

University of  
Lethbridge



## Program Planning Guide

**Departments:** Biological Sciences and Geography

**Calendar Year:** 2019/2020

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

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

# Post-Diploma Bachelor of Science Environmental Science

**Major in Environmental Science:**

[www.uleth.ca/artsci/environmental-science](http://www.uleth.ca/artsci/environmental-science)

**Academic Calendar:**

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

**Current and Past Program Planning Guides:**

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

**Co-operative Education:**

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

**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  
M2102

**Approved Diploma Programs:**

[www.uleth.ca/postdiploma](http://www.uleth.ca/postdiploma)

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

**Post-Diploma B.Sc. Environmental Science**

Completion of at least 20 courses (60.0 credit hours) from disciplines offered by the Faculty of Arts and Science, Faculty of Fine Arts, or School of Liberal Education (i.e. no courses labelled ABHL, ADCS, CDEV, CRED, EDUC, HLSC, MGT, NURS, PUBH, or TREC) with a grade point average of at least 2.00.

**Required core (14 courses):**

- \_\_\_\_\_ 1. Biology 1010 - Cellular Basis of Life
- \_\_\_\_\_ 2. Biology 2000 - Principles of Genetics
- \_\_\_\_\_ 3. Environmental Science 4000 - Selected Studies in Environmental Science II (Series)
- \_\_\_\_\_ 4. Geography 2300 - Weather and Climate
- \_\_\_\_\_ 5. Geography 2700 - Geographical Data and Analysis
- \_\_\_\_\_ 6. Geography 3740 - Geographical Information Systems
- \_\_\_\_\_ 7. **One of:**
  - \_\_\_\_\_ Physics 1050 - Introduction to Biophysics
  - \_\_\_\_\_ Statistics 1770 - Introduction to Probability and Statistics
- \_\_\_\_\_ 8. **One of:**
  - \_\_\_\_\_ Biology 3300 - Evolution
  - \_\_\_\_\_ One course (3.0 credit hours) in Biology at the 3000/4000 level chosen from the Biological Sciences List 3 (Ecology and Evolutionary Biology), see **Biological Sciences (B.Sc.) (p. 104)**

Two courses (6.0 credit hours) in Biology at the 3000/4000 level chosen from among the Biological Sciences List 1 (Cellular and Molecular Biology), List 2 (Organismal Biology), and List 3 (Ecology and Evolutionary Biology) courses, see **Biological Sciences (B.Sc.) (p. 104)**

- 9. \_\_\_\_\_
- 10. \_\_\_\_\_

Two courses (6.0 credit hours) in Geography or Geology at the 3000/4000 level, with a Science designation

- 11. \_\_\_\_\_
- 12. \_\_\_\_\_

Two lab-based courses (6.0 credit hours) in Chemistry at the 1000 level or above (preferably Chemistry 1110 - Chemistry for Life Sciences I and Chemistry 2120 - Chemistry for Life Sciences II)

- 13. \_\_\_\_\_
- 14. \_\_\_\_\_

**Electives (six courses):**

Three courses (9.0 credit hours) from List I: Fine Arts and Humanities

- 15. \_\_\_\_\_
- 17. \_\_\_\_\_

- 16. \_\_\_\_\_

One course (3.0 credit hours) from List II: Social Sciences

- 18. \_\_\_\_\_

One course (3.0 credit hours) from List I: Fine Arts and Humanities or List II: Social Sciences

- 19. \_\_\_\_\_

One additional course (3.0 credit hours) at the 3000/4000 level, excluding Activity courses (labeled PHAC and MUSE)

- 20. \_\_\_\_\_

**Concentration: Geographical Information Science (Optional)**  
See the 2019/2020 Calendar, p. 132, for more information.

- 1. \_\_\_\_\_
- 4. \_\_\_\_\_

- 2. \_\_\_\_\_
- 5. \_\_\_\_\_

- 3. \_\_\_\_\_

**Notes**

Courses labeled as “electives” may be used towards a minor if a minor is chosen. Additional courses (apart from the core and elective courses) must be completed if a concentration is declared.

To determine if a given course has a Fine Arts and Humanities, Social Science, or Science designation, see List I: Fine Arts and Humanities Courses, List II: Social Science Courses, and List III: Science Courses (see the 2019/2020 University of Lethbridge Calendar, **School of Liberal Education, Liberal Education Lists, p. 84**).

No more than two Independent Study courses (3990 or 4990; 6.0 credit hours) may be counted towards the program.

Students may not take for credit those courses offered by Biological Sciences or Geography that have close equivalents in the college diploma program.

**These excluded courses include the following:**

- Biology 1020 - Diversity of Life
- Biology 2200 - Principles of Ecology
- Geography 1000 - Introduction to Physical Geography
- Geography 2735 - Introduction to Geographical Information Science
- Geography 3080 - Soils
- Geology 2060 - Physical Geology

## 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 two 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>Biology 1010</b>  <b>Chemistry 1110</b><sup>1</sup>                      Geography 2300                      Physics 1050 or Statistics 1770                      Lib Ed Requirement course</p>	<p><b>Year 1, Spring</b>  <b>Biology 2000</b>                      Chemistry 2120<sup>1</sup>                      Geography 2700                      Lib Ed Requirement course                      Lib Ed Requirement course</p>
<p><b>Year 2, Fall</b>                      Biology 3000/4000 level                      Biology 3000/4000 level                      Environmental Science 4000                      Geography 3740<sup>2</sup>                      Lib Ed Requirement course</p>	<p><b>Year 2, Spring</b>                      Biology 3300 or List 3 Biology                      3000/4000 level                      Geography or Geology 3000/4000                      level (Science)                      Geography or Geology 3000/4000                      level (Science)                      Lib Ed Requirement course                      Elective 3000/4000 level</p>

<sup>1</sup> Preferred Chemistry courses.

<sup>2</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.

## 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 2019/2020 University of Lethbridge Calendar, School of Liberal Education for complete information.

**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).



**[www.ulethbridge.ca](http://www.ulethbridge.ca)**

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