in a Doctoral program must pursue studies under the direction of a faculty member as a full-time student for at least two full semesters within 24 consecutive months of initial registration.

## 7.8 Academic Supervision

**7.8.1** Each Doctoral candidate shall have a member of the Program assigned as the Supervisor to counsel the student in academic matters. The Supervisor is nominated by the Program and approved by the Dean of Graduate Programs.

The Supervisor must be aware of the various university regulations; must provide guidance to the student on the nature of research, the standards required, the adequacy of the student's progress, and the quality of the student's work; and must be accessible to the student to give advice and constructive criticism.

The Supervisor and student must maintain contact through regular meetings. Supervisors who expect to be absent from the University for an extended period of time must make suitable arrangements with the student and the Program for the continued supervision of the student, or must request the Program or College to nominate another Supervisor.

**7.8.2 Supervisory Committee** Each student will have a supervisory committee nominated by the Program and approved by the Dean of Graduate Programs. The chair of this committee will be the College Dean, Graduate Program Chair or designate. The duties of the committee include recommending a program of study chosen in conformity with Program regulations, supervision of the dissertation, and participation in a final oral examination. The committee may conduct other examinations, and will recommend to the Dean of Graduate Programs whether or not a degree shall be awarded to the candidate.

The composition of the Doctoral supervisory committee is as follows: at least four members, including the academic supervisor. At least one member of the committee must be from outside the Program in which the candidate's research is being carried out.

## 7.9 Doctoral Candidacy Examination

Within two years of registration as a Doctoral candidate and at least six months before the final oral examination, a student must pass a candidacy examination. The purpose of this examination is to test the student's understanding of material considered essential to completion of the degree, and to test the student's competence to conduct the research which will culminate in the dissertation. The candidacy examination may be written or oral, or both, at the discretion of the Program. Individual Programs or supervisory committees may also require other examinations in addition to the candidacy examination. Examples of such examinations would be those to test competence in languages other than English, in statistics, in computing, or in other research skills. In some Programs there may be, in addition to the candidacy examinations, comprehensive examinations to be completed before the candidacy examinations, to test knowledge in the field.

The candidacy examination is a requirement of the Office of Graduate Programs, and cannot be waived by any Program. However, the form, content, and administration of such examinations are determined by the individual Programs. While there may be wide variety in the content of candidacy examinations, the manner in which the examinations are constructed, conducted, and evaluated must be consistent within Programs.

Programs are responsible for providing students with a written statement of procedures, requirements, and regulations governing candidacy examinations. This information must be provided to Doctoral students at their initial registration, and must be on file with the Office of Graduate Programs.

When a student has successfully completed the candidacy examination, the College Dean, Graduate Program Chair or Graduate Advisor is responsible for sending confirmation of the fact, signed by all members of the supervisory committee, to the Dean of Graduate Programs.

## 7.10 Final Oral Examinations

All Doctoral programs require a final oral examination. The regulations for such examinations are the same as for Master's programs, except as noted below.

**7.10.1 Formation of the Examining Committee** The final oral examining committee for the Doctoral degree shall consist of the Dean of Graduate Programs or designate as Chair, the supervisory committee, and an external examiner from outside the university, who will normally attend the oral examination.



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Before the dissertation is forwarded to the external examiner, doctoral supervisory committee members shall each declare in writing to the supervisor and the Dean of Graduate Programs either that the dissertation is of adequate substance to warrant that the student proceed to the final examination or that the dissertation is unsatisfactory and that the student should not be allowed to proceed to the final oral examination. An evaluation of the dissertation's merits and deficiencies should accompany the declaration. A declaration of satisfactory does not constitute final approval of the dissertation. A judgement of unsatisfactory performance by a doctoral supervisory committee member will be reviewed by the Dean of Graduate Programs, but normally constitutes grounds for not sending a copy of the dissertation to the external examiner.

**7.10.2 External Examiner** A distinguished scholar with particular experience both in the field of the dissertation research and in supervising doctoral students shall be chosen as the external examiner. The student's supervisory committee shall make the recommendation, and the supervisor should then make an informal inquiry as to the prospective external examiner's willingness to serve. If the individual is prepared to serve, the nomination is then made by the Supervisor and the Graduate Program Chair to the Dean of Graduate Programs who makes the formal invitation to the external examiner.

The Dean of Graduate Programs will request that the external examiner provide a detailed report on the merits and deficiencies of the dissertation, as well as an overall evaluation using the same categories as those used by internal examiners. The external examiner is requested to present the report to the Dean of Graduate Programs within one month of the receipt of the dissertation. Adequate time must be allowed for the transmission of the dissertation and the receipt of the report. A judgement of unsatisfactory performance by the external examiner will be reviewed by the Dean of Graduate Programs, but normally constitutes a failed attempt of the dissertation defence.

The proposed external examiner must be in a position to review the dissertation objectively and to provide a critical analysis of the work and the presentation. It is therefore essential that the external examiner not have a current or previous association with the student, the supervisor, or the Program which would hinder this type of objective analysis. The external examiner should hold a PhD, hold an appointment with a recognized university or be a recognized scholar in their field, and have no affiliation (as described below) with the student or the supervisor. The supervisor and the student must submit a declaration to the Dean of Graduate Programs that neither party has performed collaborative research work with the external examiner within the last five years. While the definition of "arm's length" is left to the discretion of the Program, justification of the selection may be required by the Office of Graduate Programs.

**7.10.3 Changes in the Examining Committee** The Dean of Graduate Programs must also approve changes to the membership of the examining committee. No changes shall be made to the examining committee after the dissertation is distributed by the Office of Graduate Programs to the committee for examination. Should the dissertation not be submitted for examination within 12 months after the appointment of the examining committee, the committee appointment will lapse and a new appointment shall be necessary.

**7.10.4 Approval For Advancement to the Oral Examination** The Office of Graduate Programs must receive all examiners' reports at least two weeks prior to the intended date of the oral examination.

**7.10.5 Guidelines For Advancement to the Oral Examination** When considering the candidate's advancement to the final oral examination, the doctoral supervisory committee members may wish to use the following guidelines:

- a. If all the reports judge the dissertation to be satisfactory, advancement to the oral examination should be automatic. The Office of Graduate Programs shall send copies of all reports to each doctoral supervisory committee member and also to the candidate.
- b. If one or more of the reports judge the dissertation to need major revisions, the Office of Graduate Programs shall send copies of all the reports to doctoral supervisory committee member and the Graduate Program Chair. Two copies of all the reports are sent to the supervisor who shall provide one copy to the candidate. The doctoral supervisory committee members should strive to provide the supervisor and the candidate with specific advice about the nature and scope of the revisions required and any other pertinent matters (such as the time that should elapse before the dissertation will be accepted for reconsideration).
- c. If the doctoral supervisory committee members judge an unfavorable report by an external examiner to be unwarranted, they may recommend, through the Graduate Program Chair, that the Dean of Graduate Programs submit the dissertation to a second external examiner.

**7.10.6 Requirements Prior to Oral Examination Scheduling** The examination will normally be held at the Prince George Campus. Exceptions must have the unanimous agreement of all doctoral supervisory committee members and the student. Normally, the oral examination shall be open to all members of the University of Northern British Columbia community. In exceptional cases, the final oral examination may be closed, for example, when the results of the dissertation research must be kept confidential for a period of time. In such cases, the doctoral supervisory committee members and Graduate Program Chair shall recommend such action to the Dean of Graduate Programs who may then approve that the final oral examination be closed to all but the examining committee and the Dean of Graduate Programs (or designate).

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**Candidate Information** At least two weeks prior to the oral examination, the candidate must submit to the Office of Graduate Programs the following information: biographical data (where and when born); outstanding points in career, awards, etc.; list of degrees obtained (where and when); the exact title of the dissertation; an abstract of the dissertation (not more than 350 words); and a list of publications. This information is used to advertise the oral examination.

**Note:** The above documentation should be submitted in electronic form.

**Notice of Examination** Except in the case of a closed examination and provided the information is received in sufficient time to meet publication deadlines, a notice of the candidate's oral examination will be published. Students, staff and faculty members who are not members of the examining committee are invited and encouraged to attend the oral examination but are not permitted to participate in the formal questioning.

**7.10.7 Format of the Examination** The first part of the oral examination shall consist of an oral presentation by the candidate to include a summary of the salient points of the research within a time span of 25 to 30 minutes. This is followed by the questioning and examination of the candidate by the examining committee. The question period is normally about two hours in duration.

It is the responsibility of the Chair of the oral examination to pose questions raised by the external examiner (if not in attendance). The Chair of the oral examination may exercise discretion in allowing questions from the audience following completion of the formal examination.

**7.10.8 Decision of the Committee** Following completion of the formal examination, the candidate and audience are required to withdraw from the examination room. The examining committee members will consider their report and will also determine the nature of and procedures for approval of any revisions that will be required prior to submission of the dissertation.

The examining committee may exercise its discretion on the following matters: who must approve the required revisions, time limits for the completion of revisions, the necessity for a second oral examination, and any other matters. These matters should be summarized in a memorandum sent to the student by the Supervisor. Before being sent to the student, the memorandum should be circulated to the examining committee members for confirmation. It shall be the responsibility of a designated member of the oral examination committee (normally the supervisor) to ensure that all such revisions are completed before the copies of the unbound dissertation are submitted to the Office of Graduate Programs for binding. The candidate will be recommended for the PhD degree when the dissertation, accompanied by a signed statement from the supervisor that the required revisions are completed, is submitted to the Office of Graduate Programs, providing all other degree requirements have been satisfied.

**7.10.9 Report of the Committee** The final judgment of the examiners on the dissertation and the oral examination shall be reported to the Dean of Graduate Programs in the term "pass" or "fail". The dissertation must be passed by the external examiner and a majority of members of the examining committee. In the case of a failure for the dissertation at the PhD level a detailed written report will be prepared by the Chair and made available to the candidate and also submitted to the Office of Graduate Programs.

A student who receives a failure on either the dissertation or the oral examination twice shall be required to withdraw from his/her doctoral program.

## 7.11 Degree Completion and Graduation

**7.11.1** The University Senate grants degrees in May of each year. Each candidate for a degree must complete an Application for Graduation form and must pay the graduation fees (see Fees Section). Application for Graduation forms are available in the Office of the Registrar or from the website at [www.unbc.ca/graduateprograms](http://www.unbc.ca/graduateprograms).

**7.11.2** The deadline for completing all requirements for the degree is the final business day in April for Spring graduation.

**7.11.3** Students can be considered for the awarding of a degree only when all of the following requirements have been satisfied:

- a. Completion of the program of study and meeting the grade point average requirements for the degree.
- b. Submission of two final copies of the dissertation. Regulations governing proper submission are set out in the *Formatting Guidelines For Graduate Dissertations, Theses, Projects & Practicum Reports*. Only the latest version of these instructions is valid. Students should obtain a copy from the Office of Graduate Programs or from the Graduate Programs website at [www.unbc.ca/assets/graduateprograms/current/defence/gr\\_300\\_formatting\\_guidelines.pdf](http://www.unbc.ca/assets/graduateprograms/current/defence/gr_300_formatting_guidelines.pdf).
- c. Signing of the approval pages for the student's dissertation by the supervisor.
- d. Submission of an Application for Graduation form to the Office of the Registrar and an official degree audit completed by the University.
- e. Payment of all outstanding fees. Those students who have outstanding accounts will not receive their degree parchment or be issued transcripts. Students should be aware of the semester fee payment schedule for graduate degrees (see Fees Section).

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# Graduate General 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: [www.statcan.ca](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 0T6.

## 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 Statement of Principles

### 1. Introduction

The University of Northern British Columbia ("University") is an academic community whose purpose is to search for knowledge through teaching, research, and the free exchange of ideas. As such, the University is committed to developing among its members an enduring sense of community rooted in a working and learning environment which emphasizes mutual respect and tolerance and which is free from discrimination, harassment, disruptive behaviour, and violence. The members of the University community include students, faculty, staff, administrators, governors, senators, and, in certain contexts, visitors. In order for the members of the University community to participate fully and effectively in the University's purpose, certain standards of conduct must be recognised and respected.

### 2. Purpose

The purpose of this policy is:

- a. to set out the standards of conduct which apply to student members of the University community in connection with their participation in University-related activities and behaviour while on any of UNBC's campuses;
- b. to establish procedures for investigating a complaint that a student has breached this policy;
- c. to provide penalties for those students who have breached this policy; and
- d. to identify the procedure which will govern an appeal by a student who has been found to have breached this policy.

This policy is intended to address major concerns about student misconduct and is not intended to interfere with faculty and administration's ability to deal with minor acts of misconduct in an informal and consensual manner, where appropriate.

## 3. Definitions

- a. "Campus life" is any activity that occurs as part of life on campus. This includes but is not limited to:
  - i. being present on campus, whether as a student or the guest of a UNBC student,
  - ii. living in Residence,
  - iii. working on campus,
  - iv. attending classes, university-sponsored events, student society-sponsored events,
  - v. conducting university-sponsored research or lab activity, and
  - vi. operating a vehicle on campus
- b. "Director" is the Director, Student Success
- c. "University employee" is a faculty or staff member or a university security officer.

## 4. Statement of Principles

- a. Every student has the right to participate freely as a member of the University community subject only to reasonable conditions governing eligibility and the payment, when required, of appropriate fees or charges.
- b. Free participation in campus life requires the existence of an environment free from discrimination, violence and threats of violence, direct or indirect physical interference with one person by another person, intimidation, and verbal abuse, whether oral or written.
- c. Members of the University community must recognize and accept that the free exchange of ideas will involve exposure to the formulation and expression of ideas with which an individual is in fundamental disagreement or which an individual finds offensive. The University's purpose requires that the formulation and expression of such ideas must be tolerated, provided that neither the formulation nor the expression of such ideas violates any generally applicable laws of Canada or British Columbia or any policies of the University. Toleration does not require acceptance of such ideas, nor does it preclude the formulation and expression of a critical response to such ideas, provided that neither the formulation nor the expression of such a response violates any generally applicable laws of Canada or British Columbia or any policies of the University.
- d. Student members of the University are expected to:
  - i. comply with the generally applicable laws of Canada and British Columbia;
  - ii. honour contractual obligations arising in connection with a student's membership in the University community;
  - iii. comply with the applicable academic regulations of the University, and;
  - iv. comply with the University's policies.
- e. This policy must be interpreted and applied in conformity with both the University's purpose as an academic community and the above Statement of Principles.

## 5. Student Standards of Conduct

Within the framework set out in the Statement of Principles, acts of student misconduct subject to penalty under this policy include but are not limited to:

- a. threatening or engaging in behaviour that a reasonable person would perceive to be intimidating or offensive, or that may endanger the health or safety of students, faculty, staff or administration of the University;
- b. participating in disruptive action including but not limited to:
  - i. disrupting instructional activities including lectures, seminars, labs, examinations and tests;
  - ii. physically or verbally abusing another person;
  - iii. repetitive or intrusive use of indecent, profane or vulgar language in a public place that disturbs others;
  - iv. obstructing the rights and privileges of other members of the University community;
  - v. disrupting campus life by electronic means, whether directly or indirectly;
  - vi. obscenity.
- c. harming another person at or in connection with that person's participation in campus life;
- d. misappropriating, converting, destroying, permanently defacing, or otherwise damaging University property, resources, or the property and resources of other members of the University community;
- e. possessing the property of other members of the University Community without proper authorization;
- f. forging, falsifying, misusing, or altering any University data or record whether in physical or electronic form;
- g. obtaining or using, whether directly or indirectly, University equipment, material, or services by fraudulent or other unlawful means;
- h. possession or use of intoxicants on campus, except within approved areas under the University's Liquor Policy;
- i. possession for use or sale of illegal drugs;
- j. possession or use of firearms, fireworks, or other inherently dangerous objects on campus;
- k. failing to comply with the reasonable directions of a University employee or a University Security Officer, or a Police Officer when they are acting in performance of their duties at or in connection with campus life;
- l. breaching any law of general application of Canada or British Columbia in connection with campus life;
- m. aiding, abetting, or acting as an accomplice at or in connection with any prohibited conduct; and;
- n. any other misconduct which significantly interferes with the University's operations.

## 6. Responding to Apparent Breaches of This Policy

### Emergencies

If a student's conduct appears to pose a threat to the student's own safety or to the safety of another person, any person witnessing the conduct should contact campus security immediately. Where there is a risk of injury or harm to any person or property, the student whose conduct is in question may be required to leave the University's property immediately pending and during an investigation into the alleged misconduct. Campus security must promptly prepare a Report to be given to the Director.

### Reports of Allegations of Student Misconduct

University employees, including faculty, administration and staff may report allegations of student misconduct to the Director on the prescribed form.

### Complaints of Allegations of Student Misconduct

Members of the University community who are not University employees (students, vendors, external stakeholders) may file a Complaint alleging that a student has engaged in misconduct, in breach of this policy. The person filing the Complaint will be known as the "Complainant." The person about whom the Complaint is made will be known as the "Respondent." Such a Complaint must be made to the Director on the prescribed form and must set out in detail the facts on which the Complaint is based. A Complaint must be made within 45 days of the last event which is the subject of the Complaint, unless the Director allows a longer period of time. In allowing a longer period of time the Director must consider the following factors:

- a. the reasons for the Complainant's delay in filing the complaint;
- b. whether there will be prejudice to the Respondent or another person as a result of the delay; and
- c. the seriousness of the misconduct alleged against the Respondent.

The Director will, upon receipt of the Report or the Complaint, consider the alleged acts of misconduct and decide:

- a. that the allegations, if true, do not constitute misconduct under this policy and decline to act on the Report or the Complaint;
- b. not to investigate the Report or the Complaint because the allegations are trivial or frivolous;
- c. that the allegations fall under another University policy or fall under both this policy and another University policy, in which case the Director must refer the Report or the Complaint to the University official responsible for the administration of the other University policy and consult with the other University official and determine an orderly method of proceeding that will ensure that all elements of the Report or Complaint will be investigated; and
- d. that the allegations in the Complaint or the Report should be investigated or otherwise addressed in accordance with this policy.

The Director will notify the person who made the Report or the Complaint of the decision.

Prior to investigating a Complaint and with the consent of the Complainant and the Respondent, the Director may refer a Complaint to mediation by a mediator appointed by the Director. If the Complaint is resolved, the resolution will be put in writing, signed by the parties and filed with the Director. If the Complaint is not resolved through mediation, the Director will investigate the Complaint.

### Reports or Complaints of Criminal Misconduct

If the Director determines on reviewing a Report or a Complaint that the allegations may constitute one or more criminal offences, the Director must inquire as to whether the Complainant has reported or intends to report the allegations to the police. If the Complainant has reported or intends to report the allegations to the police, the Director will coordinate the University's investigation with the police investigation.

### Investigation of Allegations in a Report or Complaint

In conducting an investigation, the Director will engage in detailed interviews of the person who filed the Report or the Complainant; and with the student about whom the Report is made or the Respondent; and with any other witness who the Director believes has information relevant to the investigation; and will review all documents which the Director identifies during the investigation as relevant to the investigation.

After concluding the investigation, the Director must prepare an Investigation Report for the Provost setting out findings of fact and a conclusion about whether those findings constitute a breach of this policy.

### Duties of the Provost in Disciplinary Cases

On receipt of the Investigation Report, the Provost must deliver a copy to the Complainant and to the Respondent. Both the Complainant and the Respondent will be entitled to make a written submission about any matter contained in the Investigation Report. Any such submission must be delivered to the Provost within a time limit established by the Provost, always provided that the time limit must not be less than 5 working days and must be the same for both the Complainant and the Respondent. The Provost has the discretion to extend any time limit previously set.

After the deadline for any submissions has passed, the Provost must review the Investigation Report and all of the submissions received in the case of a Complaint and must make a decision. The Provost has the discretion to accept or vary the Director's conclusion.

If the Provost decides that a breach has not occurred or that the Complaint is trivial, the Provost will dismiss the Report or the Complaint. If the Provost decides that a breach of this policy has occurred, the Provost will decide on the appropriate penalty. The available options include, but are not limited to, the following:

## Regulations and Policies

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- a. a written reprimand, which will form part of the student's permanent record;
- b. a performance contract;
- c. suspension for a specified period;
- d. suspension for an indefinite period, with or without the ability to apply for readmission to the University after a fixed period;
- e. eviction from UNBC Residences;
- f. prohibition from entering UNBC Residences;
- g. payment in part or for all of the costs for replacing or repairing damage to the University's property; and
- h. any other action deemed appropriate in the circumstances, including the provision of remedial measures to the Complainant (where applicable).

If the disciplinary response involves any form of suspension, the President must review the Director's Investigation Report and any submissions made by a Complainant and a Respondent and make the decision.

### 7. General Matters

Nothing in this policy affects the President's authority under the University Act to suspend a student or to deal summarily with a matter of student discipline.

It is a serious act of misconduct to file a false and malicious Complaint under this policy or to file a Complaint solely for the purpose of retaliating against another person. Similarly, it is a serious act of misconduct to retaliate in any manner against a person for filing a Complaint or a Report or responding to a Complaint or a Report or for participating in a proceeding under this policy. The University will respond to all such acts of misconduct under the terms of the policies and contracts governing the University's relationship with the person who has engaged in the misconduct.

### 8. Appeal of a Decision Imposing Discipline under the Student Conduct Statement of Principles

A student who is subject to a penalty imposed by the President or Provost (or delegate) (the "Decision Maker") under Regulation and Policy III, Student Conduct Statement of Principles ("Student Conduct Policy"), may appeal to the Senate Committee on Student Discipline Appeals ("SCSDA"). The SCSDA is the final adjudicator of appeals under the Student Conduct Policy.

A copy of the procedures for appeals under the Student Conduct Policy is available from the Office of the Registrar. Please note that the procedures include a 15-day time limitation for filing a notice of appeal.

Appeals of academic decisions under Regulation and Policy V: General Academic Regulations and appeals of decisions under Regulation IV: Harassment, Discrimination and Diversity Initiatives are addressed under those regulations and policies.

### 9. Grounds for an Appeal under the Student Conduct Policy

An appeal to the SCSDA is not a full re-hearing of the decision to impose discipline. A student's appeal of the imposition of discipline under the Student Conduct Policy to the SCSDA must be made on one of more of the following bases:

- a. The Decision Maker incorrectly applied a University policy and, as a result, the decision was unfair;
- b. The student has material evidence that was not reasonably available prior to the time of the decision under appeal, and knowledge of that evidence would probably have led to a different decision;
- c. During the process leading up to the imposition of discipline the student did not know the substance of the complaint and was not given, at some point in the process, a reasonable opportunity to respond, or the process was otherwise procedurally unfair.

### 10. Standards of Review

The SCSDA will review the Decision Maker's decision on one or more of the three grounds of appeal listed above, with regard to the standards of review listed below.

- a. Where the appeal is under 9 a., the appropriate standard as to whether the Decision Maker misapplied a University Policy is correctness. The standard of review as to whether the decision was, as a result, unfair, is reasonableness; that is whether a reasonable person, knowledgeable about the facts, would perceive it to be unfair to let a decision based on the incorrect application of the policy stand.
- b. Where an appeal is under paragraph 9 b., the appropriate standard of review is reasonableness; that is whether a reasonable person, knowledgeable about the facts, would perceive it to be unfair to let a decision made without consideration of the new evidence stand.
- c. Where an appeal is under paragraph 9 c., the appropriate standard of review is reasonableness; that is whether a reasonable person, knowledgeable about the facts, would perceive the process to be unfair.

### 11. Outcomes

An appeal under the Student Conduct Policy will result in one of the following three outcomes:

- a. The Chair of the SCSDA, in consultation with the Registrar, may dismiss the appeal on a preliminary basis, on the basis that the appeal is frivolous, vexatious or an abuse of process;
- b. The SCSDA may uphold the disciplinary decision;
- c. The SCSDA may refer the matter back to the Decision Maker for further decision, or for further investigation and then further decision, as the Decision Maker may determine.

In all cases, where an appeal is allowed, the original penalty will remain in effect until the matter is reconsidered and a further decision is made by the Decision Maker.

## IV. 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, available at [www.unbc.ca/assets/policy/diversity/harassment\\_and\\_discrimination\\_final.pdf](http://www.unbc.ca/assets/policy/diversity/harassment_and_discrimination_final.pdf), 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 Harassment and Discrimination Advisor 250-960-6618.

## V. General Academic Regulations

Note: Graduate students are directed, as well, to the Graduate Programs Admissions and Regulations section of this Calendar.

### 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, to alter, or to amend these regulations at any time.

### 2. E-mail Communication

E-mail is one of the official means of communication between UNBC and its students. All students are assigned a UNBC e-mail address upon course registration. The e-mail address assigned to a student by the University will be the only e-mail address used by UNBC for communication with students for academic and administrative purposes. Students are responsible for checking their UNBC e-mail account regularly so as to remain current with administrative and academic notifications. It is the student's responsibility to ensure that time-critical e-mail is accessed, read, and acted upon in a timely fashion. If a student chooses to forward University e-mail to another e-mail address, it is the student's responsibility to ensure that the alternate account is active.

### 3. Full-Time Studies

A full-time graduate student during any one of the academic semesters is one who is either enrolled in courses totaling a minimum of six credit hours during a single semester or working on a dissertation, thesis, or comprehensive examination (Master's level only) project during a semester (see Graduate Programs Admissions and Regulations section).

### 4. Part-Time Studies

A part-time graduate student during any one of the academic semesters is one who is enrolled in courses totaling less than six credit hours during a single semester, and who is not working on a dissertation, thesis or project (see Graduate Programs Admissions and Regulations section).

### 5. 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.

### 6. 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, or held for pick-up at the Office of the Registrar in confidential envelopes marked 'Official Transcript'. 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 mid-term examinations.

Transcripts will not be released without payment of the required transcript fee, and/or if there is an outstanding financial obligation.

Requests for transcripts can be made online through UNBC Online Services <https://www.unbc.ca>, or by completing a Transcript Request Form available in the Office of the Registrar. There is a 3 business day turnaround for transcript requests.

Unofficial transcripts are available to students directly through Online Services at [www.unbc.ca](http://www.unbc.ca).

### 7. Evaluation of Transcripts

The evaluation of transcripts is the responsibility of the Office of the Registrar.

## 8. Criminal Records Review

Under the requirements of the Criminal Records Review Act (2008) UNBC requires, as part of the application process, criminal record reviews 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 Graduate programs:

- Community Health Science (MSc)
- Disability Management (MA)
- Counselling (MEd)
- Nursing (MScN, MSCN:FNP)
- Social Work Programs (MSW)

## 9. Student Access to Official University Record

Students have the right to inspect their Official University Record, including the student file, under the supervision of a staff member and 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 Graduate 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 Registrar.

## 10. Registration After the Published Revision Deadline Date

No graduate student is permitted to alter their registration for any course after the last date to revise registration as published in the Calendar except on the express written permission of the instructor and the Dean of Graduate Programs.

## 11. 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 Dean of Graduate Programs.

## 12. Repeating Courses

Graduate students may not repeat graduate courses except under exceptional circumstances and only with the approval of the Dean of Graduate Programs on the recommendation of the supervisory committee. In the event that a course is repeated, it is the second grade earned which will be used in the grade point average calculation.

## 13. Graduation

- Students must apply to graduate. The Application for Graduation Form must be received by the Office of the Registrar no later than March 1 of the calendar year in which graduation is contemplated, accompanied by the appropriate (non-refundable) graduation fee.
- 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.

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## 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.	PSYC 600-4	B	3.0	4 credit hours x 3.0	=	12.00
2.	PSYC 610-3	A+	4.33	3 credit hours x 4.33	=	12.99
			Total	7 credit hours	=	24.99
			Semester GPA: $24.99/7 = 3.57$			



### Grading System – Graduate Students

UNBC Grade Point	Letter Grade	Percentage	Definition/ Standing
4.33	A+	90 -100%	
4.00	A	85-89.9%	Excellent
3.67	A-	80-84.9%	
3.33	B+	77-79.9%	
3.00	B	73-76.9%	Good
2.67	B-	70-72.9%	

Passing grade is B- for all courses taken towards a graduate degree. Courses in which achievement is less than B- are assigned a letter grade of F. Individual programs may set higher standards.

The following are not included in academic average:

P	Passing grade	credit awarded
AEG	Aegrotat standing	credit awarded
DEF	Deferred grade	no credit awarded
W	Withdrawn	no credit awarded
WE	Withdrawn under extenuating circumstances	no credit awarded
AUD	Audit of course	no credit awarded
INP	Course project or Thesis work in progress	
NGR	No grade reported	

### 14. Grounds for Withholding Official Transcripts

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 a residence license agreement, the University shall not permit a student to register for further courses, and shall not issue an official transcript. The above prohibitions shall be in force until such time as indebtedness to the University has been cleared to the satisfaction of the University.

### 15. 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 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.

**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 12 (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.

**Graduation Requirement:** In order to graduate, a student must have the minimum cumulative grade point average required by the student's program, and also have satisfied non-course-based requirements of the program.

### 16. 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.

### 17. Academic Distinction

Each year a very small number of students will be graduated with Distinction. Selection criteria take into account the student's overall academic record and, as appropriate, the quality of the thesis; and are applied by a Dean's Committee on Graduate Honours chaired by the Dean of Graduate Programs. Students do not apply for graduation with distinction.

### 18. Examinations

- When a graduate course has a final examination, the examination shall normally be worth at least 25% of the total course marks.
- With the exception of laboratory, clinical or practicum-based final examinations, tests worth, aggregate, more than 10% of the final grade must not be administered during the final week of classes. During the last two weeks of classes, major papers or projects must not be newly assigned.
- 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 given during the scheduled examination period.
- Final exams are no longer than three hours in duration. Exceptions must be approved by the Program Chair.
- College Deans may make exceptions to this policy in extraordinary cases. Such exceptions must be made at the beginning of the semester, and have the approval of the Program Chair.

## 19. 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 the 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 the possession of the student in the examination room (see Regulation 23 (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.

## 20. 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 one year after the examination period, after which time they may be shredded or destroyed by other acceptable means.

## 21. 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.

## 22. 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 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.

## 23. Deferred Examinations and Grades

Students may apply for a deferred examination or a 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 deferral, 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 22 (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.

## 24. Academic Offenses

Any conduct that violates the standards of the University as set out in the Graduate University Calendar, particularly those related to academic honesty, is a serious offense. The formal processes set out in these Regulations are to be followed. The Senate Committee on Academic Appeals provides for impartial review of decisions made at lower levels as defined in these Regulations. Minimum sanctions for an academic offense includes reprimands and reduction of grades; the maximum sanction is dismissal from the student's academic program or suspension from the University (see Academic Regulation 24 (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; self-plagiarism is the submission of work previously submitted for academic credit without prior written and signed approval of the current course instructor.
- 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 or invented 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:** Knowingly submitting false medical or criminal records, transcripts, or other such certificates or information.
- 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. 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. **Aiding or Abetting** any of the above academic offences.

### 25. Procedure on Suspicion of an Academic Offence

- a. An instructor invigilator, or administrator who suspects plagiarism, cheating, or any other academic offence, and has evidence to support the accusation, 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, and will obtain a copy of the UNBC Report Form for Academic Misconduct. The instructor or administrator then will contact the student to inform the student fully of the offence and to present the evidence for it. 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 is resolved at this level, the faculty member or administrator 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. 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.
- c. If the matter is not resolved between the student and faculty member or administrator, it will be discussed by the student, faculty member, and the Chair of the program involved or, in the case of professional programs that have their own internal appeals committees, reviewed by those committees. After these discussions or reviews, the Chair and Dean will complete Parts B and C respectively of the Report Form for Academic Misconduct. Whether or not a penalty is imposed, a copy of the Report Form will be placed in the student's file in the Office of the Registrar, and copied to the student.
- d. The student may appeal any lower level decision to the Senate Committee on Academic Appeals (see Academic Regulations 49, 50).

### 26. Academic Sanctions

"Every student accepted for registration at the University of Northern British Columbia shall be deemed to have agreed to be bound by the regulations and policies of the University and of the Program in which that student is enrolled" (Academic Calendar notices, p.1). A student not adhering to the University's Regulations and Policies shall be subject to academic sanctions. 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 and that a record of the unacceptable behaviour has been placed in the student's file in the Office of the Registrar.
- b. **Reduction of Grade:** A reduction of grade, including assigning a failing grade, may be applied to an examination, test, or assignment or course 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.
- c. **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 Registrar and will be reviewed by the Senate Committee on Academic Appeals. Once the matter of suspension is final and upheld, a permanent notation will be placed on the student's transcript.

### 27. Academic Appeals - Definition

Academic appeals deal with the evaluation of a student's academic work: course grades, grades assigned on research papers and other course work, the outcome of written and oral thesis examinations, the results of an assessment to determine if a student's academic performance warrants continued enrolment in his/her Graduate Program, the outcome of a language examination, and any other academic assessment or evaluation that may be carried out within a Graduate Program.

### 28. General Procedure on Academic Appeals

- a. It is expected that, where appropriate and possible, a student will attempt to resolve a problem informally with the instructor or the appropriate person before initiating a formal appeal process.
- b. Appeals must be submitted in writing, within 15 working days of the action or decision being appealed.
- c. The person to whom the appeal is addressed will normally be a course instructor (for appeals of grades) or a supervisor (in the case of other appeals as listed in Academic Regulation 23 above). This person must acknowledge receipt of the appeal in writing within 10 days.

### 29. 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 is the final adjudicator in such matters. All formal appeals must be made through the Registrar, in writing and with necessary documentation, within 15 working days of the receipt of the decision in question. The student's written appeal must state clearly the decision being appealed, the reason(s) why the decision is considered to be unfair, what decision would be considered fair, and why it would be fair. It is incumbent upon the student to advise the University, via the Office of the Registrar, of their current contact information. All written appeals to the Senate Committee on Academic Appeals should indicate whether an in-person hearing is being requested. Otherwise, cases are adjudicated on the basis of the written submissions.

### 30. Senate Committee on Academic Appeals: Procedures

The Senate Committee on Academic Appeals follows the principles of natural justice. That is, its procedures are fair and open, appropriate to the matter under consideration, and provide the opportunity for those affected to put forward their views fully for consideration by the Committee. Following these principles, the Committee develops its own 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 direct 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 interested parties (e.g., the course Instructor(s), 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 hearing should be postponed.

All forms of adjudication are held in the strictest confidence and normally are attended only by members of the Committee and the parties to the particular appeal. Upon written notification to the Senate Committee on Academic Appeals, appellants may be accompanied by an additional party for the purpose of personal support.

Neither the appellant nor the University shall have the right to representation by legal counsel during appeal hearings except by permission of the committee Chair. The Chair, at the Chair's sole discretion, may allow legal representation where he or she judges the circumstances of the case to be exceptional.

The Secretary to Senate, in consultation with the Committee Chair as appropriate, reviews 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 the mandate of the Committee and to ensure that the appeal is both valid and could not 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 to hear or not to hear an appeal rests with the Committee.

The Senate Committee on Academic Appeals reviews decisions made at lower levels when requested to do so by the appellant. Normally it rules in two areas. It considers whether appropriate and fair adjudication was exercised in respect of a case and, where it concludes that there was unfairness, it may direct a readjudication using a procedure that it prescribes as being appropriate and fair. It considers whether the penalty assessed was consistent with University Regulations and practice and was not pernicious and, where it concludes that there was a lack of consistency or an unreasonable response, it may state its concerns clearly and direct a reconsideration. The Committee may act, whether a reconsideration has been directed or not, to overturn or to support a decision. Whatever the matter under consideration, the Committee and all parties to the appeal are provided by the Registrar with the same information, sufficient to permit a meaningful hearing. The Committee maintains a record of its deliberations and provides the reason(s) for its decisions.

### 31. 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 initiate the following process:

- a. The student obtains an Academic Appeals Form from the Office of the Registrar and submits it to the Program Chair.
- b. The Chair meets the instructor(s) on the matter, obtains the instructor's(s') comments and adds the Chair's comments.
- c. If no resolution favourable to the student is reached within seven working days, the Chair, without delay, submits the form to the Dean.
- d. If no resolution acceptable to the student is reached within seven working days, the Dean, without delay, submits the form to the Registrar for advancement to the Senate Committee on Academic Appeals.
- e. At any stage in the process, the student may choose to withdraw the appeal by notifying the Registrar.

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

### 32. Appeal of Final Grade

Students who have reason to believe their final grade in a course, once released by the Office of the Registrar, is inaccurate should meet with their course instructor immediately, if possible (see Academic Regulation 40). 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 final grade, formally, should initiate the following process:

- a. The student obtains an Academic Appeals Form from the Office of the Registrar and forward submits it to the Program Chair.
- b. The Chair meets the instructor(s) on the matter, obtains the instructor's(s') comments and adds the Chair's comments.
- c. If no resolution favourable to the student is reached within seven working days, the Chair, without delay, submits the form to the Dean.
- d. If no resolution acceptable to the student is reached within seven working days, the Dean, without delay, submits the form to the Registrar for advancement to the Senate Committee on Academic Appeals.
- e. At any stage in the process, the student may choose to withdraw the appeal by notifying the Registrar.

An appeal may result in a higher, equal or lower grade. The final recourse for all appeals is the Senate Committee on Academic Appeals. Evaluation of a student's academic performance for continued enrolment will not be done prior to the completion of a grade appeal process, if the grade in question is pertinent to the said evaluation.

### 33. Appeals Concerning Academic Program Matters

In the case of appeals concerning matters other than those listed above, the following procedures shall be followed:

- a. The student must meet with the supervisor, or the supervisory committee, or the Chair of the Program as appropriate (or, if the instructor is also the supervisor, the Chair, or, if the Chair is the supervisor, the College Dean, or, if the College Dean is the supervisor, the Provost) in an attempt to resolve the matter. Within 5 days of the meeting, the Chair of the Program (or College Dean) must send a written report of the meeting to the Dean of Graduate Programs, with a copy to the student. The report shall notify the Dean of Graduate Programs of the particulars of the case, and of the result of the meeting.
- b. If, after the process set out in 26.a) is completed, the student is unsatisfied with the result and wishes to continue the appeal, a written notice of the student's intention must be sent to the Dean of Graduate Programs within 15 days of receiving the letter from the Chair or other appropriate official. The Dean will acknowledge receipt of the notice within 5 days of receiving it.
- c. The Dean of Graduate Programs will conduct an investigation of the matter. In the course of this investigation, the Dean may ask for written reports from each member of the Committee. Committee members may submit reports even if not asked to do so. Copies of all reports will be made available to the student. After reviewing these reports, the Dean of Graduate Programs will come to one of the following decisions:
  - i. If the Dean is convinced that the process was appropriate, and that the reports clearly indicate academic deficiencies on the part of the student for which the original decision which led to the appeal was appropriate and reasonable, the Dean may decide to uphold the decision.
  - ii. If the Dean is convinced that the examination or other assessment process was flawed or improper, the Dean may order a re-examination or other re-evaluation as appropriate. The new examination or evaluation will be conducted either by the same examining committee as the original one, or by a new one, as deemed appropriate by the Dean.
  - iii. If the Dean is convinced that the examination or other process was correct, but that factors other than academic merit may have influenced the decision, the Dean may order a re-examination or a re-evaluation, as he/she deems appropriate. The new examination or evaluation will be conducted either by the same examining committee as the original one, or by a new one, as deemed appropriate by the Dean.
  - iv. If the Dean is convinced that a new examination or evaluation is unlikely to resolve the issue, or if the result of the new examination or evaluation is appealed, he/she may, with the consent of the Program, appoint external assessors to evaluate the student's performance.
  - v. In all cases concerning appeals, a further appeal may be made to the Senate Committee on Academic Appeals which shall deal with it according to its rules of procedure (see Academic Regulation 28).

### 34. Appeals Concerning Academic Relationships

Appeals may arise out of other difficulties involving the academic relationship between students and faculty members. It is sometimes necessary, for instance, for a student to change supervisors, or a student may have other difficulties with a supervisor, or a student may have difficulties of a personal nature with a faculty member. Because the personal and professional relationship between student and faculty member can become entangled, and because problems of this sort can be perceived as potentially career-threatening by a student, there is a need for a process by which a student can seek mediation and resolution in such cases. Because each is different, and because a formal committee procedure as outlined under Academic Regulation 24 may not be appropriate in such cases, the following procedure shall be followed:

- a. A student experiencing such difficulties should attempt to resolve them informally at the level of the individual instructor or the Program Chair.
- b. If this cannot be done, or if the nature of the problem is such that the student does not wish to attempt it, the student should seek the advice of the Dean of Graduate Programs, who shall follow one of the following procedures:
  - i. If the Dean of Graduate Programs thinks it advisable, the Dean shall seek to bring about a solution through informal means.
  - ii. If in the opinion of the Dean of Graduate Programs the complaint is invalid, the Dean of Graduate Programs shall advise the student of this opinion, and take no further action.
  - iii. If in the opinion of the Dean the complaint is valid but an informal solution is unlikely, or if the Dean has attempted an informal solution and has failed, he/she shall advise the student of this fact.
  - iv. In the case of 31.b) ii) and 31.b) iii), the student may choose not to proceed further, or the student may choose to proceed with the matter. In the latter case, the student shall make a written complaint, through the Registrar, to the Senate Committee on Academic Appeals which shall consider it according to its rules of procedure.

### 35. 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 circumstances. 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.

# Business Administration (MBA)

Rick Tallman, Associate Professor and Acting Chair  
Steven Cronshaw, Professor  
Waqar Haque, Professor  
Sungchul Choi, Associate Professor  
Balbinder Deo, Associate Professor  
Xin Ge, Associate Professor  
Jing Chen, Assistant Professor  
Elizabeth Croft, Assistant Professor

Website: [www.unbc.ca/commerce/mba](http://www.unbc.ca/commerce/mba)

### Locations

Prince George, British Columbia  
Vancouver, British Columbia

The MBA is recognized worldwide as the hallmark of the management professional. Graduates of the UNBC MBA program develop a well-rounded understanding of the skills needed by leaders of private and public sector organizations, and the challenges facing enterprises. The program is designed to allow professionals to complete their degree within two years while continuing to work full-time. During the first year of the program, students are introduced to the major disciplinary areas within the field of business, including strategy, economics, accounting, finance, organizational behaviour, marketing, and operations management. This part of the program builds the broad base of knowledge and skills required by senior management.

During the second year of the program, students gain a broad understanding of the global, legal and ethical environment in which organizations operate, and of the challenges facing organizations. In the context of northern British Columbia, there are economic, social, and environmental challenges confronting small and rural communities participating in a resource-based economy. Through the development of leadership and management capabilities, the MBA Program helps the communities and organizations achieve sustainable success and prosperity in a changing and complex world.

Course participants have the opportunity to focus on individual interests during the MBA Project. Working under the supervision of a faculty member, students complete a major research project, applying relevant theory to the study of a substantial organizational problem or issue.

The MBA Program course work normally includes work assessed on an individual and group basis. Enterprise problems are seldom completely resolved through individual effort, and group work reinforces and enhances individual ability to work within multi-disciplinary teams.

Students come to the MBA Program with diverse backgrounds, a range of social and cultural perspectives, and different industry and business experiences. The MBA Program encourages this diversity as it fosters a rich learning environment.

### Admission Requirements

The number of spaces in the MBA Program each year is limited to facilitate quality interaction with faculty and to enrich learning for every student. Admission is by a selection process based on criteria described below.

In addition to the general admission requirements outlined in Section 1.0 of the Graduate Academic Calendar, candidates are required to provide:

- Evidence of a minimum of three years of work experience in a managerial or professional position;
- Three letters of reference from academics, colleagues, supervisors or significant clients;
- Demonstrated proficiency in English, as stipulated in Section 1.1 of the Graduate Studies Admission and Regulations.

Application deadlines are found in this calendar under "Semester Dates," online at [www.unbc.ca/calendar/graduate/](http://www.unbc.ca/calendar/graduate/) (also under "Semester Dates"), and at the School of Business web page at [www.unbc.ca/commerce](http://www.unbc.ca/commerce). The MBA Program accepts students for the September Semester.

For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).

### Exceptional Admission

Under special circumstances, candidates who either lack a formal degree or do not meet the grade point average requirements, but who have other outstanding qualifications, such as a professional designation, may be eligible for admission. For these candidates, a personal interview is required. The personal interview is designed to assess the applicant's business skills and knowledge.

# Graduate Programs: Business Administration

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## Required Courses for the First Year

COMM 603-3	Business and Corporate Strategy
COMM 610-3	Accounting
COMM 620-3	Corporate Finance
COMM 632-3	Organizational Behaviour
COMM 640-3	Marketing
COMM 650-3	Operations Management
COMM 651-3	Quantitative Decision Analysis
COMM 690-3	Northern Business Issues
ECON 608-3	Managerial Economics

## Required Courses for the Second Year CHOOSE Option A or B

### Option A

COMM 799-6	MBA Project
Five of:	
COMM 701-3	Strategy Implementation
COMM 703-3	International Business
COMM 725-3	Financial Management
COMM 735-3	Law, Governance and Ethics
COMM 736-3	Human Resource Management and Industrial Relations
COMM 751-3	Project Management
COMM 755-3	Management of Technology

### Option B

COMM 701-3	Strategy Implementation
COMM 703-3	International Business
COMM 725-3	Financial Management
COMM 735-3	Law, Governance and Ethics
COMM 736-3	Human Resource Management and Industrial Relations
COMM 751-3	Project Management
COMM 755-3	Management of Technology



# Business Administration (MSc)

Balbinder Deo, Associate Professor and Chair  
Paul Bowles, Professor  
Steven Cronshaw, Professor  
Waqar Haque, Professor  
Pranesh Kumar, Professor  
Fiona MacPhail, Professor  
Baotai Wang, Professor  
Jalil Safaei Boroojeny, Associate Professor  
Sungchul Choi, Associate Professor  
Ajit Dayanandan, Associate Professor  
Xin Ge, Associate Professor  
Kevin Keen, Associate Professor  
Rick Tallman, Associate Professor  
Jing Chen, Assistant Professor  
Elizabeth Croft, Assistant Professor

Website: [www.unbc.ca/commerce/msc](http://www.unbc.ca/commerce/msc)

The goal of the MSc Program in Business Administration is to educate and train business professionals with advanced research skills and extensive knowledge in a specialized area, e.g., accounting, finance, human resources management/organizational behaviour, marketing, operations management/international business. These individuals meet a growing need in Northern British Columbia and beyond for professional skills in establishing, expanding, and managing all types of business enterprises that have long-term sustainability and contribute to the economic growth and vitality of the North and the country at large. The students in the program come from a wide variety of backgrounds, including business, resource development, mathematics, and the social sciences. The MSc is a research-based degree with a thesis and is different from the MBA degree which is a terminal and course-based degree. The MSc in Business Administration is normally completed in two years.

## Admissions

To be eligible for admission, students are required to have an acceptable academic standing, i.e., a grade point average of at least 3.00 (B) in the work of the last 60 credit hours, in a four-year (120 credit hours) baccalaureate degree or equivalent from a recognized institution. The MSc in Business Administration requires students to complete graduate-level courses in statistical and research methods that in turn are grounded in undergraduate-level preparation in mathematics and statistics. Accordingly, all students admitted to the MSc in Business Administration must have sufficient preparation in mathematics and statistics equivalent to the BComm degree at UNBC. Students without the necessary undergraduate preparation are required to complete these mathematics and statistics requirements before they are admitted to the MSc Program in Business Administration. Additionally, students applying to the MSc in Business Administration who hold an undergraduate degree other than the Bachelor of Commerce must have background preparation in their chosen area of MSc specialization (e.g., accounting, finance) equivalent to that obtained through the BComm degree. Students without the necessary undergraduate preparation in their intended specialty area must make up this requirement through undergraduate course work before they are admitted to the MSc in Business Administration. Both sets of requirements (i.e., mathematics/statistics and content specialization in business) may be completed as part of a Pre-Entry Program for Admission to Graduate Studies, as set out by the Business Graduate Studies Committee and as approved by the Dean of Graduate Programs. The Business Graduate Studies Committee may recommend a conditional offer of admission contingent on completion of additional preparatory courses, but graduate courses within the MSc Program must not be started until the pre-entry course work is completed.

Within the MSc Program students study and research topics in one of the specialized areas of Accounting, Finance, Human Resources Management/Organizational Behaviour, Marketing, or Operations Management/International Business. Applicants to the MSc Program must apply to one of the specialized areas within the program and the area faculty will evaluate applications against the background preparation considered necessary for specialized study within the area. Students may apply to other areas of the Business program if their area of first choice is not available.

Application deadlines are found in this calendar under "Semester Dates" or online at [www.unbc.ca/calendar/graduate](http://www.unbc.ca/calendar/graduate), also under "Semester Dates." The MSc Program in Business Administration accepts students for the September Semester.

For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).

# Graduate Programs: Business Administration

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## Requirements

The course of study has two major components: (1) 18 credit hours of courses to provide research methods and statistical knowledge and skills as well as substantive breadth of knowledge in business administration; and (2) 18 credit hours of courses to provide additional substantive depth in an area of specialized concentration that includes, a Master's Thesis representing an original empirical investigation in the chosen specialized area of business administration. Appendix A contains a detailed rationale and description of the course offerings and sequence for the MSc in Business Administration.

COMM 662-3	Research Methodology or equivalent (3 credits)
COMM 760-3	Seminar in Business Administration (3 credits)
COMM 762-6	Independent Research in Business Administration
COMM 763-12	Master's Thesis

Two courses from the following MSc ResearchTopics courses

COMM 616-3	Accounting Research 1
COMM 617-3	Accounting Research 2
COMM 618-3	Accounting Research 3
COMM 626-3	Finance Research 1
COMM 627-3	Finance Research 2
COMM 628-3	Finance Research 3
COMM 637-3	Research in Human Resources Management/ Organization Behaviour
COMM 638-3	Research in Human Resources Management/ Organization Behaviour 2
COMM 639-3	Research in Human Resources Management/ Organization Behaviour 3
COMM 646-3	Marketing Research 1
COMM 647-3	Marketing Research 2
COMM 648-3	Marketing Research 3
COMM 656-3	Research in Operations Management/ International Business 1
COMM 657-3	Research in Operations Management/ International Business 2
COMM 658-3	Research in Operations Management/ International Business 3

## Additional Required Courses

(taken in either first or second year)

STAT 671-3	Linear Models
STAT 675-3	Methods for Multivariate Data

With permission of the Chair of the MSc Program in Business Administration, alternative courses in other programs may be taken as substitutes for STAT 671-3 and STAT 675-3 if the STAT courses are not available when needed to meet MSc Program requirements. When the above two STAT courses are available they are to be taken in preference to alternative courses.

# Community Health Science (MSc Program)

Graduate Supervisors are noted below but faculty from other programs listed in the Calendar may co-supervise students as well.

Henry Harder, Professor  
Cindy Hardy, Professor (Psychology)  
Chow Lee, Professor (Biochemistry, Chemistry)  
Martha MacLeod, Professor (Nursing)  
Kenneth Prkachin, Professor (Psychology)  
Stephen Rader, Professor (Biochemistry, Chemistry)  
Glen Schmidt, Professor (Social Work)  
Shannon Wagner, Professor  
Sarah deLeeuw, Associate Professor (Northern Medical Program)  
R. Luke Harris, Associate Professor  
Dawn Hemingway, Associate Professor (Social Work)  
Peter MacMillan, Associate Professor (Education)  
Margot Parkes, Associate Professor and Canadian Research Chair, Health, Ecosystem and Society  
Geoffrey Payne, Associate Professor (Biochemistry, Northern Medical Program)  
Kevin Smith, Associate Professor  
Mamdouh Shubair, Assistant Professor  
Russ Callaghan, Adjunct Professor  
Kuo-Hsing Kuo, Adjunct Professor  
Josee Lavoie, Adjunct Professor  
William Tippett, Adjunct Professor

Website: [www.unbc.ca/health-sciences/community-health](http://www.unbc.ca/health-sciences/community-health)

The aim of this Program is to provide opportunity for health professionals and others interested in working in the health fields with the knowledge and skills to conduct community-based research, and to develop an enhanced understanding of health care systems and policy. The program provides students with relevant health research and critical appraisal skills, and opportunities to engage in a variety of health-related topics. In addition, nurses who wish to pursue a program that enhances their clinical skills may follow a nursing stream that has been established in this program.

Current students in the Program come from a wide variety of backgrounds. These include health professionals such as nurses, social workers, occupational therapists, and physicians, as well as graduates from Science and other related programs.

## Admission

Application deadlines can be found in the Graduate Programs Admissions and Regulations section of the Graduate Calendar at <http://www.unbc.ca/calendar/graduate/admissions>.

The Community Health Science MSc Program accepts students for the September Semester.

In addition to meeting the admission application requirements outlined in Section 1.0 of the Graduate Admissions and Regulations, all applicants to the Community Health Science MSc Program are required to submit a Criminal Record Check search prior to the first day of classes in their entry semester.

Domestic applicants must supply a Criminal Record Check search result after receiving an offer of admission and before the first day of classes; the search result is not required with the application. International applicants must submit a Criminal Record Check search result completed by their local policy authority upon application, and will also be required to submit a British Columbia Criminal Record Check if offered admission. The Office of the Registrar will provide instructions to domestic and international applicants who have accepted offers of admission on how to complete a British Columbia Criminal Record Check.

## Prerequisites

An undergraduate course in statistics or biostatistics. In addition to courses taught in departments of Mathematics or Statistics, courses that are included in social sciences programs such as psychology or sociology, and in the curricula of undergraduate health professions, meet this requirement.

An undergraduate course in research methodology. Appropriate courses include those found in social science undergraduate programs, and in the curricula of undergraduate health professions.

## Requirements

Seven courses (21 credit hours) at the graduate level, and a thesis (9 credit hours) are required.

The following courses must be completed by ALL students as part of their program.

One (1) course in Epidemiology:  
HHSC 601-3 Principles of Epidemiology

One (1) Canadian Health Care Course:  
HHSC 602-3 Organization and Financing of Canadian Health Care  
or POLS 603-3\* Social and Health Policy and Administration

\*Note: POLS 603-3 is precluded if the student already has credit for POLS 403-3.

One (1) Research Methods Course:  
HHSC 700-3 Advanced Techniques in Epidemiology  
or HHSC 703-3 Qualitative Research Approaches in Health and Human Sciences

# Graduate Programs: Community Health Science

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One (1) Graduate Statistics Course:

EDUC 602-4 Educational Research Data and Analysis  
or PSYC 600-4 Quantitative Methods I  
or another graduate level statistics course approved by the Program.

## **Additional Course Requirements**

Three courses (9 credit hours), chosen in consultation with the advisor.

Examples of courses taken by our students are:

HHSC 603-3	Community Research Methods
ECON 610-3	Health Economics
EDUC 603-4	Advanced Educational Research Data Analysis
GEOG 628-3	Medical Geography
PSYC 605-4	Quantitative Methods II
PSYC 620-3	Health Psychology
PSYC 720-3	Cross-Cultural Communication in Health Care Settings
SOCW 610-3	Wellness: Alternate Approaches
NURS 701-6	Advanced Clinical Practice in Community Health Nursing
NURS 702-6	Continuing Community Care
NURS 703-3	Health Program Development and Evaluation

## **Thesis**

The thesis (HHSC 799-9) shall be assigned nine credit hours.

## **Transfer Credit**

A maximum of two courses (6 credit hours) completed with at least a B standing at a recognized University may be transferred with the approval of the advisor and the Chair of the School of Health Sciences.

# Development Economics (MA Program)

Baotai Wang, Professor and Chair

Paul Bowles, Professor

Fiona MacPhail, Professor

Jalil Safaei Borojeny, Associate Professor

Ajit Dayanandan, Associate Professor

Karima Fredj, Associate Professor

Bryan Bogdanski, Adjunct Professor

Website: [www.unbc.ca/economics/graduate-programs](http://www.unbc.ca/economics/graduate-programs)

Economic development remains a critical issue for more than three-quarters of the world's population who reside in countries classified as "low income" or "middle income." The causes and consequences of economic development remain contested issues. This academic program considers the changing global, regional and national contexts for economic development; the policy lessons that can be learned from comparative studies; and the tools required to enable development economists to contribute to the development process.

Economic development cannot be studied in isolation from other dimensions of development.

An understanding of poverty, for example, requires not only economic analysis but also an understanding of the insights provided by other social and health sciences. The training of a development economist must therefore expose students to interdisciplinary approaches to development.

The Master of Arts degree in Development Economics is available on a full-time or part-time basis, involving coursework and the mandatory completion of a graduate project or thesis. Upon admission into the Development Economics MA program, each student will be assigned a supervisor, who will work closely with the students to monitor their program of study and progress. In consultation with the supervisor, students will choose courses designed to complement and inform their areas of interest.

## Admission Requirements

Applicants to the UNBC Development Economics MA program must follow the admission requirements outlined in Section 1.0 of the UNBC Graduate Academic Calendar. Applicants normally should have a four-year undergraduate degree that is equivalent to a UNBC degree in Economics. In addition to these requirements, applicants must also provide a sample of written work (usually a senior-level undergraduate essay or research paper) as part of their application. Entrance to the MA will be competitive: only applicants with a record of excellence in undergraduate work, strong letters of academic recommendation, and strong letters of intent will be considered. In their letters of intent, applicants should demonstrate evidence of interest in the MA's areas of specialization (Development Economics).

Application deadlines are found in this calendar under "Semester Dates," or online at [www.unbc.ca/calendar/graduate](http://www.unbc.ca/calendar/graduate), also under "Semester Dates." The Development Economics MA Program accepts students for the September and January Semester.

For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).

## Requirements

The course of study is composed of a minimum total of 24 credit hours of work for the project option and a minimum of 27 credit hours of work for the thesis option. First, students are required to complete 5 courses totaling 15 credit hours. Second, students are required to produce (i) both a detailed project proposal and bibliography and to defend, in a formal oral examination, a 9-credit hour project of a maximum of 50 pages in length or (ii) a detailed thesis proposal and to defend, in a formal oral examination, a 12 credit thesis of a maximum of 75 pages.

## Required Courses

ECON 601-3	The Global Economy
ECON 604-3	Poverty, Inequality and Development
ECON 710-3	Macroeconomic Policy for Development
ECON 712-3	Applied Econometrics

## Required Research

ECON 798-9	MA Project or
ECON 799-12	MA Thesis

In addition, any student who does not, at the time of entry to the program, have a course in advanced microeconomics at the undergraduate level will be required to take ECON 451-3 (Advanced Microeconomics).

## Elective Course

The elective course is normally selected from graduate level Economics courses offered at UNBC and must be approved by the supervisor.

# Disability Management (MA Program)

Henry Harder, Professor  
Cindy Hardy, Professor (Psychology)  
Shannon Wagner, Professor  
Sarah deLeeuw, Associate Professor (Northern Medical Program)  
R. Luke Harris, Associate Professor  
Margot Parkes, Associate Professor and Canadian Research Chair,  
Health, Ecosystem and Society  
Mamdouh Shubair, Assistant Professor  
Arlene Ward, Adjunct Professor

Website: [www.unbc.ca/health-sciences/disability-management](http://www.unbc.ca/health-sciences/disability-management)

The program provides graduates with the knowledge and skills necessary to assist labour, management, insurance providers, employers, and employees with the development of successful work-entry or return-to-work strategies for persons with disabilities.

The program is attractive to students interested in integrating the fields of economics, community health, social work, psychology, education, and business. The combination of course work, research, and the practical application of knowledge gives students a well-rounded, applied education in the field of Disability Management.

The program is available at the Prince George campus, either full-time or part-time, or on a part-time basis via distance delivery on the World Wide Web. Please see the information below and our website [www.unbc.ca/health-sciences/disability-management](http://www.unbc.ca/health-sciences/disability-management) for additional details.

## Admission

Application deadlines can be found in the Graduate Programs Admissions and Regulations section of the Graduate Calendar at <http://www.unbc.ca/calendar/graduate/admissions>.

The Disability Management MA program accepts students for the September Semester.

In addition to meeting the admission application requirements outlined in Section 1.0 of the Graduate Admissions and Regulations, all applicants to the Disability Management MA program are required to submit a Criminal Record Check search prior to the first day of classes in their entry semester.

Domestic applicants must supply a Criminal Record Check search result after receiving an offer of admission and before the first day of classes; the search result is not required with the application. International applicants must submit a Criminal Record Check search result provided by their local policy authority upon application, and will also be required to submit a British Columbia Criminal Record Check if offered admission. The Office of the Registrar will provide instructions to domestic and international applicants who have accepted offers of admission on how to complete a British Columbia Criminal Record Check.

## Delivery Modes

There are two modes of delivery for the Disability Management (MA) Program: face to face and distance. Both have a thesis option or a comprehensive examination option. Each option is described separately below; courses for each delivery mode follow the description.

## Thesis Option

The Thesis Option consists of four components:

Core courses in Disability Management	12 credit hours
Research methods courses	6 credit hours
Electives	9 credit hours
Thesis	9 credit hours
Total	36 credit hours

All students in the Thesis Option are required to write a letter outlining their practical experience. If their experience is considered insufficient by the program they will be required to do a practicum in addition to all requirements listed above. In addition, all students in the Thesis Option are required to travel to the Prince George campus to fulfill some of their thesis requirements.

## Comprehensive Examination Option

The Comprehensive Examination Option consists of five components:

Core courses in Disability Management	12 credit hours
Research methods courses	6 credit hours
Electives	9 credit hours
Practicum or Major Paper	6 credit hours
Comprehensive Exam	3 credit hours
Total	36 credit hours

Students in the comprehensive examination option will be required to do a practicum unless they have significant experience in the field already. In that case they will write a letter outlining their experience and request that they are allowed to prepare a Major Paper in place of a Practicum.

## Requirements

### Face-to-Face Mode

The Face-to-Face Mode is available to those students who take the program full or part-time. The courses for the Face-to-Face Mode are listed below:

#### Core Courses

DISM 609-3	Professional Ethics in Health Care Management
DISM 710-3	Foundations in Disability Management
DISM 711-3	Disability Management: Legislation, Policy & Procedures
DISM 712-3	Disability Management Interventions

Other courses may be substituted or added with the approval of the student's Supervisory Committee.

#### Research Courses

Additional two courses from the following:

EDUC 602-4	Educational Research Data Analysis
EDUC 603-4	Advanced Educational Research Data Analysis
HHSC 603-3	Community Research Methods
HHSC 703-3	Qualitative Research Approaches in Health and Human Sciences
NURS 703-3	Health Program Development and Evaluation
PSYC 600-4	Quantitative Methods I
PSYC 605-4	Quantitative Methods II
SOCW 609-3	Advanced Quantitative Research

Other courses may be substituted or added with the approval of the student's Supervisory Committee.

### Elective Courses

Candidates must complete a minimum of 9 credit hours from the following list.

COMM 630-3	Organizational Studies
COMM 631-3	Labour Management Relations
DISM 720-3	Special Topics
DISM 798-(3-6)	Directed Studies
ECON 610-3	Health Economics
ECON 611-3	Cost Benefit Analysis
EDUC 613-3	Interpersonal Counselling Skills
HHSC 602-3	Organization and Financing of Canadian Health Care
POLS 603-3	Social and Health Policy in the Context of Health and Health Care
PSYC 620-3	Health Psychology
PSYC 720-3	Cross-Cultural Communication in Health Care Settings
SOCW 605-3	Community Work/Politics of Change
SOCW 698-3	Special Topics

Other courses may be substituted or added with the approval of the student's Supervisory Committee.

### Practicum (or Major Paper) and Comprehensive Examination, or Thesis

DISM 794-6	Disability Management Major Paper
DISM 795-6	Disability Management Practicum
DISM 796-3	Disability Management Comprehensive Examination
DISM 799-9	Disability Management Thesis

# Graduate Programs: Disability Management

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## Requirements

### Distance Mode

The Distance Mode is available to those students who take the program part-time. Students completing the Distance Mode have a restricted set of electives courses. Courses for the Distance Mode are listed below.

#### Core Courses

DISM 609-3	Professional Ethics in Health Care Management
DISM 710-3	Foundations in Disability Management
DISM 711-3	Disability Management: Legislation, Policy & Procedures
DISM 712-3	Disability Management Interventions

Other courses may be substituted or added with the approval of the student's Supervisory Committee.

#### Research Courses

HHSC 603-3	Community Research Methods
NURS 703-3	Health Program Planning, Community Development and Evaluation

Other courses may be substituted or added with the approval of the student's Supervisory Committee.

#### Elective Courses

Candidates must complete a minimum of 9 credit hours from the following list.

DISM 720-3	Special Topics
DISM 798-(3-6)	Directed Studies
HHSC 602-3	Organization and Financing of Canadian Health Care
POLS 603-3	Social and Health Policy in the Context of Health and Health Care
PSYC 620-3	Health Psychology
SOCW 605-3	Community Work/Politics of Change

Other courses may be substituted or added with the approval of the student's Supervisory Committee.

### Practicum (or Major Paper) and Comprehensive Examination, or Thesis

DISM 794-6	Disability Management Major Paper
DISM 795-6	Disability Management Practicum
DISM 796-3	Disability Management Comprehensive Examination
DISM 799-9	Disability Management Thesis

### Practicum

Students are involved in field-based learning activities for the purpose of pursuing and developing research/policy/administration/practice skills within a related employment area. The practicum component stresses independent learning, and permits students to test or develop theory in the context of fieldwork. The form of field practice components varies widely in accordance with the learning needs of the students. The practicum leads to a written report that reflects students' critical analyses of their practice settings.

The report further demonstrates a deepening of professional competence, analytical skills, and professional judgement, and represents a contribution to the knowledge and skill base of the profession. The duration of this component is equivalent to three months full-time employment.

### Major Paper

The Major Paper (MP) option is for those students who have written a letter outlining their experience in the disability management field and obtained permission allowing them to prepare a Major Paper in place of a Practicum (6 credit hours). It is the aim of the MP to acquaint students with the practice of scholarship. Such acquaintance will normally entail a critical treatment of relevant academic literature using theoretical or philosophical methods. If the student wishes to pursue empirical research, either quantitative or qualitative, the thesis option must be selected.

### Comprehensive Examination

The comprehensive examination option of study requires the successful completion of a comprehensive examination that evaluates a candidate's knowledge of theory, research and practice in his/her field of study.

### Thesis

An oral examination is required as per University regulations. All students taking the thesis option will be required to be in Prince George for the oral examination.



# Education (MEd Program)

Peter MacMillan, Associate Professor and Chair  
Margo Greenwood, Professor  
Bryan Hartman, Professor  
Andrew Kitchenham, Professor  
Willow Brown, Associate Professor  
Tina Fraser, Associate Professor  
Corinne Koehn, Associate Professor  
Linda O'Neill, Associate Professor  
Lantana Usman, Associate Professor  
Edward Harrison, Assistant Professor  
Alexander Lautensach, Assistant Professor  
VernaLynn McDonald, Assistant Professor  
Gregory Nixon, Assistant Professor  
Dennis Procter, Assistant Professor  
John Sherry, Assistant Professor  
Catherine Whalen, Assistant Professor

Website: [www.unbc.ca/education/master-of-education](http://www.unbc.ca/education/master-of-education)

The Master of Education Program is responsible for the preparation of professional educators who may pursue advanced study at the doctoral level and/or advanced professional employment.

As distinct from undergraduate degree programs that advance students' knowledge of their disciplines, graduate degree programs at the Master's level have the more difficult task of not only advancing students' knowledge to the point of mastery, but also preparing students to demonstrate that they are capable of advancing the knowledge of their disciplines. The MEd degree awarded under the authority of the School of Education includes the courses and supervised study necessary to meet this obligation.

## Admission

**Application deadlines can be found in the Graduate Programs Admissions and Regulations section of the Graduate Calendar at <http://www.unbc.ca/calendar/graduate/admissions>.**

In addition to full-time students, the Education degree programs attempt to accommodate part-time students who may hold full-time jobs. For this reason, most of the Education courses are offered in the late afternoon and evening, as well as during Summer Session, so they can be accessed by persons during their annual vacation. It is recommended that students plan to make full use of the Summer Session offerings to complete their degree within the prescribed time limit. It is also recommended that students complete EDUC 602-4 (Quantitative Research Design and Data Analysis) and EDUC 610-4 (Qualitative Analysis in Education during the first half of their MEd program.

## Requirements

Provided that such courses have not been associated with the receipt of either a degree or diploma from UNBC or another educational institution, students may apply to the Dean of Graduate Programs for up to six credits for previously completed graduate level course work that is equivalent to that completed in the MEd program. Where equivalent courses have been associated previously with the receipt of either a degree or diploma, students will be permitted to elect alternative courses from the MEd program to satisfy the requirements for the degree.

Students in an MEd Program may take up to six credits of elective course work from UNBC programs other than that in which they are completing their specialization or from other institutions under the Western Deans' Agreement (students require permission of their Academic Supervisor and the Education Graduate Program Chair). Except under highly unusual circumstances, thesis students will be advised to take the research seminar course, EDUC 795-3. Students completing a thesis may be advised to include EDUC 603-4 (Advanced Educational Research Data Analysis) in their degree program in addition to the required courses.

## MEd Program Requirements

### Thesis Requirement

The thesis route emphasizes academic study, research, and the successful completion of a thesis. This program pattern is designed to develop each student's ability to evaluate theory and practice, and conduct research that contributes to the discipline. The thesis route requires the successful completion of a minimum of 32 credit hours and a maximum of 38 credit hours of graduate course credit in the Multidisciplinary Leadership specialization, or a minimum of 38 credit hours in the Counselling specialization and 9 credit hours of supervised research culminating in the completion of a thesis and the successful defense of it in an oral examination.

### Project Requirement

The project route emphasizes the study of theory and practice, and the successful completion of an innovative research and/or development project that addresses a particular aspect of practice. This program pattern is designed to develop a student's ability to evaluate and improve professional practice in the discipline. The project route requires the completion of a minimum of 32 credit hours in the Multidisciplinary Leadership specialization, or a minimum of 38 credit hours in the Counselling specialization. This credit must include a minimum of 26 credit hours of graduate course work in the Multidisciplinary Leadership specialization, or a minimum of 32 credit hours in the Counselling specialization, and 6 credit hours of supervised work, culminating in the successful completion of a project.

# Graduate Programs: Education

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## Comprehensive Examination Requirement

The comprehensive examination route requires the successful completion of a comprehensive examination that evaluates a candidate's knowledge of theory, research, and practice in his/her field of study. This program route is designed to enhance and reinforce a student's knowledge of both theory and practice, as well as their interrelationship. The comprehensive examination route requires the successful completion of a minimum of 32 credit hours and a maximum of 38 credit hours of graduate course credit in the Multidisciplinary Leadership specialization, or a minimum of 38 credit hours in the Counselling specialization. This credit must include a minimum of 29 credit hours of graduate course work in the Multidisciplinary Leadership specialization or a minimum of 35 credit hours in the Counselling specialization, and 3 credit hours awarded upon the successful completion of a written comprehensive examination.

Application can be made to the School of Education to enter a thesis or project route after having completed at least 12 credit hours of course work.

The research seminar course, EDUC 795-3, is strongly recommended, and may even be required, if research is to be undertaken.

## Counselling

The Counselling specialization is designed to prepare counsellors to provide professional services and leadership in counselling and psycho-educational programs offered in schools, post-secondary institutions, social service agencies, and community health organizations. Students have the opportunity to choose the type(s) of counselling they wish to focus upon, and to complete periods of supervised clinical practice in practicum settings that are relevant to their interests, based on availability. The specialization includes an integrated core of required courses, elective courses, and a thesis, project or comprehensive examination. Counselling students are required to complete eight required courses, three elective courses, and a comprehensive examination. Application can be made to the School of Education to enter a thesis or project route after completion of at least 12 credit hours of course work. If approved, the thesis route would consist of eight required courses, one elective, and the thesis, while a project route would consist of eight required courses, two electives, and a project.

Admission to the MEd Counselling specialization at the Prince George campus occurs each September; deadline for applications is December 15 of the prior year. Admission to the program at regional campuses does not normally occur each year and will vary in response to demand and resources.

In addition to the admission application requirements outlined in section 1.0 of the Graduate Admissions and Regulations, applicants who are applying to the Prince George campus MEd Counselling specialization are required to have graduated with a Baccalaureate degree a minimum of two years prior to the admission date to which they are applying, and to have obtained some paid or unpaid work experience in a helping capacity at a counselling-related or teaching-related setting since receiving their Baccalaureate degree. The two year post-Baccalaureate requirement does not apply to admissions to the MEd Counselling specialization at regional campuses.

Example: Terry wishes to apply to the Prince George campus MEd Counselling specialization for the 2014 admissions. Terry graduated with a Baccalaureate degree in May of 2012 and six months later obtained employment as a probation officer. Terry's application meets this admissions criteria.

Example: Dan wishes to apply to the Prince George campus MEd Counselling specialization for the 2014 admissions. Dan graduated with a Baccalaureate degree in May of 2013. Dan does not have a minimum of two years between receiving his Baccalaureate degree and the date of admissions; therefore, the application does not meet this admissions criteria.

Example: Mary wishes to apply to the Prince George campus MEd Counselling specialization for the 2014 intake. Mary graduated with a Baccalaureate degree in May of 2010. Since then Mary has not accumulated any experience working in helping capacity in a counselling-related or teaching-related setting; therefore, the application does not meet admissions criteria.

Applicants are also required to submit a Curriculum Vitae or Resumé that indicates the number of hours in each employment or volunteer position. A list of any scholarships or publications should also be included.

## Criminal Record Review

In addition to meeting the admission application requirements outlined in Section 1.0 of the Graduate Admissions and Regulations, all applicants to the Education (MEd) Counselling program are required to submit a Criminal Record Check search prior to the first day of classes in their entry semester.

Domestic applicants must supply a Criminal Record Check search result after receiving an offer of admission and before the first day of classes; the search result is not required with the application. International applicants must submit a Criminal Record Check search result provided by their local policy authority upon application, and will also be required to submit a British Columbia Criminal Record Check if offered admission. The Office of the Registrar will provide instructions to domestic and international applicants who have accepted offers of admission on how to complete a British Columbia Criminal Record Check.

## Required Courses

EDUC 602-4	Quantitative Research Design and Data Analysis
EDUC 610-4	Qualitative Analysis in Education
EDUC 613-3	Interpersonal Counselling Skills
EDUC 711-3	Counselling Theory
EDUC 712-3	Counselling Practice
EDUC 714-3	Group Counselling Processes
EDUC 717-3	Ethics in Counselling
EDUC 719-3	Counselling Practicum

## Elective Courses

EDUC 603-4	Advanced Educational Research Data Analysis
EDUC 609 -3	Aboriginal/Indigenous Learners: History, Culture, and Ways of Knowing
EDUC 618-3	Family Counselling
EDUC 619-3	Counselling for Aboriginal/Indigenous Peoples
EDUC 620-4	Educational Assessment and Evaluation
EDUC 633-3	Human Development: Implications for Education
EDUC 634-3	Achievement Motivation
EDUC 635-3	Educating Exceptional Students
EDUC 636-3	Language and Learning Disabilities
EDUC 641-3	Principles of Instruction
EDUC 644-3	Educational Programs: Development, Implementation and Evaluation
EDUC 690-3	Health and Human Sciences: Interdisciplinary Seminar
EDUC 691-3	Education Programs: Interdisciplinary Seminar
EDUC 692-3	Special Topics
EDUC 693-3	Directed Reading: Independent study under the direction of a faculty member
EDUC 715-3	Career Counselling
EDUC 716-3	Clinical Counselling
EDUC 721-3	Individual Assessment of Aptitudes and Achievement
EDUC 795-3	Research Seminar

## Thesis, Project or Comprehensive Examination

EDUC 797-3	Comprehensive Examination
EDUC 798-6	MEd Project
EDUC 799-9	MEd Thesis

## Multidisciplinary Leadership (MDL)

The Multidisciplinary Leadership specialization is designed to prepare graduates to take on roles of responsibility and leadership in a number of educational and community environments. In particular, our graduates will develop skills in collaboration and communication, as well as specific leadership practices that enable the creation of positive and innovative organizational environments. At the same time, a rigorous academic focus provides the knowledge that is necessary to ground effective practice in the diverse and rich scholarship of leadership. Working from a philosophy of reflective engagement, students will be encouraged to engage in field studies that allow them to investigate the important social, economic, political, and cultural implications for contemporary forms of leadership.

The Multidisciplinary Leadership specialization requires completion of a minimum of 32 credit hours and a maximum of 38 credit hours, and includes required core courses, focus area courses, elective courses, and an option of one of three routes: a comprehensive examination (3 credit hours), a project (6 credit hours), or a thesis (9 credit hours). Students will choose from one of the focus areas within the Multidisciplinary Leadership specialization. Multidisciplinary Leadership students are required to complete four core courses, required focus area courses, and a sufficient number of elective courses to meet the minimum 32 credit hour graduation requirement, including a comprehensive examination. The number of electives will vary according to the route chosen.

The Multidisciplinary Leadership specialization is divided into three focus areas: Educational Leadership, Assessment and Evaluation, and Curriculum. The focus areas share a common core of leadership and methodological courses, but beyond that are designed to allow students to prepare for leadership roles in a variety of specialized educational contexts.

## Educational Leadership

The Educational Leadership focus area is designed for those individuals who want to specialize in school-based leadership. The specific management responsibilities of the school principal and the legal, economic, political, and social environment in which educational institutions operate are the central focus. Nevertheless, the scope of school leadership is more than managerial in nature, and other courses focus on the importance of building professional learning communities, accommodating diversity, the context of northern education, and creating positive learning environments that are central to effective educational leadership.

# Graduate Programs: Education

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## Assessment and Evaluation

The Assessment and Evaluation focus area allows for the development of strengths in the areas of quantitative data management and decision-making. Increasing levels of accountability have become a central goal of public school systems. Teachers and administrators increasingly focus on the importance of the links between assessment and effective teaching practice. This focus area emphasizes the role of assessment in school systems as well as the acquisition of the skills needed to engage in all aspects of educational research.

## Curriculum

The Curriculum focus area provides students with the maximum flexibility to self-direct their Master of Education degree content to meet their own needs and interests. As such, it does not have any core courses other than those common to all focus areas. Students will be able to select course topics which reflect personal and professional interests. This third focus area will also allow students in the current "Curriculum and Instruction specialization-Language in Education" focus area to convert to the Multidisciplinary Leadership specialization should they so choose.

The course requirements and courses for the Multidisciplinary Leadership specialization appear below.

## Required Core Courses

EDUC 602-4	Quantitative Research Design and Data Analysis
EDUC 606-3	Leading for Change
EDUC 609-3	Aboriginal/Indigenous Learners: History, Culture, and Ways of Knowing
EDUC 610-4	Qualitative Analysis in Education

## Required Educational Leadership Focus Area Courses

Two of the following six courses must be completed to meet the focus area requirements, the remaining three courses may become electives.

EDUC 615-3	The School Principalship
EDUC 616-3	Policy and Politics in Public Education
EDUC 617-3	Leading for Learning: Teacher Leadership and Principal Preparation
EDUC 626-3	Inclusive Education: Learning for All
EDUC 655-3	Collaboration, Communication and Community: Leaders as Community Builders
EDUC 656-3	Instructional Leadership

## Required Assessment and Evaluation Focus Area Courses

EDUC 603-4	Advanced Quantitative Data Analysis
EDUC 620-4	Educational Assessment and Evaluation

## Required Curriculum Focus Area Courses

Selected courses to be approved by the Supervisory committee.

## Elective Courses

EDUC 603-4	Advanced Quantitative Data Analysis
EDUC 615-3	The School Principalship
EDUC 616-3	Policy and Politics in Public Education
EDUC 617-3	Leading for Learning: Teacher Leadership and Principal Preparation
EDUC 620-4	Educational Assessment and Evaluation
EDUC 621-3	Individual Assessment of Aptitudes and Achievement
EDUC 626-3	Inclusive Education: Learning for All
EDUC 631-3	Educational Applications of Computer Technology
EDUC 633-3	Human Development: Implications for Education
EDUC 634-3	Achievement Motivation
EDUC 635-3	Educating Exceptional Students
EDUC 636-3	Language and Learning Disabilities
EDUC 641-3	Principles of Instruction
EDUC 644-3	Educational Programs: Development, Implementation and Evaluation
EDUC 648-3	Oral Traditions and Literacy Development
EDUC 649-3	Elementary Language, Literacy, and Literature
EDUC 650-3	Secondary Language, Literacy, and Literature
EDUC 651-3	Mathematics Education
EDUC 652-3	Science Education
EDUC 653-3	Social Studies Education
EDUC 655-3	Collaboration, Communication and Community: Leaders as Community Builders
EDUC 656-3	Instructional Leadership
EDUC 690-3	Health and Human Sciences: Interdisciplinary Seminar
EDUC 691-3	Education Programs: Interdisciplinary Seminar
EDUC 692-3	Special Topics
EDUC 693-3	Directed Reading: Independent Study under the direction of a faculty member
EDUC 795-3	Research Seminar

## Thesis, Project or Comprehensive Examination

EDUC 797-3	Comprehensive Examination
EDUC 798-6	MEd Project (Research or non-research option)
EDUC 799-9	MEd Thesis

## Special Education

The Special Education specialization prepares students to provide professional services and leadership in Special Education and educational programs offered in schools and other educational institutions. The program includes an integrated core of required courses, elective courses, and thesis, project, portfolio, or comprehensive examination routes.

This Special Education specialization is delivered online or by other distance technologies. It requires a minimum of 31 graduate credit hours for completion, with an option to take up to 10 additional elective credit hours. The Special Education specialization requires students to complete five required courses, and a sufficient number of elective courses to meet the minimum 31 credit hour graduation requirement including the portfolio (3 credit hours), comprehensive examination (3 credit hours), project (6 credit hours), or thesis (9 credit hours) routes.

### Curriculum

#### Required Core Courses

EDUC 601-3	Educational Research Design and Methodology
EDUC 633-3	Human Development: Implications for Education
EDUC 635-3	Educating Exceptional Students
EDUC 636-3	Language and Learning Disabilities

One of the following research courses is required; the other may be taken as elective credit:

EDUC 602-4	Quantitative Research Design and Data Analysis
EDUC 610-4	Qualitative Analysis in Education

Choose one of the following four routes to completion: Portfolio, Comprehensive Examination, Project, or Thesis.

#### 1. Portfolio

EDUC 796-3      Portfolio  
and  
a minimum of 12 credit hours of additional coursework selected from the list of electives below.

#### 2. Comprehensive Examination

EDUC 797-3      Comprehensive Examination  
and  
a minimum of 12 credit hours of additional coursework selected from the list of electives below

#### 3. Project

EDUC 798-6      M.Ed. Project  
and  
a minimum of 9 credit hours of additional coursework selected from the list of electives below

#### 4. Thesis

EDUC 799-9      M.Ed. Thesis  
and  
a minimum of 6 credit hours of additional coursework selected from the list of electives below

#### Elective courses\*

One of EDUC 602-4 and EDUC 610-4 may be taken as an elective provided the other is taken as a required core course.

EDUC 609-3	Aboriginal/Indigenous Learners: History, Culture, and Ways of Knowing
EDUC 620-4	Educational Assessment and Evaluation
EDUC 621-3	Classroom Assessment Practices
EDUC 622-4	Psychoeducational Assessment
EDUC 631-3	Educational Applications of Computer Technology
EDUC 632-3	Language Development: Implications for Education
EDUC 634-3	Achievement Motivation
EDUC 637-3	Interventions for Literacy Disorders
EDUC 638-3	Mathematic Disorders and Remediation
EDUC 639-3	School-Based Teams, Consultants, and Families
EDUC 640-3**	Focus on a Selected Disability
EDUC 642-3	Personal and Career Planning for Students with Special Needs
EDUC 795-3	Research Seminar (Strongly Recommended, and may be required by supervisor if EDUC 799-9 or EDUC 798 Project has been chosen for the completion route)

\* With the approval of the Graduate Supervisor and Graduate Program Chair, a student may complete up to 6 credit hours of graduate course work not from the above list. These elective credit hours may be other graduate-level EDUC courses, and/or from other UNBC graduate programs, and/or from other accredited Canadian universities via approved transfer agreements (e.g. Western Deans' Agreement).

\*\* This course focuses in depth on educational aspects of a specific disability or range of disabilities, such as FASD, Autism Spectrum Disorder, hearing disability and deafness, or visual impairment. The courses are named specifically: e.g., Focus on Autism, Focus on FASD. A student may take this course up to two times (each time with a different focus).

### Leading for Learning Graduate Certificate

The Leading for Learning Graduate Certificate is intended for those professionals who wish to receive a British Columbia Education Leadership Council approved certificate. The certificate prepares graduates to become recognized educational leaders whether in a teacher-leader or administrative-leader position. The certificate is designed to ladder into the MEd in Multidisciplinary Leadership (MDL).

#### Admission

Admission requirements are the same as for the MEd degree.

The Leading for Learning Graduate Certificate requires 15 credit hours of course work – that is, five courses, two of which are required courses in the MEd Multidisciplinary Leadership (MDL) specialization, and the other three of which are part of a series of acceptable courses for the Educational Leadership Focus Area of the MDL. The certificate courses are normally offered over a four-semester cycle. While it is expected that most certificate completers will continue with completion of a Masters of Education Multidisciplinary Leadership degree, students may choose to complete only the certificate. The schedule of courses offered on most UNBC campuses allows completion of the certificate first and in the sequence of courses as follows but this is not a requirement. Variation from this schedule of courses requires the permission of the MEd MDL Coordinator and School Chair. It is also possible to complete the MEd MDL without meeting all the requirements of the certificate.

#### Required Courses

- EDUC 606-3    Leading for Change
- EDUC 609-3    Aboriginal/Indigenous Learners: History, Culture, and Ways of Knowing

#### Plus three of:

- EDUC 615-3    The School Principalship
- EDUC 616-3    Policy and Politics in Public Education
- EDUC 617-3    Leading for Learning: Teacher Leadership and Principal Preparation
- EDUC 626-3    Inclusive Education: Learning for All
- EDUC 656-3    Instructional Leadership

A Leadership Development Portfolio and an Inquiry Project must also be completed concurrently in order to meet requirements of the certificate.

Students already enrolled in the MEd MDL specialization may complete these courses and receive the certificate, subject to a sequence of available courses being offered by the university.

Students applying to UNBC's Master of Education Multidisciplinary Leadership specialization with a fully or partially completed graduate diploma or certificate, developed under the BC Educational Leadership Council process in conjunction with the Association of BC Deans of Education, may be eligible to receive up to 15 credit hours of transfer credit, at the discretion of the Chair of the School of Education. For each course so credited the student will be rebated the equivalent of one 3 credit-hour, non-degree graduate course fee against the student's total Masters of Educations tuition.

# English (MA Program)

Karin Beeler, Professor and Chair  
Stan Beeler, Professor  
Robert Budde, Professor  
Dee Horne, Professor  
Lisa Dickson, Associate Professor  
Kristen Guest, Associate Professor  
Kevin Hutchings, Professor; Canada Research Chair, in Literature, Culture, and Environmental Studies  
Maryna Romanets, Associate Professor  
Blanca Schorcht, Associate Professor

Website: [www.unbc.ca/english](http://www.unbc.ca/english)

Literary representations both reflect and help to create our views of the world, including our social theories and practices; thus, the study of literature can provide students with insights concerning past and present concepts of personal and social identity, cultural traditions and beliefs, and interpersonal and cross-cultural relationships. Since the time of Aristotle, moreover, literary commentators have analyzed “setting” as an important formal aspect of literary writing; literary study can therefore help us to investigate, and perhaps to reconsider, our relationships to both our human and non-human environments. In today’s world, where efforts to resolve intercultural conflicts and environmental problems have taken on a profound sense of urgency, literary study provides a crucial forum for intellectual and ethical debate leading to the revision of cultural practice.

The study of English literature provides students with critical skills of analysis and synthesis, helping them to identify and understand complex problems, and encouraging them to conceptualize viable resolutions and alternative understandings. Perhaps more than any other academic discipline, English literature also emphasizes the importance of literacy, including the development of effective writing and oral presentation skills, thereby providing students with the communications skills so highly valued in the professional world.

The Master of Arts degree in English is a two-year program, available on a full-time or part-time basis, involving course work and the mandatory completion of a graduate thesis. Upon admission into the English MA program, each student will be assigned a supervisor, who will work closely with the student to monitor his or her program of study and progress. In consultation with supervisors and supervisory committee members, each student will choose courses designed to complement and inform the proposed thesis research, completing most of the course work during the first year of the program. The second year will be devoted primarily to the production of the thesis.

## Admission

Applicants to the UNBC English MA program must follow the admission requirements outlined in Section 1.0 of the Graduate Academic Calendar. Entrance to the MA is competitive; only applicants with a record of excellence will be admitted. Therefore, applicants must provide the following information with their applications:

- a senior-level undergraduate research paper as a writing sample;
- undergraduate transcripts;
- strong letters of academic recommendation;
- strong letter of intent;
- evidence of interest in the MA’s areas of research specialization (Literature, Culture, Place);
- the name of the faculty member who is willing to supervise their thesis work (if possible).

Application deadlines are found in this calendar under “Semester Dates” or online at: [www.unbc.ca/calendar/graduate](http://www.unbc.ca/calendar/graduate), also under “Semester Dates.” The English MA Program accepts students for the September Semester.

For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).

## Requirements

The course of study is composed of a minimum total of 30 credit hours of work. First, students are required to complete five courses totaling 15 credit hours, including ENGL 690-3, Bibliography, the mandatory course in research methodologies; ENGL 700-3, the mandatory course in Literature, Culture and Place; and three elective courses. In the required courses, students have the opportunity to engage in close intellectual dialogue and debate with fellow graduate students and professors, thereby cultivating the productive collegial relationships crucial to the development of a dynamic graduate student culture. With the exception of ENGL 699-3 (Advanced Independent Study in Literature, which faculty members supervise on an individual basis), all courses are offered as seminar courses. The three elective courses conform to pedagogical models followed by all 600-level courses listed in the UNBC Graduate Calendar. Second, students are required to produce both a detailed thesis proposal and bibliography at the beginning of their second year of study, and to defend, in a formal oral examination, a 15 credit-hour thesis of approximately 100 pages in length.

### **Creative Writing Thesis Option**

Although UNBC does not offer degrees in Creative Writing, the English Program will offer a limited number of MA candidates the opportunity to complete a 15 credit-hour creative thesis in lieu of an academic thesis. Successful applicants who wish to pursue this option will be admitted on the same basis and will fulfill the same course and thesis requirements as other English MA candidates. Permission to undertake a creative thesis will be at the discretion of the department, and will require that students submit proposals along with a substantial portfolio of previous creative work, e.g., published writing, 8-10 pages of original poetry, 20-25 pages of prose (i.e., a short story or novel excerpt), a dramatic script or screenplay, or a combination of these genres. The proposal should outline the form, scope, and subject matter of the Creative Writing thesis. In addition, students must demonstrate some critical and theoretical awareness of the approach they plan to take for the creative thesis; and, for applicants admitted to the program, the finished thesis will include an introduction of no fewer than 15 pages delineating this critical and theoretical awareness. Because of the high standards expected for the creative project and the Department's limited faculty resources in the area of creative writing, a limited number of students will be permitted to undertake this alternative. Students should therefore note that admission to the MA program in English does not guarantee permission to write a creative thesis.

### **Required Courses**

ENGL 690-3      Bibliography  
ENGL 700-3      Studies in Literature, Culture and Place

### **Required Thesis**

ENGL 799-15      MA Thesis

### **Elective Courses**

The supervisory committee ensures the appropriate selection of elective courses. All English graduate courses approved by Senate should be considered as potential electives.



# First Nations Studies (MA Program)

Ross Hoffman, Associate Professor and Chair  
Antonia Mills, Professor  
Margaret Anderson, Professor Emeritus  
Fyre Jean Graveline, Professor  
Margo Greenwood, Professor  
Blanca Schorcht, Associate Professor (English)  
Agnieska (Agnes) Pawlowska-Mainville, Assistant Professor  
Tina Fraser, Adjunct Professor  
Earl Henderson, Adjunct Professor  
Travis Holyk, Adjunct Professor  
Greg Lowan-Trudeau, Adjunct Professor  
Paul Michel, Adjunct Professor  
Deanna Nyce, Adjunct Professor

Website: [www.unbc.ca/firstnations](http://www.unbc.ca/firstnations)

The UNBC MA program in First Nations Studies establishes 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 orient students to question underlying assumptions of everyday study. A special emphasis is placed on creating opportunities for students to learn from and about the First Nations of the north. This program includes courses taught in First Nations communities, internships, and community-based research projects. Each student's program culminates in completion of either a thesis or major project.

In addition to the high priority given to the First Nations of northern British Columbia, offerings include topics relevant to the Aboriginal Peoples of Canada and indigenous peoples of the world. The areas of study within the program are: First Nations Issues and Approaches, emphasizing the development of theory and method for the understanding of contemporary issues; Northern Nations, which facilitates with the development of skills, knowledge, and experience in the study of the languages and cultures of northern British Columbia; and Aboriginal Health and Healing. Relationships with faculty in other graduate programs at UNBC enrich the options for interdisciplinary work in areas such as Health Sciences, Education, Political Science, Gender Studies, English, History, Environmental Studies, and Geography.

Application deadlines are found in this calendar under "Semester Dates" or online at: [www.unbc.ca/calendar/graduate](http://www.unbc.ca/calendar/graduate), also under "Semester Dates." The First Nations Studies MA Program admits students for the September Semester only. Admission occurs on a two year cycle. Refer to the "Application for Admission Deadline Dates."

For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).

## Requirements

The 30 credit hours that make up the MA in First Nations Studies are normally completed within 36 months of entry into the program. The first year and a half are devoted to course work and the development of a research proposal. The second year and a half are dedicated to completing a thesis or project. All students must take FNST 600-3 Foundations of First Nations Studies, FNST 602-3 The Practice of Research, two FNST 650 Special Topics courses, and FNST 795 Research Seminar. Students must also register in either the thesis (FNST 799-12) or project (FNST 797-12).

All the students in the cohort take the same required courses, focusing their individual course work and their research on their own particular area of interest. The FNST 650 Special Topics courses are developed relative to the research interests of the students within the cohort, the expertise of the faculty, and the parameters of the discipline. Students have the option to take other elective courses in addition to what the program requires.

The classroom segment of the FNST Masters program is delivered to a cohort of students, face-to-face, in a block format over a two-year period. The program intends to offer three-day sessions spanning one weekend once a month, from September to April. In-person attendance is mandatory.

Students are expected to demonstrate a general knowledge of the Aboriginal Peoples of Canada. At a minimum, this knowledge must be comparable in scope and depth to the material covered in FNST 100-3 The Aboriginal Peoples of Canada. Students lacking such knowledge on entering the program are required to make up the deficiency through suitable course work, normally during their first semester. Such course work does not count toward the course requirements for the program.

## Language Requirement

There are no language requirements. However, students should be aware that command of one or more languages other than English may be necessary in order to pursue particular types of research.

# Gender Studies (MA Program)

Jacqueline Holler, Associate Professor and Coordinator  
Sherry Beaumont, Professor (Psychology)  
Karin Beeler, Professor (English)  
Annie Booth, Professor (Ecosystem Science and Management)  
Gail Fondahl, Professor (Geography)  
Antonia Mills, Professor (First Nations Studies)  
Heather Smith, Professor (International Studies)  
Lisa Dickson, Associate Professor (English)  
Kristin Guest, Associate Professor (English)  
Dawn Hemingway, Associate Professor (Social Work)  
Fiona MacPhail, Professor (Economics)  
Catherine Nolin, Associate Professor (Geography)  
Maryna Romanets, Associate Professor  
Ang le Smith, Associate Professor (Anthropology)  
Si Transken, Associate Professor (Social Work)  
Dana Wessell Lightfoot, Associate Professor (History)  
Theresa Healy, Adjunct Professor

Website: [www.unbc.ca/gender-studies](http://www.unbc.ca/gender-studies)

The Gender Studies MA program at UNBC offers the opportunity to work with scholars in a variety of disciplines who share a focus on women and/or gender as a category of analysis.

The program has particular strengths in areas such as gender, literature, and cultural studies; gender, history, and anthropology; gender, colonialism, and postcolonialism; gender and globalization; feminism, justice, and ethics; gender and health; and gender and international studies. Gender Studies MA students have the opportunity to design a course of study that incorporates gender- or feminism-based methodologies and interdisciplinarity while developing expertise in an area of concentration. While providing a transnational frame of reference, we also pay attention to the national and regional; students will therefore emerge from the program with both a broad analytical framework and a well-developed focus.

Application deadlines are found in this calendar under "Semester Dates" or online at: [www.unbc.ca/calendar/graduate](http://www.unbc.ca/calendar/graduate), also under "Semester Dates." The Gender Studies MA Program accepts students for the September and January Semesters.

For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).

## Requirements

### MA with Thesis

The MA with thesis is 24 credit hours in total, normally taking up to two years.

Fifteen credit hours (five courses) plus GNDR 700-9 (Gender Studies Thesis) are required. Students may take a maximum of four courses per semester. The thesis will include a written text (maximum of 100 pages) and will be defended in an oral examination. Students interested in alternative forms of presentation must obtain special permission from the Chair of the program and Dean of Graduate Programs.

MA thesis work is expected to be original, and make a substantive contribution to knowledge and the means of expressing that knowledge.

Students are required to include in their credit hours GNDR 611-3 (Feminist Theories). Students working in the field of Social Science research are required to include in their credit hours GNDR 611-3 (Feminist Theories) and GNDR 609-3 (Advanced Feminist Methods).

### MA without Thesis

The MA with course work only is 24 credit hours, and can be completed in one year.

Twenty-one credit hours (seven courses) plus GNDR 701-3 (Gender Studies Major Research Paper) are required. Students may take a maximum of four courses per semester. The major research paper is expected to be 30 to 40 pages, and to extend from an original research project already initiated in course work.

Students are required to include in their credit hours GNDR 611-3 (Feminist Theories). Students working in the field of Social Science research are required to include in their credit hours GNDR 611-3 (Feminist Theories) and GNDR 609-3 (Advanced Feminist Methods).

Students taking either the MA with Thesis or MA without Thesis may take courses in other graduate programs with the approval of the Chair or the Coordinator of the Gender Studies Program and the Dean of Graduate Programs. The interdisciplinary component in the Gender Studies program encourages students to articulate their studies with other interdisciplinary graduate programs such as International Studies, Environmental Studies, and First Nations Studies. Students may also choose to take graduate courses in the regular disciplinary fields such as History, Biology, and Political Science.

# Health Sciences (PhD Program)

Henry Harder, Professor  
 Cindy Hardy, Professor (Psychology)  
 Chow Lee, Professor (Biochemistry, Chemistry)  
 Martha MacLeod, Professor (Nursing)  
 Kenneth Prkachin, Professor (Psychology)  
 Stephen Rader, Professor (Biochemistry, Chemistry)  
 Glen Schmidt, Professor (Social Work)  
 Sarah de Leeuw, Associate Professor (Northern Medical Program)  
 Dawn Hemingway, Associate Professor (Social Work)  
 R. Luke Harris, Associate Professor  
 Ross Hoffman, Associate Professor (First Nations)  
 Peter MacMillan, Associate Professor (Education)  
 Margot Parkes, Associate Professor and Canada Research Chair in Health, Ecosystem and Society  
 Geoffrey Payne, Associate Professor (Biochemistry, Northern Medical Program)  
 Shannon Wagner, Associate Professor  
 Russell Callaghan, Adjunct Professor  
 Kuo-Hsing Kuo, Adjunct Professor  
 Josée Lavoie, Adjunct Professor

The PhD in Health Sciences offers students the opportunity to develop an advanced level of understanding and training in any one scientific discipline, or a combination of scientific disciplines, related to human health, the processes (e.g. sociological, biological, chemical, physical) that influence human health or the organization and delivery of health services. The PhD in Health Sciences promotes an integration of the linkages between social, ethical, political, and cultural dimensions, and an understanding of basic biological, ecological and physical determinants of health. Students are expected to acquire a familiarity with the scope of disciplines that contribute to knowledge and practice in health while developing expertise in a specific disciplinary area. Graduates from this program will have an area of concentration and a familiarity with other disciplines and be able to work constructively and show leadership within the increasingly complex multidisciplinary frameworks that are evolving across all parts of the health continuum.

Students must complete 6 credit hours of a mandatory interdisciplinary seminar series: HHSC 800-3 Graduate Seminar I and HHSC 801-3 Graduate Seminar II. The seminars cover core topics of Grant Writing and Project Management, Ethics and Human Subjects Research, and Methodologies Employed in Health Sciences Research as well as presentations on areas of concentration by faculty and senior students in the program..

Students must also complete a 12 credit hour thesis (HHSC 890-12 PhD Dissertation) to the satisfaction of their committee. In addition, they must also take a minimum of 6 credit hours in elective courses relevant to their area of concentration as determined by their supervisor. Students may be required, at the discretion of their supervisory committee, to take additional courses within their area of concentration.

Students must pass three separate checks on their academic progress towards a PhD: a qualifying exam, a defense of the thesis proposal, and a defense of the thesis. The qualifying exam is tailored to ensure a cross-disciplinary aptitude, and tests the student's grasp of the core interdisciplinary materials presented in the seminar series as well as core concepts of their area of concentration derived from elective course work. The thesis proposal defense is tailored to ensure students have a grasp of their area of concentration, and therefore examines the level of knowledge within the area of concentration. Upon successfully passing both the qualifying examination and the thesis proposal defense, students are granted candidate status, and embark upon the thesis work under the supervision of their faculty advisor. Following completion of the research, candidates must defend their thesis before an examination committee.

## Summary

HHSC 800-3 Graduate Seminar I	3 credit hours
HHSC 801-3 Graduate Seminar II	3 credit hours
Elective Courses	6 credit hours
HHSC 890-12 PhD Dissertation	12 credit hours
<b>Total Required</b>	<b>24 credit hours</b>

## Admission

Students are normally expected to hold a Master's degree from an accredited post-secondary institution. Normally, applicants must hold a cumulative GPA of 3.33 (B+) from the Baccalaureate and Master's degree, to be calculated over the last 30 credits of graded academic work.

In addition to a completed UNBC Graduate Application Form, applicants must provide official transcripts from all post-secondary institutions attended, a statement of intent indicating the student's research interests, possible future career aspirations, and perceived fit within the Faculty mandate and research directions; three letters of reference; and a sample of written academic work. GRE scores are optional. Only students with high GPAs and innovative research interests are likely to be successful in their applications.

Application deadlines are found in this calendar under "Semester Dates" or online at [www.unbc.ca/calendar/graduate](http://www.unbc.ca/calendar/graduate), and also under "Semester Dates." The Health Sciences PhD Program accepts students for the September semester.

For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).

## Recommended Progression

### **First Year: Mandatory Interdisciplinary Seminar, Elective Graduate Courses, Qualifying Exam**

During the first two semesters, students take a mandatory interdisciplinary seminar series: HHSC 800-3 and HHSC 801-3 Graduate Seminars. Based upon determinations made either prior to entry into the program, or in the first semester, elective courses determined by the supervisor will be also taken.

### **Second Year: Area of Concentration, Defense of Thesis Proposal**

If students are required to take additional courses to address deficiencies within their area of concentration, they may select courses from relevant course offerings within the UNBC programs, or from other accredited graduate programs in other post-secondary institutions. In addition, students normally conduct some exploratory research in their area of concentration. Students in their second and third years are expected to present on their area of concentration to the interdisciplinary seminar series as an exercise in communicating their research field to a more general audience.

At the end of their course work, PhD students normally take a qualifying exam consisting of written and oral components. The general part of the exam should demonstrate the student's ability to synthesize and extrapolate from the core interdisciplinary materials presented in the seminar program. The specialty part of the exam assesses the student's background knowledge and familiarity with the theory and methodology associated with his/her thesis topic. Students normally take the qualifying exam upon completion of the 12 credit hours of required core courses.

Once course work is complete, students work towards finalizing a thesis proposal, which should demonstrate academic rigour and be of publishable quality. Students are expected to present the thesis proposal before their committee, and to demonstrate their knowledge within their area of concentration. Normally, this defense is scheduled either at the end of the third semester or at the beginning of the fourth semester of study.

### **Third to Fifth Year: Thesis**

Upon successful completion of course work, and the successful completion of the qualifying exam and the defense of the thesis proposal, the student is officially designated as a PhD candidate, and proceeds to full-time work on the thesis under the direct supervision of the advisor and any other designated committee members. Once the thesis proposal has been approved by the committee, any major changes made to the thesis proposal require further approval of the committee.

Under normal circumstances, students are expected to complete their research and the writing of the thesis within three years of becoming a doctoral candidate.

# History (MA Program)

Jacqueline Holler, Associate Professor and Chair  
 Theodore Binnema, Professor  
 Jonathan Swainger, Professor  
 Dana Wessell Lightfoot, Associate Professor  
 Benjamin Bryce, Assistant Professor  
 Neil Lettinga, Adjunct Professor  
 Virginia Lettinga, Adjunct Professor  
 Nathan Smith, Adjunct Professor

Website: [www.unbc.ca/history](http://www.unbc.ca/history)

The Department of History offers the opportunity for graduate study leading to the MA degree. The program's regional specifications are Canada, Britain and its empire, and the Iberian world. Gender, legal, environmental, and indigenous histories are particular areas of strength. Students will be accepted subject to the availability of an appropriate supervisor.

The MA program comprises two streams. Thesis students complete 15 credit hours of graduate coursework and a 100-page thesis based on original research. Project students complete 18 credit hours of coursework and a substantial project.

Upon admission to the MA program, each student is assigned a supervisor who is responsible for the student's program and progress. There are two components to the MA program: course work and thesis/project. Students are normally expected to complete their course work in two semesters, and the total program in four semesters.

## Admission

In addition to the admission application requirements outlined in Section 1.0 of the Graduate Academic Calendar, applicants must also supply a sample of written work (thesis or paper) as part of their application.

Application deadlines are found in this calendar under "Semester Dates" or online at [www.unbc.ca/calendar/graduate](http://www.unbc.ca/calendar/graduate), also under "Semester Dates." The History MA Program accepts students for the September and January Semesters.

For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).

## Requirements

Candidates for the MA degree must satisfy the following requirements.

### Course Work

Each students will be required to write a thesis or project.

### Thesis

HIST 750-15 MA Thesis

Thesis students are expected to take five graduate courses (15 credit hours). Courses will be thematic in approach, and students will, in consultation with their supervisor, select from the list of courses below, with the exception of HIST 700-3 and HIST 745-3 which are compulsory. Students may take one of their courses in a related program.

Students are expected to decide on their thesis topic, sources, and approach as part of HIST 745-3, which is normally taken in their second semester. The thesis must be based on original research, and demonstrate an understanding of historical writing and practice, as well as independent, critical thought.

### Project

HIST 749-12 Graduate Project

Project students are required to pass six graduate courses (18 credit hours). Students must select courses from the list below, with the exception of HIST 700-3 and HIST 745-3, which are compulsory. Students may take two of their courses in a related program.

The project is an alternative to a thesis. Candidates must defend the project before a committee of academic and community examiners. The criteria for examination stipulate that the project must be substantial, must have practical application, and must include actual implementation or an implementation plan.

### Required Courses

HIST 700-3 Seminar in Historical Methodology and Research  
 HIST 745-3 Historical Methods and Approaches

### Elective Courses

HIST 701-3 Themes in the History of Gender  
 HIST 702-3 Themes in Native History  
 HIST 704-3 Themes in Environmental History  
 HIST 705-3 Themes in the History of International Relations  
 HIST 707-3 Themes in Cultural History  
 HIST 708-3 Themes in Social History  
 HIST 709-3 Themes in Legal History  
 HIST 799-3 Independent Study

# Interdisciplinary Studies (MA & MSc Programs)

IDIS Program Chair – Dr. Sarah de Leeuw

The IDIS program covers the scope of multiple disciplines, enabling faculty from other graduate programs to participate in this program. Therefore, the IDIS Graduate Program welcomes all faculty members eligible to be supervisors to participate in the IDIS Graduate Program.

Not all advances in knowledge, or in creativity, take place within established disciplines. In fact, innovative thinking and creativity may be unleashed by diminishing, bridging, or deliberately removing the boundaries between disciplines. The University of Northern British Columbia provides two options for interdisciplinary inquiry.

The MA option in Interdisciplinary Studies is specifically designed to enable students to pursue intellectual development outside the constraints of traditional disciplines in the Humanities and Social Sciences. The MSc option in Interdisciplinary Studies is specifically designed to enable students to go beyond the constraints of traditional disciplines in the Physical and Life Sciences. Applicants interested in interdisciplinary studies should consult the Chair of the IDIS program directly for advice on which option would be most appropriate for their research interests, and on how to tailor a course of study appropriate to their interests.

Applicants may undertake an Interdisciplinary Studies Program only under the following circumstances:

- The applicant has a well-conceived idea of the courses needed for the IDIS Program and of a thesis topic that the applicant wishes to pursue.
- The intellectual rationale of the thesis must be interdisciplinary; that is, it must draw from at least two of the university programs described in the UNBC Graduate Calendar.

Students in the Program must complete the following requirements:

- All interdisciplinary programs shall include a 12 credit-hour thesis, and shall be composed of a minimum total of 27 credit hours.
- The number of courses included in an IDIS Program shall be at least four in addition to the IDIS core course.
- A student may not take all courses, nor all but one course, from the same program.

## Steps to Take in Arranging an Interdisciplinary Graduate Program

It is the applicant's responsibility to provide a one page research statement. To assist in the preparation of the needed documentation, applicants should follow the steps following:

1. Determine that you meet the general graduate admission requirements at the University of Northern British Columbia by reviewing the admission requirements in the calendar. See Graduate Programs Admissions and Regulations.
2. Determine that your research topic is interdisciplinary in nature.
3. Consult the graduate advisors from the academic units relevant to your proposal to obtain specific information on course requirements and prerequisites.
4. Prepare a one page research statement to give to potential supervisors (for assistance see the section on Guidelines for Preparing a Research Proposal presented below).
5. Select/confirm potential supervisors using the faculty listings in the University Calendar as well as the program websites. Arrange meetings or contact supervisors by telephone or e-mail. (Do not send inquiries to every faculty member in a program. Choose the appropriate contacts.)
6. Program willingness to participate in your academic program is required, necessitating signatures on the Interdisciplinary Graduate Program Proposal Coversheet as follows:
  - Student signs form and gives it to the Supervisor who then obtains signatures from the Supervisor's Chair, IDIS Program Chair, and Dean of Graduate Programs.
7. Submit your completed Application for Admission and the Interdisciplinary Graduate Program Proposal Coversheet, along with your research statement, to the Graduate Studies Officer, Office of the Registrar. In addition, you need to identify at least one course that will be taken in the first semester, along with the required IDIS core course.
8. Arrange for official transcripts and three reference letters (at least two of the letters are to be academic) to be sent directly to the Graduate Studies Officer, Office of the Registrar.

## Admission

Application deadlines are found in this calendar under "Semester Dates" or online at: [www.unbc.ca/calendar/graduate](http://www.unbc.ca/calendar/graduate), also under "Semester Dates." The Interdisciplinary Studies MA and MSc Program accepts students for the September, January and May Semesters.

For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).

Students seeking admission to the Interdisciplinary Studies Program should apply directly to the Office of the Registrar.

### **Guidelines for Preparing a Research Proposal for an Interdisciplinary Program**

In the one page statement, you must identify the topic and the supervisory committee membership. You also must explain why the proposal requires an interdisciplinary approach.

The guidelines that follow are designed to assist you in preparing a properly documented application. You should put together an outline of your ideas, so that you can share this with potential supervisors. Once you have the agreement of a potential supervisor, you can seek their assistance in refining and completing the application.

#### **I. Research Statement**

1. Please specify the working title of your research. This should describe the topic and its key elements (e.g., time period, place, texts/authors, etc.).
2. Provide a statement of your research question(s) or research objective(s). The statement should be a clear, brief description of the topic area, with emphasis on the particular issue to be investigated in this area. Make sure to define terms and use language accessible to a non-specialist audience.
3. Identify what makes your research statement interdisciplinary.
  - Identify the academic courses and the experiences that have prepared you to undertake the proposed research project.
  - Specify the prospective courses that you wish to include in your program of study.
4. Consider the members of your proposed supervisory committee and the relevant expertise they will bring to the project.

Any eligible faculty member at UNBC may supervise students in the Interdisciplinary Studies Program.

# International Studies (MA Program)

Graduate supervisors are normally drawn from the Departments of Economics and International Studies.

Baotai Wang, Professor and Co-Chair  
Ken Wilkening, Associate Professor and Co-Chair  
Paul Bowles, Professor  
Fiona MacPhail, Professor  
Heather Smith, Professor  
Jalil Safaei Boroojeny, Associate Professor  
Ajit Dayanandan, Associate Professor  
Karima Fredj, Associate Professor  
Jacqueline Holler, Associate Professor  
Catherine Nolin, Associate Professor  
Chris Opio, Associate Professor  
Matias E. Margulis, Assistant Professor

Website: [www.unbc.ca/international-studies](http://www.unbc.ca/international-studies)

UNBC's innovative and interdisciplinary Master's degree in International Studies has three main streams: regional relations, international development, and global environmental policy. Students may pursue other subject areas provided the requisite faculty expertise can be identified. This program is managed jointly by the Departments of International Studies and Economics, with co-operation from faculty in Political Science, History, Geography, and Environmental Studies.

The regional relations stream encompasses a broad range of concerns. We have particular expertise in the Asia-Pacific, the Circumpolar North, Russia, the Americas, Canada's external relations, international institutions, and aspects of international security. (The program does not focus to any significant extent on regional relations in such other areas as the Middle East, South Asia or Africa.)

The focus of the international development stream is to provide students with an understanding of the global forces and factors affecting developing countries, of the dimensions of human well-being and the strategies for their improvement in developing countries, and of the theoretical and practical tools used in applied development analysis.

The global environmental policy stream encompasses policies and institutional arrangements to manage transboundary, regional, and global ecological problems, such as ozone depletion, acid rain, climate change, and northern and Arctic resources. Another emphasis is the harmonization of environment and economic development in the poor and industrializing nations of the South.

International language training (in languages other than English and French), internship, co-op, and study abroad experiences can be incorporated into the program. Recognizing the importance of language and culture, the Department of International Studies currently offers undergraduate courses in introductory and intermediate Japanese, Russian, and Mandarin, and these are open to graduate students.

Financial assistance in the form of teaching assistantships is available to some full-time students, in accordance with University regulations.

## Requirements

The program includes both a thesis and a non-thesis option. The thesis option involves four courses and a thesis (maximum 20,000 words). The non-thesis option requires five courses combined with a shorter research project.

Whichever stream a student chooses, there is a requirement for a theory course, a methodology course, and two or more subject-specific courses. For the regional relations and global environmental policy streams, the theory requirement is INTS 701-3 (State of the Discipline) and the required methodology course is INTS 700-3 (Research Methods). For the international development stream, the required theory course is ECON 601-3 (Global Economy), while the methodology requirement is satisfied either by INTS 700-3 (Research Methods), or ECON 611-3 (Cost-Benefit Analysis). In addition, students in the international development stream are also required to take the subject-specific course ECON 604-3 (Poverty, Inequality and Development).

Application deadlines are found in this calendar under "Semester Dates" or online at: [www.unbc.ca/calendar/graduate](http://www.unbc.ca/calendar/graduate), also under "Semester Dates." The International Studies MA Program accepts students for the September and January Semesters.

For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).



# Mathematical, Computer, Physical, and Molecular Sciences (MSc Program)

Chair of the Mathematical, Computer, Physical and Molecular Sciences  
Graduate Committee: Dr. Margot Mandy

## Biochemistry

Chow H. Lee, Professor  
Stephen Rader, Professor  
Kerry Reimer, Professor  
Andrea Gorrell, Associate Professor  
Geoffrey Payne, Associate Professor  
Sarah Gray, Associate Professor  
Jeffrey Northrop, Adjunct Professor  
Martha Stark, Adjunct Professor

## Chemistry

Joselito Arocena M., Professor  
Erik Jensen, Professor  
Chow H. Lee, Professor  
Jianbing Li, Professor  
Margot Mandy, Professor  
Guy Plourde, Professor  
Stephen Rader, Professor  
Kerry Reimer, Professor  
Ron Thring, Professor  
Andrea Gorrell, Associate Professor  
Todd Whitcombe, Associate Professor  
Jeffrey Northrop, Adjunct Professor  
Martha Stark, Adjunct Professor

## Computer Science

Liang Chen, Professor  
Waqar Haque, Professor  
Lee Keener, Professor  
Saif Zahir, Professor  
Alex Aravind, Associate Professor  
David Caspersen, Associate Professor  
Jernej Polajnar, Associate Professor  
Roger Wheate, Associate Professor  
Charles Brown, Adjunct Professor  
Desanka Polajnar, Adjunct Professor

## Mathematics

Lee Keener, Professor  
Iliya Bluskov, Professor  
Jennifer Hyndman, Professor  
Pranesh Kumar, Professor  
Samuel Walters, Professor  
David Caspersen, Associate Professor  
Kevin Keen, Associate Professor  
Daniel Ryan, Associate Professor  
Edward Dobrowski, Adjunct Professor

## Physics

Ahmed Hussein, Professor Emeritus

Ian Hartley, Professor  
Erik Jensen, Professor  
Elie Korkmaz, Professor  
Margot Mandy, Professor  
Mark Shegelski, Professor  
Matthew Reid, Associate Professor  
Patrick Mann, Adjunct Professor

Website: [www.unbc.ca/calendar/graduate/math-comp-science](http://www.unbc.ca/calendar/graduate/math-comp-science)

Mathematical, Computer, Physical and Molecular Sciences (MCPMS) is one stream of the Master of Science degree in the College of Science and Management. Thesis and project options are available. The thesis option has, as a substantial component, the completion of an original research program, culminating in the preparation of a thesis, and prepares graduates for careers in research or for further academic study. The project option provides training across disciplines particularly suitable to individuals with more defined career objectives, as well as provides a mechanism for non-traditional students (e.g., working students, teachers, and professionals) to upgrade their skills. Students within the MCPMS stream will, upon successful completion of the degree requirements outlined herein, obtain an MSc with one or any combination of the following study areas noted on their transcript: Mathematics, Biochemistry, Computer Science, Chemistry, and Physics.

# Graduate Programs: Mathematical, Computer, Physical, & Molecular Sciences

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All students must participate in a Graduate Seminar course (one of MCPM 704-1.5, BCMB 704-1.5, NRES 704-1.5, CPSC 704-1.5, MATH 704-1.5, or CHEM 714-1.5) for at least two semesters during their course of studies. Normally, students in the study area of Physics or a combination of study areas including Physics are expected to take PHYS 710-3.

## Thesis Option

The Master of Science thesis option is designed for candidates who wish to develop career interests related to scientific research or who intend to pursue further academic research degrees. The degree is expected to attract students from traditional science disciplines such as physics, chemistry, biochemistry, mathematics, and computer science. MSc students within the MCPMS stream are required to complete 3 credit hours of Graduate Seminar, a minimum of 12 credit hours of approved electives, and a 12 credit-hour thesis (MCPM 790-12). It is expected that the electives will consist of scientifically oriented courses and that the thesis will involve an independent investigation resulting in a scientific contribution.

The 12 elective credit hours must be graduate-level study (i.e., at or above the 600 level) selected from the science courses available at UNBC. A maximum of 6 credit hours from independent studies can be counted towards the elective requirement. Specific details of course work are determined by the research area undertaken by the student. The supervisory committee ensures the appropriate selection of elective courses, and may require a student to complete more than 12 elective credit hours if, for example, weaknesses in the student's background exist (including undergraduate prerequisites for graduate courses) or if additional courses are required for professional accreditation.

Related to the MSc thesis (MCPM 790-12), students are required to (a) make an oral presentation of the thesis proposal to the supervisory committee, (b) write an original thesis based on the research completed (in accordance with established UNBC guidelines), (c) give a public lecture on the completed thesis, and (d) present an oral defense of the thesis to the examining committee. All course requirements must have been satisfied prior to the oral defense.

## Summary of Thesis Option

Graduate Seminar	3 credit hours
Elective Courses	12 credit hours
MSc Thesis	12 credit hours
Total Required	27 credit hours

## Project Option

The Master of Science project option is designed for candidates who wish to upgrade their skills, or who are constrained in their ability to undertake a traditional research thesis. MSc students within the MCPM stream are required to complete 3 credit hours of Graduate Seminar, a minimum of 18 credit hours of approved electives, and a 6 credit-hour project. Given the course-intensive nature of this option, MSc projects are limited, subject to sufficient teaching resources and a critical mass of faculty within an area of defined specialization. It is expected that the electives will consist of scientifically oriented courses, and that the project will involve an independent investigation resulting in a scientific contribution, although this contribution need not include original research. Because of the high weighting of course offerings for this option, it is restricted to designated specializations that have been decided upon within each program area. Designation of a specialization implies that sufficient resources are available to ensure that required courses within the specialization can be offered to fulfill the requirements for the degree.

The 18 elective credit hours must be graduate-level study (i.e., at or above the 600 level) selected from the science courses available within the designated specialization. A maximum of 6 credit hours from independent studies can be counted towards the elective requirement. Normally, students in the study area of Physics or a combination of study areas including Physics are expected to take PHYS 710-3. Specific details of course work are determined by the nature of the project undertaken by each student. The supervisory committee ensures the appropriate selection of elective courses, and may require a student to complete more than 18 credit hours if weaknesses in the student's background exist (including undergraduate prerequisites for graduate courses) or if additional courses are required for professional accreditation.

In order to complete an MSc project successfully, a student is required to (a) make a presentation of the project proposal to the supervisory committee, (b) write a project report, (c) give a public lecture on the completed project, and (d) pass an evaluation of the project and report with the examining committee. All core and elective course requirements must have been satisfied prior to the oral presentation of the project.

## Summary of Project Option

Graduate Seminar	3 credit hours
Elective Courses	18 credit hours
MSc Project	6 credit hours
Total Required	27 credit hours

# Graduate Programs: Mathematical, Computer, Physical, & Molecular Sciences

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## Recommended Progression

The normal time for completion of the MSc is two academic years. While this is the recommended time line, it may be adjusted at the discretion of the supervisory committee to suit a particular student's research and program needs.

The Graduate Seminar courses (one or more of MCPM 704-1.5, NRES 704-1.5, BCMB 704-1.5, CPSC 704-1.5, MATH 704-1.5, CHEM 714-1.5) are offered during all September and January Semesters. Students are expected to enroll in a seminar course at least two times during their degree program.

Electives may be taken at any time during Years I and II. The sequencing of electives is determined by the student in discussion with the supervisory committee. Over the September and January Semesters of Year I, the student, under the direction of the supervisory committee, develops a thesis or project proposal. By the end of the second semester, the student should have successfully defended their proposal to the supervisory committee. This allows the student to undertake the collection of data during the Summer of Year I. It is expected that the student will have successfully defended the thesis or completed the evaluation phase of the project by the end of Year II.

## Admission, Regulations and Committee Structures

### Admission Requirements

In addition to the admission application requirements outlined in Section 1.0 of the Graduate Academic Calendar, acceptance to the MSc program is contingent upon the prospective student finding a member of the faculty to serve as her/his supervisor. Applicants must also provide a completed Teaching Assistantship Application and a completed Funding Worksheet. Both forms are included with the application material for this program. Normally, at least two of the three letters of recommendation, exclusive of any letter provided by an intended supervisor, must be from individuals who are able to comment on the applicant's academic and research potential. Application deadlines are found in this calendar under "Semester Dates" or online at: [www.unbc.ca/calendar/graduate](http://www.unbc.ca/calendar/graduate), also under "Semester Dates." The Mathematical, Computer, Physical and Molecular Sciences MSc Program accepts students for the September and January Semesters. At the specific request of the prospective supervisor, an applicant may be considered for May admission. For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).

## Transfer Students

On the recommendation of the program concerned, the Dean of Graduate Programs may accept courses taken at other institutions for credit toward a UNBC graduate program. At the time of application, it is recommended that applicants clearly state in a letter the intent to transfer courses and identify the courses to be considered for possible transfer.

## Normal Time Required for Completion

Normally, the degree should be completed in two years or less. Students may take longer to complete the degree depending on their personal circumstances and the nature of their research or Project involvement.

## Committee Structure

Students are advised by a supervisory committee consisting of at least three members, including the academic supervisor who will normally serve as the chair of the committee. At least one of the committee members must be from outside of the student's program. The committee will be struck during the student's first term of study.

# Natural Resources and Environmental Studies (MA Program)

Chair of the Natural Resources and Environmental Studies Graduate Program: Dr. Annie Booth

## Geography

Gail Fondahl, Professor (Geography)  
Greg Halseth, Professor, and Canada Research Chair, Rural and Small Town Studies (Geography)  
Neil Hanlon, Professor (Geography)  
Jueyi Sui, Professor (Environmental Engineering)  
Sarah deLeeuw, Associate Professor (Northern Medical Program)  
Zoe Meletis, Associate Professor (Geography)  
Catherine Nolin, Associate Professor (Geography)  
Roger Wheate, Associate Professor (Geography)

## Environmental Studies

Annie Booth, Professor (Ecosystem Science and Management)  
Gail Fondahl, Professor (Geography)  
Andrew D. Seidel, Professor (Environmental Planning)  
Jueyi Sui, Professor (Environmental Engineering)  
David Connell, Associate Professor (Environmental Planning)  
John Curry, Associate Professor (Environmental Planning)  
Balbinder Deo, Associate Professor (Business Management)  
Fredj Karima, Associate Professor (Economics)  
Michael Murphy, Associate Professor (Political Science) and Canada Research Chair, Comparative Indigenous-State Relations  
Tracey Summerville, Associate Professor (Political Science)  
Ken Wilkening, Associate Professor (International Studies)  
Lorraine Lavallee, Assistant Professor (Psychology)  
Philip Mullins, Assistant Professor (Outdoor Recreation and Tourism Management)

## Outdoor Recreation, Conservation and Tourism

John Shultis, Associate Professor (Outdoor Recreation and Tourism Management)  
Pamela Wright, Associate Professor (Outdoor Recreation and Tourism Management)  
Philip Mullins, Assistant Professor (Outdoor Recreation and Tourism Management)

Website: [www.unbc.ca/nres](http://www.unbc.ca/nres)

The Master of Arts in Natural Resources and Environmental Studies [MA (NRES)] offers students the opportunity to pursue studies of the social dimensions of human-environment interactions, from a community-based or regional perspective. The degree is distinguished by its focus on human perspectives on historical and contemporary resource and environmental issues. It encourages the study of the social, cultural, ethical, economic and political dynamics of resource and land use, and environmental change in northern ecosystems.

Students must choose from the following areas of study:

- Geography
- Environmental Studies
- Outdoor Recreation, Conservation and Tourism

All students must participate in a Graduate Colloquia (NRES 701-1) during their course of studies, complete NRES 700-3 and complete a research methods course approved by their supervisor and the Chair of the NRES graduate program. These required courses will provide students with an informed, integrated base for understanding multi-faceted resource and environmental issues. Elective courses will provide students with the option to pursue their specialized interests.

Candidates must complete a minimum of 6 elective credit hours at the graduate level (i.e., at or above the 600 level) that emphasize the human dimensions of resource or environmental issues. A maximum of 3 credit hours from independent studies can be counted towards the elective requirement. Specific details of coursework are determined by the research area chosen by each student. The supervisory committee will ensure the appropriate selection of elective courses, and may require a student to complete more than 6 credit hours if weaknesses in the student's background exist (including undergraduate prerequisites for graduate courses) or if additional courses are required for professional accreditation. The MA (NRES) degree also requires the writing and defense of an independent research thesis (NRES 794-12).

## Summary

Core Courses	4 credit hours
Methods Course	3 credit hours
Elective Courses	6 credit hours
MA Thesis	12 credit hours
Total Required	25 credit hours

Students must meet UNBC's residency requirements.

# Graduate Programs: Natural Resources and Environmental Studies

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## Recommended Progression

The normal time for completion of the MA (NRES) is two academic years. While this is the recommended timeline, it may be adjusted at the discretion of the supervisory committee to suit a particular student's research and program needs.

Research in Natural Resources and Environmental Studies (NRES 700-3) is offered annually in the September Semester. Students normally enroll in this course in Year I of their program. This timing allows students to pursue their area of specialization with a methods course or elective courses during the September Semester, in order to develop an interest-specific framework within which to pose methodological questions for the thesis proposal.

The Graduate Colloquia (NRES 701-1) is offered during the September and January Semesters. Students are required to enroll in this course, which lasts two semesters, once during their degree program.

Electives and the required methods course may be taken at any time during Years I and II. The sequencing of electives is determined by the student in discussion with the supervisory committee. Over the September and January Semesters of Year I, the student, under the direction of the supervisory committee, develops a thesis proposal. By the end of the second semester, the student should have successfully defended the thesis proposal to the supervisory committee, allowing the student to undertake the collection of data during the summer of Year I. The student is expected to have successfully defended the thesis by the end of Year II.

## Admission, Regulations and Committee Structures

### Admission Requirements

In addition to the admission application requirements outlined in Section 1.0 of the Graduate Academic Calendar, acceptance to the MA program will be contingent upon the prospective student finding a member of the faculty to serve as her/his supervisor. Applicants must also provide a completed Teaching Assistantship Application and a completed Funding Worksheet. Both forms are included with the application material for this program. Normally, at least two of the three letters of recommendation, exclusive of any letter provided by an intended supervisor, must be from individuals who are able to comment on the applicant's academic and research potential.

Application deadlines are found in this calendar under "Semester Dates" or online at: [www.unbc.ca/calendar/graduate](http://www.unbc.ca/calendar/graduate), also under "Semester Dates." The Natural Resources and Environmental Studies MA Program accepts students for the September, January and May Semesters.

For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).

## Transfer Students

On the recommendation of the program concerned, the Dean of Graduate Programs may accept courses taken at other institutions for credit toward a UNBC graduate program.

## Normal Time Required for Completion

Normally, the degree should be completed in two years. Part-time students would usually take longer to complete the degree depending on their personal circumstances and the nature of their research involvement.

## Committee Structure

Students will be advised by a supervisory committee consisting of at least three members, including the academic supervisor who will serve as the chair of the committee. At least one of the committee members must be from outside the student's program. The committee will be struck during the student's first term of study. Students must choose from the following areas of study:

- Environmental Studies
- Geography
- Outdoor Recreation and Tourism Management

# Natural Resources and Environmental Studies (MNRES Program)

Chair of the Natural Resources and Environmental Studies Graduate Program: Dr. Annie Booth

Joselito M. Arocena, Professor (Environmental Science and Engineering)  
Annie Booth, Professor (Ecosystem Science and Management)  
Darwyn Coxson, Professor (Ecosystem Science and Management)  
Keith Egger, Professor (Ecosystem Science and Management)  
Gail Fondahl, Professor (Geography)  
Arthur Fredeen, Professor (Ecosystem Science and Management)  
Greg Halseth, Professor, and Canada Research Chair, Rural and Small Town Studies (Geography)  
Ian Hartley, Professor (Ecosystem Science and Management, Physics)  
Peter Jackson, Professor (Environmental Science and Engineering)  
Kathy Lewis, Professor (Ecosystem Science and Management)  
Hugues Massicotte, Professor (Ecosystem Science and Management)  
Ellen Petticrew, Professor, and Forest Renewal BC Endowed Chair in Landscape Ecology (Geography)  
Mark Shrimpton, Professor (Ecosystem Science and Management)  
Youmin Tang, Professor, and Canada Research Chair, Climate  
Philip Burton, Associate Professor, and Regional Chair, North West, (Ecosystem Science and Management)  
David Connell, Associate Professor (Environmental Planning)  
John Curry, Associate Professor (Environmental Planning)  
Scott Green, Associate Professor (Ecosystem Science and Management)  
Steve Helle, Associate Professor (Environmental Engineering)  
Christopher Johnson, Associate Professor (Ecosystem Science and Management)  
Chris Opio, Associate Professor, (Ecosystem Science and Management)  
Paul Sanborn, Associate Professor (Ecosystem Science and Management)  
John Shultis, Associate Professor (Outdoor Recreation and Tourism Management)  
Roger Wheate, Associate Professor (Geography)  
Ken Wilkening, Associate Professor (International Studies)  
Pamela Wright, Associate Professor (Outdoor Recreation and Tourism Management)  
Philip Mullins, Assistant Professor (Outdoor Recreation and Tourism Management)

Margot Parkes, Associate Professor and Canada Research Chair in Health Ecosystems and Society  
Loraine Lavallee, Assistant Professor (Psychology)  
Jane Young, Assistant Professor (Ecosystem Science and Management)

Website: [www.unbc.ca/nres](http://www.unbc.ca/nres)

The Master of Natural Resources and Environmental Studies (MNRES) is designed to integrate the complementary aspects of resource and environmental issues. It focuses on an interdisciplinary approach to melding traditional science with social science perspectives, and resource planning and management. This degree is designed to attract students from a diverse range of backgrounds and aspirations, who share an interest in looking beyond traditional disciplinary boundaries.

The MNRES degree is one Master's degree route within the Natural Resources and Environmental Studies Graduate Program (the others are a MA and a MSc). The MNRES is the only one of the three that fully embraces the interdisciplinary philosophy of the Faculty. There are three factors that determine whether a student pursues the MNRES degree: 1) student's background; 2) elective courses undertaken at UNBC and 3) thesis topic. Depending on individualized learning objectives, the MNRES degree allows flexibility in choosing a research emphasis in the social, planned or natural environments from an interdisciplinary perspective.

All students must participate in Graduate Colloquia (NRES 701-1) during their course of studies, take a course in integrated resource management (NRES 703-3), and complete a research methods course approved by their supervisor and the Chair of NRES Graduate Program. These required courses provide students with an informed, integrated base for understanding multi-faceted resource and environmental issues. Elective courses provide students with the opportunity to pursue their specialized interests within an interdisciplinary context. The MNRES degree also requires the completion of an independent research thesis (NRES 792-12) or non-thesis project (NRES 793-6).

## Thesis Option

Students pursuing the MNRES thesis route must write and defend an independent research thesis (NRES 792-12) which incorporates research design and implementation addressing an integrated research problem. Candidates must complete a minimum of 3 elective credit hours at graduate level (i.e., at or above the 600 level) that emphasize an integrated approach to natural resource issues. A maximum of 3 credit hours from independent studies can be counted towards the elective requirement. Specific details of course work are determined by the research area chosen by each student. The supervisory committee will ensure the appropriate selection of elective courses, and may require a student to complete more than 3 credit hours if weaknesses in the student's background exist (including undergraduate prerequisites for graduate courses) or if additional courses are required for professional accreditation.

# Graduate Programs: Natural Resources and Environmental Studies

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## Summary of Thesis Option

Core Courses	7 credit hours
Methods Course	3 credit hours
Elective Courses	3 credit hours
MNRES Thesis	12 credit hours
Total Required	25 credit hours

## Non-Thesis Project Option

The non-thesis project option is designed primarily for students who wish to enhance their professional career skills. Students pursuing this option must complete a project (NRES 793-6)—an extended position paper, report, or plan—that addresses a major problem or issue relevant to the field of natural resources and environmental studies. Candidates must complete a minimum of 9 credit hours of approved elective courses at graduate level (i.e., at or above the 600 level) that result in a broad, well-informed, and integrated exposure to natural resources and environmental issues. A maximum of 3 credits from independent studies can be counted towards the elective requirement. The supervisory committee will ensure appropriate elective course selection, and may require a student to complete more than 9 credits if weaknesses in the student's background exist (including undergraduate prerequisites for graduate courses) or if additional courses are required for professional accreditation.

## Summary of Project Option

Core Courses	7 credit hours
Methods Course	3 credit hours
Elective Courses	9 credit hours
MNRES Project	6 credit hours
Total Required	25 credit hours

## Recommended Progression

The normal time for completion of the MNRES is two academic years. While this is the recommended timeline, it may be adjusted at the discretion of the supervisory committee to suit a particular student's research and program needs.

Research in Natural Resources and Environmental Studies (NRES 700-3) is offered annually in the September Semester. Students will normally enroll in this course in Year I of their program. This timing allows students to pursue their area of specialization with method course or elective courses during the September Semester, in order to develop an interest-specific framework within which to pose methodological questions for the thesis or project proposal.

The Graduate Colloquia (NRES 701-1) is offered during the September and January Semesters. Electives, the required methods course and Integrated Resource Management (NRES 703-3) may be taken at any time during Years I and II. The sequencing of courses is determined by the student in discussion with the supervisory committee.

Over the September and January Semesters of Year I, the student, under the direction of the supervisory committee, develops a thesis or project proposal. By the end of the second semester, the student should have successfully defended the thesis or project proposal to the supervisory committee, allowing the student to undertake the collection of data during the summer of Year I. The student is expected to have successfully defended the thesis by the end of Year II.

## Admission, Regulations and Committee Structures

### Admission Requirements

In addition to the admission application requirements outlined in Section 1.0 of the Graduate Academic Calendar, acceptance to the MNRES program will be contingent upon the prospective student finding a member of the faculty to serve as her/his supervisor. Applicants must also provide a completed Continuing Teaching Assistantship Application and a completed Funding Worksheet. Both forms are included with the application material for this program. Normally, at least two of the three letters of recommendation, exclusive of any letter provided by an intended supervisor, must be from individuals who are able to comment on the applicant's academic and research potential.

Application deadlines are found in this calendar under "Semester Dates" or online at: [www.unbc.ca/calendar/graduate](http://www.unbc.ca/calendar/graduate), also under "Semester Dates." The Natural Resources and Environmental Studies MNRES Program accepts students for the September, January and May Semesters.

For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).

### Transfer Students

On the recommendation of the program concerned, the Dean of Graduate Programs may accept courses taken at other institutions for credit toward a UNBC graduate program.

### Normal Time Required for Completion

Normally, the degree should be completed in two years. Part-time students may take longer to complete the degree depending on their personal circumstances, and the nature of their research involvement.

### Committee Structure

Students will be advised by a supervisory committee consisting of at least three members, including the academic supervisor who will serve as the chair of the committee. At least one of the committee members must come from outside the student's program. The committee will be struck during the student's first term of study.

# Natural Resources and Environmental Studies (MSc Program)

Chair of the Natural Resources and Environmental Studies Graduate Program: Dr. Annie Booth

## Biology

Darwyn Coxson, Professor (Ecosystem Science and Management)  
Russell Dawson, Professor, and Canada Research Chair, Avian Ecology (Ecosystem Science and Management)  
Keith Egger, Professor (Ecosystem Science and Management)  
Arthur Fredeen, Professor (Ecosystem Science and Management)  
Michael Gillingham, Professor (Ecosystem Science and Management)  
Kathy Lewis, Professor (Ecosystem Science and Management)  
Hugues Massicotte, Professor (Ecosystem Science and Management)  
William McGill, Professor (Ecosystem Science and Management, Physics)  
Ken A. Otter, Professor (Ecosystem Science and Management)  
Katherine Parker, Professor, and Ian McTaggart Cowan  
Muskwa Kechika Research Professor (Ecosystem and Science Management)  
Ellen Pettitrew, Professor, and Forest Renewal BC Endowed Chair in Landscape Ecology (Geography)  
Mark Shrimpton, Professor (Ecosystem Science and Management)  
Philip Burton, Associate Professor, and Regional Chair, Northwest, (Ecosystem Science and Management)  
Scott Green, Associate Professor (Ecosystem Science and Management)  
Dezene Huber, Associate Professor, and Canada Research Chair, Forest Entomology and Chemical Ecology (Ecosystem Science and Management)  
Christopher Johnson, Associate Professor (Ecosystem Science and Management)  
Brent Murray, Associate Professor (Ecosystem Science and Management)  
Allan Costello, Assistant Professor (Ecosystem Science and Management)  
Lisa Poirer, Assistant Professor (Ecosystem Science and Management)  
Jane Young, Assistant Professor (Ecosystem Science and Management)

## Environmental Science

Joselito M. Arocena, Professor (Environmental Science and Engineering)  
Annie Booth, Professor (Ecosystem Science and Management)  
Darwyn Coxson, Professor (Ecosystem Science and Management)  
Keith Egger, Professor (Ecosystem Science and Management)  
Arthur Fredeen, Professor (Ecosystem Science and Management)  
Ian Hartley, Professor (Ecosystem Science and Management, Physics)  
Peter Jackson, Professor (Environmental Science and Engineering)  
Jianbing Li, Professor (Environmental Engineering)  
William McGill, Professor (Ecosystem Science and Management, Physics)  
Brian Menounos, Professor, and Canada Research Chair, Glacier Change (Geography)  
Philip Owens, Professor, and Forest Renewal BC Endowed Chair in Landscape Ecology (Environmental Science)  
Ellen Pettitrew, Professor, and Forest Renewal BC Endowed Chair in Landscape Ecology (Geography)  
Michael Rutherford, Professor (Environmental Science and Engineering)  
Jueyi Sui, Professor (Environmental Engineering)  
Youmin Tang, Professor, and Canada Research Chair, Climate Prediction and Predictability (Environmental Science and Engineering)  
Ron Thring, Professor (Chemistry, Environmental Science and Engineering)  
John Curry, Associate Professor (Environmental Planning)  
Stephen Déry, Associate Professor, and Canada Research Chair, Northern Hydrometeorology (Environmental Science and Engineering)  
Steve Helle, Associate Professor (Environmental Engineering)  
Paul Sanborn, Associate Professor (Ecosystem Science and Management)  
Todd Whitcombe, Associate Professor (Chemistry)

## Forestry

Joselito M. Arocena, Professor (Environmental Science and Engineering)  
Keith Egger, Professor (Ecosystem and Science Management)  
Arthur Fredeen, Professor (Ecosystem Science and Management)  
Ian Hartley, Professor (Ecosystem Science and Management, Physics)  
Kathy Lewis, Professor (Ecosystem Science and Management)  
Hugues Massicotte, Professor (Ecosystem Science and Management)  
William McGill, Professor (Ecosystem Science and Management, Physics)  
Ron Thring, Professor (Chemistry, Environmental Science and Engineering)  
Philip Burton, Associate Professor, and Regional Chair, North West, (Ecosystem Science and Management)  
Scott Green, Associate Professor (Ecosystem Science and Management)  
Dezene Huber, Associate Professor, and Canada Research Chair, Forest Entomology and Chemical Ecology (Ecosystem Science and Management)



# Graduate Programs: Natural Resources and Environmental Studies

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Christopher Johnson, Associate Professor (Ecosystem Science and Management)  
Chris Opio, Associate Professor (Ecosystem Science and Management)  
Paul Sanborn, Associate Professor (Ecosystem Science and Management)  
Lisa Poirier Assistant Professor (Ecosystem Science and Management)

## Geography

Joselito M. Arocena, Professor (Environmental Science and Engineering)  
Peter Jackson, Professor (Environmental Science and Engineering)  
Brian Menounos, Professor (Geography), and Canada Research Chair, Glacier Change  
Philip Owens, Professor, and Forest Renewal BC Endowed Chair in Landscape Ecology (Environmental Science)  
Ellen Petticrew, Professor, and Forest Renewal BC Endowed Chair in Landscape Ecology (Geography)  
Jueyi Sui, Professor (Environmental Engineering)  
Youmin Tang, Professor, and Canada Research Chair, Climate Prediction and Predictability (Environmental Science and Engineering)  
Roger Wheate, Associate Professor (Geography)

## Outdoor Recreation, Conservation and Tourism

John Shultis, Associate Professor (Outdoor Recreation and Tourism Management)  
Pamela Wright, Associate Professor (Outdoor Recreation and Tourism Management)  
Philip Mullins, Assistant Professor (Outdoor Recreation and Tourism Management)

Website: [www.unbc.ca/nres](http://www.unbc.ca/nres)

Natural Resources and Environmental Studies (NRES) is one stream of the Master of Science degree in the College of Science and Management. This degree is designed for candidates whose research interests have a scientific emphasis, and is expected to attract students from science disciplines such as biology, forestry, environmental science, and physical geography, as well as other scientifically oriented areas of resource management. Students studying within the NRES stream will, upon successful completion of the degree requirements outlined herein, obtain a MSc (NRES).

Students must choose from the following areas of study:

- Biology
- Environmental Science
- Forestry
- Geography
- Outdoor Recreation and Tourism Management

All students must participate in Graduate Colloquia (NRES 701-1) during their course of studies, complete NRES 700-3 and complete a research methods course approved by their supervisor and the Chair of the NRES graduate program.

Candidates must complete a minimum of 6 elective credit hours at the graduate level (i.e., at or above the 600 level), selected from the science courses available at UNBC or courses that emphasize a scientific orientation to natural resource issues. A maximum of 3 credit hours from independent studies can be counted towards the elective requirement. Specific details of course work are determined by the research area chosen by each student. The supervisory committee will ensure the appropriate selection of elective courses, and may require a student to complete more than 6 elective credit hours if, for example, weaknesses in the student's background exist (including undergraduate prerequisites for graduate courses) or if additional courses are required for professional accreditation.

The MSc (NRES) also requires the completion of a research thesis (NRES 790-12) in which the student makes a scientific contribution to a traditional science field or to an applied understanding of resources and the environment. Students are required to (a) make an oral presentation of the thesis proposal to the supervisory committee, (b) write an original thesis based on the research completed (in accordance with established UNBC guidelines), (c) give a public lecture on the completed thesis, and (d) present an oral defense of the thesis to the examining committee. All core and elective course requirements must have been satisfied prior to the oral defense.

### Summary

Core Courses	4 credit hours
Methods Course	3 credit hours
Elective Courses	6 credit hours
MSc Thesis	12 credit hours
Total Required	25 credit hours

## Recommended Progression

The normal time for completion of the MSc is two academic years. While this is the recommended timeline, it may be adjusted at the discretion of the supervisory committee to suit a particular student's research and program needs.

Research in Natural Resources and Environmental Studies (NRES 700-3) is offered annually in the September Semester. Students normally enroll in this course in Year I of their program. This timing allows students to pursue their area of specialization with a methods course or elective courses during the September Semester, in order to develop an interest-specific framework within which to pose methodological questions for the thesis proposal.

The Graduate Colloquia (NRES 701-1) is offered during all September and January Semesters. Students are expected to enroll in this course, which lasts two semesters, once during their degree program.

# Graduate Programs: Natural Resources and Environmental Studies

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Electives and the required methods course may be taken at any time during Years I and II. The sequencing of electives is determined by the student in discussion with the supervisory committee. Over the September and January Semesters of Year I, the student, under the direction of the supervisory committee, will develop a thesis proposal. By the end of the second semester, the student should have successfully defended their thesis proposal to the supervisory committee, allowing the student to undertake the collection of data during the summer of Year I. The student is expected to have successfully defended the thesis by the end of Year II.

## Admission, Regulations and Committee Structures

### Admission Requirements

In addition to the admission application requirements outlined in Section 1.0 of the Graduate Academic Calendar, acceptance to the MSc program will be contingent upon the prospective student finding a member of the faculty to serve as her/his supervisor. Applicants must also provide a completed Continuing Teaching Assistantship Application and a completed Funding Worksheet. Both forms are included with the application material for this program. Normally, at least two of the three letters of recommendation, exclusive of any letter provided by an intended supervisor, must be from individuals who are able to comment on the applicant's academic and research potential.

Application deadlines are found in this calendar under "Semester Dates" or online at: [www.unbc.ca/calendar/graduate](http://www.unbc.ca/calendar/graduate), also under "Semester Dates." The Natural Resources and Environmental Studies MSc Program accepts students for the September, January and May Semesters.

For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).

### Transfer Students

Upon the recommendation of the program concerned, the Dean of Graduate Programs may accept courses taken at other institutions for credit toward a UNBC graduate program.

### Normal Time Required for Completion

Normally, the degree should be completed in two years or less. Students may take longer to complete the degree depending on their personal circumstances, and the nature of their research.

### Committee Structure

Students will be advised by a supervisory committee consisting of at least three members, including the academic supervisor who will normally serve as the chair of the committee. At least one of the committee members must be from outside of the student's program. The committee will be struck during the student's first term of study.

# Natural Resources and Environmental Studies (PhD Program)

Chair of the Natural Resources and Environmental Studies Graduate Program: Dr. Annie Booth

Joselito M. Arocena, Professor (Environmental Science and Engineering)  
Annie Booth, Professor (Ecosystem Science and Management)  
Darwyn Coxson, Professor (Ecosystem Science and Management)  
Russell Dawson, Professor, and Canada Research Chair Avian Ecology (Ecosystem Science and Management)  
Keith Egger, Professor (Ecosystem Science and Management)  
Gail Fondahl, Professor (Geography)  
Arthur Fredeen, Professor (Ecosystem Science and Management)  
Michael Gillingham, Professor (Ecosystem Science and Management)  
Greg Halseth, Professor, and Canada Research Chair, Rural and Small Town Studies (Geography)  
Ian Hartley, Professor (Ecosystem Science and Management, Physics)  
Peter Jackson, Professor (Environmental Science and Engineering)  
Kathy Lewis, Professor (Ecosystem Science and Management)  
Jianbing Li, Professor (Environmental Engineering)  
Hugues Massicotte, Professor (Ecosystem Science and Management)  
William McGill, Professor (Ecosystem Science and Management, Physics)  
Brian Menounos, Professor (Geography), and Canada Research Chair, Glacier Change  
Ken A. Otter, Professor (Ecosystem Science and Management)  
Philip Owens, Professor and Forest Renewal BC Endowed Chair, Landscape Ecology (Environmental Science)  
Katherine Parker, Professor, and Ian McTaggart Cowan Muskwa Kechika Research Professor (Ecosystem Science and Management)  
Ellen Petticrew, Professor, and Forest Renewal BC Endowed Chair in Landscape Ecology (Geography)  
Michael Rutherford, Professor (Environmental Science)  
Andrew D. Seidel, Professor (Environmental Planning)  
Mark Shrimpton, Professor (Ecosystem Science and Management)  
Jueyi Sui, Professor (Environmental Engineering)  
Youmin Tang, Professor and Canada Research Chair, Climate Prediction and Predictability (Environmental Science and Engineering)  
Ron Thring, Professor (Chemistry, Environmental Science and Engineering)  
Philip Burton, Associate Professor, and Regional Chair, Northwest, (Ecosystem Science and Management)

David Connell, Associate Professor (Environmental Planning)  
John Curry, Associate Professor (Environmental Planning)  
Stephen Déry, Associate Professor, and Canada Research Chair, Northern Hydrometeorology (Environmental Science and Engineering)  
Neil Hanlon, Associate Professor (Geography)  
Steve Helle, Associate Professor (Environmental Engineering)  
Dezene Huber, Associate Professor and Canada Research Chair, Forest and Entomology and Chemical Ecology (Ecosystem Science and Management)  
Christopher Johnson, Associate Professor (Ecosystem Science and Management)  
Michael Murphy, Associate Professor and Canada Research Chair, Comparative Indigenous-State Relations (Political Science)  
Brent Murray, Associate Professor (Ecosystem Science and Management)  
Catherine Nolin, Associate Professor (Geography)  
Chris Opio, Associate Professor (Ecosystem Science and Management)  
John Shultis, Associate Professor (Outdoor Recreation and Tourism Management)  
Roger Wheate, Associate Professor (Geography)  
Ken Wilkening, Associate Professor (International Studies)  
Pamela Wright, Associate Professor (Outdoor Recreation and Tourism Management)

Website: [www.unbc.ca/nres](http://www.unbc.ca/nres)

The PhD in Natural Resources and Environmental Studies [PhD (NRES)] offers students the opportunity to develop an advanced level of understanding and training in any one or a combination of scientific discipline(s) related to natural environments, the processes (e.g., biological, chemical, physical) that govern them, or the human dimensions (e.g., social, economic, political, cultural) that interact with them. The PhD (NRES) promotes an integration of the linkages between social, ethical, political, and cultural dimensions, and an understanding of basic ecological, biological, and physical attributes of natural resources. Emphasis is placed upon the student to acquire an interdisciplinary base upon which to found a “disciplinary” area of concentration. Graduates from this program who have an area of concentration and a familiarity with how other disciplines can contribute toward solving environmental problems should be capable of addressing a variety of natural resources and environmental issues from a number of perspectives.

Students must complete 9 credit hours of interdisciplinary core courses: NRES 801-3, NRES 802-3, and NRES 803-3. These courses will provide all students with a framework, balanced in science and human dimensions, upon which a specific PhD program may be built. Also required is a compulsory seminar course (NRES 804-3), and a PhD thesis (NRES 890-12). Students may be required, at the discretion of their supervisory committee, to take additional courses within their area.

# Graduate Programs: Natural Resources and Environmental Studies

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Students must pass three separate checks on their academic progress towards a PhD: a qualifying exam, a defense of thesis proposal, and a defense of the thesis. The qualifying exam is tailored to ensure a cross-disciplinary aptitude, and tests the student's grasp of the interdisciplinary nature of natural resource and environmental issues. The thesis proposal defense is tailored to ensure that a student has a grasp of his/her area of concentration, and therefore examines the level of knowledge within the area of concentration. Upon successfully passing both the qualifying examination and the thesis proposal defense, a student is granted candidate status, and embarks upon the thesis work under the supervision of his/her faculty advisor. Following completion of the research, the candidate must defend his/her thesis to an examination committee.

## Summary

Required Core Courses	9 credits
Graduate Seminar	3 credits
PhD Thesis	12 credits
Total Required	24 credits

## Recommended Progression

### First Year: Core Courses, Qualifying Exam

During the first two semesters, the common set of three required core courses (NRES 801-3 Integrated Environmental Systems I, NRES 802-3 Integrated Environmental Systems II, and NRES 803-3 Integrated Environmental Systems III) will be taken. In addition, the graduate seminar (NRES 804-3) will be taken by all PhD students.

At the end of the second semester, PhD students will normally take a qualifying exam consisting of written and oral components. The general part of the exam should demonstrate the student's ability to synthesize and extrapolate from the interdisciplinary perspectives of natural resource management and environmental studies, at an integrative level and scope consistent with the core PhD courses (NRES 801-3, NRES 802-3, and NRES 803-3). The specialty part of the exam will assess the student's background knowledge and familiarity with the theory and methodology associated with his/her thesis topic.

### Second Year: Area of Concentration, Defense of Thesis Proposal

If students are required to take additional courses to address deficiencies within their area of concentration, they will be able to select courses from relevant course offerings within the Natural Resources and Environmental Studies Graduate Program, as well as other UNBC programs, or from other accredited graduate programs in other post-secondary institutions. In addition, students will normally conduct some exploratory research in their area of concentration.

Once coursework is substantially complete, the students will work towards finalizing a thesis proposal, a document demonstrating academic rigor, and of publishable quality. Students will be expected to present the thesis proposal before their committee, and to demonstrate their knowledge within their area of concentration. Normally, this defense will be scheduled either at the end of the third semester or at the beginning of the fourth semester of study.

### Third to Fifth Year: Thesis

Upon successful completion of course work, and the successful completion of the qualifying exam and the defense of thesis proposal, the student is officially designated as a PhD candidate, and proceeds to full-time work on the thesis under the direct supervision of the advisor and any other designated committee members. Any major changes made to the thesis proposal after approval by the committee will require the approval of the committee.

Under normal circumstances, a student is expected to complete his/her research and the writing of the thesis within three years of becoming a doctoral candidate.

Any student requiring more than three years (6 semesters) to complete a thesis must request an extension from his/her advisor and the Dean of Graduate Programs.

### Oral Defense of the Thesis

When the student's advisor and committee have determined that the student has reached an acceptable level of completion on the thesis, the student will defend the research during an oral exam with the full examining committee. This defense, with the exception of committee deliberations, will be open to the public.

## Admission, Regulations and Committee Structures

### Admission Requirements

Students will normally be expected to hold a Master's degree from an accredited post-secondary institution. In exceptional cases, individuals with significant and relevant life experience may be admitted on probation. Normally, applicants must hold a cumulative GPA of 3.33 (B+) from the Baccalaureate and Master's degree, to be calculated over the last 30 credits of graded academic work. Acceptance to the PhD program will be contingent upon the prospective student finding a member of the faculty to serve as her/his advisor.

In addition to a completed UNBC Graduate Application Form, applicants must provide official transcripts from all post-secondary institutions attended; a statement of intent indicating the student's research interests, possible future career aspirations, and perceived fit within the Faculty mandate and research directions; a recent Curriculum Vitae; three letters of reference (including two from faculty members familiar with the prospective student's academic work); a completed Teaching Assistantship Application; a completed Funding Worksheet; and a sample of written academic work. GRE scores are optional. Only students with high GPAs and innovative research interests are likely to be successful in their applications.

## Graduate Programs: Natural Resources and Environmental Studies

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Application deadlines are found in this calendar under "Semester Dates" or online at: [www.unbc.ca/calendar/graduate](http://www.unbc.ca/calendar/graduate), also under "Semester Dates." The Natural Resources and Environmental Studies PhD Program accepts students for the September, January, and May Semesters.

For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).

### **Normal Time Required for Completion**

The completion time for the PhD between initial admittance and final defense will normally range from three to five years.

### **Supervisory Committee Structure**

The PhD Committee will consist of the designated advisor and four additional faculty members, at least one of whom will be chosen from outside the Natural Resources and Environmental Studies Graduate Program. The outside member may be chosen from other UNBC faculties or from other Canadian/United States accredited post-secondary institutions. Under exceptional circumstances, and with approval from the Dean of Graduate Programs, additional members may be added at the request of the student or the advisor. The expertise represented on the committee should reflect the concept of interdisciplinarity. The committee should be assembled during the student's first year of study.

# Master of Science in Nursing

- **Family Nurse Practitioner Stream (MScN (FNP))**
- **Thesis Stream (MScN)**

Martha MacLeod, Professor and Chair  
Lela Zimmer, Associate Professor  
Khaldoun Aldiabat, Assistant Professor  
Kathryn Banks, Assistant Professor  
Davina Banner-Lukaris, Assistant Professor  
Amy Klepetar, Assistant Professor  
Catharine Schiller, Assistant Professor  
Sue Skeates, Assistant Professor  
Greg Thomas-Reilly, Assistant Professor  
Linda Van Pelt, Assistant Professor  
Erin Wilson, Assistant Professor  
Penny Anguish, Adjunct Professor  
Janet Baillies, Adjunct Professor  
Jennifer Beaveridge, Adjunct Professor  
Helen Bourque, Adjunct Professor  
Anne Chisholm, Adjunct Professor  
Gerritt Clements, Adjunct Professor  
Tracey Day, Adjunct Professor  
Celia Evanson, Adjunct Professor  
Tina Fraser, Adjunct Professor  
Rosemary Graham, Adjunct Professor  
Monica Gregory, Adjunct Professor  
Suzanne Johnston, Adjunct Professor  
Connie-Marie Lapadat, Adjunct Professor  
Colleen Regehr, Adjunct Professor  
Shanda Rojas, Adjunct Professor  
Denise Tarlier, Adjunct Professor  
Cathy Ulrich, Adjunct Professor

Website: [www.unbc.ca/nursing/family-nurse-practitioner](http://www.unbc.ca/nursing/family-nurse-practitioner)  
[www.unbc.ca/nursing/master-of-science-nursing](http://www.unbc.ca/nursing/master-of-science-nursing)

The Master of Science in Nursing: Family Nurse Practitioner is a practice-oriented, theory-based degree that prepares graduates to be autonomous practitioners, leaders, role models, and educators in primary health care. The focus of the Family Nurse Practitioner stream is general family practice—that is care for individuals, families, groups and communities across all life stages. Family Nurse Practitioners are health professionals who have achieved the advanced nursing practice competencies at the graduate level of nursing education. Nurse Practitioners, who are regulated by the College of Registered Nurses of British Columbia, provide health care services from a holistic nursing perspective, integrated with the autonomous diagnosis and treatment of acute and chronic illness, including ordering diagnostic tests and prescribing medications.

The Thesis Stream leads to an advanced nursing practice degree that is designed to prepare graduates to become autonomous practitioners, collaborators, nurse researchers, leaders, educators, change agents, and role models. Graduates of the thesis stream will work in a variety of health care settings as clinical nurse specialists, educators, administrators, and researchers, and will work with diverse populations across all age groups.

Both streams focus on the preparation of graduates for advanced nursing practice in rural and northern communities. The streams share five core courses, which address community and program development and evaluation; engage in debates influencing health care policy; apply research and undertaking evidence-based practice; promote the health of Indigenous Peoples; and develop nursing knowledge in relation to advanced practice nursing.

Required courses for the MScN are available by distance, with some on-site (face-to-face) requirements and required clinical practice in the MScN (FNP). The streams are designed to allow professional nurses to complete their degree on a full-time or part-time basis.

### Criminal Records Search

All students in the Master of Science in Nursing program are required to submit a Criminal Record Check search prior to the first day of classes in their entry semester and prior to the commencement of their first clinical courses.

Domestic applicants must supply a Criminal Record Check search result after receiving an offer of admission and before the first day of classes; the search result is not required with the application. International applicants must submit a Criminal Record Check search result provided by their local policy authority upon application, and will also be required to submit a British Columbia Criminal Record Check if offered admission. The Office of the Registrar will provide instructions to domestic and international applicants who have accepted offers of admission on how to complete a British Columbia Criminal Record Check.

### Immunizations

All students who will be undertaking clinical learning experiences must submit records of current status of the following immunizations prior to commencement of the clinical courses: diphtheria, tetanus, poliomyelitis, measles, mumps, rubella, hepatitis B and varicella. A Mantoux test (PPD) for tuberculosis is also recommended within one month of entering the clinical setting. Failure to have up-to-date immunizations may result in the student not being permitted to practice in a clinical setting.

### CPR Certification

All students who will be undertaking clinical learning experiences must provide proof of current CPR certification, level C, prior to commencement of the clinical courses.

## College of Registered Nurses of British Columbia Requisite Skills and Abilities

All students who apply to the UNBC MScN (FNP) and MScN Thesis Streams must demonstrate the capacity to meet College of Registered Nurses of British Columbia's (CRNBC) Requisite Skills and Abilities, and sign the CRNBC form attesting to that capacity.

## Standards of Professional Conduct

In addition to fulfilling all University and Program expectations, all students are expected to abide by professional standards as set forth in the current CRNBC Professional Standards for Registered Nurses and Nurse Practitioners and the Canadian Nurses Association (CNA) Code for Ethics for Registered Nurses. Violation of professional standards may result in suspension or dismissal from the program or the educational institution.

## Misconduct

Any conduct that violates the ethical or legal standards of UNBC or CRNBC, particularly those related to academic dishonesty and professional conduct, are considered serious offenses. Academic misconduct and/or professional misconduct may result in the student being required to withdraw from the MScN Program and possibly the University. Satisfactory academic performance is not the sole criterion for progression or graduation. The UNBC School of Nursing reserves the right to require a student to withdraw from the student's program if the student is considered to be unsuited to proceed with the study or practice of advanced practice nursing.

## Academic Performance

All MScN students must adhere to all Graduate Program Admissions and Regulations as outlined in the UNBC Graduate Calendar. Students may be removed from a clinical learning experience or setting due to "unsafe or unprofessional" performance or conduct and may receive a final grade of F in that course.

## MScN (FNP) Family Nurse Practitioner Stream

### Admission to Family Nurse Practitioner Stream

In addition to the application requirements outlined in Section 1.0 of the Graduate Academic Calendar, applicants for the Family Nurse Practitioner Stream are required to submit the following for consideration of admission:

- Nursing practice résumé or curriculum vitae.
- Criminal records searches.
- Evidence of at least two years full-time practice experience, or equivalent, following completion of the Baccalaureate degree.
- Evidence of active and continuing registration as a nurse in British Columbia. Annual documentation of current, practicing CRNBC licensure is required while enrolled in the program.

Application deadlines can be found in the Graduate Programs Admissions and Regulations section of the Graduate Calendar at <http://www.unbc.ca/calendar/graduate/admissions>.

The MScN (FNP) Stream accepts students for the September Semester.

## Requirements

In addition to five core MScN courses (15 credit hours), eight nurse practitioner-specific courses (36 credit hours), are required. On-site instruction is a required component of five courses. Placements for clinical experiences will be in rural and northern communities. A final project completes the degree.

### Family Nurse Practitioner Stream

Core Courses	15 credit hours
Nurse Practitioner Courses (includes project):	36 credit hours
Total	51 credit hours

### Family Nurse Practitioner Stream Requirements

#### Core courses

NURS 604-3	The Healing and Well-being of Indigenous Peoples
NURS 606-3	Developing Nursing Knowledge
NURS 607-3	Applying Research and Evidence to Practice
NURS 703-3	Health Program Planning, Community Development and Evaluation
POLS 603-3*	Social and Health Policy in the Context of Health and Health Care

*\*Note: POLS 603-3 is precluded if students already have credit for POLS 403-3. Students are required to choose another course to make up the credit hours upon consultation with their supervisor.*

#### Nurse Practitioner Courses

NURS 602-3	Pathophysiology
NURS 603-3	Health Assessment and Diagnostic Reasoning
NURS 605-3	Pharmacological Management and Therapeutic Interventions
NURS 608-3	Ethics, Accountability and Responsibility for Practice
NURS 720-6	Practicum: Integrating Primary Health Care I
NURS 730-6	Practicum: Integrating Primary Health Care II
NURS 790-9	Nurse Practitioner Internship
NURS 798-3	Nurse Practitioner Project

- Three Assessment Reports on Applicant for Admission to Graduate Studies. Letters of reference may accompany the Assessment Reports. At least one of the assessments/letters must be from a health professional from the prospective student's most recent practice setting.
- An academic transcript showing undergraduate courses in nursing theory, health assessment, and community health nursing, and research.

# Graduate Programs: Nursing

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## Program Costs

Costs associated with study in the MScN (FNP) are the responsibility of the individual student, including transportation costs, and any expenses involved in academic studies, lab, and clinical practica. This includes travel, accommodation, and living expenses associated with required clinical practice or travel to campus for required face-to-face (on-campus) course work. See the Fees section in this calendar.

## MScN Thesis Stream

### Admission to MScN Thesis Stream

In addition to the application requirements outlined in Section 1.0 of the Graduate Academic Calendar, applicants for the Academic Master's Stream are required to submit the following for consideration of admission:

- Three Assessment Reports on Applicant for Admission to Graduate Studies. Letters of reference may accompany the Assessment Reports. At least one of the assessments/letters must be from a health professional from the prospective student's most recent practice setting.
- An academic transcript showing undergraduate courses in nursing theory, health assessment, community health nursing, and research.
- Nursing practice résumé or curriculum vitae.
- Criminal records searches prior to being admitted.
- Applicants must have current active registration (in the jurisdiction in which the student resides while taking the program). Annual documentation of current licensure is required while enrolled in the program.

Application deadlines can be found in the Graduate Programs Admissions and Regulations section of the Graduate Calendar at <http://www.unbc.ca/calendar/graduate/admissions>.

The MScN Thesis Stream accepts students for the September Semester and January Semesters.

In addition to meeting the admission application requirements outlined in Section 1.0 of the Graduate Admissions and Regulations, all applicants to the Disability Management MA program are required to submit a Criminal Record Check search prior to the first day of classes in their entry semester.

Domestic applicants must supply a Criminal Record Check search result after receiving an offer of admission and before the first day of classes; the search result is not required with the application. International applicants must submit a Criminal Record Check search result provided by their local policy authority upon application, and will also be required to submit a British Columbia Criminal Record Check if offered admission. The Office of the Registrar will provide instructions to domestic and international applicants who have accepted offers of admission on how to complete a British Columbia Criminal Record Check.

## Thesis Stream Requirements

In addition to the core courses, one elective and two advanced nursing practice courses are required. As well, students must complete an independent research thesis.

### Thesis Stream

Core Courses	15 credit hours
Advanced Practice Courses	6 credit hours
Elective	3 credit hours
Thesis	12 credit hours
Total	36 credit hours

### Core courses

NURS 604-3	The Healing and Well-being of Indigenous Peoples
NURS 606-3	Developing Nursing Knowledge
NURS 607-3	Applying Research and Evidence to Practice
NURS 703-3	Health Program Planning, Community Development and Evaluation
POLS 603-3*	Social and Health Policy in the Context of Health and Health Care

*\*Note: POLS 603-3 is precluded if students already have credit for POLS 403-3. Students are required to choose another course to make up the credit hours upon consultation with their supervisor.*

### Advanced Nursing Practice Courses

NURS 609-3	Qualitative Research Approaches in Nursing and Health
NURS 610-3	Quantitative Research in Nursing and Health

### Electives

At least 3 credit hours of graduate-level study (i.e. at or above the 600 level). The purpose is to broaden the student's depth and scope of learning on a particular topic of interest. The supervisory committee will ensure the appropriate selection of relevant elective course(s).

### Thesis

NURS 799-12	Thesis
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MScN Thesis Stream students must write and defend an independent research thesis. The thesis entails research in a topic area developed in consultation with the student's supervisory committee. Oral examination is required as per University regulations.

## Program Costs

Costs associated with study in the MScN are the responsibility of the individual student, including transportation costs, and any expenses involved in academic studies, lab, and clinical practica. This includes travel, accommodation, and living expenses associated with required clinical practice or travel to campus for required face-to-face course work. See the Fees section in this calendar.



# Political Science (MA Program)

Alex Michalos, Professor Emeritus  
Boris DeWiel, Associate Professor and Chair  
Natalie Loukacheva, Associate Professor, and Canada Research Chair,  
Aboriginal Governance and Law  
Michael Murphy, Associate Professor, and Canada Research Chair,  
Comparative Indigenous-State Relations  
Tracy Summerville, Associate Professor  
Gary Wilson, Associate Professor  
John Young, Associate Professor

Website: [www.unbc.ca/political-science](http://www.unbc.ca/political-science)

A Master's degree in Political Science is designed for students who normally would have the equivalent of an undergraduate major in Political Science and want to undertake advanced training in scholarly research.

The graduate program provides students with an advanced education in the discipline of Political Science at all levels including local, regional, national and international spheres. We specialize in comparative politics, political philosophy and Aboriginal-state relations, with additional specialities in other areas. Each student's program of study is designed individually to meet his or her scholarly interests.

## Admission

Successful applicants to the program will hold a four-year baccalaureate in Political Science, and will have obtained a GPA of at least 3.0. UNBC and the Department of Political Science are committed to interdisciplinary co-operation, so students without undergraduate majors in Political Science may be admitted with special provisions made regarding course work and thesis research programs.

Application deadlines are found in this calendar under "Semester Dates" or online at: [www.unbc.ca/calendar/graduate](http://www.unbc.ca/calendar/graduate), also under "Semester Dates." The Political Science MA Program accepts students for the September and January Semesters.

For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).

## Requirements

Students may choose either a Thesis, a Project or a Course-based option.

## Thesis Option

The requirements for the thesis option are four graduate courses, a thesis proposal, and a 12 credit-hour thesis. At least three of the four required graduate courses must be from the discipline of Political Science and must include POLS 702-3 Scope and Methods of Political Science or a suitable alternative chosen by the student's supervisor.

## Project Option

The requirements for the project option are five graduate courses and a 9 credit-hour project. At least three of the five required graduate courses must be from the discipline of Political Science and must include POLS 702-3 Scope and Methods of Political Science or a suitable alternative chosen by the student's supervisor.

## Course-based Option

The requirements for the course-based option are eight graduate courses. At least five of the eight required graduate courses must be from the discipline of Political Science and must include POLS 702-3 Scope and Methods of Political Science or a suitable alternative chosen by the student's supervisor, and POLS 795-3 Major Research Paper, which is overseen and graded by the student's supervisor.

## Course Offerings

POLS 600-3	Classics in Political Theory
POLS 601-3	Resource Politics
POLS 603-3	Social and Health Policy and Administration
POLS 605-3	Topics in Society and Democracy
POLS 612-3	Aboriginal-State Relations
POLS 613-3	Democracy and Diversity
POLS 614-3	Comparative Federalism
POLS 615-3	Comparative Northern Development
POLS 617-3	Ethical Leadership
POLS 627-3	Ethics and Public Affairs
POLS 634-3	Resource Communities in Transition
POLS 672-3	Contemporary Theories of Political Community
POLS 698-3	Special Topics in Political Science
POLS 702-3	Scope and Methods of Political Science
POLS 704-3	Independent Study
POLS 795-3	Major Research Paper
POLS 797-9*	Graduate Project
POLS 799-12	Master's Thesis

## Research

UNBC has a number of research institutes that focus on the social, political, and economic concerns of northern BC and similar regions elsewhere. Research among faculty in Political Science includes the mapping of aboriginal land claims in Russia, local government reform in Siberia, and analyses of public services and the quality of life of northern communities. Related research from faculty in other disciplines includes resource-community sustainability, health problems of aboriginal people in Northern BC and Siberia, and Northern BC child welfare issues.

# Psychology (MSc Program)

Cindy Hardy, Professor and Chair  
Sherry Beaumont, Professor  
Henry Harder, Professor  
Han Li, Professor  
Paul Madak, Professor  
Kenneth Prkachin, Professor  
Robert Tait, Professor  
William Owen, Associate Professor  
Glenda Prkachin, Associate Professor  
Paul D. Siakaluk, Associate Professor  
Loraine Lavallee, Assistant Professor

Website: [www.unbc.ca/psychology](http://www.unbc.ca/psychology)

The MSc in Psychology at UNBC provides breadth in the substantive and methodological areas of Psychology, with a focus on health and human psychology. The MSc provides advanced research and experiential training so that graduates gain skills beneficial to academic and related areas.

## Admission

Applicants must have an Honours degree in Psychology or an undergraduate degree in Psychology (or a related field) with research experience.

Students interested in applying for the MSc in Psychology are responsible for ensuring that all application materials are received at UNBC by the application deadline:

- a completed application form,
- a letter of interest,
- official transcripts from all post-secondary institutions,
- scores on the Graduate Record Examination General and Advanced Psychology tests,
- three letters of reference from academic referees, and
- a copy of a thesis or paper submitted for course work.

Application deadlines are found in this calendar under “Semester Dates” or online at: [www.unbc.ca/calendar/graduate](http://www.unbc.ca/calendar/graduate), also under “Semester Dates.” The Psychology MSc Program accepts students for the September Semester.

For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).

## Requirements

Students in the MSc Program are required to complete a minimum of 20 credit hours of course work consisting of two quantitative methods courses:

PSYC 600-4	Quantitative Methods I
PSYC 605-4	Quantitative Methods II

and four courses, two of which must be from among the following:

PSYC 610-3	Cognitive Neuroscience
PSYC 615-3	Social Psychology
PSYC 620-3	Health Psychology
PSYC 631-3	Psychopathology
PSYC 635-3	Cognition and Learning
PSYC 645-3	Developmental Psychology

Required graduate courses in Psychology are offered on a two-year schedule.

These courses will provide students with the basic foundations upon which to build their MSc research. In addition, all MSc students are required to successfully complete an MSc thesis (PSYC 690-12).

Students must have a cumulative GPA of B+ or greater by the end of their second semester of registration, and maintain it at B+ or better thereafter.

Students may be required to address deficiencies within their background preparation in Psychology or in their area of concentration that are identified by the Psychology Graduate Committee. Additional courses may be required.

Normally, a student will present an acceptable thesis proposal to their supervisory committee by the end of their first year in the program. It is expected that defence of the Master's thesis will take place within two years of acceptance into the program.

# Psychology (PhD Program)

Cindy Hardy, Professor and Chair  
Sherry Beaumont, Associate Professor  
Henry Harder, Professor  
Han Li, Professor  
Paul Madak, Professor  
Kenneth Prkachin, Professor  
Robert Tait, Professor  
William Owen, Associate Professor  
Glenda Prkachin, Associate Professor  
Paul D. Siakaluk, Associate Professor  
Lorraine Lavallee, Assistant Professor

Website: [www.unbc.ca/psychology](http://www.unbc.ca/psychology)

The PhD in Psychology at UNBC provides breadth in the substantive and methodological areas of Psychology, with a focus on health and human psychology. The PhD provides advanced research and experiential training so that graduates gain skills beneficial to academic and related areas.

More specifically, the objectives of the PhD program in Psychology is to develop scholars and researchers who have an advanced level of understanding of the psychological sciences, including comprehensive knowledge of contemporary theory and evidence in Psychology and a high level of methodological expertise and can contribute to the larger body of scientific knowledge of psychology through research.

## Admission

Applicants must have both a Bachelors and Masters degree, at least one of which must be in Psychology with a research-based thesis.

Students interested in applying for the PhD in Psychology are responsible for ensuring that all application materials are received at UNBC by the application deadline:

- a letter of interest,
- official transcripts from all post-secondary institutions,
- three letters of reference from academic referees, and
- a copy of a thesis or paper submitted for course work.

In addition to the above, applicants who do not have a Master's degree in Psychology must submit scores on the Graduate Record Examination Advanced Psychology test by the application deadline.

Application deadlines are found in this calendar under "Semester

Dates" or online at: [www.unbc.ca/calendar/graduate](http://www.unbc.ca/calendar/graduate), also under "Semester Dates." The Psychology PhD Program accepts students for September semester admission.

For additional information about graduate admissions or to download application materials, go to the Graduate Programs website at [www.unbc.ca/graduate-programs](http://www.unbc.ca/graduate-programs).

## Requirements

Students in the PhD program are required to complete a minimum of 12 credit hours of course work consisting of two graduate seminars:

PSYC 800-3 Graduate Seminar

3 credit hours of research practica:

PSYC 860-(3-6) Research Practicum

and two courses from:

PSYC 810-3	Cognitive Neuroscience
PSYC 815-3	Social Psychology
PSYC 820-3	Health Psychology
PSYC 822-3	Cross-Cultural Communication in Health Care Settings
PSYC 825-3	Cognitive Neuropsychological Assessment
PSYC 826-3	Personality Assessment
PSYC 830-3	Psychological Interventions
PSYC 831-3	Psychopathology
PSYC 835-3	Cognition and Learning
PSYC 845-3	Developmental Psychology

Required courses in Psychology are offered on a two-year schedule. These courses provide students with the basic foundations upon which to build their PhD research. In addition, students are required to complete successfully a comprehensive examination and a PhD dissertation (PSYC 890-12). The comprehensive examination is tailored to ensure each student is adequately prepared to begin work on the PhD dissertation.

Students must have a cumulative GPA of B+ or better by the end of their second semester of registration, and maintain it at B+ or better thereafter.

Students may be required to address deficiencies within their background preparation in Psychology or in their area of concentration that are identified by the Psychology Graduate Committee. Additional courses may be required.

Normally, students take a comprehensive examination by the end of the first year in the program (or 12 credit hours for part-time students). Upon successfully completing the comprehensive examination, and presenting an acceptable dissertation proposal to their supervisory committee, a student is granted PhD Candidate status, and embarks upon completion of the dissertation under the supervision of a Faculty Academic Supervisor. Normally, it is expected that the defence of the dissertation by full-time PhD Candidates will take place within three years of acceptance into the program.

# Social Work (MSW Program)

Dawn Hemingway, Associate Professor and Chair  
Glen Schmidt, Professor  
Bruce Bidgood, Associate Professor  
Nancy Jokinen, Associate Professor  
Indrani Margolin, Associate Professor  
Heather Peters, Associate Professor  
Joanna Pierce, Associate Professor  
Si Transken, Associate Professor  
Dave Sangha, Assistant Professor  
Tammy Stuble, Assistant Professor

Website: [www.unbc.ca/social-work](http://www.unbc.ca/social-work)

The Master of Social Work program is available on a full- or part-time basis, and can be completed through a thesis or practicum route. The MSW builds on the BSW by offering students an integrated research/policy/practice concentration in one of the key thematic areas: social work in northern and remote areas, First Nations, women and the human services, and community practice and research. The aim of the MSW is to provide students with advanced social work research, policy, and practice skills. It is designed to enable students to pursue independent studies that will help them undertake a variety of responsibilities in management, policy formulation, program consultation, planning, advanced social work, clinical practice, and research within the human services.

## Admission

**Enrolment in the MSW is strictly limited.**

In addition to the admission application requirements outlined in Section 1.0 of the Graduate Academic Calendar, all students in the Social Work MSW program are required to submit a Criminal Record Check search prior to the first day of classes in their entry semester.

Domestic applicants must supply a Criminal Record Check search result after receiving an offer of admission and before the first day of classes; the search result is not required with the application. International applicants must submit a Criminal Record Check search result provided by their local policy authority upon application, and will also be required to submit a British Columbia Criminal Record Check if offered admission. The Office of the Registrar will provide instructions to domestic and international applicants who have accepted offers of admission on how to complete a British Columbia Criminal Record Check.

Completion of the MSW Supplementary Application form is also required in order to be considered for admission. The MSW Supplementary Application form is included with the application material for this program. Two academic letters of reference and one professional letter of reference must be submitted.

Application deadlines can be found in the Graduate Programs Admission and Regulations section of the Graduate Calendar at <http://www.unbc.ca/calendar/graduate/admissions>.

The Social Work MSW program accepts students for the September Semester.

The MSW program at UNBC emphasizes a pro-active orientation that aims to provide informed theoretical, empirical, and substantive choices for improvements in human service programs, policies, education, and social work practice. This approach to social work and social policy is known as social administration.

The key elements in this social administration approach as they relate to the thematic areas of the MSW at UNBC consist of the following:

- the description and analysis of the operation of human services in northern and remote regions;
- the study of social policies and social work practices, and their individual and social consequences for the people and communities in the interior and northern British Columbia;
- the examination of global, historical, social, and economic changes, and the way these affect the living conditions and the people served by human service agencies and organizations in northern and remote areas; and
- the recognition of the values central to the responsibility of human service professionals to work with socially disadvantaged and powerless groups, and to expand the power and resources of these groups through social work practice.

Within this social administration approach courses are arranged so students develop skills that integrate the research/policy/practice domains of social work. A major emphasis of the MSW is to foster critical intervention skills that link the domains of social policy, social work research, and social work practice. For example, if one chooses to develop a speciality in community practice and research, or social policy, the program of studies will emphasize the linkages between these domains or dimensions of social work.

## Requirements

The MSW consists of a practicum or thesis option, and clusters of courses that provide for a research/policy/practice concentration in one of the key focus areas: social work in northern and remote areas, First Nations, women and the human services, and community practice and research.

Human service experience is required before candidates can be considered for the MSW program. Please see descriptions for Entry Routes 1 and 2 (below). To be admitted, a grade point average of at least 3.00 (B) in the work of the last 60 credit hours (approximately the last two years) leading to the Baccalaureate degree is required. Letters of reference, as well as a written statement of the candidate's research and practice interests and reasons for pursuing a MSW, are also required. A personal interview may be requested. Applicants who do not meet the above requirements may still be admitted under the provisions of affirmative action.

## Taking a MSW at UNBC

There are two entry routes into the MSW.

### Entry from a Bachelor of Social Work leads into the Advanced Year of the MSW program.

For full-time students entering from a BSW, this MSW program consists of 33 credit hours, including completion of a thesis or practicum report.

This program requires the successful completion of a minimum course work of 21 credit hours for thesis students and 24 credit hours for practicum students. The program comprises an integrated core of five required courses, two elective courses, and a thesis; OR five required courses, three electives, and a practicum.

### Entry with a Bachelor's degree in a related field or discipline, and two years (24 months full-time equivalent) human service experience. Entry at this level begins with an MSW Foundation Year of studies.

For full-time students entering from a Bachelor's degree in a related field, this MSW program consists of a minimum two-year (24 month) program of courses and practica. A thesis or practicum report is required following completion of course work. An oral defense is required for the thesis. This route normally includes 66 credit hours, consisting of 33 credit hours in each of the two years.

## MSW

### Requirements

Thesis students must take the following required courses:

SOCW 609-3	Advanced Quantitative Research
HHSC 703-3	Qualitative Research Approaches in Health and Human Sciences
SOCW 704-3	MSW Integrative Seminar
SOCW 700-12	MSW Thesis

Practicum students must take the following required courses:

SOCW 609-3	Advanced Quantitative Research
HHSC 703-3	Qualitative Research Approaches in Health and Human Sciences
SOCW 704-3	MSW Integrative Seminar
SOCW 732-9	MSW Practicum II

All students are required to take at least two of the following courses, and may take the other two courses as electives:

SOCW 601-3	Current Issues in Northern/Remote Social Work
SOCW 602-3	First Nations: Advanced Social Work Practice
SOCW 603-3	Women: Policy/Practice Issues
SOCW 605-3	Community Work/Politics of Change

### Electives

SOCW 604-3*	Directed Readings
SOCW 610-3	Wellness: Alternate Approaches
SOCW 613-3	Clinical Social Work Practice
SOCW 615-3	Multi-Cultural Social Work Practice
SOCW 620-3	Policy Making/Human Services
SOCW 621-3	Comparative Welfare Analysis
SOCW 640-3	Social Work Supervision and Leadership
SOCW 651-3	Legal Issues for Women
SOCW 698-3	Special Topics
SOCW 701-3	Research Practicum

Thesis students are required to take a total of two electives. Those two electives may be taken from the two lists immediately above, and/or from other UNBC graduate programs, and/or from other accredited Canadian universities via approved transfer agreements (e.g., the Western Deans' Agreement).

Practicum students are required to take a total of three electives, one of which must come from the two lists of courses immediately above. The two other electives may come from the above lists and/or be taken from other UNBC graduate programs and/or from other accredited Canadian universities via approved transfer agreements (e.g., the Western Deans' Agreement).

\* Students may only take SOCW 604-3 Directed Readings course once for 3 credits.

### MSW Foundation Year

For those with baccalaureate degrees in related areas and two years of full-time previous human service experience, the MSW normally consists of 66 credit hours (two years) of study. The foundation year consists of six 600-level courses, two 600-level social work electives, plus SOCW 632-9 (MSW Practicum I).

The 600 level courses are:

SOCW 630-3	Communication Skills
SOCW 631-3	Critical Social Work Practice
SOCW 632-9	MSW Practicum I
SOCW 633-3	Critical Social Policy
SOCW 634-3	Social Work Research/Policy/Practice
SOCW 635-3	Social Work Philosophy and Ethics
SOCW 637-3	Advanced Practice

MSW students in their Foundation Year must successfully complete SOCW 634-3 prior to registration in SOCW 609 and HHSC 703.

# Course Descriptions

## Course Prefixes Listed Alphabetically

Course Code	Courses
ANTH	Anthropology
BCMB	Biochemistry and Molecular Biology
BIOL	Biology
CHEM	Chemistry
COMM	Commerce/Business Administration
CPSC	Computer Science
DISM	Disability Management
ECON	Economics
EDUC	Education
ENGL	English
ENPL	Environmental Planning
ENSC	Environmental Science
ENVS	Environmental Studies
FNST	First Nations Studies
GNDR	Gender Studies
GEOG	Geography
HHSC	Health and Human Science
HIST	History
IDIS	Interdisciplinary
INTX	International Exchange
INTS	International Studies
MATH	Mathematics
MCPS	Mathematical, Computer and Physical Sciences
NRES	Natural Resources and Environmental Studies
NREM	Natural Resources Management
NURS	Nursing
ORTM	Outdoor Recreation and Tourism Management
PHYS	Physics
POLS	Political Science
PSYC	Psychology
SOCW	Social Work

## 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

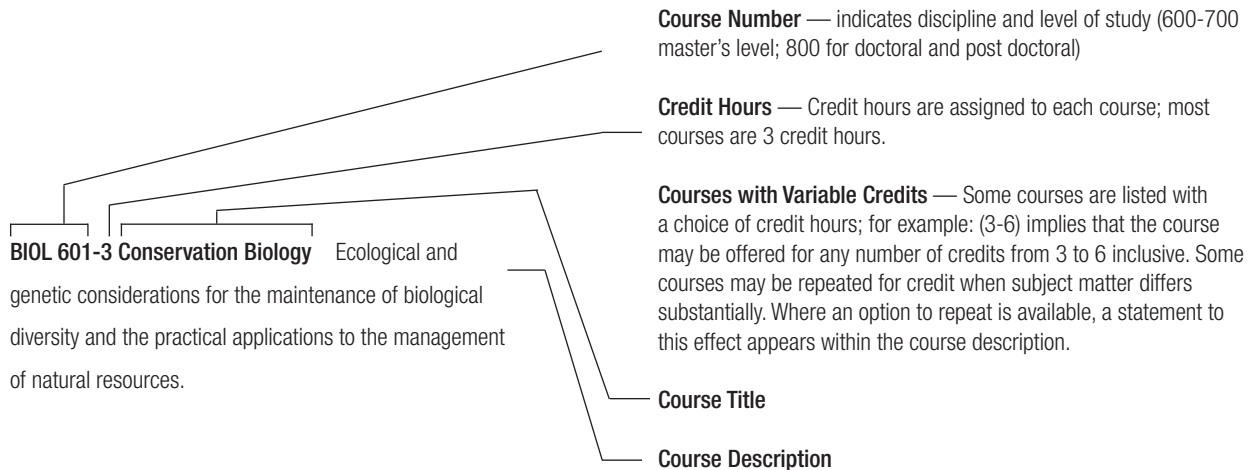
A prerequisite course is an academic requirement that must be successfully completed prior to the student taking a course. Prerequisites are used to ensure that a student has the required background to successfully complete the course. Prerequisites may also have prerequisites. These prerequisites must also be fulfilled.

## Course Offerings

Not all courses are offered every year. Check the UNBC Website at [www.unbc.ca](http://www.unbc.ca) for a list of the courses being offered in each semester.

## Course Descriptions

The explanation below will help clarify the terms found in the course descriptions.



## Anthropology (ANTH)

**ANTH 600-3 Advanced Anthropological Theory** This course surveys and critiques selected contemporary approaches to cultural and social theory.

*Prerequisites:* Permission of the instructor  
*Precluded:* ANTH 400-3

**ANTH 601-3 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:* Permission of the instructor  
*Precluded:* ANTH 401-3

**ANTH 604-3 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:* Permission of the instructor  
*Precluded:* ANTH 404-3

**ANTH 605-3 Landscapes, Place and Culture** This course provides an examination and critique of the anthropological approaches to landscape, space and place. Cross-cultural and cross-temporal case studies are used.

*Prerequisites:* Permission of the instructor  
*Precluded:* ANTH 405-3

**ANTH 606-3 Feminist Perspectives in Anthropology** This course will survey and critique selected theoretical approaches and ethnographies to examine key areas 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:* Permission of the instructor  
*Recommended:* GNDR 710-3  
*Precluded:* ANTH 406-3

**ANTH 607-3 British Columbia Ethnography** This course is a comparative critique of contemporary ethnographic research of selected cultures or regions.

*Prerequisites:* Permission of the instructor  
*Precluded:* ANTH 407-3

**ANTH 609-3 Advanced British Columbia Archaeology** This course is a problem-based seminar in which selected issues are examined from several points of view.

*Prerequisites:* Permission of the instructor  
*Precluded:* ANTH 409-3

**ANTH 610-3 Theory of Nation and State** A critical examination of theories of ethnicity, nationalism and statehood from an anthropological perspective.

*Prerequisites:* Permission of the instructor  
*Precluded:* ANTH 410-3

**ANTH 611-3 Biological Anthropology** This course is a problem-oriented and project-based seminar in which a selected topic, or topics, in biological anthropology is examined. Credit is available for both ANTH 411-3 (3-6) and ANTH 611-3, provided the topic is substantially different between offerings.

*Prerequisites:* ANTH 200-3 or permission of the instructor

**ANTH 613-3 Environmental Anthropology** This course is an examination of the anthropological literature on ecology and environmental practices in which contemporary issues and examples relevant to indigenous practices and northern peoples are developed.

*Prerequisites:* Permission of the instructor  
*Precluded:* ANTH 413-3

**ANTH 614-3 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  
*Precluded:* ANTH 414-3

**ANTH 615-3 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:* Permission of the instructor  
*Precluded:* ANTH 415-3

**ANTH 616-6 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 617-6 and ANTH 618-3  
*Precluded:* ANTH 416-6

## Course Descriptions: ANTH

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**ANTH 617-6 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 616-6 and ANTH 618-3

*Precluded:* ANTH 417-6

**ANTH 618-3 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 the instructor

*Co-requisites:* ANTH 616-6 and ANTH 617-6

*Precluded:* ANTH 418-6

**ANTH 619-3 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:* Permission of the instructor

*Precluded:* ANTH 419-3

**ANTH 620-3 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:* Permission of the instructor

*Precluded:* ANTH 420-3

**ANTH 621-(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 210-2

*Precluded:* ANTH 421-(3-6)

**ANTH 622-(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.

*Precluded:* ANTH 422-(3-6)

**ANTH 623-3 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:* Permission of the instructor

*Precluded:* ANTH 423-3

**ANTH 625-3 Introduction to Zooarchaeology** This lab course introduces students to the study of animal bones found in archeological 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:* Permission of the instructor

*Precluded:* ANTH 425-3

**ANTH 630-3 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 analysing stone tools, and includes a strong theoretical component on stone tool production and use in pre-Industrial societies. Weekly lab focus on analytical procedures, and in addition students are expected to complete assigned readings and participate in discussions.

*Prerequisites:* Permission of the instructor

*Precluded:* ANTH 430-3



**ANTH 651-3 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 451-3, FNST 651-3

**ANTH 698-3 Special Topics in Anthropology** Credit available for both ANTH 498-3 and ANTH 698-3 provided topic differs substantively between offerings.

*Prerequisites:* Permission of the instructor  
*Precluded:* ANTH 498-3

**ANTH 699-3 Independent Study** Credit available for both ANTH 499-3 and ANTH 699-3 provided topic differs substantively between offerings.

*Prerequisites:* Permission of the instructor

### Biochemistry and Molecular Biology (BCMB)

**BCMB 601-3 Basic Science of Oncology** This is a lecture-based course designed to provide insight into our basic understanding of the biological chemistry of cancer. Major topics include chemical carcinogenesis, genomic instability, oncogenes and tumor suppressor genes, cell growth, apoptosis, tumor progression and metastasis, tumor angiogenesis, hormones, viruses, and drug resistance. This course also provides an in-depth look at the advanced technology used in controlling the disease, including immunotherapy and therapeutic approaches in controlling gene expression.

*Prerequisites:* Permission of Instructor

*Precluded:* BCMB 401-3, CHEM 405-3, CHEM 605-3

**BCMB 602-3 Macromolecular Structure** This is a lecture-based course designed to provide students an understanding of the theory behind structural techniques used in biochemical laboratories. Topics include X-ray crystallography, nuclear magnetic resonance spectroscopy and electron microscopy; students are expected to develop an understanding of the theory and application of the techniques and technical considerations. Students also learn how to judge the quality of data.

*Prerequisites:* Permission of Instructor

*Precluded:* BCMB 402-3, CHEM 405-3, CHEM 605-3

**BCMB 603-3 Advanced Nucleic Acids** This is a lecture-based course designed to provide in-depth knowledge on advanced topics in nucleic acid biochemistry. Topics include mechanistic analysis of nucleic acid metabolism, the RNA world hypothesis and theories of the origin of life, epigenetics, specificity and role of polymerases and repair pathways, replication and recombination mechanisms, RNA structural motifs and physical processing in gene expression, structure and function of non-coding RNA, silencing and micro RNA, catalytic RNA molecules, and applications of RNA molecules.

*Prerequisites:* Permission of Instructor

*Precluded:* BCMB 403-3, CHEM 405-3, CHEM 605-3

**BCMB 605-3 Topics in Biochemistry and Molecular Biology** This course considers advanced topics in biochemistry. Topics depend on instructor and student interest and normally focus on material not dealt with in other courses. Note: Credit may be granted for both 400- and 600-level offerings of Topics in Biochemistry and Molecular Biology 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:* Permission of Instructor

**BCMB 609-3 Enzymology** This lecture-based course emphasizes the importance and 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:* Permission of Instructor

*Precluded:* BCMB 409-3, CHEM 409-3

**BCMB 701-3 Cell Biology Theory and Techniques** This course focuses on the most advanced topics in cell biology. Students are given the opportunity to learn both the theory and practical aspects of various techniques used in cell biology, including fluorescence microscopy. Students develop relevant expertise in cell biology methods as part of the course requirement.

*Prerequisites:* Permission of instructor

**BCMB 702-3 Chemical Biology Theory and Techniques** This course focuses on a new discipline, spanning the fields of chemistry and biology, that forms the basis of current pharmaceutical research. Chemical biology uses the techniques and tools of chemistry to study and manipulate biological systems, often using small molecules produced synthetically or derived from natural sources. Both in vitro and in vivo systems that are probed with small molecules are covered in this course. Emphasis is placed on the theoretical and experimental strategies used to design or discover molecules with useful properties, including biochemical and cell-based screens.

*Prerequisites:* Permission of instructor

**BCMB 703-3 Molecular Biology Theory and Techniques** This course focuses on the most advanced topics in molecular biology. Emphasis is placed on the development of expertise in the relevant molecular biology techniques used to study DNA, RNA, and proteins.

*Prerequisites:* Permission of instructor

**BCMB 704-1.5 Graduate Seminar** Students investigate and present ideas and results pertaining to current research in Biochemistry and Molecular Biology. The offerings may include presentations of current literature, research methodology, and topics related to students' own research or project work. This is a PASS/FAIL course.

*Prerequisites:* Permission of instructor

**BCMB 705-3 Advanced Topics in Biochemistry and Molecular Biology** This course focuses on selected advanced topics in biochemistry and molecular biology.

*Prerequisites:* Permission of instructor

**BCMB 706-3 Bioinformatics Tools** This course focuses on the use of bioinformatics tools in biochemistry and molecular biology research. Students are given the opportunity to learn the most widely used as well as more advanced bioinformatics tools to study bio-molecules.

*Prerequisites:* Permission of instructor

**BCMB 790-3 Special Topics** This course focuses on selected special topics in advanced biochemistry, molecular biology and/or cell biology.

*Prerequisites:* Permission of instructor

### Biology (BIOL)

**BIOL 601-3 Conservation Biology** Ecological and genetic considerations for the maintenance of biological diversity and the practical applications to the management of natural resources.

*Precluded:* BIOL 411-3

**BIOL 602-3 Fisheries Management** Management of freshwater and anadromous fishes of British Columbia.

*Precluded:* BIOL 414-3

**BIOL 603-3 Population and Community Ecology** Structure and dynamics of populations; theoretical and applied aspects of population and community ecology.

*Precluded:* BIOL 410-3

**BIOL 604-3 Wildlife Ecology** The general ecology and biology of wildlife species, including physiology, behaviour, nutrition and endocrinology.

*Precluded:* BIOL 412-3

**BIOL 605-3 Wildlife Management** Management criteria for reptiles, amphibians, birds and mammals. Emphasis on the socio-economic aspects of management. Communication processes are addressed.

*Precluded:* BIOL 413-3

**BIOL 606-3 Fish Ecology** The general life history, ecology, zoogeography and habitats of freshwater, anadromous and marine fishes.

*Precluded:* BIOL 406-3

**BIOL 611-3 Insects, Fungi and Society** The historical, social and economic importance of insects and fungi to human society, including underlying biological and ecological principles.

*Precluded:* BIOL 421-3

**BIOL 620-3 Animal Behaviour** Adaptive significance and evolutionary basis of behaviour patterns exhibited by the major animal phyla.

*Precluded:* BIOL 420-3

**BIOL 623-3 Molecular Evolution and Ecology** A lecture and laboratory based course that 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.

*Precluded:* BIOL 423-3, BIOL 709-3

**BIOL 624-3 Plant Ecology** Principles of ecology as they relate to plants. Structure, classification and analysis techniques, and the dynamic behaviour of plant communities.

*Precluded:* BIOL 404-3

**BIOL 625-3 Applied Genetics and Biotechnology** Familiarization with 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, quantitative/molecular genetics, biotechnology and molecular ecology.

*Prerequisites:* Permission of instructor

*Precluded:* BIOL 425-3

**BIOL 632-3 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.

*Precluded:* BIOL 402-3

**See NRES course listing for additional 700-level Biology courses.**

## Chemistry (CHEM)

**CHEM 602-3 Topics in Organic Chemistry** Credit may be granted for both 400 and 600 level offerings of Topics in Chemistry courses, provided the content of the independent offerings of the courses is sufficiently different (as determined by the Program Chair or Dean).

*Prerequisites:* Permission of instructor

**CHEM 603-3 Topics in Inorganic Chemistry** Credit may be granted for both 400 and 600 level offerings of Topics in Chemistry courses, provided the content of the independent offerings of the courses is sufficiently different (as determined by the Program Chair or Dean).

*Prerequisites:* Permission of instructor

**CHEM 604-3 Topics in Physical Chemistry** Credit may be granted for both 400 and 600 level offerings of Topics in Chemistry courses, provided the content of the independent offerings of the courses is sufficiently different (as determined by the Program Chair or Dean).

*Prerequisites:* Permission of instructor

**CHEM 605-3 Topics in Biochemistry** Credit may be granted for both 400 and 600 level offerings of Topics in Chemistry courses, provided the content of the independent offerings of the courses is sufficiently different (as determined by the Program Chair or Dean).

*Prerequisites:* Permission of instructor

**CHEM 610-3 Topics in Analytical Chemistry** 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, provided the content of the independent offerings of the courses are sufficiently different (as determined by the Program Chair or Dean).

*Prerequisites:* CHEM 310-3

*Precluded:* CHEM 410-3

**CHEM 699-(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 Program Chair

*Precluded:* CHEM 499-(3-6)

**CHEM 702-3 Advanced Topics in Organic Chemistry**  
Selected advanced topics in organic chemistry.

*Prerequisites:* Permission of instructor

**CHEM 703-3 Advanced Topics in Inorganic Chemistry**  
Selected advanced topics in inorganic chemistry.

*Prerequisites:* Permission of instructor

**CHEM 704-3 Advanced Topics in Physical Chemistry**  
Selected advanced topics in physical chemistry.

*Prerequisites:* Permission of instructor

**CHEM 705-3 Advanced Topics in Biochemistry**  
Selected advanced topics in biochemistry.

*Prerequisites:* Permission of instructor

**CHEM 710-3 Advanced Topics in Analytical Chemistry**  
Selected advanced topics in analytical chemistry.

*Prerequisites:* Permission of instructor

**CHEM 714-1.5 Graduate Seminar** Students investigate and present ideas and results pertaining to current research in Chemistry. The offerings may include presentations of current literature, research methodology, and topics related to students' own research or project work. This is a PASS/FAIL course.

**CHEM 790-3 Special Topics** Selected special topics in advanced chemistry.

*Prerequisites:* Permission of instructor

## Commerce (COMM)

**COMM 603-3 Business and Corporate Strategy** The goal of the first module of this course is to introduce students to the strategy formulation process and to the pursuit of competitive advantage in the single market or industry context. The second section of this course builds on the strategic planning concepts introduced in the Business Strategy module. At the corporate level, firms ranging from small to large in size operate in multiple markets and/or industries. The purpose of this module is to analyze how various corporate strategy approaches can create a whole that is greater than the sum of the parts.

**COMM 610-3 Accounting** Using financial information for decisions and control is an important skill for managers. This course explores selected topics within the realms of financial and management accounting using a combination of lectures and case studies. More specifically, the financial accounting segment focuses on the structure and interpretation of financial accounts prepared primarily for external users. Management accounting focuses on the internal users and includes such topics as budgeting, cost-volume-profit analysis, activity-based costing, planning and control, the balanced scorecard, relevant costs and variable costing versus full-absorption costing.

**COMM 616-3 Accounting Research 1** This course reviews and critiques research methods, analysis, and strategies within a specialized area of accounting drawing upon faculty expertise. The course is delivered by individual faculty members in the accounting area on a revolving basis drawing on their active program of accounting research.

*Precluded:* COMM 416-3

**COMM 617-3 Accounting Research 2** This course reviews and critiques research methods, analysis, and strategies within a specialized area of accounting drawing upon faculty expertise. The course is delivered by individual faculty members in the accounting area on a revolving basis drawing on their active program of accounting research.

*Precluded:* COMM 417-3

**COMM 618-3 Accounting Research 3** This course reviews and critiques research methods, analysis, and strategies within a specialized area of accounting drawing upon faculty expertise. The course is delivered by individual faculty members in the accounting area on a revolving basis drawing on their active program of accounting research.

*Precluded:* COMM 418-3

**COMM 620-3 Corporate Finance** This course establishes the theory and practice foundations of financial management. The central concerns of the financial manager, namely capital budgeting, capital structure, working capital management and financial planning are studied extensively using quantitative and qualitative inquiry. These concerns of the financial manager are applicable not only to corporate settings but more broadly to not-for-profit and governmental organizations.

**COMM 626-3 Finance Research 1** This course reviews and critiques research methods, analysis, and strategies within a specialized area of finance drawing upon faculty expertise. The course is delivered by individual faculty members in the finance area on a revolving basis drawing on their active program of finance research.

*Precluded:* COMM 426-3

**COMM 627-3 Finance Research 2** This course reviews and critiques research methods, analysis, and strategies within a specialized area of finance drawing upon faculty expertise. The course is delivered by individual faculty members in the finance area on a revolving basis drawing on their active program of finance research.

*Precluded:* COMM 427-3

**COMM 628-3 Finance Research 3** This course reviews and critiques research methods, analysis, and strategies within a specialized area of finance drawing upon faculty expertise. The course is delivered by individual faculty members in the finance area on a revolving basis drawing on their active program of finance research.

*Precluded:* COMM 428-3

**COMM 630-3 Organizational Studies** An in-depth look at the interaction of individuals and groups in organizations including work motivation, employee attitudes and how change affects the worker.

*Prerequisites:* Permission of instructor

*Precluded:* COMM 430-3

**COMM 631-3 Labour Management 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:* Permission of instructor

*Precluded:* COMM 431-3

**COMM 632-3 Organizational Behaviour** The ability to successfully manage people is a critical skill for managers who want to create and manage high performing organizations. This course focuses on helping students develop people management skills and the knowledge and skills needed to transform the organization. There is an emphasis on leadership as it relates to motivating people, building effective teams and interpersonal relations, managing change, creating learning organizations and developing the organization.

*Precluded:* COMM 630-3

**COMM 637-3 Research in Human Resources Management/ Organization Behaviour 1** This course reviews and critiques research methods, analysis, and strategies within a specialized area of human resources management and organization behaviour drawing upon faculty expertise. The course is delivered by individual faculty members on a revolving basis, drawing on their active program of research.

*Precluded:* COMM 437-3

## Course Descriptions: COMM

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**COMM 638-3 Research in Human Resources Management/ Organization Behaviour 2** This course reviews and critiques research methods, analysis, and strategies within a specialized area of human resources management and organization behaviour drawing upon faculty expertise. The course is delivered by individual faculty members on a revolving basis, drawing on their active program of research.

*Precluded:* COMM 438-3

**COMM 639-3 Research in Human Resources Management/ Organization Behaviour 3** This course reviews and critiques research methods, analysis, and strategies within a specialized area of human resources management and organization behaviour drawing upon faculty expertise. The course is delivered by individual faculty members on a revolving basis, drawing on their active program of research.

*Precluded:* COMM 439-3

**COMM 640-3 Marketing** This course focuses on developing and executing effective marketing strategies and plans. Students develop an understanding of major marketing concepts and their applications. These include developing a customer-focus organization, identifying marketing opportunities, forecasting demand, product/service development, buyer behaviour, market segmentation, targeting, pricing, communication and distribution.

**COMM 646-3 Marketing Research 1** This course reviews and critiques research methods, analysis, and strategies within a specialized area of marketing drawing upon faculty expertise. The course is delivered by individual faculty members in the marketing area on a revolving basis drawing on their active program of marketing research.

*Precluded:* COMM 446-3

**COMM 647-3 Marketing Research 2** This course reviews and critiques research methods, analysis, and strategies within a specialized area of marketing drawing upon faculty expertise. The course is delivered by individual faculty members in the marketing area on a revolving basis drawing on their active program of marketing research.

*Precluded:* COMM 447-3

**COMM 648-3 Marketing Research 3** This course reviews and critiques research methods, analysis, and strategies within a specialized area of marketing drawing upon faculty expertise. The course is delivered by individual faculty members in the marketing area on a revolving basis drawing on their active program of marketing research.

*Precluded:* COMM 448-3

**COMM 650-3 Operations Management** This course helps students to understand the nature of problems and to find solutions in manufacturing and service operations conducted in profit and not-for-profit organizations. It includes the application of quantitative tools and techniques of analysis for taking managerial decisions about operations. It covers topics such as; productivity and its measurement in organizations, operations strategy, decision making, forecasting, product and service design, design of operations systems, management of quality, production planning and control of operations, project management, e-commerce, lean and just-in-time systems. The use of case studies, projects, and class presentations are emphasized to promote interaction among individuals and teams.

**COMM 651-3 Quantitative Decision Analysis** There is a large variety of quantitative tools and techniques available in literature and the topics such as applications of decision analysis models, forecasting models, linear programming models, network models, inventory, quality, scheduling, waiting lines and simulation related models are included in this course to enhance the decision analysis skills of students.

**COMM 656-3 Research in Operations Management/International Business 1** This course reviews and critiques research methods, analysis, and strategies within a specialized area of operations management and international business drawing upon faculty expertise. The course is delivered by individual faculty members on a revolving basis, drawing on their active program of research.

*Precluded:* COMM 456-3

**COMM 657-3 Research in Operations Management/International Business 2** This course reviews and critiques research methods, analysis, and strategies within a specialized area of operations management and international business drawing upon faculty expertise. The course is delivered by individual faculty members on a revolving basis, drawing on their active program of research.

*Precluded:* COMM 457-3

**COMM 658-3 Research in Operations Management/International Business 3** This course reviews and critiques research methods, analysis, and strategies within a specialized area of operations management and international business drawing upon faculty expertise. The course is delivered by individual faculty members on a revolving basis, drawing on their active program of research.

*Precluded:* COMM 458-3

**COMM 662-3 Research Methodology** This course emphasizes the development and implementation of the quantitative and qualitative research designs most frequently used in applied and field settings, including case studies, archival research, experimental and quasi-experimental designs, survey research, and observational research. The topic of research ethics is also covered in this course.

**COMM 690-3 Canada's Asia-Pacific Gateway** This intensive seminar course explores political, economic and managerial issues that are particularly important in British Columbia as the business customer base shifts to Asia. Guest speakers, and individual and group research, complement course readings and lecture content.

**COMM 698-3 Special Topics in Business Administration** This course seeks to enhance and broaden the analytical and research skills of students by providing curriculum in special areas of research in management (like behavioural research and analysis, mathematical finance, project management, quantitative methods in business) based on the research agenda of faculty and emerging areas of research.

**COMM 701-3 Strategy Implementation** This course is designed to advance students' understanding of how to turn strategic thinking into decisions, actions and the attainment of strategic objectives. Strategic plans often fail to achieve their potential due to implementation problems. The goal of this course is to assist students to integrate learning and experience in order to avoid these pitfalls. This integrative course assumes a working familiarity with all major functional areas, as well as a foundation in strategic analysis and strategy formulation.

*Prerequisites:* COMM 603-3 or permission of the instructor

**COMM 703-3 International Business** The goal of this course is to provide a framework for analyzing and managing key international business issues. Students gain an understanding of the role played by the international manager in balancing responsiveness to local conditions against the challenges of planning and integrating global operations.

**COMM 725-3 Financial Management** Case analysis and class investigation of 'live cases' are used to explore managerial issues in finance including financial forecasting, management of working capital, business and share price valuation, capital structure and development of long term finance. Depending on class interests, more specialized topics such as dividend policy, mergers and acquisitions, use of derivatives and financing high-technology ventures are covered.

**COMM 735-3 Law, Governance and Ethics** Managers require a fundamental understanding of the network of legal and ethical responsibilities that connect stakeholders with organizations. The philosophy and principles of law, corporate governance and ethics are discussed, with class investigation of case examples used to study selected topics within each field of study.

**COMM 736-3 Human Resource Management and Industrial Relations** This course has a dual emphasis on human resources management and industrial relations. In the area of human resources management, students learn how to develop human resource strategies, and how to manage compensation, performance evaluation and diversity. In the industrial relations area, students learn about the Canadian industrial relations system, the legal environment and collective bargaining with an emphasis on the negotiation process.

*Prerequisite:* COMM 631-3

**COMM 751-3 Project Management** The course content includes project life cycle, project planning, budgeting, resource loading, resource leveling and planning, cost estimation and crashing. It also includes project evaluation, auditing, communication, and termination; and includes the use of basic statistical tools and project management related software for project management related exercises and for practical case studies.

*Prerequisite:* COMM 650-3

**COMM 755-3 Management of Technology** This course helps students to understand the nature of technology and innovations, effect of technology on businesses and business processes, development of new products and services for businesses by making use of innovations and technology. It includes topics such as; diffusion of products and process innovations in industry, business and technology, new product development and its introduction in the market, management of technological change process in organizations, management of research and development, technology forecasting, technology transfer, technology strategy and planning for growth and sustainable development. Case studies, seminars, class presentations are emphasized to promote interaction among participants.

**COMM 760-3 Seminar in Business Administration** This course includes a basic introduction to scholarship in business and reviews the current state of theory, research, and practice across the range of topics in business administration. Faculty members within specialized areas of business administration (accounting, finance, human resources management/organizational behaviour, marketing, operations management/international business) present 2 - 3 week modules in their areas of specialization.

**COMM 762-(3,6) Independent Research in Business Administration** Working individually or in a small group, students conduct research under the supervision of a faculty member within a specialized area of business administration. Students normally complete six credit hours of this course.

*Prerequisites:* COMM 662 and COMM 760, or permission of the instructor

**COMM 763-12 Master's Thesis** Designed and executed by the student, the MSc thesis involves an original empirical investigation in the chosen specialized area of business administration.

*Prerequisites:* COMM 661, COMM 662, and COMM 760

**COMM 798-(3-6) Independent Study** Under special circumstances a program of independent study may be agreed to with a member of faculty.

*Prerequisites:* Permission of the Program Chair

**COMM 799-6 MBA Project** The capstone of the MBA program, the MBA project demonstrates the student's ability to undertake practical business research with limited guidance from a member of faculty. Students normally complete their research during the second year of the program.

### Computer Science (CPSC)

**CPSC 600-3 Software Engineering Project** This course provides students, working in groups, with an opportunity to apply the principles of software engineering, learned in previous courses, in a controlled and yet realistic project environment. They gain a significant integral project experience involving various project phases, such as requirements elicitation, system design, and prototyping, as well as team organization, human factors, professionalism, and project management.

*Prerequisites:* Permission of the instructor

*Precluded:* CPSC 400-3, CPSC 301-3

**CPSC 624-3 Advanced Database Systems** This course introduces advanced concepts in database design and applications. Topics include transaction management, concurrency control, query processing and optimization, recovery and security, data warehousing and data mining, handling of special data types such as multimedia, spatial data, and XML documents. An introduction to object-oriented and object-relational models, parallel and distributed databases, and special purpose databases is also provided. Support for complex applications, information retrieval and data analysis is examined.

*Prerequisites:* Permission of the instructor

*Precluded:* CPSC 424-3

**CPSC 625-3 Introduction to Compiler Design** This course is an introduction to programming language translation, compilers, interpreters, and other language processors. Topics include the phases of a compiler, lexical analysis and scanner design, syntax analysis and parsing techniques, semantic analysis, code generation, compiler generation tools, compile time and run time aspects of semantics, execution environment and run time support, code optimization, and testing. Students design and implement a compiler for a small language.

*Prerequisites:* Permission of the instructor

*Precluded:* CPSC 425-3, CPSC 325-3

**CPSC 641-3 Distributed Systems** This course covers the fundamental principles and paradigms underlying the design of distributed computing systems. The coverage includes the definition and types of distributed systems, communication, processes, naming, synchronization, consistency and replication, fault tolerance, and security. Term projects focus on case studies of specific systems representing web-based, peer-to-peer, mobile, grid, and other modern paradigms.

*Prerequisites:* Permission of the instructor

*Precluded:* CPSC 441-3

**CPSC 642-3 Parallel Computing** This course introduces students to concepts in high performance computing. Topics include classification of parallel architectures, basic communications operations, interconnection networks, topologies of dynamic and static networks, performance issues and techniques for optimization, and dynamic programming. Parallel algorithm design for high-performance computing—such as applications in computational biology, finite-element and finite-difference methods for numerical simulations, dense/sparse matrix algorithms, and multidimensional data structures—is also discussed. Message passing (MPI and OpenMP) is used for implementation of algorithms on high performance cluster computers.

*Prerequisites:* Permission of instructor

*Precluded:* CPSC 442-3

**CPSC 644-3 Computer Networks** This course explores essential topics in computer networks including TCP protocol, TCP reliable transport service, Internet protocol IP addresses, IP datagram and datagram forwarding, IPv6, network applications, real time interactive applications protocols (RTP, RTCP, SIP, H.323), security in computer networks, and network management. Network applications discussed include client-server interaction, naming and domain name system DNS, multimedia networking, VoIP, audio and video streaming.

*Prerequisites:* Permission of the instructor

*Precluded:* CPSC 444-3

**CPSC 650-3 Bioinformatics** This course introduces computational techniques for solving biological problems and presents an overview of the tools and methods used to analyze large biological data sets. After introducing molecular biology for computer scientists—cells and organelles, chromosome, gene, DNA, RNA, proteins, transcription and translation—the course explores pairwise and multiple sequence alignment, sequence database searches, pattern identification of genes, promoters and transcription factor binding sites, as well as secondary and tertiary structure prediction for RNA and proteins. Markov models for gene prediction are introduced.

*Prerequisites:* Permission of instructor

*Precluded:* CPSC 450-3

**CPSC 651-3 Digital Image Processing and Computer Vision** Digital image processing is central to our digital age. This course explores topics in image representation, transforms, enhancement, restoration, segmentation, retrieval, and indexing.

*Prerequisites:* Permission of instructor

*Precluded:* CPSC 451-3



**CPSC 672-3 Knowledge Based Systems** This course introduces students to Expert Systems. The two major topics addressed are Rule-based systems and Fuzzy Logic systems. Goal-driven forward-chaining and backward-chaining paradigms are introduced. Automatic theorem provers, inference engines and problems of knowledge representation and knowledge acquisition are discussed. Approaches to reasoning about uncertainty, including Bayesian probabilities, certainty factors, non-monotonic logics and reasoning with beliefs, are covered. A Fuzzy Logic system is implemented and an application is developed and tested.

*Prerequisites:* Permission of the instructor  
*Precluded:* CPSC 472-3

**CPSC 674-3 Natural Language Processing** This course introduces the formal and practical methods of Natural Language processing. Topics include formal grammars and the Chomsky hierarchy, natural languages, models of syntax, augmented lexicons, parsing methods, semantic structures and knowledge representation for natural language processing, linguistic models, discourse models, problems of reference, machine translation, part of speech tagging, ambiguity and information retrieval.

*Prerequisites:* Permission of the instructor  
*Precluded:* CPSC 474-3

**CPSC 675-3 Multiagent Systems** An introduction to the theoretical and practical aspects of intelligent agents and multiagent systems, this course is open to graduate students in different areas and fosters creative multidisciplinary interaction. Coverage includes the basic concepts, agent architectures, deductive and practical reasoning agents, reactive and hybrid agents, multiagent interactions, human-agent interactions, agreements, communication, and teamwork. Individual or team projects allow students to explore specific topics in their areas of interest through theoretical or laboratory work.

*Prerequisites:* Permission of the instructor  
*Precluded:* CPSC 475-3

**CPSC 682-3 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  
*Precluded:* CPSC 482-3

**CPSC 690-3 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 699-3 Special Topics** The topics for this course vary, depending on student interest and faculty availability. The course may be repeated any number of times, provided all topics are distinct from one another.

*Prerequisites:* Permission of the instructor  
*Precluded:* CPSC 499-3 on the same topic

**CPSC 704-1.5 Graduate Seminar in Computer Science** The course comprises weekly seminar sessions. Students will investigate and present ideas and results pertaining to current computer science research. The offerings may include presentations of current literature, research methodology, and topics related to students' own research or project work. Students will participate in discussions and critique of the work presented.

MSc students are required to attend and participate in all seminar sessions to obtain credit for the course. This is a PASS/FAIL course. (All MSc students must register in a seminar course twice during their program of studies. It is expected that all MSc students will attend the seminar each semester available.)

**CPSC 706-3 Topics in Computer Science Research and Methodology** This course is designed to expose graduate students to research methods, principles and design techniques in computer science, which may include evolution of fundamental ideas in computer science, theoretical foundations, formal techniques in the areas of system specification, design, verification, validation and performance analysis. The course aims to offer methods and principles widely applicable in computer science. Specific applications studied will vary.

*Prerequisites:* Permission of the instructor

**CPSC 720-3 - Advanced Programming Languages** Topics for this course may include advanced study of general programming language design concepts, formal reasoning about programs and languages, pragmatic evaluation of language properties, and case studies of specific languages. The course may be used to communicate programming language theory and practice specific to students' project or thesis research needs.

**CPSC 723-3 Transaction Processing and Concurrency Control** This course provides an introduction to the key principles of transaction processing systems. It includes the architecture of transaction processing systems, including transactional communications paradigms, and mechanisms for recovering from transaction and system failures. Some of the commercial transaction processing systems, transactional aspects of database servers, messaging systems, Internet servers, and object-oriented systems, as well as each of their subsystems are also studied through various examples.

*Prerequisites:* CPSC 422-3 or equivalent or permission of the instructor

## Course Descriptions: CPSC

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### **CPSC 740-3 Analysis and Modelling of Communication**

**Networks** This course aims to introduce techniques for analysing the performance of communication networks and systems. The techniques to be covered include different queuing models and the applications and limitations of these models for the analysis of communication networks, such as: Introduction, probability, queuing analysis, M/M/1 and other models, Performance Modelling, Simple and complex Packet Switched Networks and other modelling techniques.

*Prerequisites:* CPSC 440-3 or CPSC 640-3 or equivalent or permission of the instructor

### **CPSC 741-3 Advanced Topics in Distributed Computing**

This course focuses on exploration of principles of distributed computing through a study of selected advanced topics of research interest to faculty and students.

*Prerequisites:* Permission of the instructor

### **CPSC 744-3 Internet and Mobile Security**

This course provides a comprehensive study of issues in internet and mobile security including types of security services, firewalls and virtual private networks. Other topics covered include denial of service attacks, virus, worms, Trojan horses, replay violations, cookies, Public key cryptography, hash algorithms, Data Encryption Standard (DES), MD5, Modular arithmetic, primes and Euclid's algorithm, Public key algorithms, Prominent Internet Security, Procedures like Diffie-Hellman, authentication, passwords, mutual authentication, authorization, RADIUS and AAA, IPsec, IKE, PKI. The course also covers transport layer security and secure socket layer protocols, authentication of mobile users and privacy operations.

*Prerequisites:* CPSC 440-3 or equivalent or permission of the instructor

### **CPSC 750-3 Digital Compression for Multimedia**

This course covers topics including: Data compression, multimedia bandwidth requirements, ad hoc compression methods, lossless and lossy compression algorithms, the components of a data compression system, introduction to information theory, statistical compression methods such as Hoffman and Arithmetic entropy coders, the JBIG standards, Dictionary based compression methods (LZ family), Universal Lossless source coding, Model based compression methods (PPM, DMC), Transform based text compression (BWT transform), Image compression methods (Mathematical preliminaries), scalar and vector quantization, Predictive coding, DPCM, hierarchical vector quantization, Transform Coding (DCT-JPEG/MPEG) and wavelet transform (EZW/RMF), Subband Coding, and Wavelet Compression. A brief discussion of Video and Sound Compression is also provided.

**CPSC 760-3 Modelling and Simulation** This course covers fundamental modelling and simulation concepts and discrete-event systems in particular. The course introduces systems modelling and simulation concepts, basic probability distributions and random numbers, queuing models, and overview of relevant object oriented concepts. The fundamental concepts and practical simulation techniques for modelling different types of systems are covered. An in-depth study of modelling elements, simulation protocols, and their relationships including verification and validation are discussed. Various distributed systems are introduced as case studies and a significant part of the course and hand-on experience is through simulation projects. Understanding of distributed systems and object oriented programming concepts and basic probability theory is required.

*Prerequisites:* Permission of the Instructor

### **CPSC 790-3 Graduate Seminar**

**CPSC 791-3 Advanced Special Topics I** This course introduces selected advanced special topics in computer science. The content may vary.

**CPSC 792-3 Advanced Special Topics II** This course introduces selected advanced special topics in computer science. The content may vary.

### Disability Management (DISM)

#### **DISM 609-3 Professional Ethics in Health Care Management**

This course addresses the ethical practice of health care management. Students are exposed to ethical dilemmas inherent to our health care system and are provided with the skills and knowledge to resolve these dilemmas. Students become familiar with several health care professionals' codes of ethics and learn how to apply various ethical decision making models.

*Prerequisite:* Graduate Standing

**DISM 710-3 Foundations in Disability Management** This course will provide a comprehensive overview of the principles and practices of disability management in the workplace. The course begins with an introduction to the interdisciplinary nature of return to work services and interventions, theoretical foundations of disability management and benchmark models or approaches used, and the typical issues and needs among persons challenged by return to work barriers. The application of management skills in resolving disability management problems will also be covered including traditional management skills in the areas of budgeting, human resources, service provision and problem solving skills.

**DISM 711-3 Disability Management: Legislation, Policy & Procedures** This course will provide the skills and knowledge required to develop organizational policy and procedures that are based on societal values, legislation and regulation, collective bargaining agreements, and the specific organizational culture.

**DISM 712-3 Disability Management Interventions** The primary goal of disability management is to help workers with limitations and restrictions return to work at the optimum point in their rehabilitation and recovery. This course will cover the skills, knowledge and attitudes required for effective disability interventions. Additional topics covered include: working with the supervisor, the individual and the shop steward to develop, implement and monitor a successful transitional work plan.

**DISM 720-3 Special Topics** This course covers topics of special interest, which may vary from year to year.

**DISM 794-6 Disability Management Major Paper** The Major Paper (MP) option is for those students who have written a letter outlining their experience in the disability management field and obtained permission allowing them to prepare a Major Paper in place of a Practicum (6 credits). It is the aim of the MP to acquaint students with the practice of scholarship. Such acquaintance normally entails a critical treatment of relevant academic literature using theoretical or philosophical methods. If the student wishes to pursue empirical research, either quantitative or qualitative, the thesis option must be selected.

*Prerequisites:* Completion of all the Disability Management required courses

**DISM 795-6 Disability Management Practicum** Students participate in field-based learning activities for the purpose of pursuing and developing research/policy administration/practice skills within a related employment area. The duration of this component is equivalent to three months full-time employment.

**DISM 796-3 Disability Management Comprehensive Examination** The comprehensive examination option of study requires the successful completion of a comprehensive examination that evaluations a candidate's knowledge of theory, research, and practice in his/her field of study.

*Prerequisites:* Completion of all course work

#### **DISM 798-(3-6) Directed Studies**

#### **DISM 799-9 Disability Management Thesis**

### Economics (ECON)

**ECON 601-3 Global Economy and Development** This course analyzes the evolution, and assesses competing theories, of the global economy. The prospects for developing countries within the global economy are examined.

*Precluded:* ECON 701-3 and ECON 401-3

**ECON 604-3 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.

*Precluded:* ECON 704-3 and ECON 404-3

**ECON 608-3 Managerial Economics** This course examines the economic basis of managerial decision-making. The focus is on demand analysis, production and costs, and price determination in different market structures. Other topics covered include pricing strategies, decision-making under risk, and the economic rationale for business regulation. Case studies and events reported in the business press inform the course.

**ECON 610-3 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.

*Precluded:* ECON 410-3

**ECON 611-3 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.

*Precluded:* ECON 411-3

**ECON 623-(3, 6) Economics Field Study** This course allows students to learn about the application of economics in specific contexts. Course location varies with instructor and year taken. This course may be repeated to a maximum of 6 credit hours if the course content differs.

*Prerequisites:* Graduate student standing and permission of the Chair

**ECON 625-3 Trade and the Environment** This course considers the relationship between different international trade regimes and environmental issues.

*Precluded:* ECON 425-3

#### **ECON 635-3 Financial Economics and Quantitative**

**Methods** This course explores the theoretical and conceptual foundations of financial economics. The course also includes quantitative methods for testing some of the basic financial propositions in finance.

*Prerequisites:* Graduate student standing and permission of the Chair

*Precluded:* ECON435-3

**ECON 710-3 Macroeconomic Policy for Development** This course provides a critical understanding of macroeconomic models used in International Monetary Fund stabilization programs. Structuralist and other heterodox approaches are also considered. Topics covered include exchange rate policies, inflation, interest rate policies and financial liberalization.

**ECON 712-3 Applied Econometrics** This course provides an introduction to econometric methods. Topics covered include simple and multiple regressions, hypothesis and diagnostic testing, and time series models. Students are expected to become familiar with one or more course-related software packages.

#### **ECON 698-3 Special Topics in Economics**

**ECON 798-9 Economics Project** The project is a policy and/or applied paper relevant to one or more developing countries. Proposals for projects and the projects themselves are evaluated by the supervisory committee. An oral defence is required.

**ECON 799-12 Master's Thesis** The MA thesis should pose and examine a significant development question in a way that demonstrates critical thinking, an understanding of the relevant literature, and the ability to conduct systematic research. In preparation for the thesis, a research proposal is to be drafted for approval by a supervisory committee. An oral defence of the thesis is required.

## Education (EDUC)

**EDUC 601-3 Educational Research Design and Methodology** An introduction to the paradigms of educational inquiry, the formulation of research questions, the consideration of ethical issues, the principal types and methods of educational research, the preparation of research proposals, and the reporting of research results. Students will be encouraged and assisted to utilize this course to develop either a thesis or project proposal that will satisfy the research requirement of the MEd degree program.

**EDUC 602-4 Quantitative Research Design and Data Analysis (Lecture/Lab)** This course is an introduction to the descriptive and inferential univariate statistics commonly used to quantitatively analyze social sciences research data. Topics include graphing, central tendency and dispersion measures, standard scores, data cleaning, hypothesis testing, correlation, simple linear regression, nonparametric statistics, and an introduction to ANOVA, including factorial ANOVA, with multiple comparisons. Research methodology is integrated throughout the course. The student is given instruction in common word processing and spreadsheet programs for the purpose of statistical analysis and reporting.

**EDUC 603-4 Advanced Quantitative Data Analysis (Lecture/Lab)** This course provides an examination of a variety of advanced (generally multivariate) methods of quantitatively analyzing social science research data. Selected topics include: introductory matrix algebra, a review and an extension of ANOVA techniques introduced in EDUC 602-4 including ANCOVA, MANOVA, and MANCOVA, multiple linear, and logistic regression, and factor analysis. Additional methodological and/or analytic topics are included in accord with the expressed research interests and needs of students. The student is given instruction in one or more common statistical programs.

*Prerequisites or Co-requisites:* EDUC 602-4 or equivalent

**EDUC 606-3 Leading for Change** This course reviews contemporary management and organizational theory emphasizing the role that leaders can play in facilitating and managing change. Other areas of focus include developing a learning organization, organizational responsiveness, processes of organizational change and improvement, strategic planning, and program evaluation. By highlighting the accountability policy trends in BC and Canadian schools, this course emphasizes the links between theory and practice.

**EDUC 609-3 Aboriginal/Indigenous Learners: History, Culture, and Ways of Knowing** This course explores the difficult history Aboriginal/Indigenous people have had with Western education. It also explores Indigenous ways of knowing, contemporary educational theory, and instructional practices in relation to the needs and resources of Aboriginal/Indigenous students in rural and urban northern communities. Students are encouraged to examine achievement data and to explore cultural assumptions around definitions of Aboriginal/Indigenous student success. Students will consider the cultural relevance of teaching resources, assessment tools, and school improvement interventions. Issues of Aboriginal/Indigenous access, retention, and participation in education systems are emphasized, along with the need for rebuilding trust among educational institutions and Aboriginal/Indigenous communities.

*Precluded:* EDUC 646-3

**EDUC 610-4 Qualitative Analysis in Education (Lecture/Lab)** This course provides an introduction to the conceptual underpinnings of qualitative research and to qualitative data analysis methods, including case study, discourse analysis, grounded theory, action research, phenomenology, and ethnography. The course includes a lab in which students will be introduced to the use of qualitative analysis software.

**EDUC 611-3 Advanced Topics in Qualitative Research** This course is an exploration of epistemological issues in qualitative research, including ethics, researcher role, reflexivity, voice, and interpretation. The course includes in-depth study and application of one or more of the qualitative approaches to analysis introduced in EDUC 610-4.

*Prerequisites:* EDUC 610-4 or equivalent

**EDUC 613-3 Interpersonal Counselling Skills** This course explores the theory and practice of interpersonal communication and helping skills in counselling. It provides opportunity within the classroom setting to practice and receive feedback on basic helping and communications skills.

*Prerequisites:* This course is restricted to MEd Counselling or DISM students, or by permission of the instructor

**EDUC 615-3 The School Principalship** This course explores the skills, knowledge and personal attributes central to effective school leadership in British Columbia. It emphasizes the legal and policy context for schools by examining school law (Legal duties and responsibilities), collective bargaining and school finance; and it explores effective interpersonal and supervisory skills in the workplace. Examples from the field experiences of participants and the instructor permit opportunities for developing personal praxis.

## Course Descriptions: EDUC

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**EDUC 616-3 Policy and Politics in Public Education** This course examines the politics of education at the local, provincial and national levels by considering the governance structures, patterns or trends in education and political influences on educational decision makers. Emphasis is placed on the policy process. Both the theory and practice of policy development are explored including agenda setting, stakeholder influence, bureaucratic systems, policy design, implementation and evaluation, and the principles and processes of inclusive decision making.

**EDUC 617-3 Leading for Learning: Teacher Leadership and Principal** This course provides an overview of the skills, knowledge, and personal attributes central to effective teacher leadership and principal leadership in schools in British Columbia. It features a current emphasis on distributed leadership and on various kinds of influence within schools that function as sustainable learning communities. The course explores collegial relationships as a background for instructional improvement and invites identification of personal leadership goals as well as plans for implementation.

*Precluded:* EDUC 615-3

**EDUC 618-3 Family Counselling** This course is an introduction to classic and postmodern theories of family counseling including Bowen, Structural, Strategic, and Experimental Family Therapies. Application of theory to practice is included.

*Prerequisite:* This course is restricted to MEd students or permission of the instructor

**EDUC 619-3 Counselling for Aboriginal/Indigenous Peoples** This course examines the place of counselling in the holistic context of Aboriginal/Indigenous approaches to health and healing. In particular, it examines the counselling processes that are inherent in traditional healing practices such as the sweat lodge, concentric circle, talking circle and vision quest.

**EDUC 620-4 Educational Assessment and Evaluation (Lecture/Lab)** This course provides training in the practices of item and instrument construction coupled with an introduction to classical test theory and item response modelling (IRM). Construction of selection and open-ended item formats are dealt with for achievement, performance assessment, and affective measures. Evaluation of items and instruments is accomplished using classical item analysis, reliability and validity, and a brief introduction to item response models. The course includes a survey of commercial psychoeducational measures, particularly individual aptitude and achievement tests. Instruction in the use of specialized software for test construction, classical item analysis and IRM is part of the course.

*Prerequisites:* EDUC 602-4 or equivalent

**EDUC 621-3 Classroom Assessment Practices** In this course, we will examine the relationships between and purposes of classroom-based assessment and evaluation. We will consider the roles of formative and summative assessment, including dynamic assessment, curriculum-based assessment, portfolios, conferencing, and standardized testing; and the implications of such practices for grading, instructional approaches, school achievement, and planning for diverse students. The course includes a practical component so that students will explore effective assessment practices and how to interpret assessment results, as well as how to evaluate current trends in educational evaluation.

*Prerequisites:* None; elective course open to all graduate Education students. Graduate students outside of Education, non-degree graduate students, and upper level undergraduate students also may take the course, as per the admission guidelines in the graduate calendar.

**EDUC 622-4 Psychoeducational Assessment** This course provides an overview of individualized assessment, including formal standardized instruments, informal tests, and classroom-based tools and instruction on the administration and interpretation of Level B tests. There is also a field application involving the design, administration, and interpretation of an individual assessment for learning.

**EDUC 626-3 Inclusive Education: Learning for All** This course presents "inclusive education" as a transition toward the predominance of a "success for all" educational philosophy. Components of inclusion include but are not limited to integration of exceptional students and examination of achievement data for minority groups. Issues of quality and equity of educational opportunity for all genders, orientations, cultures, religions, and socioeconomic groups are also explored. Connections are made to current instructional concepts such as culturally relevant practice and differentiated instruction. Students are expected to apply course content to develop action inquiry projects designed to improve equity in their own professional settings.

*Precluded:* EDUC 535-3 and EDUC 635-3

**EDUC 631-3 Educational Applications of Computer Technology** This course examines the role of computer technology as a teaching and learning resource in contemporary educational environments. It will also include a review of generic and subject-specific criteria that may be used to evaluate educational software. The course will allow and assist students to examine a variety of computer applications that are relevant to particular aspects of education; for example, curriculum development, instructional design, counselling, evaluation.

**EDUC 632-3 Language Development: Implications for Education** An exploration of theories of language development across the life-span, drawn from Linguistics, Psycholinguistics, Sociolinguistics, and Educational Psychology. Links between language development, and cognition, learning, and social development, and their educational implications will be addressed.

### **EDUC 633-3 Human Development: Implications for Education**

Contemporary theories of human development are examined along with their implications for teaching and counselling children, adolescents, and adults.

### **EDUC 634-3 Achievement Motivation**

Current theories of achievement motivation, grounded in practical classroom examples. Our examination will be research oriented, ranging from a micro level of analysis (e.g., individual case studies) to a macro level of analysis (e.g., school structures). A central issue is how teachers and counsellors can understand and foster students' motivation for school learning.

### **EDUC 635-3 Educating Exceptional Students**

An examination of the nature and characteristics of exceptional students and a review of current theory and research concerned with accommodating their special needs in a variety of educational environments; for example, counselling or instructional environments.

### **EDUC 636-3 Language and Learning Disabilities**

In this course, we will review current theoretical and research literature on language-based learning disabilities, including disabilities of oral language, reading, and written expression, and their implications for students' learning. Strategies for assessment, planning, teaching, and intervention for preschool, school-aged, and adult learners will be addressed.

### **EDUC 637-3 Interventions for Literacy Disorders**

This course provides an overview of diagnostic and remedial strategies for literacy disorders. Students are provided with an overview of individualised assessment, including informal tests, and classroom-based tools and instruction on remedial strategies specific to literacy errors and deficiencies. There is also a field application, in which students work in a supervised setting with one child exhibiting a literacy disorder, out of which a final report is produced.

### **EDUC 638-3 Mathematic Disorders and Remediation**

This course provides an overview of diagnostic and remedial strategies for mathematics. Students are provided with an overview of individualised assessment, including formal standardised instruments, informal tests, and classroom-based tools and instruction on remedial strategies specific to mathematics errors and deficiencies. There is also a field application, in the form of a brief mathematics clinic in which students work in a supervised setting with one remedial mathematics child, out of which a final report is produced.

### **EDUC 639-3 School-Based Teams, Consultants, and Families**

This course is an overview of the strategies, policies, and procedures related to school-based team meetings. Included is a review of the professional literature, a description of the roles and responsibilities of team members such as teachers, administrators, parents, students, and families, and an analysis of the techniques used in school-based team meetings.

### **EDUC 640-3 Focus on a Selected Disability**

This course examines a specific special need, with topics determined by the interests of students and the availability of faculty members to teach them. For example, it may focus in depth on educational aspects of a specific disability or range of disabilities, such as FASD, Autism Spectrum Disorder, hearing disability and deafness, or visual impairment. This course may be taken up to two times but with a different disability focus each time.

### **EDUC 641-3 Principles of Instruction**

An examination of models of instruction with particular emphasis on models of contemporary teaching and learning. Students will be encouraged to identify and reflect on their own models of instruction for teaching and counselling.

### **EDUC 642-3 Personal and Career Planning for Students with Special Needs**

This course is an evaluative survey of theories and practices employed to facilitate career decision making for students with special needs.

### **EDUC 644-3 Educational Programs: Development, Implementation and Evaluation**

A study of program planning within curriculum guidelines. The course will address the changing roles, resources and responsibilities of educators within the context of change in educational institutions.

### **EDUC 645-3 Discourse in Classrooms**

An examination of the theory and practice of facilitating learning across school disciplines through classroom discourse. Students will consider theories of meaning and how students and educators structure language to achieve multiple purposes, and the social and academic implications of these patterns of language use. The relationship of classroom discourse to cross-disciplinary materials, instructional strategies, and evaluation procedures will be discussed.

### **EDUC 648-3 Oral Traditions and Literacy Development**

A critical examination of theory, research, and current teaching practices in oral and written language development. Teaching that builds upon oral language experiences and oral cultural traditions will be emphasized. Topics will include emergent literacy of young children, literacy development in cultures with strong oral traditions, and approaches to adult literacy. Parallels and divergences across these topics will be explored.

### **EDUC 649-3 Elementary Language, Literacy, and Literature**

A critical examination of theory, research, and current teaching practices in language, literacy, and literature in elementary schools. Topics will include the writing process, reader response and children's literature, and a critical examination of current research on teaching reading.

### **EDUC 650-3 Secondary Language, Literacy, and Literature**

A critical examination of theory, research, and current teaching practices in language, literacy, and literature in secondary schools.

## Course Descriptions: EDUC

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**EDUC 651-3 Mathematics Education** A critical examination of theory and research associated with current practices and emerging trends in curriculum development and instruction in mathematics. Students may elect to focus upon either the elementary or secondary level of the curriculum.

**EDUC 652-3 Science Education** A critical examination of theory and research associated with current practices and emerging trends in curriculum development and instruction in general science. Students may elect to focus upon either the elementary or secondary level of the curriculum.

**EDUC 653-3 Social Studies Education** A critical examination of theory and research associated with current practices and emerging trends in curriculum development and instruction in social studies. Students may elect to focus upon either the elementary or secondary level of the curriculum.

**EDUC 655-3 Collaboration, Communication and Community: Leaders as Community Builders** This course examines the need for collaboration and communication as tools for managing the social and cultural complex environment of schools and communities. Areas of focus include the principles of effective communication and inclusive decision making, the principles of diversity and inclusion, media and public relations, and the application of new technologies to promote dialogue.

**EDUC 656-3 Instructional Leadership** This course explores the principles and practices of designing effective curriculum and instructional systems, while also exploring the role of instructional leaders in creating a positive culture that enhances both teacher and student learning. The course is also useful to the future school principal interested in models of supervision and its relationship to instructional planning and implementation. Other topics include adult development, reflective practice and professional growth models.

**EDUC 690-3 Health and Human Sciences: Interdisciplinary Seminar** An interdisciplinary analysis and discussion of topics of common interest to graduate students in the Faculty of Arts, Social and Health Sciences.

**EDUC 691-3 Education Program: Interdisciplinary Seminar** This course is an interdisciplinary analysis and discussion of topics of common interest to students enrolled in the Master of Education Program in Counselling or Curriculum and Instruction specializations.

**EDUC 692-3 Special Topics** Topics to be determined by the special interests of students and the availability of faculty members to teach those topics. This course may be retaken any number of times, provided all topics are distinct.

**EDUC 693-3 Directed Reading: Independent study under the direction of a faculty member** This course provides an opportunity for students to study an educational topic relevant to their program if additional study is either desirable or necessary to correct possible deficiencies in their preparation for graduate study.

**EDUC 711-3 Counselling Theory** This course is an examination of the theoretical foundations of counselling. Topics reviewed include analytic, behavioural, cognitive, existential, person-centred, gestalt, feminist, and postmodern therapies.

**EDUC 712-3 Counselling Practice** This course is an integrative exploration of information on counselling skills, strategies, techniques, and client issues required for effective practice. It includes an overview of current versions of Brief Therapy (Solution-Focused), Narrative Therapy, and Cognitive Behavioural Therapy. Individual clinical supervision of video-recorded sessions is a major component of this course.

*Prerequisite:* EDUC 613-3 This course is restricted to MEd Counselling students

**EDUC 714-3 Group Counselling Processes** This course addresses the theory and practice of group counselling. Opportunities are provided to participate in and conduct group sessions.

**EDUC 715-3 Career Counselling** This course is an evaluative survey of the counselling theories and practices employed to facilitate career decision making in schools and community agency settings.

**EDUC 716-3 Clinical Counselling** This course is an examination of specific areas of clinical counselling such as behaviour disorders, mental subnormality, learning disabilities, mood disorders, anxiety disorders, and personality disorders.

**EDUC 717-3 Ethics in Counselling** This course examines the ethical and legal issues found in counselling practice with individuals, couples, families, and groups. It also presents an ethical decision-making process and model for application to counselling practice dilemmas. Students become familiar with counselling codes of ethics.

**EDUC 719-3 Counselling Practicum** This course includes a practicum placement in at least one school, agency or institutional setting; scheduled seminars; and individual supervision. Students are required to complete 150 hours of direct client contact time at their practicum.

*Prerequisites:* EDUC 613-3, EDUC 711-3, 712-3, and 714-3 and one Counselling elective course. This course is restricted to MEd Counselling students

**EDUC 721-3 Individual Assessment of Aptitudes and Achievement** A survey of psychoeducational measures, particularly the administration, scoring and interpretation of individual aptitude and achievement tests.

*Prerequisite:* EDUC 620-3 or equivalent

**EDUC 740-3 Curriculum Development and Evaluation** A review of theories of curriculum development and evaluation with strong emphasis on the linkages to educational foundations and teaching practices.



**EDUC 780-3 Foundations of Education** This course will take an historical approach and consider shifts in philosophical, political, sociological, psychological, and epistemological perspectives as well as related shifts in models of education.

**EDUC 795-3 Research Seminar** A seminar focused on supporting students' ongoing work on their theses or projects. In particular, the course will identify and explain the various tasks that are typically involved in the development of a thesis or project; for example, design, implementation, analysis, interpretation and writing. Co-operative problem solving will be employed to assist students to develop their theses or project plans.

*Prerequisites:* EDUC 601-3 and 602-3 or equivalent

**EDUC 796-3 Portfolio** The portfolio route requires the successful completion of a professional portfolio that demonstrates a candidate's knowledge of education research, theory, and practice in his/her field of study (Special Education). This course enhances and reinforces a student's knowledge of educational research, theory, and practice as well as their interrelationship as evidenced by selected artifacts and accompanying rationales.

**EDUC 797-3 Comprehensive Examination** The comprehensive pattern of study requires the successful completion of a comprehensive examination that evaluates a candidate's knowledge of education theory and practice in his/her field of study (Counselling or Curriculum and Instruction). This program pattern is designed to enhance and reinforce a student's knowledge of both educational theory and practice as well as their interrelationship.

*Prerequisites:* successful completion of all other degree requirements

**EDUC 798-6 MEd Project** Students are asked to develop theoretically defensible innovations in educational practice. These may include innovative curricula, instructional strategies, or counselling practices. The efficacy of the innovations must be evaluated and the results reported as a part of a formal report of the project. The completed project report must be submitted to the student's supervisory committee for evaluation.

**EDUC 799-9 MEd Thesis** Students are asked to evaluate educational theory and practice, identify a significant question and implement a research strategy that addresses the question. The completed thesis must be submitted to the student's supervisory committee for evaluation.

## Course Descriptions: ENGL

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### English (ENGL)

*Students wishing to take any 600-level graduate English courses as part of an interdisciplinary or other MA program should consult the Department of English Chair.*

**ENGL 600-3 Advanced Contemporary Theory** This course offers 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.

**ENGL 609-3 Advanced Studies in Film or Television** This course offers advanced study in film or television.

**ENGL 610-3 Advanced Studies in Women and Literature** This course investigates 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.

**ENGL 620-3 Advanced Studies in First Nations Literature** Drawing on postcolonial and cultural theories, this course examines contemporary First Nations and Native American literatures written in English.

**ENGL 630-3 Advanced Studies in Canadian Literature** This course examines multicultural and cross-cultural expressions in modern and contemporary Canadian literature. Authors studied may include Margaret Laurence, Hugh McLennan, Rohinton Mistry, Rudy Wiebe, Aritha van Herk, Joy Kogawa, Marlene Nourbese Philip.

**ENGL 631-3 Advanced Studies in Northern BC Literature** This course in Northern BC Literature offers advanced study of authors such as Barry McKinnon, Eden Robinson, Brian Fawcett, George Stanley, Jacqueline Baldwin, and Ken Belford.

**ENGL 640-3 Advanced Studies in Postcolonial Literatures** This course undertakes an investigation of the central issues of postcolonial literature, including postcolonial nationalism, colonial mimicry, imperial versus native languages, and the political and social responsibility of the writer.

**ENGL 650-3 Advanced Studies in Comparative Literature** This advanced course in Comparative Literature focuses on texts written in English or English translation. Special topics may include comparative studies of a genre, theme, period or region. Writing which crosses borders or the writing of specific cultural groups may also be included.

**ENGL 660-3 Advanced Studies in Children's Literature** This course offers advanced study in children's literature and culture.

**ENGL 670-3 Advanced Creative Writing - Poetry** This course offers advanced lectures and workshops in the craft of writing poetry.

**ENGL 671-3 Advanced Creative Writing - Fiction and Creative Non-Fiction** This course offers advanced lectures and workshops in the craft of writing fiction and/or creative non-fiction.

**ENGL 672-3 Advanced Creative Writing - Drama and Script-Writing** This course offers advanced lectures and workshops in the craft of writing drama and script-writing.

**ENGL 680-3 Advanced Studies in Science Fiction** This course offers advanced study of the structures and motifs of science fiction and fantasy.

**ENGL 683-3 Advanced Studies in Romantic Literature** This course investigates a particular aspect of Romantic Literature. The focus could be on the works of a specific author or school of authors, a literary genre, or a particular social or theoretical concern.

**ENGL 684-3 Advanced Studies in Victorian Literature** This course offers special study of an author (or authors), theme or genre in Victorian literature. Possible authors include George Eliot, Dickens, or the Brontës. Possible topics include social realism, psychological realism, violence and domestic realism, fictional autobiography, Victorian gothic or female self-expression.

**ENGL 685-3 Advanced Studies in Modern and Contemporary Literature in the United States** This advanced course in American writing since 1900 emphasizes American cultural contexts. The course may focus on specific author or specific authors, on a particular genre, theme or region, or on ethnic and minority literature.

**ENGL 686-3 Advanced Studies in Literature of the Fantastic** This course explores various periods and aspects of fantastic literature. When appropriate, the course will include film and graphic arts as well as literary texts.

**ENGL 690-3 Bibliography** This course offers an introduction to the conventions of literary bibliography, as well as electronic bibliography and document retrieval. Where possible, the course is related to another graduate course being taken concurrently by the student.

**ENGL 691-3 Advanced Studies in Renaissance Literature** This course examines various aspects of Renaissance literature and art. The focus could be on the works of a specific author, a genre, or theoretical considerations.

**ENGL 692-3 Advanced Information Technologies** This course offers an introduction to electronic bibliography and document retrieval, and the theory and practice of hypermedia. Computer applications for the study of literature may be developed as part of a research project.

**ENGL 693-3 Advanced Cultural Studies** This course introduces students to the interdisciplinary methodologies of cultural studies, with a focus on definitions of culture and the imbrications of race, class, and gender. It explores the themes of postmodernism, popular culture, historical cultural formations, social history, and/or the relation between politics and culture.

**ENGL 698-3 Advanced Topics**

**ENGL 699-3 Independent Study in Literature**

**ENGL 700-3 Studies in Literature, Culture and Place** This course investigates theories and representations of culture and place in literary studies. Authors studied may include Homi K. Bhabha, Edward Said, and Raymond Williams. The course may explore intersections of culture and place across literary periods and nationalities, in contemporary popular culture, and in contemporary theory.

**ENGL 799-15 English MA Thesis** Under the guidance of a supervisor, students are required to produce and defend an academic thesis of approximately 100 pages in length. At the discretion of the Department, students may complete a creative thesis that meets the requirements outlined in the English (MA program) section of the Graduate Calendar. The thesis is intended to require approximately 12 months of full-time work.

### Environmental Planning (ENPL)

**ENPL 605-3 Land Use Planning** An evaluation of land use planning at the federal, provincial, and municipal levels. The course will familiarize students with theories of property rights and their applications to land use planning and tenure systems.

*Precluded:* ENPL 410-3, ENVS 410-3, ENVS 605-3

**ENPL 606-3 Planning Theory, Process and Implementation**

Theories of planning and how theory informs planning practice. How planners manage planning processes, how plans are implemented. Use of communicative skills important in expediting implementation within the political environment of planning practice.

*Precluded:* ENPL 411-3, ENVS 411-3, ENVS 606-3

**ENPL 609-3 First Nations Community and Environmental**

**Planning** This is a workshop style, project-based course that will allow students to work on an applied, field-based planning project in collaboration with a First Nations community.

*Prerequisite:* Permission of the instructor

*Precluded:* ENPL 409-4

**ENPL 615-3 Advanced Environmental Assessment** An examination of current methods used in planning and project development for environmental assessment. This course will focus on applied research using case studies.

**ENPL 619-3 Ecological Design** This course provides an overview of the unique planning and development dimensions of small communities and rural regions, with specific focus on ecological constraints and opportunities. Current planning practice and new ecological planning principles are examined. Design and planning technologies are utilized.

*Precluded:* ENPL 415-3

**See NRES course listing for additional 700-level Environmental Planning courses.**

## Environmental Science (ENSC)

**ENSC 604-3 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.

*Precluded:* ENSC 404-3, ENVS 404-3, ENVS 604-3

**ENSC 607-3 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.

*Precluded:* ENSC 406-3, ENVS 406-3, ENVS 607-3

**ENSC 608-3 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.

*Precluded:* ENSC 408-3, ENVS 408-3, ENVS 608-3

**ENSC 612-3 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.

*Precluded:* ENSC 412-3, ENVS 712-3, ENVS 612-3

**ENSC 618-3 Environmental Measurement and Analysis** This 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 (e.g., waste management) and systems impacted by anthropogenic activity (e.g., contamination).

*Precluded:* ENVS 418-3, ENSC 418-3

### **ENSC 625-3 Climate Change and Global Warming**

The climate change and global warming caused by human activity has become one of the most significant environmental, social and economic threats that we have faced. This course presents the science of global climate change and global warming. Emphasis is placed on scientific principles responsible for climate changes, observed evidence of global climate change and global warming, and future climate change. Course topics include climate system, greenhouse effect, El Niño, atmospheric and ocean circulation, Earth's past and present climate, climate models, future climate projection, and climate change impacts on Canada.

*Precluded:* ENSC 425-3

### **ENSC 635-3 Soil Biological Processes and the Environment**

Processes at the interface between the biosphere, atmosphere, hydrosphere and lithosphere are critical to the regulation of environmental quality on Earth. This course provides an overview of the soil habitat from a biological perspective and of how soil organisms and the processes they mediate play critical roles in a sustainable planet.

*Precluded:* FSTY 455-3; NREM 655-3; ENSC 435-3

### **ENSC 650-3 Environmental and Geophysical Data Analysis**

The focus of this course is on the principles and practicality of the most common environmental and geophysical data analysis methods, including time series analysis and multivariate statistical analysis as well as their application in the environmental and natural sciences. This course consists of lectures and labs, where students apply theories and methods learned in lectures to solve practical problems using computers and software for statistical data analysis.

*Precluded:* ENSC 450-3

### **ENSC 651-3 Groundwater Hydrology**

This course introduces fundamental principles of groundwater flow and their applications to solve problems related to groundwater resources evaluation, development, and management. Topics include the role of groundwater in geological processes, the occurrence and movement of groundwater, steady-state and transient well hydraulics, aquifer testing techniques, unsaturated flow theory, and groundwater modelling techniques. Supporting computer software may be used.

*Precluded:* ENSC 451-3

### **ENSC 652-3 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.

*Precluded:* ENSC 452-3

### **ENSC 653-3 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.

*Precluded:* ENSC 453-3

## Course Descriptions: ENSC, ENVS

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**ENSC 654-3 Snow and Ice** This course focuses on the physical processes involving snow and ice that greatly influence the hydrometeorology of Northern BC and the remainder of Canada. The goals of this course include gaining a better understanding of snowpack, permafrost, lake ice, and glacier formation and ablation processes, learning about the characteristics of snow and ice and how they will evolve with climate change, and conducting an extensive snow survey in the field as the basis of a research project and in-class presentation.

*Prerequisites:* Permission of the Instructor

**ENSC 660-3 Soil Chemical Processes and the Environment** Reactions at the interface of the atmosphere, biosphere, hydrosphere and lithosphere play key roles in regulating environmental quality on Earth. This course focuses on the key chemical processes in soils, in the Earth's "Critical Zone." The fundamental concepts of chemistry and mineralogy are applied to help students understand the soil system and its relevance to processes in natural ecosystems and environments impacted by human activity.

*Precluded:* FSTY 455-3; NREM 655-3; ENSC 660-3

**See NRES course listing for additional 700-level Environmental Science courses.**

## Environmental Studies (ENVS)

**ENVS 602-3 Environmental and Natural Resources Issues and Ethics** Analysis of environmental and natural resource issues from an ethical perspective; viewpoints and value systems that determine management decisions.

*Precluded:* ENVS 414-3, NREM 411-3

**See NRES course listing for additional 700-level Environmental Studies courses.**

### First Nations Studies (FNST)

**FNST 600-3 Foundations of First Nations Studies** Theory and Practice: A seminar in which major contributions to the field are reviewed and the methods, approaches and conclusions of the works are explicated and located within contemporary theory.

**FNST 601-3 Research Methods** A graduate seminar on quantitative methods of research in First Nations Studies, including community-based research methodology.

**FNST 602-3 The Practice of Research** A seminar in which students will design and pilot projects to implement methods and approaches for research in First Nations Studies, and will present papers discussing the implications of various approaches for the discipline. An advanced graduate research methods course from another program may be substituted with special permission.

**FNST 603-3 Northern Nations I** A Seminar on the languages and cultures of the First Nations of northern British Columbia.

*Prerequisites:* must have completed FNST 133-3 and 134-3 or equivalent to enroll

**FNST 604-3 Northern Nations II** An advanced seminar on the languages and cultures of the First Nations of northern British Columbia for students who have completed FNST 603-3.

**FNST 605-3 The State of the Discipline** A seminar in which students will present papers concerning current theoretical and methodological issues in the discipline.

**FNST 606-3 Indigenous Issues in International Perspective** A seminar in which issues such as land right, relations to nation-states and cultural autonomy are examined by graduate student papers presenting cases from a variety of indigenous groups.

**FNST 607-3 Indigenous Perspectives on Race, Class, Gender and Power** A seminar in which examples from specific groups will be read against contemporary theory.

**FNST 613-3 Themes in Aboriginal Women's Studies** This course explores topics relating to aboriginal women in both Canadian and international contexts. Topics may vary from year to year.

*Precluded:* GNDR 613-3

**FNST 621-3 First Nations Songs and Poetry** A study of songs and poetry in a First Nation's language.

*Prerequisites:* FNST level 4 (or equivalent) in the appropriate First Nations language

**FNST 622-3 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:* FNST level 4 (or equivalent) in the appropriate First Nations language

**FNST 623-3 A Study of a First Nation's Language Family and Its Linguistic Relatives** This course includes: 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:* FNST level 4 (or equivalent) in the appropriate First Nations language

**FNST 624-3 The Literature of a First Nation** A study of a First Nation's literature in a First Nation's language.

*Prerequisites:* FNST level 4 (or equivalent) in the appropriate First Nations language

#### FNST 650-3 Special Topics

**FNST 651-3 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:* Permission of the instructor

*Precluded:* ANTH 451-3, ANTH 651-3, FNST 451-3

#### FNST 751-3 Directed Readings

#### FNST 790-3 Internship

#### FNST 791-3 Internship

**FNST 795-3 Research Seminar** This course focuses on supporting students' ongoing work on their thesis. In particular, the course will identify and explain the various tasks that are typically involved in the development of a thesis; for example, design, implementation, analysis, interpretation and writing. Co-operative problem solving will be employed to assist students to develop their thesis plans.

*Prerequisites:* FNST 600 and FNST 602

*Precluded:* EDUC 795-3 and HHSC 795-3

## Course Descriptions: FNST

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**FNST 797-12 MA Project** The MA Project is a praxis-oriented community-based research option and will be considered an alternative to the Thesis for completion of the Master's Degree in First Nations Studies. A Project committee made up of the advisor from the First Nations program, one other faculty, and one First Nations community member guides the MA Project student. Students taking the Project path are required to produce a scholarly product to be presented in a scholarly form.

*Prerequisites:* Students must have completed the required courses for the MA in First Nations Studies (FNST 600-3; FNST 602-3, FNST 790-3; one elective course in the student's chosen stream; one elective from graduate offerings at UNBC; and one elective from either the First Nations Issues and Approaches stream or from the Northern Nations stream)

**FNST 799-12 Thesis**



### Gender Studies (GNDR)

*The following courses are offered as seminar courses. They may also be offered as reading courses, or as independent study courses.*

#### **GNDR 601-3 Cultural Studies: Gender, "Race," and Representation**

This course explores the visual expression of women artists, photographers, fashion designers and film makers while also examining feminist critical responses to these visual forms of expression.

**GNDR 604-3 Advanced Feminist Ethics** This course will provide an analysis and critique of both the historical and contemporary literature of 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.

**GNDR 609-3 Advanced Feminist Methods** 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.

**GNDR 610-3 Feminist Political Philosophy** This course provides an analysis and critique of both the historical and contemporary literature on feminist political philosophy. The course traces feminist political philosophy from its enlightenment roots to its contemporary post-modernist critique on enlightenment notions of rationality.

**GNDR 611-3 Contemporary Feminist Theories** This course covers the recent history of feminist theories beginning with Simone de Beauvoir's *The Second Sex*.

*Precluded:* WMST 411-3

**GNDR 613-3 Themes in Aboriginal Women's Studies** This course explores topics relating to aboriginal women's studies in both Canadian and international contexts. Topics may vary from year to year.

*Precluded:* FNST 613-3

**GNDR 698-(3-6) Special Topics** This course provides detailed examination of a topic selected by the instructor. Topics may vary from year to year. This course may be repeated for credit where topics vary. This course may be repeated for a maximum of six credits.

#### **GNDR 700-9 Gender Studies Thesis**

#### **GNDR 701-3 Gender Studies Major Research Paper**

**GNDR 703-3 Gender and Post-Colonialism** This course examines key post-colonial feminist theorists while also considering post-colonial theorists from a critical feminist perspective.

**GNDR 706-3 Feminism and Contemporary Critical Theory** This course examines new directions in feminist theories focusing on US, Canadian, British, Third World/postcolonial feminist theories of the 1980s and 1990s. We will discuss the intersections among gender, class, race, sexuality, imperialism and ecology from a multidisciplinary perspective including law, society, politics, literature, culture, science and anthropology. We will also look at critical articulations between feminisms and theories such as Marxism, postcolonialism, psychoanalysis and post-modernism.

#### **GNDR 799-(1-6) Independent Study**

### Geography (GEOG)

**GEOG 601-3 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:* Permission of the instructor

*Precluded:* GEOG 401-3

**GEOG 602-3 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 self-determination movements.

*Prerequisites:* Permission of the instructor

*Precluded:* GEOG 402-3

**GEOG 603-3 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:* Permission of the instructor

*Precluded:* GEOG 403-3

**GEOG 605-3 Fluvial Geomorphology** This course investigates river channel morphometry and landforms developed by running water and focuses on the physical processes and techniques of measurement. Weekend field trips are required.

*Prerequisites:* Permission of the instructor

*Precluded:* GEOG 405-3

**GEOG 611-3 Quaternary and Surficial Geology** This course examines geomorphic processes and environmental change in BC during the last two million years of Earth's history.

*Prerequisites:* Permission of the instructor

*Precluded:* GEOG 411-3

**GEOG 613-3 Advanced GIS** This course covers the use of remote sensing and satellite imagery in GIS: including scene correction, enhancement and time comparison. This course will deal with advanced GIS and mapping techniques, concentrating on northern BC.

*Prerequisites:* GEOG 300-3 or permission of the instructor

*Precluded:* GEOG 413-3

**GEOG 614-3 Weathering Processes** A detailed look at weathering processes and their applied aspects.

*Prerequisites:* Permission of the instructor

*Precluded:* GEOG 414-3

**GEOG 620-3 Geographies of Environmental Justice** This course examines ongoing environmental justice debates over expertise, access, rights, and compensation, in the context of environmental racism and responses to it. We consider connections between space, places, identity, and justice in contaminated environments. We explore scholarship and activism, and learn about Canadian and international case studies related to resource extraction; manufacturing and industrial processes; waste disposal; access to basic services; trade; and tourism.

*Prerequisites:* Permission of the instructor

*Precluded:* GEOG 420-3

**GEOG 624-3 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 British Columbia.

*Prerequisites:* Permission of the instructor

*Precluded:* GEOG 424-3

**GEOG 626-3 Geographies of Culture, Rights and Power** This seminar examines geographical approaches to culture, rights, and power as they related 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 refugee movements, foreign policy, and grassroots solidarity organizing.

*Precluded:* GEOG 498-3 Culture, Rights and Power, GEOG 426-3 Geographies of Culture, Rights and Power and NRES 798-3 Culture, Rights and Power

**GEOG 628-3 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. An emphasis is placed on rural and remote places in northern BC.

*Prerequisites:* GIS skills

*Precluded:* GEOG 428-3

**GEOG 632-3 Remote Sensing** This course considers 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, pre-processing, enhancement, classification, change detection, multi-data integration and vectorization.

*Prerequisites:* GEOG 300-3 or permission of instructor

*Precluded:* GEOG 432-3

**GEOG 657-3 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 632-3 or instructor's permission

*Precluded:* GEOG 457-3 Advanced Remote Sensing

**See NRES course listing for additional 700-level Geography courses.**

### Health Sciences (HHSC)

**HHSC 600-3 Critical Social and Health Issues in Northern Communities** This course will expose students to critical issues in the analysis of social and health problems in Northern Communities. The emphasis will be on interdisciplinary research and analysis in a northern context. Topics will be organized around specific problems to be found in the community, and ways of analyzing them from social and health perspectives.

**HHSC 601-3 Principles of Epidemiology** Epidemiological principles applicable to infectious and non-infectious diseases: occurrence and distribution; factors underlying distribution of disease; host-agent environment complex; principles underlying etiology and causation.

**HHSC 602-3 Organization and Financing of Canadian Health Care** The historical development and current structure and financing of the Canadian health care system are related to changes that have occurred in the political, social, and technological environment.  
*Prerequisite:* POLS 603-3 and POLS 403-3

**HHSC 603-3 Community Research Methods** A survey of design, strategies, methods, and applied socio-medical disciplines as related to health and health care. Emphasis is based on the application of quantitative and qualitative techniques and in the measurement and health-related attitudes and behaviours and program outcomes.

**HHSC 604-3 The Health of First Nations People** This course provides a detailed review of the health status and its determinants of the First Nations peoples. Emphasis is placed not only on biological determinants but also on those factors that are derived from the status of the First Nations in the larger population including evolving lifestyles, dominant government and social policies, and environmental influences.  
*Prerequisite:* NURS 604-3

**HHSC 605-3 Health in Developing Countries** The patterns of mortality and morbidity in developing countries will be described with a particular focus on those conditions such as malaria that are endemic and influence not only the health but also the social and economic development of the countries. Special emphasis will be placed on Pacific Rim countries.

**HHSC 606-3 Health Promotion** This course examines health promotion theories, principles, and underlying philosophies. Students identify and critique health promotion issues and will also gain experience in developing strategies to promote health and well-being at individual, group and community levels.

**HHSC 607-3 Cultural Perspectives on Health and Illness** The cultural influences on the definition, experience, and expression of illness are examined. Attention will be given to ways in which culturally responsive health care can be provided. May be taken as ANTH 498-3 with the permission of the instructor.

**HHSC 609-3 Critical Appraisal of Health Literature** This course increases the students' skill in the evaluation of health sciences literature. Issues related to conducting research in a variety of health and human service sites are discussed. The course gives students an opportunity to appraise critically various types of research articles. Areas that are explored include; surveying the literature, assessing the quality of research studies, evaluation of health services, and economic analyses.

**HHSC 640-(3-6) Special Topics in Health Sciences** The topics for this course will vary, depending on student interest and faculty availability. This course may be repeated for up to 6 credits total (with permission of the instructor and program chair).

*Prerequisites:* Permission of the instructor and Program Chair

#### HHSC 680-(3-6) Directed Studies

**HHSC 700-3 Advanced Techniques in Epidemiology** This course builds on the principles learned in HHSC 601-3 and focuses on new and advanced techniques in epidemiology. Topics include: risk adjustment, survival analysis, uses of administrative health data, health geography, and advanced training in study design.

**HHSC 702-3 Seminar in Qualitative Data Collection** In this seminar, experienced qualitative researchers will share their experiences in undertaking qualitative research, and will assist students to learn how to collect data for their thesis. It is expected that the range of data collection techniques will include, but not be limited to: individual interviews, group interviews, document analysis, participant observation and video analysis. Students will gain practice in one of the techniques. Particular attention will be paid to collecting meaningful data in cross cultural situations. Included will be discussion of issues in data transcription and data management.

**HHSC 703-3 Qualitative Research Approaches in Health and Human Sciences** This course explores various approaches to qualitative research in the health and human sciences. These approaches are discussed in light of the epistemological and ontological commitments, their methods and their demands upon the researcher. Included is an examination of inherent issues of ethics and rigour. The approaches examined normally include: phenomenology, interpretive phenomenology, participatory action research, feminist research, grounded theory and institutional ethnography.  
*Prerequisite:* NURS 609-3

**HHSC 760-3 Field School in Human Ecology** This field-school is an intensive, interdisciplinary course addressing themes including social-ecological systems, human-environment relationships and ecosystem approaches to health. The course includes class-based sessions and intensive field-based components relevant to the course theme and location, which differ from year to year. The field-school brings together colleagues in natural sciences, health sciences, social sciences, humanities, and beyond, who work in collaboration with interested parties and community members to address issues at the interface of environment, society and health.

*Prerequisite:* NRES 760-3

**HHSC 795-3 Research Seminar** This course is focused on supporting students' ongoing work with respect to their theses. In particular, the course identifies and explains the various tasks that are typically involved in the development of a thesis, including, for example, design, implementation, analysis, interpretation, and writing. Co-operative problem solving is employed to assist students in developing their thesis plans.

*Prerequisites:* EDUC 602-4 or HHSC 601-3 and HHSC 603-3

*Prerequisite:* EDUC 795-3

**HHSC 799-9 Thesis**

**HHSC 800-3 Graduate Seminar I** This seminar is geared toward developing critical thinking skills and aims to help students evaluate a broad spectrum of topics. The seminar functions to generate debate on key issues, promotes interaction with faculty members and other students in the program, and acts as a context for presentations by the students and invited speakers. Each PhD student is expected to give two 50-minute presentations. One presentation will be on a topic agreed upon by the students and the course instructor, and the other is related to the student's research thesis research.

**HHSC 801-3 Graduate Seminar II** This seminar is geared toward developing critical thinking skills and aims to help students evaluate a broad spectrum of topics. The seminar functions to generate debate on key issues, promotes interaction with faculty members and other students in the program, and acts as a context for presentations by the students and invited speakers. Each PhD student is expected to give two 50-minute presentations. One presentation will be on a topic agreed upon by the student and the course instructor, and the other related to the student's thesis research.

**HHSC 820-0 Qualifying Examination and Dissertation Proposal Defense** This course is a two-part process, beginning with the Qualifying Examination. Students must submit a paper addressing a research question or topic chosen in collaboration with his/her Supervisory committee. The Qualifying Paper must include a critical review of literature relevant to the research question, discussion of the theoretical frameworks used to understand or frame the research question, or an in-depth analysis of a specific content area. Subsequent to the Qualifying Examination, students prepare and defend a research Dissertation Proposal that integrates theory, current research and methods in fields related to the selected research problem.

**HHSC 840-3 Special Topics in Health Sciences** The topics for this course vary depending on student interest and faculty availability. This course may be repeated for up to 6 credit hours total (with the permission of the instructor and program chair).

**HHSC 880-3 Directed Readings** This course provides a concentration on a particular topic or topics agreed upon by the student and the instructor. This course may be repeated for up to 6 credit hours total (with the permission of the instructor and program chair).

**HHSC 890-12 PhD Dissertation** The doctoral thesis must emphasize the candidate's original research or provide an original investigation, interpretation or synthesis of existing research.

## Course Descriptions: HIST

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### History (HIST)

#### **HIST 700-3 Seminar in Historical Methodology and Research**

This course traces the development of modern historical thought.

**HIST 701-3 Themes in the History of Gender** The course explores aspects of the history of gender, drawing on the literature on women and men in various parts of the world.

**HIST 702-3 Themes in Indigenous History** This course examines the history of indigenous people and their relations with non-indigenous people, drawing on the literature on a number of countries.

**HIST 704-3 Themes in Environmental History** This course explores aspects of environmental history, drawing on the literature from a number of countries.

**HIST 705-3 Themes in the History of International Relations** Aspects of the history of the relations between nations drawing on the literature from a number of countries.

**HIST 707-3 Themes in Cultural History** This course explores themes in the history of culture and draws upon relevant literature from various countries or eras.

**HIST 708-3 Themes in Social History** This course explores themes in social history and draws upon relevant literature from various countries or eras.

**HIST 709-3 Themes in Legal History** Exploring themes in legal history, this course may draw on literature from various countries and eras.

**HIST 745-3 Historical Methods and Approaches** Historical methods and research techniques are examined in this seminar; students also learn about research design and prepare thesis proposals.

**HIST 749-12 Graduate Project** The project will be an equivalent alternative to a thesis. Candidates will defend the project before a committee of academic and community examiners. The criteria for examination stipulate that the project must be substantial (the equivalent in terms of research and preparation of a 100 page thesis), must have practical application, must include actual implementation or an implementation plan.

*Prerequisites:* Students must have completed the four graduate courses required for a Master's degree in history, including HIST 700-3

*Precluded:* HIST 750-12

**HIST 750-15 MA Thesis** Working under the guidance of a supervisor, each student must plan a study requiring original research, and sophisticated analysis, to produce and defend a substantial thesis (85-100 pages long). The entire thesis, from beginning to completion, is intended to require approximately twelve months of full-time work.

**HIST 799-3 Independent Study** The details of this course will be determined on a case-by-case basis between faculty and graduate students.

## Interdisciplinary Studies (IDIS)

**IDIS 704-3 Graduate Seminar in Interdisciplinary Studies** The weekly seminar course allows students to investigate and present ideas and results pertaining to current research in interdisciplinary studies. The offerings may include presentations of current literature, research methodology, and topics related to students' own research work. Students participate in discussions and critique the work present. All IDIS students must successfully complete this seminar course once during their program of studies. MA and MSc students are required to attend and participate in all seminar sessions to obtain credit for the course. This is a PASS/FAIL course.

*Precluded:* INTS 470-3

**IDIS 791-3-6 Special Topics** The course provides an opportunity for students to study at an advanced level a topic relevant to their interdisciplinary program.

**IDIS 798-12 MSc Thesis** The MSc thesis requires that a student undertake original research involving a literature review and the development of a research design and methodology appropriate to the research problem. The implementation of the research methodology normally includes original investigation and data collection, the analyses and discussion of which constitute the major part of the completed research thesis. The thesis may involve, but is not confined to, the testing of a specific hypothesis or hypotheses.

**IDIS 799-12 MA Thesis**

## International Exchange (INTX)

**INTX 688 (1-18) International Exchange Program** Graduate 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 at least six credit hours of graduate level coursework at UNBC and approval of the graduate supervisor. A student may register in this course more than once for a maximum of 12 credit hours.

### International Studies (INTS)

**INTS 640-3 Environment and Development in the Circumpolar North** Examination of conservation and development issues and experiences in the northern circumpolar countries.

**INTS 644-3 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.

*Precluded:* INTS 444-3

**INTS 650-3 Pacific Affairs** A detailed study of contemporary issues in the relations between Asia-Pacific nations, including an assessment of regional and subregional institutions.

**INTS 660-3 Issues in Canadian Foreign Policy** A detailed examination of selected problems in Canada's foreign relations.

**INTS 663-3 Canadian-American Relations** A review of the evolution of relations between Canada and the United States.

**INTS 664-3 Canada and the Americas** An examination of issues and problems in Canada's relationship with the countries of North, Central and South America.

**INTS 670-3 International Environmental Policy** This seminar considers international actions dealing with such environmental problems 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 on 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"?

*Precluded:* INTS 470-3

**INTS 680-3 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.

*Precluded:* INTS 480-3

**INTS 698-(3-6) Special Topics in International Studies** This course offers a detailed examination and analysis of a contemporary issue in international studies, including the exploration of future policy options.

**INTS 699-(3-6) Independent Study** This course enables students to read in depth in an area of international studies not normally covered by existing courses in the program. Permission of the graduate advisor and consent of the faculty supervisor is required.

**INTS 700-3 Research Methods** A graduate seminar on quantitative and qualitative methods of social science research.

**INTS 701-3 State of the Discipline** A graduate seminar in which students prepare and present a series of papers concerning theoretical, methodological and instructional issues in International Studies.

**INTS 798-9 MA Project** Professionally oriented paper or project for students choosing the non-thesis option. Proposals for projects and the projects themselves are evaluated by the supervisory committee. An oral defence is required.

**INTS 799-12 MA Thesis**



## Mathematics (MATH)

**MATH 602-3 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, Banach spaces, linear functionals and dual spaces, topological vector spaces, and Hilbert space.

*Prerequisites:* MATH 302-3

*Precluded:* MATH 400-3, MATH 402-3, MATH 600-3

**MATH 603-3 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

*Precluded:* MATH 401-3, MATH 403-3, MATH 601-3

**MATH 620-3 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

*Precluded:* MATH 420-3

**MATH 621-3 Field Theory** Topics discussed will include: fields, field extensions, splitting fields, automorphism group, Galois Theory.

*Prerequisites:* MATH 320-3

*Precluded:* MATH 421-3

**MATH 650-3 Combinatorics** This course is 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:* Permission of the instructor

*Precluded:* MATH 450-3

**MATH 655-3 Graphs and Algorithms** Topics are chosen from basic graph concepts, flows and connectivity, trees, matchings and factors, graph colouring, scheduling, planar graphs, and algorithms.

*Prerequisites:* MATH 224-3 or CPSC 141-3

*Precluded:* MATH 455-3

**MATH 699-3 Special Topics in Mathematics** The topics for this course will vary, depending on student interest and faculty availability.

*Prerequisites:* Permission of the instructor

**MATH 700-3 Topics in Functional Analysis** Topics may include operators on Hilbert spaces, Banach space theory, operator analysis.

*Prerequisites:* Permission of the instructor

**MATH 702-3 Functional Analysis II** Topological linear spaces, continuous linear transformations, topologies on the conjugate space, the Banach-Alaoglu theorem, metrizable, quotient spaces, reflexivity, the open mapping, closed graph, and uniform boundedness theorems, classical convergence theorems of integration theory, measures and measurability, Banach algebras.

*Prerequisites:* Permission of the instructor

**MATH 704-1.5 Graduate Seminar in Mathematics** The course is comprised of weekly seminar sessions. Students will investigate and present ideas and results pertaining to current research in mathematics. The offerings may include presentations of current literature, research methodology, and topics related to students' own research or project work. Students will participate in discussions and critique the work presented.

MSc students are required to attend and participate in all seminar sessions to obtain credit for the course. This is a PASS/FAIL course. (All MSc students must register in a seminar course twice during their program of studies. It is expected that all MSc students will attend the seminar each semester available.)

*Prerequisites:* Permission of the instructor

**MATH 705-3 Complex Analysis** Analytic functions, Cauchy-Riemann equations, power series, Liouville theorem, maximum modulus principle, Cauchy's theorem, winding number, calculus of residues, meromorphic functions, conformal mappings, Riemann mapping theorem, analytic continuation.

*Prerequisites:* Permission of the instructor

**MATH 720-3 Topics in Algebra and Logic** Topics may include Universal Algebra, Recursion Theory, Model Theory.

*Prerequisites:* Permission of the instructor

**MATH 725-3 Topics in Topology** Topics are chosen from topological spaces, Tychonoff theorem, Tietze extension theorems, Urysohn lemma, compactification, homotopy theory, fundamental group, uniform spaces, and knot theory.

*Prerequisites:* MATH 226-3 and MATH 302-3 and either MATH 321-3 or MATH 405-3, or permission of the instructor

**MATH 730-3 Topics in Numerical Analysis and Approximation** Topics may include introduction to Approximation theory, Chebyshev systems and orthogonal polynomials.

*Prerequisites:* Permission of the instructor

**MATH 731-3 Topics in Applied Mathematics** Topics may include Operations Research, Discrete modelling, Biomathematics.

*Prerequisites:* Permission of the instructor

### Mathematical, Computer, Physical and Molecular Sciences (MCPM)

**MCPM 704-1.5 Graduate Seminar** This course comprises weekly seminar sessions and is offered during both the September and January semesters. At least one of the course offerings each year provides students with an opportunity to present ideas pertaining to their research proposals, or the overall research design, methodology and results of a thesis or non-thesis project. The second offering each year may follow a similar traditional seminar format or may involve a class project related to MCPM. Students are required to attend and participate in all seminars to get credit for the course. (All MSc students must register in a seminar course twice during their program of studies. It is expected that all MSc students will attend the seminar each semester in which it is available.) This is a PASS/FAIL course.

**MCPM 705-3 Research Design and Methods** This course exposes Master's students to a wide variety of research designs and methodology. Topics include the history of science, nature of research, hypothesis formulation, experimental design, sampling, and analytical approaches to experimental and theoretical studies.

**MCPM 790-12 MSc Thesis** Credit for the MSc thesis results from the student making a contribution to a scientific field. It requires that a student undertake original research involving a literature review and the development of a research design and methodology appropriate to the research problem. The implementation of the research methodology normally includes original investigation and data collection, the analyses and discussion of which constitutes the major part of the completed research thesis. The thesis may involve, but is not confined to, the testing of a specific hypothesis or hypotheses.

**MCPM 791-6 MSc Project** Credit for the MSc Project is given for the completion of an extended position paper, report, plan or program that makes a contribution to, or addresses a major problem issue in, a scientific field. The development of the project requires the application of original thought to the problem or issue under investigation. The non-thesis project does not require the development of a research design or research methodology, and need not involve the collection of original data.

**MCPM 798-(1-3) Special Topics** This course fulfils requirements for specialized instruction in the Mathematical, Computer, Physical, and Molecular Sciences Graduate Program. Topics chosen are dependent upon student interest and instructor availability. Topic headings and credit hours vary from year to year and from section to section. This course may be repeated for a maximum of three credit hours.

*Prerequisites:* Permission of the Chair of the Mathematical, Computer, Physical, and Molecular Sciences Graduate Program Committee

**MCPM 799-(1-6) Independent Study** This course provides a concentration on a particular topic or topics agreed upon by the student and a member of the faculty in the Mathematical, Computer, Physical and Molecular Sciences Graduate Program. This course may be repeated to a maximum of 6 credit hours.

*Prerequisites:* Permission of the Chair of the Mathematical, Computer, Physical, and Molecular Sciences Graduate Program Committee

## Natural Resources and Environmental Studies (NRES)

*The content of NRES 700-level courses supports the range of streams within the NRES degrees including Biology, Environmental Science, Environmental Studies, Forestry, Geography, and Outdoor Recreation and Tourism Management.*

**NRES 700-3 Research in Natural Resources and Environmental Studies** This course exposes Master's students to various philosophies and epistemologies regarding research within the field of natural resources and environmental studies. Topics include the nature of research, communicating research, research ethics, qualitative and quantitative methodology and interdisciplinary research..

*Prerequisite:* Enrollment in a graduate program

**NRES 701-1 Graduate Colloquia** Through attendance at weekly research colloquia over the September and January Semesters, this course exposes students to styles of presentation and a range of research conducted in natural resources and environmental studies. This is a PASS/FAIL course.

**NRES 703-3 Integrated Resource Management** A critical examination of the concepts, policies, and methods for integrating multiple uses and resource values into management of forest and range land ecosystems.

**NRES 710-3 Modelling and Simulation** This course enables students to use models to represent and analyze quantitative aspects of natural systems (static, dynamic, and spatial). The course involves use of analytical, physical, and/or numerical models such as computational fluid dynamics models to simulate natural systems. Visualization, validation, verification, and sensitivity analysis of models are discussed.

**NRES 712-3 Spatial and Temporal Analyses** This course exposes students to analyses associated with the spatial and temporal dynamics of ecological systems. Emphasis is on recognizing and understanding inherent challenges of these approaches rather than statistical theory. Topics may include: identification of temporal and spatial patterns, issues of inference and statistical tests associated with spatial and temporal analyses, and applications of remote sensing and GIS to environmental monitoring and natural resources management.

*Prerequisites:* Permission of the instructor

**NRES 720-3 Global Change** This integrative course deals with physical, chemical, biological, and social dimensions of human influence on global conditions such as greenhouse gases, desertification, ozone depletion and eutrophication. Global element cycles are used to provide integration. Impacts of global change on people, communities and economies, and adaptation to or mitigation of global change are discussed.

*Prerequisites:* Earth System Science (400 level) or equivalent course, or permission of instructor

**NRES 730-3 Disturbance Ecology** This course covers the effects of biotic and abiotic disturbance agents on ecological processes in terrestrial and aquatic systems. Topics covered may include the role of disturbance frequency, scale and pattern in vegetation and animal succession, animal and plant adaptation and dependence on disturbance, and effects of anthropogenic disturbances or management of disturbance events on ecosystem function. The course may include a field study of a selected system, e.g., sub-boreal forest or prairie landscape.

*Prerequisites:* Permission of the instructor

**NRES 731-3 Soil Ecology** This course takes an ecological approach to the role of soil organisms in energy flow and biogeochemical cycling, and the contributions of soil organisms and associated processes to ecosystem productivity, sustainability and environmental quality. The habitat, interactions, adaptation and function of organisms in the forest floor, mineral horizons, and at the root-soil interface are studied. Students conduct a research project that employs modern methods to investigate the role of soil organisms in an area pertinent to the course.

*Prerequisites:* Permission of the instructor

**NRES 732-3 Forest Systems and Management** This course covers the important processes and features of forest systems, with special emphasis on sub-boreal, boreal, and riparian systems. Processes such as tree and forest gas and nutrient exchange, tree growth and acquisition of resources, and the effects and interactions of management practices, pathogens, arthropods, vertebrates, and climate change on forest systems are examined. The course requires each student to complete a 'forest systems' laboratory or field research project with a UNBC faculty member.

*Prerequisites:* Background in forest ecology and silviculture

**NRES 733-3 Plant-Animal Interactions** This course examines the contribution of plant and animal interactions to ecosystem variability and stability. Examples include a range of taxa from invertebrates through large mammals, living in systems that have co-evolved versus those that have not. Topics may include plant defenses to herbivory, use of stable isotopes to define food webs, and the applicability of using predator-prey models to describe plant-animal interactions.

*Prerequisites:* Strong background in general ecology

**NRES 735-3 Biological Adaptations** This course explores, for a variety of taxa, the mechanisms that plants and animals use to successfully live, grow, and reproduce. Themes covered in this course include the importance of homeostasis, factors limiting exploitation of different environments, and adaptations that affect evolution of organisms (including adaptations to extremes in temperature and pressure). Behavioural, ecological, physiological, biochemical, and genetic examples are discussed.

*Prerequisites:* Permission of the instructor

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**NRES 737-3 Evolutionary Processes** This course is an examination of evolutionary process, including discussions on micro and macro-evolutionary change. Emphasis is placed on current evolutionary theories and a critical examination of data analysis. Topics vary with the instructor, but normally include molecular evolution, concepts and mechanism of speciation, biogeography and behavioural evolution.

*Prerequisites:* Permission of the instructor

**NRES 751-3 Processes in Geomorphology** This course considers the interdisciplinary aspects of selected processes in geomorphology. Topics may include implications of the impact and/or interaction of vegetation, organisms and humans on attributes of slope processes, fluvial processes, animals in the landscapes, cold regions processes and environmental sedimentology. Specific topics depend on available faculty and student interests.

*Prerequisites:* Permission of the instructor

**NRES 760-3 Field School in Human Ecology** This field-school is an intensive, interdisciplinary course addressing themes including social-ecological systems, human-environment relationships and ecosystem approaches to health. The course includes class-based sessions and intensive field-based components relevant to the course theme and location, which differ from year to year. The field-school brings together colleagues in natural sciences, health sciences, social sciences, humanities, and beyond, who work in collaboration with interested parties and community members to address issues at the interface of environment, society and health.

*Precluded:* HHSC 760-3

**NRES 770-3 Rural and Small Town Geography** This course integrates social science research on rural and small town change within the context of northern communities. Issues may include work, housing, gender, ethnicity, social services provision, community conflict, and quality of life. The course emphasizes case study research within theoretical frameworks, and draws especially upon examples from northern British Columbia.

*Prerequisites:* Permission of the instructor

*Precluded:* GEOG 624-3

**NRES 771-3 Law and the Geographies of Justice** This course explores the relations between power, justice, law, and the construction of place. Students gain an understanding of geographic approaches to rights issues in a variety of contexts (dependant upon instructor and student interests). Key concepts of legal geography, cultural geography, indigenous rights, globalization, culture, social justice, international law, and customary law are examined.

*Prerequisites:* Permission of the instructor

### **NRES 772-3 Geographical Perspectives on Restructuring**

This course focuses on instances of industrial and social change in northern British Columbia in the context of political and economic developments at the provincial, national, and international levels. Specific topics vary from year to year depending on instructor and student interests, but include such interests as social, economic and political restructuring together with their impacts on topics such as regional resource-based economies, emerging modes of economic and welfare governance, and reform processes in health care delivery and social policy. Conceptual approaches considered include regulation theory, world systems theory, and post-structural perspectives on contemporary change.

*Prerequisites:* Permission of the instructor

### **NRES 773-3 Advanced Qualitative Research Methodology**

This seminar course explores methodological approaches to, and theoretical frameworks of, qualitative research. Emphasis is given to exploring key concepts of validity, rigour, reliability, subjectivity/objectivity, and ethics of concern to qualitative researchers. The course surveys various frameworks including indigenous, feminist, and critical methodologies, among others, to understand their assumptions and approaches to fieldwork including interviewing, survey work, field notes, writing results, and reciprocity. This course explores how to translate abstract concepts such as place, space, scale, region, and mobility into viable field methods.

### **NRES 774-3 Dimensions of Outdoor Recreation and Nature-Based**

This course integrates ecological and social science approaches to the study of outdoor recreation, nature-based tourism and protected areas. The course emphasizes the latest quantitative and qualitative theoretical research and its applicability to recreation and tourism and draws upon examples from British Columbia, Canada and the world.

*Prerequisites:* Permission of the Instructor

**NRES 790-12 Master of Science (NRES) Thesis** The MSc thesis results in a scientific contribution to a traditional science field or to an applied understanding of resources and the environment. It requires that a student undertake original research involving a literature review and the development of a research design and methodology appropriate to the research problem. The implementation of the research methodology will normally include original investigation and data collection, the analyses and discussion of which will constitute the major part of the completed research thesis. The thesis may involve, but is not confined to, the testing of a specific hypothesis or hypotheses. Required for graduation in the Master of Science (Natural Resources and Environmental Studies stream).

**NRES 792-12 Master of Natural Resources and Environmental Studies Thesis** The MNRES thesis addresses an integrated research problem. It requires that a student undertake original research involving a literature review and the development of a research design and methodology appropriate to the research problem. Implementation of the research methodology will normally include original investigation and data collection, the analyses and discussion of which will constitute the major part of the completed research thesis. The thesis may involve, but is not confined to, the testing of a specific hypothesis or hypotheses. Required for graduation in the Master of Natural Resources and Environmental Studies Thesis option.

**NRES 793-6 Master of Natural Resources and Environmental Studies Non-Thesis Project** The MNRES non-thesis project is an extended position paper, report, plan or program that addresses a major problem or issue relevant to the field of natural resources and environmental studies. The development of the project requires the application of original thought to the problem or issue under investigation, and the framing of that problem within the broader context of natural resources and the environment. The non-thesis project does not require the development of a research design or research methodology, and need not involve the collection of original data. Required for graduation in the Master of Natural Resources and Environmental Studies Non-Thesis option.

**NRES 794-12 Master of Arts (NRES) Thesis** The MA thesis contributes to the understanding of social, political, economic, and/or cultural dimensions of natural resources and the environment. It requires that a student undertake original research involving a literature review and the development of a research design and methodology appropriate to the research problem. The implementation of the research methodology will normally include original investigation and data collection, the analyses and discussion of which will constitute the major part of the completed research thesis. The thesis may involve, but is not confined to, the testing of a specific hypothesis or hypotheses. Required for graduation in the Master of Arts (Natural Resources and Environmental Studies).

**NRES 798-(1-3) Special Topics** This course is intended to fulfill requirements for specialized instruction in any of the disciplines represented in the Faculty of Natural Resources and Environmental Studies. Topics will be chosen depending upon student interest and instructor availability, and topic headings will vary from year to year and from section to section.

**NRES 799-(1-6) Independent Study**

**NRES 801-3 Integrated Environmental Systems I** This course is an interdisciplinary examination of the biological, chemical, and physical processes of ecosystems. Key sciences to be considered include biology, ecology, physics, chemistry, earth sciences, selected social sciences, and recent developments in systems theory, as well as interactions among the sciences. This course will involve a critical examination of the nature and distribution of components within ecosystems, the processes that govern them, and their relevance to environmental systems. Major issues in natural resource management and environmental studies, such as global climate change, will provide the discussion framework for this class.

*Prerequisites:* Admission into the PhD NRES program

**NRES 802-3 Integrated Environmental Systems II** This course exposes the student to the major extant theoretical explanations of human use, valuation, appreciation, and perceptions of the natural environment. Included will be overviews of the role of science in society, market and non-market valuation processes with respect to natural resources, attitude formation, aesthetics and perceptual bases, planning and policy implications, and the driving forces in human uses of natural resources. An important component will be an exploration of the major natural resource issues involving environmental ethics and reasoning.

*Prerequisites:* Admission into the PhD NRES program

**NRES 803-3 Integrated Environmental Systems III** Students in the graduate cohort work together to formulate an interdisciplinary perspective on their graduate research projects. Supervisors and the supervisory committees guide students in the development of their research proposals, while the NRES 803-3 cohort and instructor provides inputs, through seminars and discussions, to help the student relate the research thesis to the social and arts, physical, and life sciences of natural resources and the environment.

*Prerequisites:* NRES 801-3 and 802-3, admission into the PhD NRES program

**NRES 804-3 Graduate Seminar** This seminar is geared toward developing "critical thought" and aims to help candidates respond across a broad spectrum of topics. The seminar functions to generate debate on various (frequently contentious) issues, to promote interaction with faculty members and other students across the entire Faculty, and to act as a platform for presentations by the students themselves and invited speakers. Each PhD student is expected to give two 50 minute presentations. One presentation will be on a topic agreed upon by the student and the course coordinator, and the other will be relative to the student's thesis.

*Prerequisites:* Admission into the PhD NRES program

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**NRES 805-3 Environmental Research Methods (Not required, at the discretion of PhD committee)** This course is designed to introduce students to the philosophy of science, and the range of methods that are of increasing importance in environmental research and practice. The first part of the course will focus on scientific methods and design, and the use, function, interpretation, and misuse of biostatistics. The second half of the course will examine the growing use of qualitative methodologies, including focus groups, oral interviews, ethnographic techniques, including their uses, function and misuse.

**NRES 890-12 Thesis Research** The doctoral thesis must stress original research or an original investigation, interpretation or synthesis of existing research.

**NRES 899-(1-3) Independent Research**

## Natural Resources Management (NREM)

**NREM 607-3 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.

*Precluded:* NREM 400-3

**NREM 608-3 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.

*Precluded:* NREM 410-4

**NREM 613-3 Agroforestry** This course introduces students to agroforestry concepts, strategies and practices (systems). Discussions include ecological, economic, and social circumstances under which a landowner lives and makes decisions about whether or not to practice agroforestry. Both temperate and tropical approaches to agroforestry systems are addressed in the course. Special attention is given to agroforestry research and development in British Columbia. Students are exposed to current modelling techniques used in agroforestry, as well as research opportunities in agroforestry.

*Precluded:* NREM 413-3

**NREM 615-3 Forest Soils** This course examines the distinctive physical, chemical and biological properties of forest soils from an ecological perspective, emphasizing western Canadian examples. Major themes include the role of soils in forest site classifications, carbon and nutrient cycling in forests, soil determinants of forest productivity, and the responses of soils to forest management practices. Field trips and laboratory exercises provide experience in techniques used to assess forest soil properties and management impacts.

*Prerequisites:* None (FSTY 205-3 or equivalent is recommended)

*Precluded:* FSTY 315-3 or FSTY 415-3

**NREM 625-3 Soil Formation and Classification** Examination of soil formation with emphasis on environmental forces including human activity; distribution and classification of soils in northern and interior BC; correlation of the Canadian system of Soil Classification with international systems such as Soil Taxonomy and FAO/UNESCO Soil Map of the World.

*Precluded:* FSTY 425-3

**See NRES course listing for additional 700-level Natural Resources Management courses.**

## Nursing (NURS)

**NURS 602-3 Pathophysiology** This course provides an intensive, comprehensive, evidence-based background for assessment and advanced nursing management of common acute/episodic and chronic illnesses encountered across the life-span in primary health care settings. Normal anatomy and physiology are reviewed and the pathophysiology of selected conditions, diseases or disorders is examined in-depth. Particular attention is given to epidemiological evidence relevant to northern British Columbia.

### **NURS 603-3 Health Assessment and Diagnostic Reasoning**

This course prepares students to perform comprehensive advanced health assessments with clients across the life-span. The integration of interpersonal communication and physical assessment skills with diagnostic reasoning, critical thinking and clinical decision-making in determining differential diagnoses is emphasized. Students learn health assessment and diagnostic reasoning in accordance with Nurse Practitioner professional regulations and within the context of interpersonal practice.

*Prerequisites or Co-requisites:* NURS 602-3 or permission of the Program Coordinator or Chair, School of Nursing

### **NURS 604-3 The Healing and Well-being of Indigenous Peoples**

This course provides a critical examination of Indigenous healing and well-being in relation to the historical influences of European contact and colonization, government social policy, environmental change, migration, and evolving lifestyles. Traditional and contemporary knowledge, world-views and spirituality, as well as Indigenous approaches to healing and well-being within families and communities are explored.

*Precluded:* HHSC 604-3

### **NURS 605-3 Pharmacological Management and Therapeutic Interventions**

This course provides students with the most current advanced knowledge of pharmacology, including pharmacokinetics and pharmacodynamics. Students learn about evidence-based practice in the selection, prescription and monitoring of drugs to treat diseases, disorders, conditions and injuries commonly used in primary health care settings within the CRNBC limits and conditions prescribing and dispensing regulations. Based on client health history, disease, disorder or condition, this course involves in-depth study of the mechanisms of drug actions, therapeutic and adverse effects, drug interactions, and client education. Emphasis is on clinical decision-making applied in case studies that span a variety of age groups and conditions.

*Prerequisites:* NURS 602-3

**NURS 606-3 Developing Nursing Knowledge** This course explores the historical, philosophical and theoretical underpinnings of professional nursing, and the evolution and application of nursing knowledge. The focus is to examine the connections between nursing theory and practice. The relationships between nursing theory, critical thinking, analysis and synthesis of clinical knowledge and diagnostic reasoning of competent, ethical decision-making are examined.

**NURS 607-3 Applying Research and Evidence to Practice** This course provides an overview of major research methods (quantitative and qualitative) and basic statistics. Students are encouraged to critically examine, analyze and synthesize research findings and epidemiological evidence in order to inform and guide advanced nursing practice. In addition to the research literature, students are introduced to how to critique and clinically apply evidence-based guidelines, databases, and health informatics sources.

### **NURS 608-3 Ethics, Accountability and Responsibility for Practice**

This course emphasizes health care ethics and ethical practice as well as the legislative acts, regulations and bylaws of the family nurse practitioner role as it evolves in British Columbia. Implications for those factors on professional responsibility, accountability and practice management are also addressed. The importance of personal responsibility for continued professional development and maintaining family nurse practitioner competence is also emphasized.

### **NURS 609-3 Qualitative Research Approaches in Nursing and Health**

This course explores various approaches to qualitative research in nursing and health, beginning with the epistemological and ontological commitments. Approaches normally examined include qualitative description, phenomenology, participatory action research, feminist research, grounded theory and forms of ethnography. Practical concerns encountered in undertaking qualitative research, including issues of ethics and rigour, are explored. This course prepares students to undertake a qualitative thesis.

*Precluded:* EDUC 610-4, GNDR 609-3, HHSC 703-3

### **NURS 610-3 Quantitative Research in Nursing and Health**

This course introduces students to a range of quantitative research designs, methods and statistical approaches that are commonly used in nursing practice, nursing education and health care. The course prepares students by providing methodological tools required to undertake a thesis.

*Precluded:* SOCW 609-3

**NURS 612-3 Women and Health** An examination of the health issues of northern women in which a holistic perspective is encouraged. Students will use epidemiological and other research resources to explore general issues as well as specific health concerns.

*Prerequisites:* None. Students from all disciplines are welcome to the course.

*Precluded:* NURS 412-3

### **NURS 652-6 Chronic Disease Management, Palliative Care and Wound Care**

This course has three components: Chronic Disease Management utilizes current, evidence-based knowledge, skills and management tools to provide effective patient-centred care for clients with chronic health challenges in rural practice. The Palliative Care section enables the learners to extend their knowledge surrounding palliative care guidelines and concludes with grief and bereavement issues. In the Wound Care component, students learn how to provide evidence-based and cost-effective wound care for people residing in rural settings.

*Precluded:* NURS 452-6

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**NURS 653-3 Nursing Practice with Older Persons** This course focuses on health promoting, person-centred practice for nurses working with older persons in rural acute care. Assessment focuses on the physical and mental health of older persons within the context of their everyday experience and their family and/or culture. Particular attention is paid to the strengths of the individual as well as the presenting health challenges. Nurses explore strategies to prevent and/or address common health issues experienced by older persons.

*Precluded:* NURS 453-3

**NURS 656-3 Mental Health and Addictions** This course provides students with the basic knowledge and skills required to care for people living with common mental health and addiction issues encountered in rural nursing practice. A holistic relational nursing focus allows students to apply concepts discussed in a variety of health challenges and to intervene appropriately. Nursing approaches to clinical decision making with clients who have specific mental health problems such as psychotic, mood, anxiety, and personality disorders are highlighted. Nursing practice approaches to addictions, substance use, and crisis intervention, including aggression and suicide attempts are addressed.

*Precluded:* NURS 456-3

**NURS 680-(3-6) Special Topics in Nursing** This course addresses topics of current interest in nursing, which vary from year to year.

**NURS 681-(1-6) Independent Study** The details of this course are determined on an individual basis between faculty and graduate students.

**NURS 701-6 Advanced Clinical Practice in Community Health Nursing** The course will concentrate on the theory of advanced practice for community health nursing and the particular roles nurses carry in these areas. A practicum is required.

**NURS 702-6 Continuing Community Care** The course will concentrate on the theory of advanced practice for continuing community care nursing and the particular roles nurses carry in these areas. A practicum is required.

**NURS 703-3 Health Program Planning, Community Development and Evaluation** This course addresses health program planning, community development and program evaluation theory and practice. Epidemiological perspectives and community assessment approaches are explored. Particular focus is on program planning, development, and evaluation in northern, rural and remote communities.

### **NURS 720-6 Practicum: Integrating Primary Health Care I**

This course enables students to consolidate and practice knowledge and skills in assessing, diagnosing and managing physical and mental health/illness of adults, older adults and their families. The focus is on the management of common episodic and chronic health conditions of individuals across the life-span, within the context of family and community in northern primary health care settings. Emphasis is placed on health promotion and illness/injury prevention strategies and on chronic self-care management. Situations requiring physician referral and managing rapidly changing situations are also addressed. This two-part course, which consists of on-site practice seminars and a clinical practicum, includes a structured clinical evaluation.

*Prerequisites:* NURS 602-3, NURS 603-3, NURS 605-3, NURS 607-3, NURS 608-3, or permission of the Program Coordinator or Chair, School of Nursing

### **NURS 730-6 Practicum: Integrating Primary Health Care II**

This course enables students to extend their knowledge and practice skills in northern primary health care setting with an emphasis on the development of core family nurse practitioner competencies related to caring for perinatal women, infants, children and adolescents. Emphasis is placed on health promotion and illness/injury prevention strategies and on chronic self-care management. Situations requiring physician referral and managing rapidly changing situations are also addressed. This two-part course, which consists of on-site practice seminars and a clinical practicum, includes a structured clinical evaluation.

*Prerequisites:* NURS 720-6, or permission of the Program Coordinator or Chair, School of Nursing

**NURS 790-9 Nurse Practitioner Internship** This final practicum course, consisting of seminars and concentrated clinical practice, sees students building upon previously acquired family nurse practitioner knowledge and skills. Students undertake autonomous, collaborative primary health care practice, through consolidating their skills and judgment in the assessment, management and care of individuals and families across the life-span. Students collaborate with other health professionals to provide comprehensive care, and begin to take on leadership roles in addressing population health needs, service gaps and the promotion of health in primary health care settings.

*Prerequisites:* NURS 730-6, or permission of the Program Coordinator or the Chair, School of Nursing

**NURS 798-3 Nurse Practitioner Project** In this course, which spans the final three semesters of the program, students undertake a practice-based project that examines and synthesizes knowledge in a critical area of concern to nurse practitioners. The project is completed under the supervision of a faculty member within the options and guidelines established by the program.

*Prerequisites:* Permission of the instructor

**NURS 799-12 Thesis** The thesis is an original, independent research project carried out under the supervision of faculty.

*Prerequisites:* Completion of course requirements for Master's in Nursing Science



## Outdoor Recreation and Tourism Management (ORTM)

**ORTM 600-3 Conservation Area Design and Management** 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 to policies, procedures and practices to protect and manage resource and tourism resources within an integrated management context.

*Preclusions:* ORTM 400-3

**ORTM 603-3 International Dimensions of Recreation and Tourism** This course discusses global dimensions and forces in recreation and tourism, particularly those 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 ORTM, the impact of the concepts of sustainable development and biodiversity in ORTM, the risk society, the changing role of local communities in conservation, sex tourism, and enforcement issues in the developing world.

*Preclusions:* ORTM 403-3

**ORTM 607-3 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.

*Preclusions:* ORTM 407-3

**ORTM 608-3 The Psychology of Recreation and Tourism** This course examines the factors that shape individual and societal perceptions, experiences, and behaviours in resource recreation and tourism experiences and settings. Current psychological theory and research are employed to examine how the individual transects both social and natural environment settings in the pursuit of resource-based recreation and tourism activities. Concepts used in ORTM are viewed through the lens provided by research in social and environmental psychology, environmental sociology and perceptual geography.

*Preclusions:* ORTM 408-3

**ORTM 609-3 Critical Approaches to Outdoor Recreation** This seminar course critically questions and creatively reconsiders the nature of outdoor recreation activities as related to contemporary, and interrelated, social and environmental issues. The course is firmly grounded in recreation and leisure studies literature offering anthropological, critical, historical, and socio-ecological interpretations of particular activities (e.g. canoeing, rock climbing, mountaineering), and involving concepts such as identity, place, skill, and community. The course may involve practical experiences and field trips to inform academic content, but these are not the focus.

*Preclusions:* ORTM 409-3

**ORTM 612-3 Issues and Trends in Recreation and Tourism** This seminar-based course examines current issues and trends facing the outdoor recreation, conservation and nature-based tourism study areas. Topics normally change each year, based on recent issues and trends in the broad ORTM discipline, and cover content not traditionally included in any meaningful way in other ORTM courses.

*Preclusions:* ORTM 412-3

**ORTM 614-3 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, tensions between science and 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.

*Preclusions:* ORTM 414-3

**ORTM 633 (1-6) Graduate Field School** This graduate level experiential course provides a combination of theoretical and practical skills in the field. The course integrates outdoor recreation, conservation and nature-based tourism perspectives, and may be based in various locations in BC or worldwide. This course may be repeated to a maximum of 6 credit hours.

## Physics (PHYS)

**PHYS 600-3 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 or equivalent or permission of the instructor

*Precluded:* PHYS 400-3

**PHYS 604-3 Solid State Physics** Physics of the solid state of matter. Covers: theories of metals, crystal lattices, reciprocal lattice, periodic potentials, electron dynamics, band structure, conduction in metals, phonons in metals, semiconductors, diamagnetism and paramagnetism, superconductivity.

*Prerequisites:* PHYS 302-3 or equivalent or permission of the instructor

*Precluded:* PHYS 404-3

**PHYS 606-3 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 302-3 or equivalent or permission of the instructor

*Precluded:* PHYS 406-3

**PHYS 607-3 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 302-3 or equivalent or permission of the instructor

*Precluded:* PHYS 407-3

**PHYS 609-3 Mathematical Methods in Physics** This course is 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

*Precluded:* PHYS 409-3, MATH 409-3

**PHYS 710-3 Advanced Quantum Mechanics** Review of quantum mechanics including operators, linear vector spaces, Dirac notation; density operator; angular momentum; spin; and rotation groups; addition of angular momentum; symmetries and conservation laws; identical particles; time-dependent and time-independent perturbation theory; scattering theory; interaction of radiation with matter; introduction to relativistic quantum mechanics; special topics.

*Prerequisites:* Permission of the Chair/Instructor

**PHYS 720-3 Condensed Matter Physics** Theory and application of solid state physics to macroscopic and microscopic phenomena in materials. Topics to be chosen from the following: review of crystal lattices, unit cells, reciprocal lattice, Bloch theorem; free and nearly free electron models, tight binding model; band structure and Fermi surfaces, electron dynamics, scattering; metals, semiconductors and insulators; phonons, phonon bandstructure, scattering; diamagnetism, paramagnetism, ferromagnetism, magnetic ordering and scattering; heterostructures, quantum Hall effect; topics in surface physics (surface states, work function, reconstruction); topics in superconductivity (Type I & Type II, flux quantization, Josephson Effect, BCS Theory, high-temperature superconductivity).

*Prerequisites:* Permission of the Chair/Instructor

**PHYS 730-3 Advanced Nuclear Physics** Topics to be chosen from the following: properties of nuclei, the nuclear force and the two-nucleon system; nuclear structure; nuclear models; the collective model; many-body basis states; Hartree-Fock Hamiltonian; spherical and deformed shell model; nuclear excitation and the electromagnetic transition; weak interaction and beta-decay; alpha decay; nuclear fission; thermonuclear fusion; nuclear reactions; compound nucleus formation; direct reactions; the optical model; intermediate energy nucleon-induced reactions; electron- and photon-induced reactions; meson-nucleon and meson-nucleus reactions; heavy-ion reactions.

*Prerequisites:* Permission of the Chair/Instructor

**PHYS 740-3 Elementary Particle Physics** Topics to be chosen from the following: quarks, leptons and the standard model; symmetries and conservation laws; Dirac equation and the Dirac field; gauge invariance and gauge theories — Quantum Electrodynamics; phenomenology of hadronic interactions, strong interaction, SU(3), and the quark model; other quark flavours — charm and beauty; principles of Quantum Chromodynamics; the weak interaction and parity non-conservation, invariance under CP and T; the heavy gauge bosons and the electro-weak theory; CP-violation; grand unification, supersymmetry; superstrings, particle physics and cosmology.

*Prerequisites:* Permission of the Chair/Instructor

**PHYS 798-3 Advanced Topics in Physics** This course covers topics of current interest in physics research, which vary from year to year.

*Prerequisites:* Permission of the Chair/Instructor

### Political Science (POLS)

**POLS 600-3 Classics in Political Philosophy** This course provides a close analysis of a classic treatise in political philosophy. Texts vary yearly.

*Precluded:* POLS 400-3

**POLS 601-3 Resource Politics** This course examines the roles which natural resources and the environment have come to play within the contemporary political system. Emphasis on Canada and British Columbia.

*Precluded:* POLS 401-3

**POLS 603-3 Social and Health Policy in the Context of Health and Health Care** This course examines the evolution of social and health services in Canada in a comparative context and encourages students to think broadly about health care, taking into account the social, political, cultural, historical and economic factors that affect health and health policy. Students critically examine the impact of global, national, provincial and local influences on the delivery of health care and on the enactment of advanced practice. Students use concepts of public policy and policy analysis to analyze policies that are relevant to professional practice and health care and to be equipped to engage in policy debates and to influence health policy.

*Precluded:* POLS 403-3

**POLS 605-3 Topics in Society and Democracy** This course is a comparative analysis of the challenges of political, economic and social transition. Topics may include religion and democracy, the market and democracy, and constitutions and democracy.

*Precluded:* POLS 405-3

**POLS 606-3 Political Change in the Asia-Pacific Region** This course offers a comparative analysis of the strategies of political and economic development and social change in selected countries in the Asia-Pacific region.

**POLS 608-3 Business-Government Relations** Government and politics together make up one of the most important variables that business faces in a modern economy. Problems examined include the regulatory process, tax policy administration, labour relations law, lobby practices, and local building codes. These questions and others relating to the appropriate role of the modern state in the economy constitute the major concerns of this course.

*Precluded:* POLS 408-3

**POLS 612-3 Comparative Aboriginal-State Relations** This course is a comparative study of relations between modern states and aboriginal peoples, and the quest by aboriginal peoples for self-determination.

*Precluded:* POLS 412-3

**POLS 613-3 Democracy and Diversity** This course is an exploration of the politics of ethnic, racial and religious diversity and its impact on the theory and practice of democracy in the 21st Century. Theoretical concepts and models are examined in relation to case studies drawn from Canada and around the globe.

*Precluded:* POLS 413-3

**POLS 614-3 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.

*Precluded:* POLS 414-3

**POLS 615-3 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.

*Precluded:* POLS 415-3

**POLS 617-3 Ethical Leadership** This course provides an overview of the literature on leadership throughout history as well as reviews the main leadership theories developed in the 20th and 21st centuries, with a focus on what makes a good leader, both in the sense of administrative or managerial effectiveness as well as in a moral sense. In addition to providing students with grounding in mainstream theories of leadership, this course focuses on case-based material and evaluates models of successful leadership in both the public and private sector.

*Precluded:* POLS 417-3, COMM 437-3

**POLS 627-3 Ethics and Public Affairs** This course is an exploration of the ethical foundations of domestic and foreign policy making in contemporary democratic states. Special emphasis is placed on the tension that frequently arises between moral idealism and political realism in the conduct of public affairs.

**POLS 634-3 Resource Communities in Transition** An examination of issues facing rural, remote and northern resource communities across Canada. It compares issues across Canada's provincial north 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.

*Precluded:* POLS 434-3, POLS 601-3

**POLS 672-3 Seminar in Political Philosophy** This is a participatory seminar in which students are guided through the process of conducting a research project in political philosophy. Topics are chosen according to students' interests.

*Precluded:* POLS 472-3

## Course Descriptions: POLS

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**POLS 698-3 Special Topics in Political Science** This course provides students with in-depth knowledge of a specialized topic in political science. The topic of the course will be noted on the transcript. Credit available for both POLS 498-3 and ANTH 698-3 provided the topic differs substantively between offerings.

*Prerequisites:* Permission of the instructor

*Precluded:* POLS 498-3

**POLS 702-3 Scope and Methods of Political Science** A graduate seminar which examines major considerations in doing quantitative and qualitative methods of social research and explores critical, theoretical, and other methodological issues in the discipline.

**POLS 704-3 Independent Study** The details of this course will be determined on a case-by-case basis between faculty and graduate students.

**POLS 795-3 Major Research Paper** This course is intended for students in the Political Science Master's degree program who have chosen the course-based option. The content of the course is determined by the student's graduate supervisor, who oversees the student's research and grades the final paper. It is normally the final course in the student's program of studies.

**POLS 797-9 Graduate Project** The Graduate Project is a requirement for students choosing the MA Project Option. Students will prepare a 12,000 - 15,000 word research paper, under the direction of a supervisor from Political Science. The project will contain a thorough review of the existing literature, a detailed bibliography, and will demonstrate clear evidence of critical thinking. A project proposal, and the final research paper, will be assessed by a graduate committee, comprising the supervisor, one other member from Political Science, and one member from outside the program.

**POLS 799-12 Master's Thesis** The MA thesis should pose and attempt to deal with a significant public question in a way that demonstrates critical thinking, an understanding of the relevant literature, and the ability to conduct systematic research. This should be accomplished within the limits of 20,000 - 25,000 words. In preparation for the thesis, a research proposal is to be drafted (in consultation with the faculty) and submitted for discussion and approval to a committee of three persons appointed by the Program Chair.

## Psychology (PSYC)

**PSYC 600-4 Quantitative Methods I** The course emphasizes linear statistical models involving one response variable (i.e., univariate methods). If time permits, logistic regression will be introduced. The laboratory component of the course focuses on the use of a statistical package to produce results. Examples are drawn from the health and human sciences, broadly defined.

*Prerequisites:* an undergraduate course in research methods and data analysis or permission of the instructor

**PSYC 605-4 Quantitative Methods II** The course considers statistical models involving multiple response variables (i.e., multivariate methods). The course covers: MANOVA, discriminant functions analysis, repeated measures designs, principal components analysis and an introduction to factor analysis. If time permits, loglinear models will be introduced. The laboratory component of the course focuses on the use of a statistical package to produce results. Examples are drawn from the health and human sciences, broadly defined.

*Prerequisites:* PSYC 600-4 or equivalent

**PSYC 610-3 Cognitive Neuroscience** This course provides exposure to major and emergent issues in the study of brain and behaviour relationships. The focus of the course is on the theoretical and physiological basis of neuropsychological processes.

**PSYC 615-3 Social Psychology** This course offers an advanced study of social psychology and social cognition. The course provides exposure to major current issues in the study of social behaviour. Topics of special relevance to the social problems of the north are considered.

**PSYC 620-3 Health Psychology** This is an advanced seminar in health psychology dealing with such areas as psychosocial epidemiology, stress and its management, social factors and health, behavioural risk factors for chronic disease and disability, and intervention programs based on behavioural change.

**PSYC 631-3 Psychopathology** This course examines historical and current approaches to the study of behaviour disorders and problems of life adjustment, including critical evaluation of empirical findings in selected areas. Classification systems, including the current revision of the APA Diagnostic and Statistical Manual, are critically reviewed.

**PSYC 635-3 Cognition and Learning** This course provides an advanced study of cognition and cognitive processes.

**PSYC 645-3 Developmental Psychology** This course provides an advanced study of human development from infancy through adulthood.

**PSYC 690-12 Master's Thesis** An original, empirical research project.

**PSYC 712-3 Independent Research** Allows an MSc student to conduct research under the supervision of a faculty member.

**PSYC 720-3 Cross-Cultural Communication in Health Care Settings** This course focuses on communication (including information transmission and interactive processes) between health professionals and people of differing cultural backgrounds. Issues examined include gaps in health perceptions between service providers and diverse groups, barriers within, and proposed changes to, the health care system.

**PSYC 725-3 Cognitive Neuropsychological Assessment** This course provides exposure to the assessment of cognitive neuropsychological functioning. Emphasis is placed on providing practical hands-on experience in the administration and scoring of commonly used tests of mental status, depression, achievement, memory, and/or intelligence. Also included is an introduction to fundamental measurement concepts and ethics.

*Prerequisites:* Permission of the instructor

*Precluded:* PSYC 625-3

**PSYC 726-3 Personality Assessment** This course provides exposure to standardized procedures for the evaluation of personality. Emphasis is placed on administration, scoring, and interpretation of objective tests of personality. Also included is an overview of the history and theories of personality assessment, psychometrics, responsible test use, and current controversies.

**PSYC 730-3 Psychological Interventions** This is an advanced seminar on the application of psychological procedures to the change of human social, emotional, behavioural and personality functioning.

*Precluded:* PSYC 630-3

**PSYC 740-3 Ethical and Legal Issues in Psychology** An advanced seminar focused on scientific and professional, ethical and legal issues.

*Precluded:* PSYC 640-3

**PSYC 750-(3-6) Special Topics in Advanced Psychology** This course provides an advanced study in specific substantive areas. Topics may include aging, communication theory, cross-cultural issues, emotion, gender, and health promotion, history and systems. The topic area is noted on the transcript.

*Precluded:* PSYC 650-3

## Course Descriptions: PSYC

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**PSYC 760-3 Research Practicum** The research practicum will focus on the acquisition of technical skills and practical research experience. Students will be expected to demonstrate the use of experimental methods consistent with their career goals. They will have the opportunity to develop and demonstrate their skills in individual research laboratories in psychology.

*Prerequisites:* PSYC 600-4 and permission of the instructor  
*Co-requisite:* PSYC 605-4

**PSYC 770-(3-6) Fieldwork Practicum** This course provides supervised exposure to applied psychology practice. It includes observation of applied psychology, supervised practice of assessment and/or intervention techniques, participation in case supervision, and attendance at case conferences.

*Prerequisite:* Permission of the instructor

**PSYC 800-3 Graduate Seminar** The graduate seminar is geared toward developing critical thinking skills and aims to help students evaluate a broad spectrum of topics. The seminar functions to generate debate on key issues, promote interaction with faculty members and other students in the program, and to act as a context for presentations by the students. Each student is expected to give, in a manner acceptable for a national or international conference presentation, one presentation in each semester of enrolment.

### **PSYC 805-3 Advanced Topics in Quantitative Psychology**

This course is designed to introduce students to advanced topics in quantitative psychology. The course content may vary from year to year and will be determined, in part, by program requirements. Some possible topics are: (a) quasi-experimental design and field studies, (b) factor analysis and structural equation modelling, (c) loglinear modelling and logistic regression, (d) signal detection theory, (e) scaling, (f) psychometric theory, or (g) nonparametric statistics. Examples will be drawn from the health and behavioural sciences, broadly defined.

*Prerequisites:* PSYC 600-4 and PSYC 605-4, or permission of the instructor

**PSYC 810-3 Cognitive Neuroscience** This course provides exposure to major and emergent issues in the study of brain and behaviour relationships. The focus of the course is on the theoretical and physiological basis of neuropsychological processes.

**PSYC 812-3 Independent Research** Allows a PhD student to conduct research under the supervision of a faculty member.

**PSYC 815-3 Social Psychology** This course offers an advanced study of social psychology and social cognition. The course provides exposure to major current issues in the study of social behaviour. Topics of special relevance to the social problems of the north are considered.

**PSYC 820-3 Health Psychology** This is an advanced seminar in health psychology dealing with such areas as psychosocial epidemiology, stress and its management, social factors and health, behavioural risk factors for chronic disease and disability, and intervention programs based on behavioural change.

### **PSYC 822-3 Cross-Cultural Communication in Health Care**

**Settings** This course focuses on communication (including information transmission and interactive processes) between health professionals and people of differing cultural backgrounds. Issues examined include gaps in health perceptions between service providers and diverse groups, barriers within, and proposed changes to, the health care system.

**PSYC 825-3 Cognitive Neuropsychological Assessment** This course provides exposure to the assessment of cognitive neuropsychological functioning. Emphasis is placed on providing practical hands-on experience in the administration and scoring of commonly used tests of mental status, depression, achievement, memory, and/or intelligence. Also included is an introduction to fundamental measurement concepts and ethics.

*Prerequisites:* Permission of the instructor  
*Precluded:* PSYC 625-3, 725-3

**PSYC 826-3 Personality Assessment** This course provides exposure to standardized procedures for the evaluation of personality. Emphasis is placed on administration, scoring, and interpretation of objective tests of personality. Also included is an overview of the history and theories of personality assessment, psychometrics, responsible test use, and current controversies.

*Precluded:* PSYC 625-3, PSYC 726-3

**PSYC 830-3 Psychological Interventions** This is an advanced seminar on the application of psychological procedures to the change of human social, emotional, behavioural and personality functioning.

*Precluded:* PSYC 630-3, PSYC 730-3

**PSYC 831-3 Psychopathology** This course examines historical and current approaches to the study of behaviour disorders and problems of life adjustment, including critical evaluation of empirical findings in selected areas. Classification systems, including the current revision of the APA Diagnostic and Statistical Manual, are critically reviewed.

*Precluded:* PSYC 631-3

**PSYC 835-3 Cognition and Learning** This course provides an advanced study of cognition and cognitive processes.

**PSYC 845-3 Developmental Psychology** This course provides an advanced study of human development from infancy through adulthood.

**PSYC 850-(3-6) Special Topics in Advanced Psychology** This course provides an advanced study in specific substantive areas. Topics may include aging, communication theory, cross-cultural issues, emotion, gender, and health promotion, history and systems. The topic area is noted on the transcript.

*Precluded:* PSYC 650-3, PSYC 750-(3-6)

**PSYC 860-(3-6) Research Practicum** The research practicum focuses on the acquisition of technical skills and practical research experience. PhD students are expected to demonstrate the use of experimental methods consistent with their career goals. They have the opportunity to develop and demonstrate their skills in individual research laboratories in psychology.

*Prerequisites:* enrolment in PhD program and permission of the instructor

**PSYC 870-(3-6) Fieldwork Practicum** This course provides supervised exposure to applied psychology practice. It includes observation of applied psychology, supervised practice of assessment and/or intervention techniques, participation in case supervision, and attendance at case conferences.

*Prerequisite:* Permission of the instructor

*Preclusion:* PSYC 770-(3-6)

**PSYC 890-12 PhD Dissertation** An original, empirical research project.

## Social Work (SOCW)

**SOCW 600-3 Social Work and Community Data Analysis** This course uses the Social Administration framework of the MSW program. Students will be introduced to existing databases and will be taught a wide range of computer applications and software packages that are particularly useful in community based social work practice, policy and advocacy in northern regions and communities. This course extends throughout the MSW year and will also integrate qualitative and participatory research approaches.

**SOCW 601-3 Issues in Northern/Remote Social Work** Current issues in Northern and Remote Social Work Policy and Practice unravels, explores and analyzes the linkages between community issues, personal presenting problems and global, national and regional historical, economic and social developments. It focuses on public issues and personal problems as they affect different demographic groups and First Nations populations that live in the central and interior of British Columbia. This course aims to formulate changes in social work practice and policy that gives a greater voice to the consumers of welfare and the social and personal services of the welfare state.

**SOCW 602-3 First Nations: Advanced Social Work Practice** First Nations: Advanced Social Work Practice investigates conceptual, policy and practice issues that will help professionals in the human services develop an appropriate role for social work in indigenous cultures. Government and legal processes, values, economic factors, policies and practices will be examined. Issues such as racism, the position of women and children in relation to reserve, town and city life, autonomy, integration, underdevelopment and the transfer of social services to First Nations will be addressed.

**SOCW 603-3 Women: Policy/Practice Issues** Women and Human Services: Critical Issues in Policy and Practice explores the historical nature of the role of women and women's struggles in Canada with particular focus on the role of women in northern, remote and First Nation communities. The exploration also includes a review of feminist perspectives and the meaning and application of feminist practice for social work in the areas of policy, research, counselling and direct service. The course draws on interdisciplinary knowledge and will provide the opportunity to analyze and debate the social and political forces which have shaped the condition of women in social work in particular and in human services generally. While gender relations are the focus, they will be analyzed as they intersect with race, class, ability, sexual orientation, aging, and so on.

**SOCW 604-3 Directed Readings** Directed Readings enables students to undertake an independent reading course in an area that fits a chosen MSW research/policy/practice concentration. Students may take a maximum of one Directed Readings course.

**SOCW 605-3 Comm Work/Politics of Change** Community Work and the Politics of Change is based on theories of social change and interactive problem solving skills with groups and communities is the main focus of this course. Critical analysis of selected field experiences will be examined in relation to the values of participatory democracy, co-operation, empowerment, mutual aid and a social justice vision of genuine community. Issues to be examined include developing grass roots leadership, valuing undervalued persons and building a community culture of hope. The methods of popular education, participatory action research and other forms of qualitative research directed to the politics of change will be examined.

**SOCW 609-3 Advanced Quantitative Research** Advanced Quantitative Research in Social Policy and Social Work Practice covers a range of quantitative methods, research designs, statistical analyses and measures. The course explores social policy and social work issues in comparative, national and provincial contexts and links measures, methods and analyses to current issues and debates in social work policy and practice. The course prepares students with the research tools necessary to undertake their thesis and/or practicum projects.

*Prerequisite:* MSW Foundation Year students must successfully complete SOCW 634-3

**SOCW 610-3 Wellness: Alternate Approaches** This course introduces and explores a variety of techniques in expressive arts, movement and process-oriented therapeutic approaches in working with individuals, couples, families and groups. Themes and exercises focus on addictive behaviours, mental health and wellness. Exercises are interwoven throughout the course. These incorporate the materials taught and provide students with the opportunity to practice the different techniques examined in this course.

**SOCW 613-3 Clinical Social Work Practice** Critical analysis of psychotherapy and counselling, particularly by women and ethnic/racial minorities has had an influence on how psychotherapy is organized and how values are expressed. Psychotherapy and counselling have also been influenced by the reality of restructuring in health care, education and social services. Social workers have been faced with the challenge of delivering service in environments that are increasingly restrictive. These developments have encouraged the implementation of new therapeutic approaches which emphasize brevity, respect for clients, client strength and collaborative approaches to problem solving. This course explores clinical practice within this context with emphasis on issues that pertain to northern British Columbia. The course requires critical analysis as well as practice skills.

**SOCW 614-3 Social Work/Postmodern Debates** Social Work and the Postmodern Debates surrounding postmodernity are contesting prevailing value systems and dominant ideologies of western society. The politics of postmodernism have been taken up in the social sciences and humanities—how they are affecting social work discourse, policy and practice will be the focus of this course.



**SOCW 615-3 Multi-Cultural Social Work Practice** Social Work Practice In a Multi-Cultural Context is to prepare students for work with various ethnic and racial minority clientele. Topics include: the impact of formal and informal social policies and institutions on the well-being of minorities; the relationship between cultural norms and social work practice. Opportunities for experiential learning in the classroom and community settings allow students to interact with selected cultural groups.

**SOCW 620-3 Policy Making/Human Services** Policy Making and Human Service Administration will examine the formation and impact of social policy in a variety of areas (such as the pension debate, unemployment insurance reforms, criminal law reform, welfare reform and the personal social services). Socio-political, economic and international forces shaping policy-making will be identified. It will provide students with an opportunity to apply classic and current organization theory to social services administration. The areas under examination include: current problems and issues in social service administration; the impact of hierarchical and bureaucratic structures on social work practice with an emphasis on state social work; and the impetus for organizational changes. Theory and research on the role of the professional worker within the state sector, case materials and students' practice experience will form the basis for discussion.

**SOCW 621-3 Comparative Welfare Analysis** Comparative Social Welfare Analysis provides a critical introduction to comparative social policy. 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; welfare convergence versus divergence; welfare regime analysis; crisis of the welfare states; and the impact of welfare states.

**SOCW 622-3 Hunger/Welfare/Food Security** Hunger, Food Security and Social Policy will examine the issue of hunger and food insecurity in Canada and other advanced industrial societies and will explore competing approaches to achieving food security in terms of the politics of welfare in local, national and international contexts. Topics will include: issues in the definition and measurement of hunger; social and economic consequences; responses of the state and civil society including the role of food banks and non government organizations; food security as a human rights issue and the role of domestic and international legislation; and the contribution of the health, welfare, education, environment, agriculture and food policy sectors in achieving food security.

**SOCW 630-3 Communication Skills** This introductory course 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 is placed 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:* Admission to the MSW Program Foundation Year

**SOCW 631-3 Critical Social Work Practice** This course critically examines the historical origins, value, 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 are contrasted with other models of social work practice including general systems theory, ecological theory, and case management.

*Prerequisites:* Admission to the MSW Program Foundation Year

**SOCW 632-9 MSW Practicum I** This field placement introduces MSW students who do not have a BSW to the social work role and organizational settings. The field placement consists of 546 hours and provides students with an opportunity to enhance and refine their generalist social work skills. The focus of the placement is on the development of generalist skills, however, where possible, students are matched to a placement that broadly meets their area of interest.

*Prerequisites:* Admission to the MSW Program Foundation Year  
*Co-requisites:* SOCW 637-3

**SOCW 633-3 Critical Social Policy** This course examines the development of social policy in Canada, including current debates from conventional and critical perspectives, and invites students to consider the relationship between research, policy and social work practice. The course reviews ideologies of social welfare policy, its formulation and implementation and consequences for people in need. Policy formulation is 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 are explored.

*Prerequisites:* Admission to the MSW Program Foundation Year

## Course Descriptions: SOCW

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**SOCW 634-3 Social Work Research/Policy/Practice** This course 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 are 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:* Admission to the MSW Program Foundation Year

**SOCW 635-3 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 Social Work Code 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:* Admission to the MSW Program Foundation Year

**SOCW 637-3 Advanced Practice** This course is designed for graduate students who have worked in social work practice settings but who do not have formal social work training. The historical and cultural development of social work practice models is surveyed with emphasis on contemporary models of practice such as anti-oppressive practice, constructivism, feminist practice, First Nations practice approaches and structural practice. Key components of practice such as assessment, intervention planning, advocacy, organizing, recording, confidentiality, evaluation, case management, interdisciplinarity and termination are studied.

*Prerequisites:* Admission to the MSW Program Foundation Year  
*Co-requisites:* SOCW 632-9

**SOCW 640-3 Social Work Supervision and Leadership** This course examines leadership and supervision from a social work perspective and it also draws on interdisciplinary knowledge from related fields of practice in health, education, business, and human services. The course emphasizes social justice and the effective and responsible use of human and material resources. Components of supervision and leadership such as administration, support, education, clinical supervision, performance management, recruitment and retention of employees, organizational context, interdisciplinary practices, and problem solving are addressed in this course. The course also encourages the development of styles of leadership and supervision that are respectful and anti-oppressive in nature.

**SOCW 651-3 Legal Issues for Women** This course offers students an overview of constitutional, case and statutory law relating to current women's issues. With an emphasis on the application of Canadian law as it relates to issues facing social workers. The course examines the implications to women of recent changes in constitutional law (e.g. equality provisions in the Charter of Rights and Freedoms), marital and property laws (e.g., child custody and maintenance), and civil and criminal laws (e.g., issues of sexual harassment, sexual assault, wife assault).

**SOCW 698-3 Special Topics** This course number designation will be available to permit faculty to offer courses in areas of specialization.

*Prerequisites:* Graduate standing

**SOCW 700-12 MSW Thesis** Students taking this route will register for a thesis leading to a written report of high academic quality that demonstrates mastery of the field specified and an ability to undertake research. The thesis may be based on research about models of advanced practice, policy and/or evaluation in the thematic areas of the MSW program.

**SOCW 701-3 Research Practicum** This course is a research-based practicum that provides students with the opportunity to enhance and refine their research skills. It normally takes place two days per week over one semester. This elective is available to both practicum and thesis route students.

*Prerequisites:* Admission to the MSW program

**SOCW 704-3 MSW Integrative Seminar** MSW Thesis/Practicum/Project Proposal Development/Integrative Seminar has two dimensions. One is the focus on the relationship between theory, ideology, policy and practice in the study of social welfare. Its objective is to enable students to acquire, develop and apply analytical approaches to the social policy. The second dimension focuses on the development of thesis/practicum/project proposals. Students are encouraged to use theoretical approaches in the formulation of the MSW research for thesis, practicum and project. It examines the steps used in the development of thesis, practicum and project proposals. It gives the students an opportunity to present their proposals and thesis/practicum/project plans with other students and faculty.

**SOCW 732-9 MSW Practicum II** This field placement requires students to perform in a social work role or organizational setting. Field education provides students with an opportunity to enhance and refine their social work skills and focus on an area of particular interest. Students normally are placed in an agency or organizational setting that matches their specific learning needs.

*Prerequisites:* Admission to the MSW program

## Statistics (STAT)

**STAT 641-3 Nonparametric Statistics** This course discusses the methodology and application of nonparametric statistics. Topics covered include goodness-of-fit tests, contingency tables, empirical distribution function tests, the sign test, the Wilcoxon test, the Wilcoxon-Mann-Whitney test, the Kruskal-Wallis test, and rank correlation.

*Precluded:* MATH 441-3, STAT 441-3, MATH 641-3

**STAT 671-3 Linear Models** This course discusses the estimation of parameters in the multiple linear regression model by the least-squares method. Topics covered include the statistical properties of the least-squares estimators, the Gauss-Markov theorem, estimates of residual and regression sums of squares, distribution theory under normality of the observations, assessment of normality, variance stabilizing transformations, examination of multicollinearity, variable selection methods, logistic regression for a binary response, log-linear models for count data, and generalized linear models.

*Precluded:* STAT 471-3, MATH 471-3, MATH 499-3 Regression, MATH 671-3

**STAT 672-3 Survey Sampling Design and Analysis** This course discusses the planning and practice of sample surveys. Topics covered include simple random sampling, unequal probability sampling, stratified sampling, cluster sampling, multistage sampling, cost-effective design, analysis and control of sources of sampling and non-sampling error, ratio estimation, model-based regression estimation, resampling, and replication methods.

*Precluded:* STAT 472-3, MATH 472-3, MATH 499-3 Design of Sample Surveys, MATH 672-3

**STAT 673-3 Experimental Design and Analysis** This course discusses experimental designs and analyses. Topics covered include basic principles and guidelines for designing experiments, simple comparative designs, single factor analysis of variance, block designs, factorial designs, response surface methods and designs, nested and split plot designs, and the analysis of covariance.

*Precluded:* STAT 473-3, MATH 473-3, MATH 499-3 Design of Experiments, MATH 673-3

**STAT 675-3 Methods for Multivariate Data** This course discusses practical techniques for the analysis of multivariate data. Topics covered include estimation and hypothesis testing for multivariate means and variances; partial, multiple and canonical correlations; principal components analysis and factor analysis for data reduction; multivariate analysis of variance; discriminant analysis for classification; and cluster analysis.

*Precluded:* STAT 475-3, MATH 475-3, MATH 499-3 Applied Multivariate Analysis, MATH 675-5

**STAT 699-(1-3) Special Topics in Statistics** The topic for this course varies, depending on student interest and faculty availability. This course may be taken any number of times provided all the topics are distinct.

*Prerequisites:* Permission of instructor

**STAT 704-1.5 Seminar in Statistics** This course comprises seminar sessions relating to applications or the theory of statistics, or both. Students investigate and present ideas and results pertaining to current research. The offerings may include presentations of current literature, statistical methodology, and topics related to the student's own research or project work or that of others. Students participate in discussions and critiques of their and others' presentations.

This is a PASS/FAIL course. This course may be repeated to a maximum of 3 credit hours. Student must attend and participate in all seminar session to obtain credit for the course.

*Prerequisites:* Permission of instructor

**STAT 731-(1-6) Advanced Topics in Statistics** This course is intended to fulfill requirements for specialized instruction in the discipline of Statistics. Topics are chosen depending upon student interest and faculty availability, and topic headings vary from year to year and from section to section. This course may be taken any number of times provided all the topics are distinct.

*Prerequisites:* Permission of instructor

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