ASBIOL – Biology and Medicine Pre-Major

University Arts and Science

Effective Term & Year: Fall 2022
Program Outline Review Date: 2027-03-01

Program Area: Math and Sciences

Description:

The Biology and Medicine Pre-Major Pathway program identifies a recommended pathway for the first two years of study towards a four-year degree in Biology. This pathway also maps the strongly recommended course prerequisites for admission into the UBC School of Medicine, as well as providing two of the first three required years of study before applying to medical school. Students who complete all requirements of this pathway will earn a College of the Rockies Associate of Science degree.

Program Information:

The Pre-Major pathway meets the requirements of the Biology Flexible Pre-Major; therefore, students who complete the pre-major are eligible for admission into Year 3 in the UBC Biology undergraduate program or other Biology degree programs across the province.

After transfer, students with a goal of medical school complete at least one additional year (30 credits), including UBC BIOC 302 or equivalent, for a total of 90 post-secondary credits, after which they become eligible to apply for admission to the UBC Medicine program.

Students should plan carefully with an education advisor to ensure that all requirements are met.

Credentials Granted:

Associate of Science Degree

Minimum Course Grade: A minimum grade of D

Program Average: A minimum program grade point average of 3.0/10 (C average)

Program Goals and Career Pathways:

Students who complete this pathway can consider entering a Majors program in Biology at the following BC institutions:

- Simon Fraser University
    - Take SFU STAT 201 in Yr. 3
- Thompson Rivers University
- Take PHYS 103 and PHYS 104
- University of British Columbia-Okanagan
    - Take two organismal courses in Yr. 2
- University of British Columbia-Vancouver
- University of the Fraser Valley
- University of Northern British Columbia
    - Take two organismal courses in Yr. 2
- University of Victoria
    - Take PHYS 103 and PHYS 104
- Vancouver Island University

The Pre-Major pathway is designed for transfer into Year 3 of a Bachelor of Science in Biology program.

Acceptance into a Biology major program is competitive and is not guaranteed. Students may wish to apply for dual admission with COTR and UVic to ensure acceptance into a Year 3 Biology program.

To complete the requirements of pre-med program and apply to UBC, students need to take 30 additional credits including UBC BIOC 302 after completing the COTR Biology and Medicine Pre-Major Pathway program. UBC states that BC applicants with less than a 75% overall academic average will not receive a full file review. All courses, including failures, are counted in the UBC GPA calculation.

Details on the UBC MD undergraduate admissions prerequisites are available here: http://mdprogram.med.ubc.ca/files/2015/07/Prerequisite-Chart-2015-2016.pdf

UBC requires that all 90 credits must be taken at a post-secondary institution. While an advanced placement course such as AP BIOL can count towards prerequisites (with a 4 or better on the AP exam), such courses do not count towards the 90-credit requirement at a post-

secondary institution.

Admission to the UBC medical program requires an additional year of study after completing this credential. Admission is limited to Canadian citizens and permanent residents; BC residents are given preference over residents of other provinces.

Delivery Methods: On-Campus (Face-to-Face), Online

Credits: 60

Admission Requirements:

- Complete all of the following
  - Secondary school graduation or equivalent
  - Rule Not Selected
  - Earned a minimum grade of C+ (65%) in at least 1 of the following:
    - ENST 12 – English Studies 12
    - ENFP 12 – English First Peoples 12
    - ENGL090 – English – Provincial Level
  - Complete 1 of the following
    - Earned a minimum grade of C+ (65%) in each of the following:
      - PREC 11 – Pre-Calculus 11
      - PREC 12 – Pre-Calculus 12
    - Complete all of the following
      - Completed the following:
        - PREC 12 – Pre-Calculus 12
      - Earned a minimum grade of B (75%) in each of the following:
        - CALC 12 – Calculus 12
    - Earned a minimum grade of C+ (65%) in at least 1 of the following:
      - MATH090 – Mathematics – Provincial Level
      - MATH100 – Pre-Calculus (3)
  - Earned a minimum grade of C (60%) in each of the following:
    - ATPH 12 – Anatomy and Physiology 12
    - CH 12 – Chemistry 12
    - PHYS12 – Physics 12

Recommended Admission Requirements:

Basic computer skills recommended

Program Completion Requirements:

- Complete all of the following

  Associate of Science Degree

  6 credits in first year- English

  - Complete all of the following
    - Completed the following:
      - ENGL100 – English Composition (3)
    - Completed at least 1 of the following:
      - ENGL101 – Introduction to Poetry and Drama (3)
      - ENGL102 – Introduction to Prose Fiction (3)

  6 credits in Mathematics which shall include at least 3 credits in Calculus

  - Completed at least 2 of the following:
    - MATH103 – Differential Calculus (3)
    - MATH104 – Integral Calculus (3)

  36 credits in Science, which shall include at least 3 credits in a laboratory science

  - Complete all of the following
    - Completed at least 12 of the following:
      - CHEM101 – Fundamentals of Chemistry 1 (3)
      - CHEM102 – Fundamentals of Chemistry 2 (3)
      - BIOL101 – Introduction to Biology 1 (3)
      - BIOL102 – Introduction to Biology 2 (3)
      - PHYS103 – Introduction to Physics 1 (3)
      - CHEM201 – Organic Chemistry 1 (3)
      - CHEM202 – Organic Chemistry 2 (3)
      - BIOL200 – Introduction to Microbiology (3)
      - BIOL201 – Cell Biology (3)
      - BIOL202 – Introduction to Biochemistry (3)
      - BIOL203 – Genetics (3)
      - STAT106 – Statistics (3)
    - Or Elective
    - BIOL 200 – UNBC Requirement
      BIOL 201 – UVic Requirment
      BIOL 203 UNBC and UVic Requirement
      STAT 106 UVic Requirement

  6 credits in Arts other than English (excluding Mathematics and Laboratory-based Science courses)

  - Complete all of the following
    - Completed at least 1 of the following:
      - INDG105 – Introduction to Health and Wellness in Indigenous Communities (3)
      - INDG250 – Indigenous Community Health and Healing (3)
      - FNST101 – First Nations Studies (3)
    - Or Elective

    - Completed at least 1 of the following:
        - PSYC101 – Introduction to Psychology 1 (3)
        - PSYC102 – Introduction to Psychology 2 (3)

  6 credits in Arts, Science, or other areas
- Complete all of the following
    - Completed at least 1 of the following:
        - STAT206 – Calculus Based Statistics (3)
        - PHYS104 – Introduction to Physics 2 (3)
    - PHYS 104 required for UVic and TRU Biology major
    - Completed at least 1 of the following:
        - BIOL204 – Introduction to Ecology (3)
        - BIOL208 – Vertebrate Biology (3)
    - BIOL 208 UBC Requirement
      BIOL 204 UNBC and UVic Requirement

Grand Total Credits: 60

Program Completion Requirements Notes:

A grade of "D" grants credit, but may not be sufficient as a prerequisite for sequential courses.

Flexible Assessment: Yes

In some cases students may be able to apply for recognition of prior learning outside the classroom. This flexible assessment process provides equivalent course credit. It is a rigorous process that may include external evaluation, worksite assessment, demonstration, standardized test, self-assessment, interview, products/portfolio, and challenge exam, or other measures as appropriate. Tuition fees apply. Contact an education advisor for more information.

Program Transfer Credit:

For information about block transfer agreements between programs in British Columbia, Alberta, and elsewhere, please visit http://www.cotr.bc.ca/transfer.

To minimize transfer issues, check with an academic advisor at the institution that will receive the transfer credits.

Academic Policies:

College of the Rockies policies related to courses can be found at https://cotr.bc.ca/about-us/college-policies/ and include the following:

- Policy 2.4.3 Students with Documented Disabilities
- Policy 2.4.4 Student Conduct (plagiarism, other cheating, behavioral misconduct)
- Policy 2.4.8 Academic Performance
- Policy 2.5.3 Grade Appeal
- Policy 2.4.9 Student Concerns Re Faculty

Program Changes:

Information contained in this program outline is correct at the time of publication. Courses and course content may be revised from time to time based on changing educational, employment and marketing needs. The timetable may also be revised.

Course Descriptions: Refer to Course Outlines – https://outlines.cotr.bc.ca/course/