Program Planning Guide

Program: Bachelor of Science/Bachelor of Education (B.Sc./B.Ed.)
Major (Arts and Science): Geography
Major (Education): Science Education
Calendar Year: 2019/2020
Name: ____________________________
ID: ______________________________

Major in Geography:
www.uleth.ca/artsci/geography

Academic Calendar:
www.uleth.ca/ross/academic-calendar

High School Admission Requirements:
www.uleth.ca/ross/admissions/undergrad/high-school

Faculty of Education Admission Requirements:
www.uleth.ca/education/programs-degrees/
undergraduate-studies/admission

Current and Past Program Planning Guides:
www.uleth.ca/ross/ppgs

Faculty of Arts and Science Advising:
www.uleth.ca/artsci/advising
artsci.advising@uleth.ca
403-329-5106
M2102

Faculty of Education Advising:
www.uleth.ca/education/student-advising
edu.sps@uleth.ca
403-329-2254
TH421

This is a planning guide and not a graduation check or guarantee of course offerings. You should have a program check done in your final year of studies. Students are responsible for the accuracy of their own programs. The guide should be used in conjunction with the University of Lethbridge Calendar, which is the final authority on all questions regarding program requirements and academic regulations. Contact an Academic Advisor in the Faculty of Arts and Science or Faculty of Education for advising information.
Name: ___________________________________________________________ ID: ____________________

B.Sc./B.Ed. (Geography/Science Education)
Completion of at least 30 courses (90.0 credit hours) from disciplines offered by the Faculty of Arts and Science, Faculty of Fine Arts, or School of Liberal Education with a grade point average of at least 2.00.
Completion of the equivalent of 20 courses (60.0 credit hours) in Education with a program grade point average of at least 2.50 in Education courses and the appropriate major.

Major Requirements (16 courses)

1. Biology 1020 - Diversity of Life
2. Chemistry 1000 - General Chemistry I
3. Geography 1000 - Introduction to Physical Geography
4. Geography 2030 - Geomorphology
5. Geography 2300 - Weather and Climate
6. Geography 2700 - Geographical Data and Analysis
7. Geography 2735 - Introduction to Geographical Information Science
8. One of:
   Mathematics 1560 - Calculus I
   Mathematics 1565 - Accelerated Calculus I
9. One of:
   Physics 1000 - Introduction to Physics I
   Physics 1050 - Introduction to Biophysics
10. One of:
    Geography 2090 - Biogeography
    Geology 2060 - Physical Geology
11. One of:
    Geography 3710 - Field Techniques in the Earth Sciences
    Geography 3720 - Remote Sensing
    Geography 3740 - Geographical Information Systems
12-13. Two of:
    Geography 3035 - Fluvial Geomorphology
    Geography 3060 - Glaciology and Glacial Geomorphology
    Geography 3080 - Soils
    Geography 3300 - Microclimatology
    Geography 3400 - Hydrology
14. One of:
    Geography 4065 - Irrigation Science
    Geography 4400 - Advanced Hydrology
    Geography 4415 - Integrated Watershed Management
    Geography 4725 - Advanced Remote Sensing

Two additional lab-based courses (6.0 credit hours) in Biology, Chemistry, or Physics
15. __________________ 16. __________________

Other Courses (minimum 14 courses)
Courses offered by the Faculty of Arts and Science, Faculty of Fine Arts, or School of Liberal Education only (no courses labelled ABHL, ADCS, CDEV, CRED, EDUC, HLSC, MGT, NURS, PUBH, or TRDC unless cross-listed with a course from one of the above faculties)
1. __________________ 8. ________________
2. __________________ 9. ________________
3. __________________ 10. ________________
4. __________________ 11. ________________
5. __________________ 12. ________________
6. __________________ 13. ________________
7. __________________ 14. ________________

Education Requirements (20-course equivalent)

Education 2500 - Practicum I - Orientation to Teaching
Professional Semester I (15.0 credit hours)
Professional Semester II (15.0 credit hours)
Professional Semester III (15.0 credit hours)

Education Foundation: __________________

Three Education Electives:
1. __________________ 3. ________________
2. __________________

Recommended courses:
Biology 1010 - Cellular Basis of Life
Environmental Science 2000 - Fundamentals of Environmental Science
Completion of the Liberal Education List Requirement (Lib Ed Requirement).

Only four courses (12.0 credit hours) in total may be counted from any one discipline toward the Lib Ed Requirement. Disciplines are identified by separate course subject codes. Out-of-faculty courses (i.e. labelled ABHL, ADCS, CDEV, CRED, HLSC, MGT, NURS, PUBH, and TREC) will not meet this requirement.

See the 2019/2020 Calendar, p. 83, for more information.

LIST I: Fine Arts and Humanities Courses
1. __________________ 3. __________________
2. __________________ 4. __________________

LIST II: Social Science Courses
1. __________________ 3. __________________
2. __________________ 4. __________________

LIST III: Science Courses
1. __________________ 3. __________________
2. __________________ 4. __________________

Not more than 10 courses (30.0 credit hours) may be completed at the 1000 level (or lower) [0500 - 1999] for credit towards the degree, excluding Activity courses (labelled PHAC and MUSE) and courses numbered in the range of 0520 to 0530.

1. __________________ 6. __________________
2. __________________ 7. __________________
3. __________________ 8. __________________
4. __________________ 9. __________________
5. __________________ 10. __________________ (max.)

Completion of at least 10 courses (30.0 credit hours) from disciplines offered by the Faculty of Arts and Science, Faculty of Fine Arts, or the School of Liberal Education at the 3000/4000 level, excluding Activity courses (labelled PHAC and MUSE). Out-of-faculty courses (i.e. labelled ABHL, ADCS, CDEV, CRED, EDUC, HLSC, MGT, NURS, PUBH, and TREC) will not meet this requirement.

1. __________________ 6. __________________
2. __________________ 7. __________________
3. __________________ 8. __________________
4. __________________ 9. __________________
5. __________________ 10. __________________ (min.)

___ Not more than three Independent Study courses (9.0 credit hours) may be completed for credit towards the degree.

___ Not more than three Disciplinary Credit Applied Studies courses (9.0 credit hours) may be completed for credit towards the degree. Students may, in addition, complete Applied Studies 2000, 2001, 2010, and 2011.

___ Not more than 17 courses (51.0 credit hours) may be completed from any one discipline for credit towards the degree.

Note: Disciplines are identified by a specific course label (e.g. KNES, ASTR, and HIST are separate disciplines).

___ Not more than six credit hours in Activity courses (i.e. courses labelled PHAC and MUSE) may be completed for credit towards the degree, except for Kinesiology majors (not more than 15.0 credit hours) and Music majors (not more than 12.0 credit hours).

___ Residence Requirement:
Degree:
Art and Science: at least 15 courses (45.0 credit hours) offered by the Faculty of Arts and Science, Faculty of Fine Arts, or School of Liberal Education must be completed at the University of Lethbridge.
Education: at least 15 courses (45.0 credit hours) offered by the Faculty of Education must be completed at the University of Lethbridge.
Major: at least half of the courses required in the major must be completed at the University of Lethbridge.

Education Minor (If Applicable):
See the 2019/2020 Calendar, p. 146, for eligible minors.

1. __________________ 4. __________________
2. __________________ 5. __________________
3. __________________ 6. __________________

Education (methods requirement)

Education Specialization (If Applicable):
See the 2019/2020 Calendar, p. 150, for details.

1. __________________ 4. __________________
2. __________________ 5. __________________
3. __________________

Please refer to page 4 of this guide for Faculty of Education admission requirements.
Sample Sequencing Plan

Shown below is a sample sequence of courses for your degree. If you follow this plan, you should be able to graduate in five years, provided you complete five courses per term. This is just one example of how you could complete your major and degree requirements; you may find that a different sequence works as well as this one.

<table>
<thead>
<tr>
<th>Year 1, Fall</th>
<th>Year 1, Spring</th>
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</thead>
<tbody>
<tr>
<td>Geography 1000</td>
<td>Biology 1020</td>
</tr>
<tr>
<td>Chemistry 1000</td>
<td>Geography 2300</td>
</tr>
<tr>
<td>Mathematics 1560 or</td>
<td>Physics 1000 or Physics 1050</td>
</tr>
<tr>
<td>Mathematics 1565</td>
<td>Lib Ed Requirement course</td>
</tr>
<tr>
<td>Lib Ed Requirement course</td>
<td>Lib Ed Requirement course</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Year 2, Fall</th>
<th>Year 2, Spring</th>
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</thead>
<tbody>
<tr>
<td>Education 2500 1</td>
<td>Geography 2700</td>
</tr>
<tr>
<td>Geography 2030</td>
<td>One of: Geography 2090 2 or</td>
</tr>
<tr>
<td>Geography 2735</td>
<td>Geology 2060</td>
</tr>
<tr>
<td>Additional lab-based Biology,</td>
<td>Additional lab-based Biology,</td>
</tr>
<tr>
<td>Chemistry, or Physics course</td>
<td>Chemistry, or Physics course</td>
</tr>
<tr>
<td>Lib Ed Requirement course</td>
<td>(Biology 1010 recommended)</td>
</tr>
<tr>
<td>Lib Ed Requirement course</td>
<td>Lib Ed Requirement course</td>
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</tbody>
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<thead>
<tr>
<th>Year 3, Fall</th>
<th>Year 3, Spring</th>
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<tbody>
<tr>
<td>Professional Semester I</td>
<td>Geography 3000-level list course</td>
</tr>
<tr>
<td></td>
<td>Environmental Science 2000 (recommended)</td>
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<tr>
<td></td>
<td>Elective 3000/4000 level</td>
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<tr>
<td></td>
<td>Elective 3000/4000 level</td>
</tr>
<tr>
<td></td>
<td>Lib Ed Requirement course 3000/4000 level</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4, Fall</th>
<th>Year 4, Spring</th>
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</thead>
<tbody>
<tr>
<td>One of: Geography 3710,</td>
<td>Professional Semester II</td>
</tr>
<tr>
<td>Geography 3720, or</td>
<td></td>
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<tr>
<td>Geography 3740</td>
<td></td>
</tr>
<tr>
<td>Geography 3000-level list course</td>
<td></td>
</tr>
<tr>
<td>Geography 4000-level list course</td>
<td></td>
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<tr>
<td>Elective 3000/4000 level</td>
<td></td>
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<tr>
<td>Elective 3000/4000 level</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 5, Fall</th>
<th>Year 5, Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Semester III</td>
<td>Education Foundation course</td>
</tr>
<tr>
<td></td>
<td>Education elective</td>
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<tr>
<td></td>
<td>Education elective</td>
</tr>
<tr>
<td></td>
<td>Elective 3000/4000 level</td>
</tr>
</tbody>
</table>

**Terms Used**

**Lib Ed Requirement course**: A course that could count toward the Liberal Education List Requirement. You may use courses in your major towards this 12-course requirement. As some courses may not fit specific program requirements, students should consult their Faculty advising office. See the 2019/2020 University of Lethbridge Calendar, School of Liberal Education for complete information.

The School of Liberal Education offers Liberal Education 1000 and 2000, specifically designed to introduce first-year students to the wide scope of human knowledge and teach essential university success skills, critical thinking, and integrative thinking (see the 2019/2020 University of Lethbridge Calendar, Course Catalogue). LBED 1000 and 2000 may be used toward satisfying the Lib Ed Requirement.

**Elective**: A course that you may choose freely from all those available and applicable to your program. Use courses inside or outside your major, bearing in mind any restrictions that may apply (e.g., a maximum of 17 courses from any one discipline).

**Faculty of Education Admission**

Admission to the Faculty of Education requires successful completion of the following:

- 14 graded term courses (42.0 credit hours).
- Minimum cumulative grade point average of 2.50 on all U of L and transferable courses taken within the terms containing the last 14 courses (42.0 credit hours). All courses must be graded.
- Minimum of five courses (15.0 credit hours) in the major.
- Minimum cumulative grade point average of 2.50 on all graded courses comprising the major, including all transferable courses.
- Credit in Education 2500 - Practicum I - Orientation to Teaching (or equivalent) including a favourable recommendation from the instructor.

Students are advised to contact Student Program Services in the Faculty of Education (TH421; tel. 403-329-2254) for guidelines regarding the requirements stated above. For specific information on admission requirements, please refer to the Combined Degrees section of the Academic Calendar:

www.uleth.ca/ross/academic-calendar/cal_doc.pdf

Students of Indigenous descent, and students with a significant shift in academic performance, are advised to refer to the current Calendar for the Faculty of Education’s Special Case Admission policy.

**Application and Document deadlines**: www.uleth.ca/ross/admissions/undergrad/deadlines

**Combined Degrees Program**:

Students begin this program in the Faculty of Arts and Science where they progress toward completion of Arts and Science degree requirements, and prepare to meet the admission requirements for the Faculty of Education. Please note that completion of admission requirements does not guarantee admission to the Faculty of Education.

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**Note**: Courses in **bold** in Years 1 and 2 of the sample sequence are prerequisite(s) for required courses and should be completed early in your program. Students are advised to review the prerequisites for electives courses within the major and plan accordingly.

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1. Education 2500 must be completed (with a Pass Recommend) before admission. It may also be taken in the spring or summer term immediately prior to the fall intake.

2. Term of offering may vary.

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Elementary Education and Inclusive Education students will reverse the fall and spring terms in Year 5 and complete PS III in the spring.