

University of  
Lethbridge



## Program Planning Guide

**Department:** Geography

**Calendar Year:** 2017/2018

**Name:** \_\_\_\_\_

**ID:** \_\_\_\_\_

**Bachelor of Science**  
**Geography**

**Major in Geography:**

[www.uleth.ca/artsci/geography](http://www.uleth.ca/artsci/geography)

**Academic Calendar:**

[www.uleth.ca/ross/academic-calendar](http://www.uleth.ca/ross/academic-calendar)

**High School Admission Requirements:**

[www.uleth.ca/ross/admissions/undergrad/high-school](http://www.uleth.ca/ross/admissions/undergrad/high-school)

**Current and Past Program Planning Guides:**

[www.uleth.ca/ross/ppgs](http://www.uleth.ca/ross/ppgs)

**Faculty of Arts and Science Advising:**

[www.uleth.ca/artsci/advising](http://www.uleth.ca/artsci/advising)  
[artsci.advising@uleth.ca](mailto:artsci.advising@uleth.ca)  
403-329-5106  
SU060

**Co-operative Education:**

[www.uleth.ca/artsci/coop](http://www.uleth.ca/artsci/coop)

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 for advising information.

**Name :** \_\_\_\_\_

**ID :** \_\_\_\_\_

**B.Sc. Geography**

Completion of at least 40 courses (120.0 credit hours) with a grade point average of at least 2.00.

**Major Requirements (23 courses)**

- \_\_\_\_\_ 1. Archaeology 1000 - Introduction to Archaeology
- \_\_\_\_\_ 2. Environmental Science 2000 - Fundamentals of Environmental Science
- \_\_\_\_\_ 3. Geography 1000 - Introduction to Physical Geography
- \_\_\_\_\_ 4. Geography 1200 - Introduction to Human Geography
- \_\_\_\_\_ 5. Geography 2030 - Geomorphology
- \_\_\_\_\_ 6. Geography 2210 - Spatial Organization of Economic Activity
- \_\_\_\_\_ 7. Geography 2300 - Weather and Climate
- \_\_\_\_\_ 8. Geography 2700 - Geographical Data and Analysis
- \_\_\_\_\_ 9. Geography 2735 - Introduction to Geographical Information Science

\_\_\_\_\_ 10. **One of (Field Course):**

- \_\_\_\_\_ Archaeology 3300 - Archaeological Field Work (Series)
- \_\_\_\_\_ Archaeology 3700 - Geoarchaeology and Landscape Analysis
- \_\_\_\_\_ Geography 3710 - Field Techniques in the Earth Sciences
- \_\_\_\_\_ Geography 3780 - Field Research in Geography
- \_\_\_\_\_ Geography 4710 - Remote Sensing Field Techniques

\_\_\_\_\_ 11-12. **Two of (Geographical Techniques):**

- \_\_\_\_\_ Geography 3235 - Quantitative Models for Geographic Analysis
- \_\_\_\_\_ Geography 3700 - Cartography
- \_\_\_\_\_ Geography 3720 - Remote Sensing
- \_\_\_\_\_ Geography 3740 - Geographical Information Systems
- \_\_\_\_\_ Geography 4700 - Advanced Computer Mapping
- \_\_\_\_\_ Geography 4725 - Advanced Remote Sensing
- \_\_\_\_\_ Geography 4730 - Spatial Statistics
- \_\_\_\_\_ Geography 4740 - Advanced Geographical Information Systems

\_\_\_\_\_ 13-15. **Three of (Physical Geography):**

- \_\_\_\_\_ Geography 2090 - Biogeography
- \_\_\_\_\_ Geography 3035 - Fluvial Geomorphology
- \_\_\_\_\_ Geography 3060 - Glaciology and Glacial Geomorphology
- \_\_\_\_\_ Geography 3075 - Environmental Resources Management
- \_\_\_\_\_ Geography 3080 - Soils
- \_\_\_\_\_ Geography 3300 - Microclimatology
- \_\_\_\_\_ Geography 3400 - Hydrology I
- \_\_\_\_\_ Geography 2060 - Physical Geology

\_\_\_\_\_ 16-17. **Two of:**

- \_\_\_\_\_ Biology 1020 - Diversity of Life
- \_\_\_\_\_ Chemistry 1000 - General Chemistry I
- \_\_\_\_\_ Physics 1000 - Introduction to Physics I or Physics 1050 - Introduction to Biophysics

\_\_\_\_\_ 18. **One of:**

- \_\_\_\_\_ Mathematics 1410 - Elementary Linear Algebra
- \_\_\_\_\_ Mathematics 1560 - Calculus I
- \_\_\_\_\_ Mathematics 1565 - Accelerated Calculus I
- \_\_\_\_\_ Statistics 1770 - Introduction to Probability and Statistics

Four additional courses (12.0 credit hours) in Geography at the 3000/4000 level with a Science designation.

19. \_\_\_\_\_ 21. \_\_\_\_\_

20. \_\_\_\_\_ 22. \_\_\_\_\_

One additional course (3.0 credit hours) at the 2000 level or higher from the offerings in Astronomy, Biochemistry, Biology, Chemistry, Computer Science, Engineering, Mathematics, Statistics, or Physics

23. \_\_\_\_\_

**Other Courses (minimum 17 courses)**

1. \_\_\_\_\_ 10. \_\_\_\_\_

2. \_\_\_\_\_ 11. \_\_\_\_\_

3. \_\_\_\_\_ 12. \_\_\_\_\_

4. \_\_\_\_\_ 13. \_\_\_\_\_

5. \_\_\_\_\_ 14. \_\_\_\_\_

6. \_\_\_\_\_ 15. \_\_\_\_\_

7. \_\_\_\_\_ 16. \_\_\_\_\_

8. \_\_\_\_\_ 17. \_\_\_\_\_

9. \_\_\_\_\_

**Notes**

To determine if a given course in Geography has a Science designation, see List III: Science Courses (Part 4, p. 82).

See also:

- Bachelor of Arts - Geography
- Bachelor of Arts or Bachelor of Science - Archaeology and Geography
- Bachelor of Science/Bachelor of Education - Geography/Science Education
- Bachelor of Science/Bachelor of Management - Geography

**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.

Only four courses (12.0 credit hours) from each of the Faculties of Education (EDUC), Health Sciences (ADCS, HLSC, NURS, PUBH, and TREC), and Management (MGT) may be counted towards the Lib Ed Requirement.

See the 2017/2018 Calendar, p. 79, 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 12 courses (36.0 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. _____ | 7. _____         |
| 2. _____ | 8. _____         |
| 3. _____ | 9. _____         |
| 4. _____ | 10. _____        |
| 5. _____ | 11. _____        |
| 6. _____ | 12. _____ (max.) |

Completion of at least 15 courses (45.0 credit hours) from disciplines offered by the Faculty of Arts and Science or the Faculty of Fine Arts at the 3000/4000 level, excluding Activity courses (labelled PHAC and MUSE).

- |          |                  |
|----------|------------------|
| 1. _____ | 9. _____         |
| 2. _____ | 10. _____        |
| 3. _____ | 11. _____        |
| 4. _____ | 12. _____        |
| 5. _____ | 13. _____        |
| 6. _____ | 14. _____        |
| 7. _____ | 15. _____ (min.) |
| 8. _____ |                  |

\_\_\_\_ Not more than five Independent Study courses (15.0 credit hours) may be completed for credit towards the degree.

\_\_\_\_ Not more than five Disciplinary Credit Applied Studies courses (15.0 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 24 courses (72.0 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).

\_\_\_\_ Not more than four courses (12.0 credit hours) from disciplines offered outside the Faculty of Arts and Science or the Faculty of Fine Arts may be completed for credit towards the degree (i.e. labelled ADCS, CDEV, CRED, EDUC, HLSC, MGT, NURS, PUBH, and TREC). Courses cross-listed between the Faculty of Arts and Science and another Faculty do not count towards this limit.

\_\_\_\_ Residence requirement:

Degree: a minimum of 20 courses (60.0 credit hours) must be completed at the University of Lethbridge, including at least 10 Arts and Science courses (30.0 credit hours) at the 3000/4000 level.

Major: at least half of the courses required in the major must be completed at the University of Lethbridge.

**Minor (Optional):** \_\_\_\_\_  
See the 2017/2018 Calendar, p. 137, for eligible minors.

- |          |          |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

**Concentration: Geographical Information Science (Optional)**  
See the 2017/2018 Calendar, p. 123, for more information.

- |          |          |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ |          |

## 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 four 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.

<p><b>Year 1, Fall</b>  <b>Geography 1000</b>                      Required Biology, Chemistry, or Physics course                      Required Mathematics or Statistics course                      Lib Ed Requirement course                      Lib Ed Requirement course</p>	<p><b>Year 1, Spring</b>                      Archaeology 1000  <b>Geography 1200</b>                      Required Biology, Chemistry, or Physics course                      Lib Ed Requirement course                      Lib Ed Requirement course</p>
<p><b>Year 2, Fall</b>                      Environmental Science 2000                      Geography 2030                      Geography 2210                      Lib Ed Requirement course                      Elective</p>	<p><b>Year 2, Spring</b>                      Geography 2300                      Geography 2700                      Geography 2735                      Required science course                      Elective</p>
<p><b>Year 3, Fall</b>                      Geography - Field course<sup>1</sup>                      Geographical Techniques course                      Physical Geography course                      Elective 3000/4000 level                      Elective</p>	<p><b>Year 3, Spring</b>                      Geographical Techniques course                      Physical Geography course                      Geography 3000/4000 level                      Elective 3000/4000 level                      Elective</p>
<p><b>Year 4, Fall</b>                      Physical Geography 3000-level                      Geography 3000/4000 level                      Elective 3000/4000 level                      Elective 3000/4000 level                      Elective</p>	<p><b>Year 4, Spring</b>                      Geography 3000/4000 level                      Geography 3000/4000 level                      Elective 3000/4000 level                      Elective 3000/4000 level                      Elective 3000/4000 level</p>

<sup>1</sup> Term of offering may vary.

**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.

Additional requirements for the Concentration in Geographical Information Science should be taken in place of Elective courses.

Students considering entry to a graduate program in Geography are advised to complete Geography 4900. They should also complete a 4000-level Independent Study course in Geography in their final year.

## 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. See the 2017/2018 University of Lethbridge Calendar, Part 4 - Academic Regulations for complete information.

The Faculty of Arts and Science 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 2017/2018 University of Lethbridge Calendar, Part 14 - Courses). 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 24 courses from any one discipline).

