

trentu.ca/biomedical

Program Coordinator

L. Kerr, BSc, MSc (Carleton), PhD (British Columbia)

Professors

See faculty listings in Biology, Chemistry, Mathematics, Philosophy, Physics & Astronomy, and Psychology

Students who complete the Biomedical Science degree will appreciate that many techniques and experimental approaches to health and medicine are complementary, and will be able to apply the principles they have learned to assess and solve problems as they relate to real-world health issues. The program gives students training in both practical and theoretical aspects of a diversity of medically-related topics. A distinctive feature of the program is the requirement that students intern with a collaborating agency or individual sponsor in a health or medical science setting.

Notes

- Biomedical Science is a direct entry program with a limited number of student places. A secondary school diploma and six Ontario 4U or 4M courses with a minimum 75% overall final average is required for admission. These include ENG4U (Grade 12 English); MHF4U (Advanced Functions) or MCV4U (Calculus and Vectors); SCH4U (Grade 12 Chemistry); SBI4U (Grade 12 Biology); and SPH4U (Grade 12 Physics) or SES4U (Earth and Space Science). The admission average is calculated using the applicant's five required courses noted above and the highest additional 4U/M-level course grade. As this is a limited enrolment program, fulfillment of the minimum requirements does not guarantee admission.
- Students may apply on a competitive basis to enter the Biomedical Science program after first year if a minimum cumulative average of 75% in specific courses has been achieved. See trentu.ca/biology/programs/biomedical-science-bsc for details.
- To remain in the program, students must maintain a minimum cumulative average of 75%. Students who are unable to achieve these grades may switch to the Honours program in Biology, transfer to a BSc or BA program in another discipline and make up any degree requirements for a major, or repeat courses (subject to Trent University's policy on repeating courses) until they achieve the required grades to apply for readmission to the program.
- For information on individual courses see Calendar entries under the appropriate discipline.
- Students intending to pursue graduate studies or work in research laboratories are recommended to complete an Honours research thesis (BIOL 4020D).
- Students intending to pursue studies in professional schools (medical, dental, pharmacy, etc.) should consult the most recent academic requirements of the schools they are interested in applying to.
- There is no joint-major program, General program, or minor in Biomedical Science.

Bachelor of Science Program in Biomedical Science

- In addition to the program requirements listed below, students must satisfy the University degree requirements (see p. 14).

The single-major Honours program. 20.0 credits including the following 14.0 credits:

- 0.5 BIOM credit consisting of BIOM 1000H
- 3.5 BIOL credits consisting of BIOL 1050H, 1051H, 2050H, 2070H, 2600H, 3040H, and 3080H
- 1.5 CHEM credits consisting of CHEM 1000H, 1010H, and 2100H
- 1.5 MATH credits consisting of MATH 1110H, 1120H, and 1550H
- 0.5 PHIL credit consisting of PHIL 2390H
- 1.0 PSYC credit consisting of PSYC 1020H and 1030H
- 0.5 BIOL credit from BIOL 3830H or 3840H
- 0.5 CHEM credit from CHEM 2110H or 2300H
- 0.5 PHYS credit from PHYS 1001H or 1060H
- 0.5 credit from BIOL 2000H, MATH 2560H, or PSYC 2018H
- 1.0 BIOM credit from BIOM 4450Y and 2.5 credits from the following; or 0.5 BIOM credit from BIOM 4460H and 3.0 credits from the following:

ANTH-BIOL-SAFS 4440H	BIOL 4340H
BIOL-PSYC 3210H	BIOL 4355H
BIOL 3250H	BIOL 4370H
BIOL 3640H	BIOL 4380H
BIOL 3660H	BIOL 4630H
BIOL 3830H (if not taken as a required course)	BIOL 4710H
BIOL 3840H (if not taken as a required course)	BIOL-PSYC 4840H
BIOL 4080H	CHEM 2110H (if not taken as a required course)
BIOL 4130H	CHEM-BIOL 2300H (if not taken as a required course)
BIOL 4160H	CHEM-BIOL 3310H
BIOL 4190H	CHEM-BIOL 3320H
BIOL 4260H	
BIOL 4320H	
- 14.0 science credits are required for the Honours degree

Please consult the academic timetable for information on courses that will be offered in 2019–2020, including when they will be scheduled.

» **BIOM 1000H: Introduction to Biomedical Science (Sc)**

Examines mechanisms and determinants of health and disease by focusing on molecular and cellular processes. Students are introduced to theories and research techniques in cellular and molecular biology, genetics, microbiology, biochemistry, physiology, and psychology. Open only to students in the Biomedical Science program. Excludes BIOL 1030H.

» **BIOM-BIOL 4450Y: Placement in Health Sciences (Sc)**

A placement in a medically or health related setting for the equivalent of six hours a week for 24 weeks. Students are required to write a report on their placement. Open only to students in the Biomedical Science program. Prerequisite: A minimum cumulative average of 75% and 13.5 university credits including BIOL 2050H, BIOL 2070H, BIOL 3080H, CHEM 1000H, and CHEM 1010H; or permission of instructor. Co-requisite: BIOL 3830H or 3840H. Excludes BIOM-BIOL 4460H.

» **BIOM-BIOL 4460H: Placement in Medical Sciences (Sc)**

A placement in a hospital, human, or animal health-care setting (e.g., dental or veterinary clinic) for at least three hours a week for 12 weeks. Students are assigned practical readings and background theory from their preceptor(s). Open only to students in the Biomedical Science program. Prerequisite: A minimum cumulative average of 75%, a minimum overall average of 80% in completed BIOL courses, and 13.5 university credits including BIOL 3830H or 3840H. Co-requisite: BIOL 4160H and 4320H. Enrolment is limited and competitive. Students must apply in the year before anticipated enrolment in the course. Application forms may be obtained from the Biology website under forms at trentu.ca/biology/experience and must be submitted before April 15. Students may not apply retroactively. Excludes BIOM-BIOL 4450Y.