

**MAJOR REQUIREMENTS for a BACHELOR OF SCIENCE in CHEMISTRY (BIOPHYSICAL)**

MINIMUM DEGREE CREDIT HOURS REQUIRED TO GRADUATE = 120 (CORE + MAJOR + GENERAL ELECTIVES)

**MATHEMATICS (2 courses • 8 hours)**

- MATH 2554 Calculus I
- MATH 2564 Calculus II

**PHYSICS (2 courses • 8 hours)**

- PHYS 2054 University Physics I
- PHYS 2074 University Physics II

**Note:** *These mathematics and physics prerequisite requirements are substantial, and these courses and their prerequisites should be scheduled early in the student's program.*

**BIOLOGY (3 courses • 11 hours)**

- BIOL 1543/1541L Principles of Biology
- BIOL 2533/2531L Cell Biology

Select any BIOL lecture course numbered 3000 or higher:

- BIOL \_\_\_\_\_

**CHEMISTRY WRITING REQUIREMENT**

- Satisfied by the formal research/analytical reports required in Physical Chemistry Laboratory—CHEM 3451L or CHEM 3512L—or by completing an honors thesis.

**CHEMISTRY (43 hours minimum)**

- CHEM 1203/1201L Chemistry for Majors I
- CHEM 1223/1221L Chemistry for Majors II

or

- CHEM 1103/1101L University Chemistry I
- CHEM 1123/1121L University Chemistry II

- CHEM 2263/2261L Analytical Chemistry

- CHEM 3603/3601L Organic Chemistry I
- CHEM 3613/3611L Organic Chemistry II

or

- CHEM 3703/3702L Organic Chemistry for Majors I
- CHEM 3713/3712L Organic Chemistry for Majors II

- CHEM 3504 Physical Chemistry I (*fall only*)

(*pre-requisite: CHEM 2263 & PHYS 2074; pre or co-requisite: MATH 2564*)

- CHEM 3514/3512L Physical Chemistry II

- CHEM 4813H Honors Biochemistry I
- CHEM 4843H Honors Biochemistry II

or

- CHEM 3813 Introduction to Biochemistry

(*pre-requisite: CHEM 3613/3611L*)

- CHEM 4723 Experimental Methods in Organic Chemistry (*fall only*)

(*pre-requisite: CHEM 3613/3611L*)

- CHEM 4213/4211L Instrumental Analysis (*spring only*)

(*pre-requisite: CHEM 2263/2261L & CHEM 3613/3611L*)

- CHEM 4853 Biochemical Techniques (*spring only*)

(*pre-requisite: CHEM 3813 or CHEM 4843H*)

- Completion of a senior thesis based on independent research wherein at least one credit hour is earned in CHEM 400V (chemistry research) and/or CHEM 498V (senior thesis) during each of three different semesters.

**Note:** Anytime a "for majors" course option is completed, it will suffice to complete the "not for majors" pre-requisite listed above.