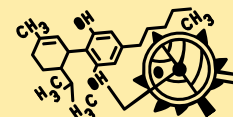


# BIOCHEMISTRY SPECIALIZATION

Courses for Students Enrolling in Fall 2023



## FIRST YEAR

BIOL 1506E Biology I\*  
BIOL 1507E Biology II  
CHMI 1006E General Chemistry I #  
CHMI 1007E General Chemistry II  
MATH 1036E Calculus I ##  
MATH 1037E Calculus II OR MATH 1057E Linear Algebra I  
PHYS 1006E Introductory Physics I  
PHYS 1007E Introductory Physics II

**6 elective credits**

# Students lacking grade 12 4U Chemistry must first take CHMI 1031.

## Students lacking grade 12 4U Advanced Functions or who have attained a grade of less than 60% must first take MATH 1912.

## SECOND YEAR

BIOL 2026E Introduction to Microbiology  
CHMI 2117E Introductory Quantitative Analysis  
CHMI 2227E Biochemistry I  
CHMI 2316E Inorganic Chemistry I  
CHMI 2426E Organic Chemistry I  
CHMI 2427E Organic Chemistry II  
CHMI 2516E Introductory Physical Chemistry I  
COSC 2836E Computer Software for the Sciences  
OR STAT 2246E Statistics for Scientists

**3 credits from:**

BIOL 2126E Cell Biology \*\*  
BIOL 2XXX, 3XXX or 4XXX\*\*\*

**3 elective credits**

§This program has a co-op option. Please contact the School of Natural Sciences for more information.

## THIRD YEAR

CHMI 3226E Biochemistry II  
CHMI 3416E Intermediate Organic Chemistry  
CHMI 4226E Recombinant DNA Technology  
CHMI 3217E Biochemistry of Nucleic Acids  
OR CHMI 4217E Biomembranes, Structure and Function  
NATS 3106E Scientific Writing and Communication

**3 credits from list A and 3 credits from list B:**

See QR Code for Credit list



**3 credits from :**

BIOL 2126E Cell Biology \*\*  
BIOL 2XXX, 3XXX, 4XXX

**6 elective credits**

§This program has a co-op option. Please contact the Department of Chemistry and Biochemistry for more information.

## FOURTH YEAR

NATS 4005E Honours Thesis  
OR NATS 4106E Literature Review + 3cr CHMI at 3rd/4th year level  
CHMI 3217E Biochemistry of Nucleic Acids  
OR CHMI 4217E Biomembranes, Structure and Function

**3 credits from list A and 3 credits from list B:**



**3 credits from :**

BIOL 2126E Cell Biology \*\*  
BIOL 2XXX, 3XXX or 4XXX\*\*\*

3 upper year BIOL credits  
9 elective credits

Students must include a minimum of 12 credits from the Arts.

PHIL 2345E or PHIL 2525E is highly recommended as an elective.

\* Students must take at least 21 BIOL credits as part of their program.

\*\* BIOL 2126E is mandatory and can be taken in 2nd, 3rd or 4th year.

\*\*\*BIOL 2007E is highly recommended

The following courses may be used as BIOL credits in the Biochemistry program: ANTR 3047E, ANTR 3086E, PHED 2506E, PHED 2507E, PHYS 2606E, PSYC 2606E, PSYC 2617E, PSYC 3506E.

In addition, CHMI 3427E, CHMI 4237E, CHMI 4286, CHMI 4287, and CHMI 4297 may be used as BIOL credits if not used as CHMI credits.

Note: Students may not exceed 48 credits at the 1000 or 9100 level in their degree program.

