B.S. and B.A. in Chemistry
Degree Requirements (2018-19)

MERCYHURST UNIVERSITY
Department of Chemistry and Biochemistry

Name: _____ **Degree**: BA *or* BS* **Class of 20**_____

Mercyhurst REACH Curriculum

First Year Experience
( ) iMU 101 – Introduction to Mercyhurst
( ) iMU 102 – Involvement at Mercyhurst
( ) COMP 120 – Writing and Research

Liberal Arts Experience
Reason and Faith: *CST, PHIL, RLST*
( ) Course 1
( ) Course 2

Expression: *ENG, ART, DANC, MUS, THEA*
( ) ENG
( ) Course 2

Analytical
(✓) CHEM 121/122 – General Chemistry I /Lab
(✓) MATH 171 – Calculus I

Contexts and Systems: *ECON, HIS, POLI*
( ) Course 1
( ) Course 2

Humans in Connection: *ANTH, PSYC, SOC, ASIA, CHNS, FREN, JPNS, RUSS, SPAN*
( ) Course 1
( ) Course 2

Senior Capstone
( ) ETH 400 – Reach Capstone
(✓) CHEM 410 – Research I

Outreach
( ) BTG 300 – Beyond the Gates

General Elective Courses

( ) At least 18 credits of general elective courses

Chemistry Major Curriculum

First-Year Level (16 cr)
( ) CHEM 121/122 General Chemistry I/Lab
( ) CHEM 131/132 General Chemistry II/Lab
( ) MATH 170 Calculus I
( ) MATH 171 Calculus II

Sophomore Level (20 cr)
( ) CHEM 240/241 Organic Chemistry I/Lab
( ) CHEM 242/243 Organic Chemistry II/Lab
( ) MATH 233 Calculus III*
( ) PHYS 201/203 General Physics I/Lab
( ) PHYS 202/206 General Physics II/Lab

Junior/Senior Level (≥ 34-36 cr)
( ) CHEM 230/231 Quantitative Analysis/Lab
( ) CHEM 310 Advanced Inorganic Chemistry
( ) CHEM 331/332 Biochemistry I/Lab
( ) CHEM 314 Advanced Organic Chemistry ***or***
  ( ) CHEM 335/336 Spectral Interpretation/Lab
( ) CHEM 333/334 Instrumental Analysis/Lab
( ) CHEM 341 Physical Chemistry I
( ) CHEM 343 Experimental Physical Chemistry
( ) CHEM 351 Physical Chemistry II
( ) CHEM 409 Senior Seminar
( ) CHEM 410 Research I
( ) CHEM 412 Research I Lab*
( ) Major Elective Course

Major Elective Courses
( ) BIO 142/143 Cellular and Molecular Biology/Lab
( ) CHEM 314 Advanced Organic Chemistry
( ) CHEM 335/336 Spectral Interpretation/Lab
( ) CHEM 420 Chemical Biology
( ) FRSC 360 Forensic Chemistry
( ) MATH 240 Differential Equations
( ) PHYS 310 Modern Physics
( ) PHYS 370 Optics
( ) PHYS 420 Quantum Mechanics

At least 121 credit hours are required for graduation. For the BS degree, students earn a minimum of 33 hr in the REACH Curriculum, 18 hr in general electives, and 70 hr in the major curriculum. Students must enroll in one additional science and lab for the BA degree.