

| <b>Honours in Physical Geography<br/>(126 credits)</b>   | <b>Honours in Physical Geography<br/>(123 credits)<br/>Program abolished</b>   |
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| <b>Requirements<br/>2003-2005</b>  | <b>New course codes<br/>2006</b>   |
| Compulsory first-year credits: <span style="float: right;">36</span><br>Suggested course stream for full-time students   | Compulsory first-year credits: <span style="float: right;">33</span><br>Suggested course stream for full-time students   |
| <b>Fall:</b>   | <b>Fall:</b>   |
| <del>BIO1120</del> Introduction to Organismal Biology <span style="float: right;">-4</span>  | <b>BIO1130</b> Introduction to Organismal Biology <span style="float: right;">3</span>   |
| <del>CHM1310</del> Principles of Chemistry <span style="float: right;">-4</span>   | <b>CHM1311</b> Principles of Chemistry <span style="float: right;">3</span>  |
| GEG1301 The Physical Environment <span style="float: right;">3</span>  | GEG1301 The Physical Environment <span style="float: right;">3</span>  |
| GEO1115 Introduction to Earth Materials <span style="float: right;">3</span>   | GEO1115 Introduction to Earth Materials <span style="float: right;">3</span>   |
| MAT1320 Calculus I <span style="float: right;">3</span>  | MAT1320 Calculus I <span style="float: right;">3</span>  |
| <del>PHY1104</del> Fundamentals of Physics I <span style="float: right;">3</span>  | <b>PHY1121</b> Fundamentals of Physics I <span style="float: right;">3</span>  |
| <b>Winter:</b>   | <b>Winter:</b>   |
| <del>CHM1320</del> Organic Chemistry I <span style="float: right;">-4</span>   | <b>CHM1321</b> Organic Chemistry I <span style="float: right;">3</span>  |
| ENG1100 Workshop in Essay Writing <span style="float: right;">3</span>   | ENG1100 Workshop in Essay Writing <span style="float: right;">3</span>   |
| or   | or   |
| ENG1112 Technical Report Writing <span style="float: right;">3</span>  | ENG1112 Technical Report Writing <span style="float: right;">3</span>  |
| GEO1111 Introduction to Earth Systems <span style="float: right;">3</span>   | GEO1111 Introduction to Earth Systems <span style="float: right;">3</span>   |
| <del>MAT1323</del> Calculus and Matrix Algebra <span style="float: right;">3</span>  | <b>MAT1332</b> Calculus for the Life Sciences II <span style="float: right;">3</span>  |
| <del>PHY1102</del> Fundamentals of Physics II <span style="float: right;">3</span>   | <b>PHY1122</b> Fundamentals of Physics II <span style="float: right;">3</span>   |
| Compulsory second-year credits and higher <span style="float: right;">30</span>  | Compulsory second-year credits and higher <span style="float: right;">30</span>  |
| GEG2301 Geomorphology <span style="float: right;">3</span>   | GEG2301 Geomorphology <span style="float: right;">3</span>   |
| GEG2304 Climatology <span style="float: right;">3</span>   | GEG2304 Climatology <span style="float: right;">3</span>   |
| GEG2320 Introduction to Digital Cartography and GIS <span style="float: right;">3</span>   | GEG2320 Introduction to Digital Cartography and GIS <span style="float: right;">3</span>   |
| GEG3102 Hydrology <span style="float: right;">3</span>   | GEG3102 Hydrology <span style="float: right;">3</span>   |
| GEG3105 Remote Sensing <span style="float: right;">3</span>  | GEG3105 Remote Sensing <span style="float: right;">3</span>  |
| GEG3306 Quaternary Paleogeography <span style="float: right;">3</span>   | GEG3306 Quaternary Paleogeography <span style="float: right;">3</span>   |
| or   | or   |
| GEO2334 Quaternary Geology and Climate Change <span style="float: right;">3</span>   | GEO2334 Quaternary Geology and Climate Change <span style="float: right;">3</span>   |
| GEG4010 Directed Research in Physical Geography <span style="float: right;">6</span>   | GEG4010 Directed Research in Physical Geography <span style="float: right;">6</span>   |
| GEG4918 Camp d'automne II / Field Camp II <span style="float: right;">3</span>   | GEG4918 Camp d'automne II / Field Camp II <span style="float: right;">3</span>   |
| MAT2378 Probability and Statistics for the Natural Sciences <span style="float: right;">3</span>   | MAT2378 Probability and Statistics for the Natural Sciences <span style="float: right;">3</span>   |
| Minimum of 51 credits of electives, as follows: <span style="float: right;">51</span>  | Minimum of 51 credits of electives, as follows: <span style="float: right;">51</span>  |
| 1. Twenty-one credits (minimum) from the following GEG courses, at least nine credits must be GEG 4000-level; GEG 4001 cannot be counted towards this requirement- | 1. Twenty-one credits (minimum) from the following GEG courses, at least nine credits must be GEG 4000-level; GEG 4001 cannot be counted towards this requirement- |
| GEG3101 Advanced Geomorphology <span style="float: right;">3</span>  | GEG3101 Advanced Geomorphology <span style="float: right;">3</span>  |
| GEG3114 Biogeography <span style="float: right;">3</span>  | GEG3114 Biogeography <span style="float: right;">3</span>  |
| GEG3300 Selected Topics in Physical Geography <span style="float: right;">3</span>   | GEG3300 Selected Topics in Physical Geography <span style="float: right;">3</span>   |
| GEG3302 Natural Resource Management <span style="float: right;">3</span>   | GEG3302 Natural Resource Management <span style="float: right;">3</span>   |
| GEG3312 Advanced GIS <span style="float: right;">3</span>  | GEG3312 Advanced GIS <span style="float: right;">3</span>  |
| GEG3321 Geographical Approaches to Environmental Issues <span style="float: right;">3</span>   | GEG3321 Geographical Approaches to Environmental Issues <span style="float: right;">3</span>   |
| GEG4001 Northern Canada Field Research <span style="float: right;">6</span>  | GEG4001 Northern Canada Field Research <span style="float: right;">6</span>  |
| GEG4101 Permafrost Geomorphology <span style="float: right;">3</span>  | GEG4101 Permafrost Geomorphology <span style="float: right;">3</span>  |

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|---|--------------|---|----------|
| GEG4102 Drainage Basin Processes and Environmental Change                               | 3            | GEG4102 Drainage Basin Processes and Environmental Change                               | 3        |
| GEG4103 Northern Hydrology  | 3            | GEG4103 Northern Hydrology  | 3        |
| GEG4105 GIS in Environmental Research   | 3            | GEG4105 GIS in Environmental Research   | 3        |
| GEG4118 Environmental Impact Assessment   | 3            | GEG4118 Environmental Impact Assessment   | 3        |
| GEG4120 GIS and Numerical Spatial Analysis  | 3            | GEG4120 GIS and Numerical Spatial Analysis  | 3        |
| GEG4304 Microclimatology  | 3            | GEG4304 Microclimatology  | 3        |
| GEG4506 Géomorphologie Karstique et environnement pléistocènes                          | 3            | GEG4506 Géomorphologie Karstique et environnement pléistocènes                          | 3        |
| GEG4507 Géoarchéologie  | 3            | GEG4507 Géoarchéologie  | 3        |
| GEG4508 Climat, environnement et société  | 3            | GEG4508 Climat, environnement et société  | 3        |
| GEG4509 Les changements climatiques   | 3            | GEG4509 Les changements climatiques   | 3        |
| GEG4515 La télédétection appliquée à l'environnement                                    | 3            | GEG4515 La télédétection appliquée à l'environnement                                    | 3        |
| GEG4516 Palynologie   | 3            | GEG4516 Palynologie   | 3        |
| GEG4517 L'holocène  | 3            | GEG4517 L'holocène  | 3        |
| GEG4916 Seminar in Physical Geography   | 3            | GEG4916 Seminar in Physical Geography   | 3        |
| 2. Twelve credits of Earth Sciences electives from :                                    | 12           | 2. Twelve credits of Earth Sciences electives from :                                    | 12       |
| GEO2163 Introduction to Mineralogy  | 3            | GEO2163 Introduction to Mineralogy  | 3        |
| GEO2164 Analytical Methods in Mineralogy  | 3            | GEO2164 Analytical Methods in Mineralogy  | 3        |
| GEO2165 Stratigraphy and Sedimentation  | 3            | GEO2165 Stratigraphy and Sedimentation  | 3        |
| GEO2307 Environmental Geology   | 3            | GEO2307 Environmental Geology   | 3        |
| GEO2321 Structural geology and Tectonics  | 3            | GEO2321 Structural geology and Tectonics  | 3        |
| <del>GEO3152</del> Geological Data Analysis   | <del>3</del> | <b>GEO3352</b> Geological Data Analysis   | <b>3</b> |
| GEO3163 Igneous Petrology   | 3            | GEO3163 Igneous Petrology   | 3        |
| GEO3166 Siliciclastic Sedimentology   | 3            | GEO3166 Siliciclastic Sedimentology   | 3        |
| GEO3167 Mineral Deposits  | 3            | GEO3167 Mineral Deposits  | 3        |
| GEO3342 Introduction to Hydrogeology  | 3            | GEO3342 Introduction to Hydrogeology  | 3        |
| GEO3382 Geochemistry  | 3            | GEO3382 Geochemistry  | 3        |
| GEO4341 Advanced physical Hydrogeology  | 3            | GEO4341 Advanced physical Hydrogeology  | 3        |
| GEO4342 Groundwater Geochemistry  | 3            | GEO4342 Groundwater Geochemistry  | 3        |
| GEO4354 Quantitative Analysis in Geology  | 3            | GEO4354 Quantitative Analysis in Geology  | 3        |
| 3. Human geography electives: 12 credits from GEG courses other than those listed above | 12           | 3. Human geography electives: 12 credits from GEG courses other than those listed above | 12       |
| 4. Other electives that can be taken to meet the requirement of 51 credits of electives |              | 4. Other electives that can be taken to meet the requirement of 51 credits of electives |          |
| <del>BIO2109</del> Ecology  | <del>4</del> | <b>BIO2129</b> Ecology  | <b>3</b> |
| BIO3115 Conservation Biology  | 3            | BIO3115 Conservation Biology  | 3        |
| BIO3117 Ecosystem Ecology   | 3            | BIO3117 Ecosystem Ecology   | 3        |
| <del>CSI1303</del> Introduction to Computing Concepts                                   | <del>4</del> | <b>CSI1308</b> Introduction to Computing Concepts                                       | <b>3</b> |
| EVS1101 Introduction to Environmental Science   | 3            | EVS1101 Introduction to Environmental Science   | 3        |
| PHI2398 Environmental Ethics  | 3            | PHI2398 Environmental Ethics  | 3        |
| At least nine credits of free electives without a GEG code                              | 9            | At least nine credits of free electives without a GEG code                              | 9        |