University of Lethbridge

Calendar Year: 2026/2027

PROGRAM PLANNING GUIDE

Name:_____

ID: | | | | | | | | | |

Bachelor of Science

Neuroscience

Neuroscience is a rapidly expanding discipline that aims to solve the mysteries of the brain's functionality by better understanding its resilient capacity for consciousness, perception, memory and learning. The primary focus of this multidisciplinary program is to enhance your technical and practical skills with extensive theoretical knowledge in biology, chemistry, physics, psychology, philosophy and other related areas. With an emphasis on neurological disorders, the program will also give you hands-on experience using the latest instruments, technology and research findings.

What determines my program requirements?

Please refer to the Academic Calendar (www.ulethbridge.ca/ross/academic-calendar) for complete program information.

Calendar Year: 2026/2027 - Your calendar year is set to the academic year you are admitted (or readmitted), and you should follow the requirements for that year for the duration of your program.

Faculty/School: Faculty of Arts and Science (www.ulethbridge.ca/artsci)

Program(s): Bachelor of Science

Major(s): Neuroscience

Minor: A defined set of courses designed to provide depth in a particular discipline, study in an interdisciplinary area, or focus on a theme-related topic. To learn more about optional minors, see www.ulethbridge.ca/ross/minors.

Am I admissible to this program?

Admission: www.ulethbridge.ca/ross/admissions/undergrad

Transfer: www.ulethbridge.ca/ross/transfer-resources

When/How do I apply to the University?

Deadlines: www.ulethbridge.ca/ross/admissions/undergrad/deadlines

Step-by-Step: www.ulethbridge.ca/ross/admissions/step-by-step

Where can I find information on courses?

Course Catalogue: www.ulethbridge.ca/ross/courses

Registration Guide: www.ulethbridge.ca/ross/registration-guide

When can I register for classes?

Register early! (March for Summer and Fall; November for Winter)

Registration Dates: www.ulethbridge.ca/ross/registration-dates

How can I enhance my program?

Career Bridge: www.ulethbridge.ca/career-bridge

Co-op Education: www.ulethbridge.ca/career-bridge/co-operative-education

Honours Thesis: www.ulethbridge.ca/ross/undergraduate-thesis

Double Major: www.ulethbridge.ca/ross/double-major

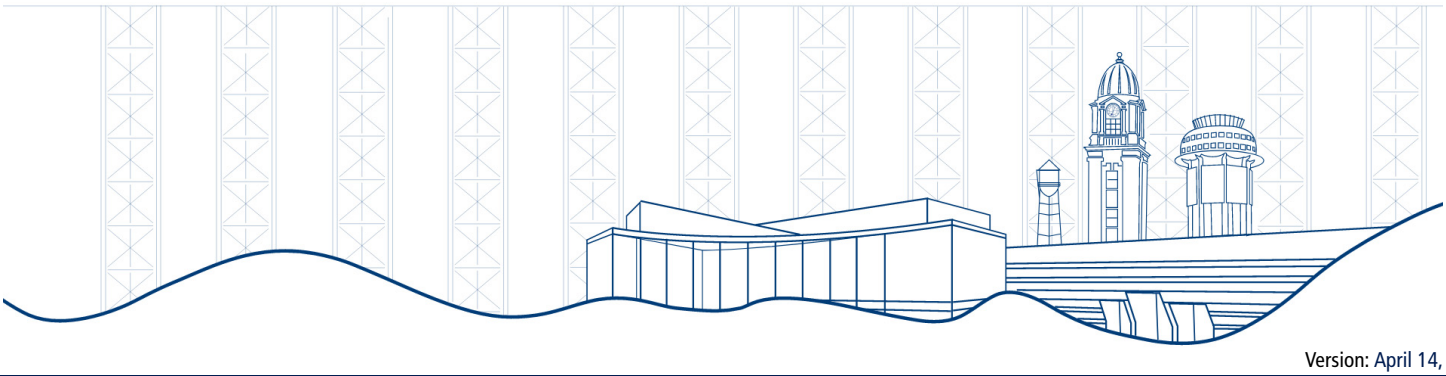
What supports are available to students?

Student Services: www.ulethbridge.ca/campus-life/student-services

Student Success Centre: www.ulethbridge.ca/student-success-centre

Accessible Learning: www.ulethbridge.ca/ross/alc

Counselling Services: www.ulethbridge.ca/counselling



Version: April 14, 2026

Contact an Academic Advisor (www.ulethbridge.ca/ross/academic-advising) for advising information

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 ensuring they have met program requirements. This guide should be used in conjunction with the University of Lethbridge Academic Calendar, which is the final authority on program requirements and academic regulations.

PROGRAM REQUIREMENTS (2026/2027)

Required courses and notes

Name:_____

ID: | | | | | | | | | |

Major Requirements (24 Courses)

_____ **1.** Biology 1010 - Cellular Basis of Life
_____ **2.** Biology 1020 - Diversity of Life
_____ **3.** Biology 2000 - Principles of Genetics
_____ **4.** Neuroscience 2610 - Principles of Brain Structure and Function
_____ **5.** Neuroscience 2620 - Principles of Behavioural Neuroscience
_____ **6.** Neuroscience 3600 - Fundamental Neurobiology
_____ **7.** Psychology 1010 - Introduction to Psychology A: Evolution, Mechanisms, and Cognition/Perception
_____ **8.** Psychology 2330 - Learning and Cognition
_____ **9.** Psychology 2700 - Behaviour and Evolution
_____ **10.-12.** **Three of:**
- _____ [1] Biochemistry 2000 - Introductory Biochemistry
- _____ Neuroscience 3610 - Human Neuropsychology
- _____ Neuroscience 3615 - Functional Neuroanatomy
- _____ Neuroscience 3625 - Cellular and Molecular Neurobiology
- _____ Neuroscience 3645 - Cognitive Neuroscience I
- _____ Neuroscience 3655 - Cognitive Neuroscience II
- _____ Neuroscience 3660 - Neurobiological Basis of Learning and Memory in the Mammal
- _____ Neuroscience 3710 - Behaviour and the Evolution of Brains

_____ **13.** **One of:**
- _____ Neuroscience 4630 - Neuroscience (Series)
- _____ Neuroscience 4980 - Applied Studies
- _____ Neuroscience 4990 - Independent Study
- _____ [2] Neuroscience 4995 - Undergraduate Thesis (6.0 credit hours)

_____ **14.** **One of:**
- _____ Philosophy 2220 - Introduction to Philosophy of Mind
- _____ [3] Philosophy 3402 - Biomedical Ethics

_____ **15.** **One of:**
- _____ Physics 1000 - Introduction to Physics I
- _____ Physics 1050 - Introduction to Biophysics

_____ **16.** **One of:**
- _____ One course (3.0 credit hours) in English at the 1000 level or higher
- _____ Writing 1000 - Introduction to Academic Writing

_____ **17.** **One of:**
- _____ Psychology 2030 - Thinking with Data I
- _____ Statistics 1770 - Introduction to Probability and Statistics

_____ **18.-19.** Two courses (6.0 credit hours) in Neuroscience or Psychology at the 3000/4000 level with a Science designation (see **School of Liberal Education** in the 2026/2027 University of Lethbridge Calendar, www.ulethbridge.ca/ross/academic-calendar).
- _____ 18._____
- _____ 19._____

_____ **20.-24.** **One of the following Streams (a. or b.):**

[1] **Stream a:**
- _____ Biochemistry 2000 - Introductory Biochemistry
- _____ Chemistry 1110 - Chemistry for Life Sciences I
- _____ Chemistry 2120 - Chemistry for Life Sciences II
- _____ Two additional courses (6.0 credit hours) in Biology, Chemistry, Neuroscience, or Psychology at the 3000/4000 level with a Science Designation (see **School of Liberal Education** in the 2026/2027 University of Lethbridge Calendar, www.ulethbridge.ca/ross/academic-calendar)

_____

_____

Stream b:
- _____ Chemistry 1000 - General Chemistry I
- _____ Chemistry 2000 - General Chemistry II
- _____ Chemistry 2500 - Organic Chemistry I
- _____ Chemistry 2600 - Organic Chemistry II

One of:
- _____ Mathematics 1410 - Elementary Linear Algebra
- _____ Mathematics 1560 - Calculus I
- _____ Mathematics 1565 - Accelerated Calculus I

Notes

[1] Students may not choose Stream a. if Biochemistry 2000 was chosen as part of the "Three of" list.

[2] If Neuroscience 4995 is chosen, the requirement for two additional courses at the 3000/4000 level in Neuroscience or Psychology with a Science designation is reduced to one additional course.

[3] This course has a prerequisite or corequisite that is not required for the major.

Electives (16 Courses)

_____ **25.-40.** Sixteen additional courses (48.0 credit hours) chosen to complete program requirements
- _____ 25._____
- _____ 26._____
- _____ 27._____
- _____ 28._____
- _____ 29._____
- _____ 30._____
- _____ 31._____
- _____ 32._____
- _____ 33._____
- _____ 34._____
- _____ 35._____
- _____ 36._____
- _____ 37._____
- _____ 38._____
- _____ 39._____
- _____ 40._____

PROGRAM REQUIREMENTS (2026/2027)

Required courses and notes

Name:_____

ID: | | | | | | | | | |

Liberal Education List 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. Cross-listed courses count toward the limit for both disciplines (e.g. Geography 3225/Global Business 3225 counts toward the limit for Geography and Dhillon School of Business courses).

Only four courses (12.0 credit hours) in total from the Faculty of Education (EDUC), Faculty of Health Sciences (AMHC, HLSC, INHL, NURS, PUBH, and TREC), and the Dhillon School of Business (ACCT, AGEM, DGTR, FINC, GLBU, HRLR, IGBM, MGT, and MKTG) may be counted towards the Lib Ed Requirement.

To determine if a course has a Liberal Education designation, see School of Liberal Education in the 2026/2027 University of Lethbridge Undergraduate Calendar, www.ulethbridge.ca/ross/academic-calendar.

_____ **1.-4.** **List I: Fine Arts and Humanities**

_____ 1._____
_____ 2._____
_____ 3._____
_____ 4._____

_____ **5.-8.** **List II: Social Science**

_____ 5._____
_____ 6._____
_____ 7._____
_____ 8._____

_____ **9.-12.** **List III: Science**

_____ 9._____
_____ 10._____
_____ 11._____
_____ 12._____

General Requirements

_____ A minimum of 40 courses (120.0 credit hours) with a GPA of at least 2.00.

_____ A maximum of five Independent Study courses (15.0 credit hours) may be completed for credit towards the degree.

_____ A maximum of 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.

_____ A maximum of 24 courses (72.0 credit hours) may be completed from any one discipline for credit towards the degree. Disciplines are identified by a specific course label (e.g. KNES, ASTR, and HIST are separate disciplines).

_____ A maximum of 6.0 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).

_____ A maximum of six courses (18.0 credit hours) from disciplines offered outside the Faculty of Arts and Science, Faculty of Fine Arts, or School of Liberal Education may be completed for credit towards the degree (i.e. labelled ACCT, AGEM, AMHC, CDEV, CRED, DGTR, EDUC, FINC, GLBU, HLSC, HRLR, IGBM, INHL, MGT, MKTG, NURS, PUBH, and TREC). Courses cross-listed between the Faculty of Arts and Science and another Faculty or School do not count towards this limit.

_____ Residence requirement: a minimum of 20 courses (60.0 credit hours) must be completed at the University of Lethbridge, including at least 10 courses (30.0 credit hours) from disciplines offered by the Faculty of Arts and Science, Faculty of Fine Arts, or School of Liberal Education at the 3000/4000 level. At least half of the courses required in the major must be completed at the University of Lethbridge.

A **maximum** of 12 courses (36.0 credit hours) may be completed at the 1000 level (or lower) for credit towards the degree, excluding Activity courses (labelled PHAC and MUSE) and courses numbered in the range of 0520 to 0530.

_____ **1.-12.** **Introductory Course Limit**

_____ 1._____
_____ 2._____
_____ 3._____
_____ 4._____
_____ 5._____
_____ 6._____
_____ 7._____
_____ 8._____
_____ 9._____
_____ 10._____
_____ 11._____
_____ 12._____

A **minimum** of 15 courses (45.0 credit hours) from disciplines offered by the Faculty of Arts and Science, Faculty of Fine Arts, or School of Liberal Education at the 3000/4000 level, excluding Activity courses (labelled PHAC and MUSE). Out-of-faculty courses (i.e. labelled ACCT, AGEM, AMHC, CDEV, CRED, DGTR, EDUC, FINC, GLBU, HLSC, HRLR, IGBM, INHL, MGT, MKTG, NURS, PUBH, and TREC) will not meet this requirement.

_____ **1.-15.** **Senior Course Requirement**

_____ 1._____
_____ 2._____
_____ 3._____
_____ 4._____
_____ 5._____
_____ 6._____
_____ 7._____
_____ 8._____
_____ 9._____
_____ 10._____
_____ 11._____
_____ 12._____
_____ 13._____
_____ 14._____
_____ 15._____

Optional Minor: _____

For information about minors see **Minors** in the 2026/2027 University of Lethbridge Calendar, www.ulethbridge.ca/ross/academic-calendar.
Consult with an Academic Advisor if you wish to add a minor to your program.

_____ **1.-6.** **Required Courses**

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

RECOMMENDED SEQUENCING PLAN (2026/2027)

Recommended Course Sequence

Name:_____

ID: | | | | | | | | | |

Shown below is the recommended sequence of courses for your degree. Consult timetables for course offerings, prerequisites, and corequisites before registering each term as some courses may have limited offerings (ie. once a year, alternating years, or only offered in the Fall or Winter terms).
Consult with an Academic Advisor in your faculty if you wish to alter this sequence with regard to the specifically listed courses.
Note that this sequence was prepared based on course scheduling at the time of publication and <u>may</u> change during your studies.

First Year

Biology 1010
Biology 1020
Chemistry 1000
Chemistry 2000
Psychology 1010
One of: English 1900 or Writing 1000
Mathematics requirement
Lib Ed Requirement course
Lib Ed Requirement course
Lib Ed Requirement course

Second Year

Biology 2000
Chemistry 2500
Chemistry 2600
Neuroscience 2610
Neuroscience 2620
One of: Philosophy 2220 or Philosophy 3402
One of: Physics 1000 or Physics 1050
Statistics requirement
Lib Ed Requirement course
Lib Ed Requirement course *(Philosophy 1000 recommended)*

Third Year

Neuroscience 3600
Psychology 2330
Psychology 2700
Neuroscience list course
Neuroscience list course
Lib Ed Requirement course 3000/4000 level
Elective 3000/4000 level
Elective 3000/4000 level
Elective 3000/4000 level
Elective

Fourth Year

Neuroscience or Psychology 3000/4000 level (Science)
Neuroscience or Psychology 3000/4000 level (Science)
Neuroscience 4000-level list course
Neuroscience list course
Elective 3000/4000 level
Elective 3000/4000 level
Elective 3000/4000 level
Elective 3000/4000 level
Elective 3000/4000 level
Elective

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 elective courses within the major and plan accordingly.

The above sequence includes only courses from Stream b. Chemistry group. Plan accordingly if you are interested in completing the courses from Stream a. Chemistry group (see p. 3 of the Program Planning Guide).