Bachelor of Science – Chemistry (Conc. in Analytical Biochemistry) 2020-21

STUDENT NAME:

STUDENT MRU ID #:

ADMISSION YEAR/CATALOGUE YEAR:

MOUNT ROYAL UNIVERSITY 1910 | Faculty of Science and Technology

YEAR ONE – FALL		
CHEM 1201 [FW]	General Chemistry - Structure and Bonding	
MATH 1200 [FW]	Calculus for Scientists I	
PHYS 1201 [FW]	Classical Physics I	
GNED Foundation [FW] Cluster 1	One of: GNED 1101 or 1103	
GNED Foundation [FW] Cluster 4	One of: GNED 1401 or 1404	
YEAR ONE - WINTER		
CHEM 1202 [FW]	General Chemistry - Introduction to Quantitative Chemistry	
MATH 2200 [FW]	Calculus for Scientists II (Pre-req: MATH 1200)	
PHYS 1202 [FW]	Classical Physics II (Pre-req: MATH 1200 and PHYS 1201)	
BIOL 1202 [FW]	Introduction to Cell Biology	
GNED Foundation [FW] Cluster 2	One of: GNED 1201, 1202, 1203 or 1204	
YEAR TWO – FALL		
CHEM 2101 [FW]	Organic Chemistry I (Pre-req: CHEM 1201 & CHEM 1202)	
CHEM 2301 [F]	Analytical Chemistry I (Pre-req: CHEM 1202 & MATH 1200)	
COMP 2001 [F]	Programming for the Sciences (Pre-req: GNED Foundation Cluster 1)	
BIOL 1204 [FW]	The Evolution of Eukaryotes (Pre-req: BIOL 1202)	
GNED Foundation [FW] Cluster 3	One of: GNED 1301, 1302, 1303 or 1304	
YEAR TWO - WINTER		
CHEM 2102 [FW]	Organic Chemistry II (Pre-req: CHEM 2101)	
BCEM 2201 [FW]	General Biochemistry (Pre-req: CHEM 2101)	
CHEM 2302 [W]	Analytical Chemistry II (Pre-req: CHEM 2301)	
BIOL 2101 [W]	Genetics (Pre-req: BIOL 1202 & 1204)	
GNED Tier 2 Cluster 2 [FW]		
YEAR THREE – FALL		
CHEM 2401 [F]	Inorganic Chemistry (Pre-req: CHEM 1201 and CHEM 1202)	
BCEM 3201 [F]	Protein Biochemistry (Pre-req: BCEM 2201)	
BIOL 2202 [FW]	Cellular and Molecular Biology (Pre-req: BIOL 2101)	
CHEM 3200 [F]	Research Methods in Chemistry (Pre-req: CHEM 2302 & COMP 2001)	
CHEM 2601 [F]	Physical Chemistry (Pre-req: CHEM 1201 & 1202, MATH 1200 & PHYS 1201)	
YEAR THREE – WINTER		
CHEM 3601 [W]	Thermodynamics (Pre-req: CHEM 1201 & 1202, PHYS 1202, MATH 2200)	
BCEM 3202 [FW]	Enzymes and Metabolic Systems (Pre-req: CHEM 2102 and BCEM 2201)	
GNED Tier 2 Cluster 3 [FW]		
GNED Tier 2 Cluster 4 [FW]		
Elective		
YEAR FOUR – FALL		
CHEM 4301[F2021]	Advanced Analytical Chemistry (Pre-req: CHEM 2302)	
BCEM 4201[F2021]	Lipids and Membranes - *in development*	
GNED Tier 3		
GNED Tier 3		
Elective		
YEAR FOUR – WINTER		
BCEM 5200 [W2022]	Analytical Biochemistry in a Community Context – in development	
BCEM 4210 [W2022]	Topics in Structural Biology – *in development*	
GNED Tier 3		
Elective		
Elective		

PLEASE READ:

General Education: General Education approved courses, otherwise known as "GNED requirements", are designed to give you a well-rounded knowledge base and are organized into 4 thematic clusters. Each Cluster has 3 levels: tier 1 (foundation), tier 2 and tier 3.

Cluster 1: Numeracy & Scientific Literacy
Cluster 2: Values, Beliefs & Identity
Cluster 3: Community & Society
Cluster 4: Communication

Students must take a foundation level from each of the four clusters, three tier 2 GNEDs (one from each of cluster 2, 3, and 4), and a total of three tier 3 GNEDs from at least two clusters, for a total of 10 GNED courses.

For more information and a list of GNED courses, visit mtroyal.ca/gened and click 'courses' on the left-hand navigation.

Junior courses: are courses at the 1000 level. Students are allowed a maximum of sixteen junior courses for graduation purposes.

Electives: an elective is any three-credit course. It is advised that students in this major select senior level electives wherever possible to avoid exceeding the sixteen junior course limits.

Prerequisites and course descriptions: can be found in the Academic Calendar under the 'courses' link at https://catalog.mtroyal.ca/

Advising Plan: Students are strongly advised to follow the progression of classes and course load indicated below. Deviation from the recommended course pattern may result in scheduling conflicts.

To be considered full time a student must be enrolled in a minimum of 9 credit hours or three, 3- credit courses.

[F] Indicates that the course runs in Fall semester only.
[W] Indicates that the course runs in Winter semester only.
[FW] Indicates that the course is offered in both Fall and Winter semester.

Community Service Learning requires three courses with the 'CSL' designation, learn more here: mru.ca/csl – your Chemistry major may qualify.

This document is only intended to be a guide for students and should be used together with the Mount Royal University Academic Calendar which states academic policies and degree requirements. Be sure to consult with your Academic Advisor to confirm graduation requirements or if you have any questions.