



## Program Planning Guide

Current and past Program Planning Guides are available on the UofL website at [www.uleth.ca/ross/ppgs/ppg.html](http://www.uleth.ca/ross/ppgs/ppg.html)

**Calendar Year: 2010/2011**  
**Faculty: Arts & Science/Education**

### Department of Geography

#### About Geography

Geographers study the earth on which we all live. This includes land masses, oceans, the atmosphere and the influence of these on humankind. The spatial organization of cultural and economic activities and the way humans modify the earth's environment are major themes in modern Geography.

#### B.A. vs. B.Sc. in Geography

There are several directions a student may take in completing a program of study in Geography. Those with an interest in physical science can concentrate on courses in Physical Geography, Geology and Geoarchaeology (designated 'Science') and receive a Bachelor of Science degree. Others may concentrate on the human dimension of Geography, including Urban, Economic, Agriculture and Planning, and qualify for a Bachelor of Arts degree.

#### Archaeology Courses

A number of Archaeology courses are offered through the Department of Geography. Archaeology does not count toward the major in Geography for the B.Sc./B.Ed Combined Degrees program. However, students may be able to fit Archaeology courses into the B.Sc. portion of their Combined Degrees program.

#### Seminars, Workshops, Practica, and Field Trips

Since Geography and Archaeology formulate theories and concepts centred upon human/earth relationships, a special effort is made to involve students in 'hands-on' experience. To this end, a series of seminars, workshops, practica, and field trips are scheduled from time to time. Students are encouraged to attend conferences with faculty from the Department of Geography. We feel that you should actually see the world as well as study it in classes. The Department routinely sends students to places such as Israel, the Grand Canyon, California and the Arctic. The trips are excellent opportunities for students to broaden their horizons and practice what is learned in the classroom.

#### Opportunities for B.Sc./B.Ed. Graduates

Many of our graduates have continued their education in graduate schools throughout Canada and the United States. Others have qualified for positions in education, urban affairs, transportation, recreation, resources, and many other diverse areas. Our majors have contributed to scholarly events. Student papers have been published in various professional journals. Also, our students actively participate in conferences, workshops, and seminars throughout western Canada and the United States.

#### Science Education Majors

To complete a Science Education major, students must concentrate on Physical Geography and Geology courses.

#### Co-operative Education in the Sciences

A Co-op option, requiring three work terms, is available. Students interested in the Co-operative Education/Internship program should contact the Coordinator of Co-operative Education in the Career Resources Centre (B610 | phone: 403-382-7154) for further information.

## Geography/Bachelor of Education

**Faculty of Education****Choosing an Education Major**

The Faculty of Education offers 11 different majors that correspond to teaching subjects in Alberta schools (see p. 163 in the 2010/2011 University of Lethbridge Calendar for a listing). In highly competitive teaching majors, the GPA for admission may be above the minimum requirements.

**How to Choose a Major**

Students generally begin by thinking about which subjects they enjoyed and did well at in school. Students are also encouraged to conduct additional research regarding their interests and aptitudes. Students who are uncertain about their major should try taking introductory courses in several areas.

**Choosing Courses Outside the Major**

Students sometimes find that their initial objective to teach only at the elementary level or only at the secondary school level is later modified—or even completely changed. Students are therefore encouraged to select courses that will prepare them for teaching in a variety of situations. Moreover, students should select courses that not only provide breadth and richness for the classroom but also provide the basis for the development of a teaching minor or specialization.

**Choosing an Education Minor**

The Faculty of Education offers 19 minors (see p. 167 in the 2010/2011 University of Lethbridge Calendar for a listing). A minor consists of five non-Education courses (excluding those used in the major) and one curriculum and instruction Education course. Students may use the same courses to fulfill the minor and the General Liberal Education Requirement (GLER).

**Choosing an Education Specialization**

The Faculty of Education offers three specializations:

- Early Childhood Education
- Special/Inclusive Education
- Technology in Education

The specializations consist of four courses and corresponding Professional Semester III focus.

**Advantages of Completing a Minor and/or Specialization**

Completing a minor and/or a specialization allows students to develop expertise in a second area of teaching and be more versatile and marketable as a graduating teacher. For more information, see the 2010/2011 University of Lethbridge Calendar, Part 8 - Education, Sections 7. Education Minors (p. 167) and 8. Education Specializations (p. 172).

**Where to Get Help**

You can start career research at your school counselling centre, at your local library, or on the Internet, including websites like Alberta Advanced Education and Technology ([www.advancededucation.gov.ab.ca](http://www.advancededucation.gov.ab.ca)). There are also many programs and people at the University of Lethbridge to assist you with a choice of major. Career and Employment Services (CES) assists students and alumni with their career exploration needs (in particular, see “What Can I Do With a Major in...?” at [www.uleth.ca/ross/ces/majors.html](http://www.uleth.ca/ross/ces/majors.html)). Students may also contact an Academic Advisor in Student Program Services in the Faculty of Education (email: [edu.sps@uleth.ca](mailto:edu.sps@uleth.ca) | phone: 403-329-2254) or in the Faculty of Arts and Science (email: [artsci.advising@uleth.ca](mailto:artsci.advising@uleth.ca) | phone: 403-329-5106).

**Program Requirements**

The B.Sc./B.Ed. combined degrees program with a major in Geography/Science Education requires a minimum of 30 courses in Arts and Science and 20 in Education. A minimum of 16 courses (10 courses in Geography and six cognates) is required in the Geography major. A maximum of 17 courses in Geography (including Geology) is allowed. To do a B.Sc./B.Ed. with a Geography/Science Education major, you will emphasize Geography courses that are on the Science list (see p. 87 of the 2010/2011 University of Lethbridge Calendar).

**Transfer Credit**

Remember that you may use both University of Lethbridge credit and credit transferred from another college or university to meet degree and major requirements. Transfer credit may be either specified or unspecified. Specified credit is indicated on your transcript by the subject name and the specific number of the course, e.g., Geography 1000, 2700, etc. Unspecified credit (1XXX, 2XXX, etc.) is indicated by the subject name and level of the course in parentheses, e.g., Geography (1000 level), Geography (2000 level), etc.

**Unspecified Course Credit**

Unspecified course credit means that the University of Lethbridge does not offer the same course you transferred in, but we recognize it and treat it as a regular course. An unspecified course would count as one of your maximum of 17 from one department, but it could not meet a specific course requirement. For example, if Geography 2700 is required in your program, you could not use Geography (2000 level) to fulfill that requirement. Students with unspecified transfer credit need to consult an Academic Advisor to establish how the transfer credit fits in the degree program. This should be done as soon as possible after transfer credit is awarded.

**Program Worksheet**

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

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

**Required Courses:**

- \_\_\_\_ 1. Geography 1000 - Introduction to Physical Geography
- \_\_\_\_ 2. Geography 2030 - Geomorphology
- \_\_\_\_ 3. Geography 2300 - Weather and Climate
- \_\_\_\_ 4. Geography 2700 - Geographical Data and Analysis
- \_\_\_\_ 5. Geography 2735 - Introduction to Geographical Information Science
- \_\_\_\_ 6. ONE of:
  - \_\_\_\_ Geography 2090 - Biogeography
  - \_\_\_\_ Geology 2060 - Physical Geology
- \_\_\_\_ 7. ONE of:
  - \_\_\_\_ Geography 3710 - Field Techniques in the Earth Sciences
  - \_\_\_\_ Geography 3720 - Remote Sensing
  - \_\_\_\_ Geography 3740 - Geographical Information Systems
- \_\_\_\_ 8-9. TWO of:
  - \_\_\_\_ Geography 3035 - Fluvial Geomorphology
  - \_\_\_\_ Geography 3060 - Glaciology and Glacial Geomorphology
  - \_\_\_\_ Geography 3080 - Soils
  - \_\_\_\_ Geography 3300 - Microclimatology
  - \_\_\_\_ Geography 3400 - Hydrology I
- \_\_\_\_ 10. ONE of:
  - \_\_\_\_ Geography 4065 - Irrigation Science
  - \_\_\_\_ Geography 4400 - Hydrology II
  - \_\_\_\_ Geography 4415 - Integrated Watershed Management
  - \_\_\_\_ Geography 4725 - Advanced Remote Sensing
  - \_\_\_\_ Geography 4750 - Glacial Processes, Measurements, and Models

**Required Cognates:**

- \_\_\_\_ 11. Biology 1020 - Diversity of Life
- \_\_\_\_ 12. Chemistry 1000 - General Chemistry I
- \_\_\_\_ 13. Physics 1000 - Introduction to Physics I
- \_\_\_\_ 14. Mathematics 1560 - Calculus I
- \_\_\_\_ 15-16. Two additional lab-based courses in Biology, Chemistry, and/or Physics
  - 1. \_\_\_\_\_
  - 2. \_\_\_\_\_

**Recommended Courses:**

Biology 1010 - Cellular Basis of Life

Environmental Science 2000 - Fundamentals of Environmental Science

**Note:** You are reminded that you must complete a minimum of 20 Arts and Science courses designated as 'Science' (see the 2010/2011 Calendar, Part 7, Section 20. Divisional Course Designation, p. 112 and Part 4, Section 11. General Liberal Education Requirement, p. 85).

## 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 semester. 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.

<b>Year 1, Fall</b> Geography 1000 Chemistry 1000 ( <i>required cognate</i> ) Mathematics 1560 ( <i>required cognate</i> ) GLER course GLER course	<b>Year 1, Spring</b> Biology 1020 ( <i>required cognate</i> ) Geography 2300 Physics 1000 ( <i>required cognate</i> ) GLER course GLER course
<b>Year 2, Fall</b> Education 2500 <sup>1</sup> Geography 2030 Geography 2735 Biology, Chemistry, or Physics cognate GLER course	<b>Year 2, Spring</b> Geography 2700 One of: Geography 2090 <sup>2</sup> or Geology 2060 Biology, Chemistry, or Physics cognate ( <i>Biology 1010 recommended</i> ) GLER course GLER course
<b>Year 3, Fall</b> Professional Semester I	<b>Year 3, Spring</b> Geography 3000-level list course Environmental Science 2000 <i>(recommended)</i> Science elective 3000/4000 level Science elective 3000/4000 level Elective 3000/4000 level
<b>Year 4, Fall</b> One of: Geography 3710 <sup>2</sup> , Geography 3720, or Geography 3740 Geography 3000-level list course Science elective 3000/4000 level Elective 3000/4000 level GLER course	<b>Year 4, Spring</b> Professional Semester II
<b>Year 5, Fall</b> Professional Semester III	<b>Year 5, Spring</b> Education Foundation course Education elective Education elective Education elective Geography 4000-level list course

Elementary Education and Special/Inclusive Education students will reverse the Fall and Spring semesters in Year 5 and complete PS III in the Spring.

### Terms Used

**GLER course:** A course that could count toward the General Liberal Education Requirement. You may use courses in your major towards this 12-course requirement. See the 2010/2011 University of Lethbridge Calendar, Part 4 - Academic Regulations (p. 85) 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 2010/2011 University of Lethbridge Calendar, Part 14 - Courses, p. 306). LBED 1000 and 2000 may be used toward satisfying the GLER.

**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 department).

**Cognate:** A course from a related discipline deemed to complement the chosen area of study and to encompass knowledge and skills essential to that area.

<sup>1</sup> Education 2500 may also be taken in Spring or Summer semester.

<sup>2</sup> Semester of offering may vary.

