

B.S. in Biochemistry Degree Requirements (2018-19)



Name: _____

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

Major Elective Courses (*Students must earn at least 8 credit hours from these courses. At least 1 must be a BIO course.*)

- BIO 200/201 Microbiology/Lab
- BIO 244/245 Histology/Lab
- BIO 330/331 Immunology/Lab
- BIO 334/325 Human Anatomy/Lab
- BIO 344/345 Human Physiology/Lab
- BIO 360/361 Systems Physiology/Lab
- BIO 430 Molecular Biology
- CHEM 310 Advanced Inorganic Chemistry
- CHEM 314 Advanced Organic Chemistry
- CHEM 333/334 Instrumental Analysis/Lab
- CHEM 335/336 Spectral Interpretation/Lab
- CHEM 343 Experimental Physical Chemistry
- CHEM 351 Physical Chemistry II
- FRSC 360 Forensic Chemistry
- MATH 233 Calculus III

General Elective Courses

- At least 18 credits of general elective courses

Biochemistry 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 (24 cr)

- BIO 142/143 Cellular & Molecular Biology/Lab
- BIO 310/311 Genetics/Lab
- CHEM 240/241 Organic Chemistry I/Lab
- CHEM 242/243 Organic Chemistry II/Lab
- PHYS 201/203 General Physics I/Lab
- PHYS 202/206 General Physics II/Lab

Junior/Senior Level (≥ 30 cr)

- CHEM 230/231 Quantitative Analysis/Lab
- CHEM 331/332 Biochemistry I/Lab
- CHEM 338/339 Biochemistry II/Lab
- CHEM 341 Physical Chemistry I
- CHEM 409 Senior Seminar
- CHEM 410 Research I
- CHEM 412 Research I Lab
- CHEM 420 Chemical Biology
- Major Elective Course
- Major Elective Course
- Major Elective Course [*if necessary for credit hours*]

At least 121 credit hours are required for graduation. Students earn a minimum of 33 hr in the REACH Curriculum, 18 hr in general electives, and 70 hr in the major curriculum.