

Approved Science Options: 2016-2017 Academic Calendar

Physical Sciences (B 233)

ASTR 1301 – Planetary Astronomy
 CHEM 1202 – General Chemistry – Introduction to Quantitative Chemistry
 CHEM 1203 – The Organic Chemistry of Life
 CHEM 2101 – Organic Chemistry I
 CHEM 2102 – Organic Chemistry II
 CHEM 2205 – Computers in Chemistry
 CHEM 2211 – The Chemistry Between Us
 CHEM 2301 – Analytical Chemistry I: Quantitative Analysis
 CHEM 2302 – Analytical Chemistry II: Introduction to Instrumental Analysis
 CHEM 3103 – Advanced Organic Synthesis
 CHEM 3201 – Spectroscopy
 CHEM 3401 – Solid State
 CHEM 3601 – Thermodynamics
 CHEM 3602 – Elementary Quantum Mechanics
 CHEM 3801 – Nuclear Chemistry
 CHEM 3802 – The Science and Politics of Nuclear Energy
 CHEM 4213 – Drug Discovery
 CHEM 4701 – Molecular Modeling
 CHEM 5201 – Independent Projects I
 CHEM 5202 – Independent Projects II
 PHYS 1202 – Classical Physics II
 PHYS 1209 – Elementary Modern Physics
 PHYS 2201 – Acoustics, Optics and Radiation
 PHYS 2203 – Electromagnetism
 PHYS 3103 – Introduction to Biophysics
 PHYS 3401 – Solid State
 PHYS 3601 – Thermodynamics
 PHYS 3602 – Elementary Quantum Mechanics

Mathematics and Computer Science (B 175)

COMP 1502 – Programming II: Object Oriented Programming
 COMP 2008 – Scientific Computing I
 COMP 2503 – Programming III: Data Structures
 COMP 2511 – Web I: Client Development
 COMP 2521 – Database I: Data Modeling and Query Languages
 COMP 2531 – Computer Architecture and Operating Systems
 COMP 2541 – Systems Analysis
 COMP 3008 – Scientific Computing II
 COMP 3012 – Robotics
 COMP 3313 – Introduction to Computability
 COMP 3504 – Programming IV: Software Engineering
 COMP 3512 – Web II: Web Application Development
 COMP 3532 – System Administration and Maintenance
 COMP 3533 – Network Infrastructure and Security
 COMP 3551 – GUI Development
 COMP 3553 – Human Computer Interaction
 COMP 4513 – Web III: Advanced Web Development
 COMP 4522 – Database-II: Advanced Databases
 COMP 4535 – Computer Security
 COMP 4543 – Project Management and Quality Assurance
 COMP 4545 – Information Systems Organization
 COMP 4555 – Games Development
 MATH 1202 – Calculus for Scientists II
 MATH 1203 – Linear Algebra for Scientists and Engineers
 MATH 1271 – Discrete Mathematics
 MATH 2101 – Abstract Algebra
 MATH 2301 – Calculus III
 MATH 2302 – Calculus IV
 MATH 2307 – Differential Equations I
 MATH 2311 – Linear Algebra II
 MATH 2321 – Mathematical Probability
 MATH 2323 – Introduction to Mathematical Statistics
 MATH 3101 – Numerical Analysis
 MATH 3303 – Topics in Applied Mathematics and Data Analysis
 MATH 4101 – Abstract Algebra II
 MATH 4102 – Analysis I
 MATH 4103 – Complex Analysis

Biological Sciences (B 344)

BCEM 2201 – General Biochemistry
 BCEM 3201 – Protein Biochemistry
 BCEM 3202 – Enzymes and Metabolic Systems
 BCEM 4212 – Biochemical Pharmacology
 BIOL 2101 – Genetics
 BIOL 2102 – How They Do It: Patterns of Reproduction
 BIOL 2105 – Microbiology I
 BIOL 2202 – Cellular and Molecular Biology
 BIOL 2203 – Human Anatomy
 BIOL 2204 – Zoology II: Deuterosomes
 BIOL 2213 – Principles of Ecology and Evolution
 BIOL 2214 – Zoology I: Protosomes
 BIOL 2309 – Plants and People
 BIOL 3101 – Molecular Genetics
 BIOL 3102 – Intermediate Cell Biology
 BIOL 3103 – Introduction to Biophysics
 BIOL 3104 – Human Physiology I
 BIOL 3105 – Microbiology II
 BIOL 3106 – Evolutionary Biology
 BIOL 3107 – Evolution in Health and Disease (formerly BIOL 4204)
 BIOL 3108 – Conservation Biology
 BIOL 3203 – Genomes
 BIOL 3204 – Histology
 BIOL 3205 – Human Physiology II
 BIOL 3301 – Animal Behaviour
 BIOL 3216 – Human Adaptation to Environmental Stress
 BIOL 4207 – Womb to Tomb: Embryology, Development, and Aging
 BIOL 5201 – Independent Projects I
 BIOL 5202 – Independent Projects II
 Note: Courses that are *italicized* are under development.

Earth Sciences (B 248)

GEOG 1101 – Physical Environment
 GEOG 1103 – Human Environment
 GEOG 1105 – Introduction to Mapping, GIS and Remote Sensing
 GEOG 2107 – Weather and Climate
 GEOG 2109 – Ecological Land Classification and Soils
 GEOG 2111 – Earth's Changing Surface
 GEOG 2437 – Biogeography
 GEOG 2445 – Environmental Problems and Resource Management
 GEOG 2553 – Geographic Information Systems
 GEOG 2555 – Introduction to Remote Sensing
 GEOG 3107 – Advanced Biogeography
 GEOG 3109 – Overseas Field Study in Physical Geography
 GEOG 3309 – Overseas Field Study in Human Geography
 GEOG 3445 – Global Environmental Issues
 GEOG 3553 – Spatial Analysis and GIS
 GEOL 1101 – Physical Geology
 GEOL 1103 – Historical Geology
 GEOL 1151 – Introduction to the Petroleum Industry
 GEOL 2103 – Minerals and Rocks
 GEOL 2107 – Paleontology
 GEOL 2109 – Stratigraphy and Sedimentology
 GEOL 2151 – Environmental Geology and Earth Resources
 GEOL 2153 – Natural Hazards and Disasters
 GEOL 2155 – Geological History of Life
 GEOL 2157 – Water: Geologic and Geographical Issues
 GEOL 3107 – Geomorphology
 GEOL 3115 – Exploration Geophysics
 GEOL 4105 – Hydrogeology
 GEOL 4107 – Geology of Western Canada
 GEOL 4109 – Petroleum Geology

To properly plan your courses, semesters and degree program please check with the Departments directly for an indication of when a course normally runs.

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.