

Youngstown State University

B.A. Degree in Chemistry*

Pre-Pharmacy Track

YEAR ONE

Fall Semester

CHEM 1515/L , GenChem1/Lab	4
CHEM 1515R , Recitation Gen Chem 1	1
MATH 1571 ¹ , Calculus 1	4
ENGL 1550 ¹ , Writing 1	3
Foreign Language ¹	<u>4</u>
Total	16

SH

Spring Semester

CHEM 1516/L , GenChem.2/Lab	4
CHEM 1516R , Recitation Gen Chem 2	1
MATH 1572, Calculus 2	4
ENGL 1551, Writing 2	3
Foreign Language	<u>4</u>
Total	16

SH

YEAR TWO

Fall Semester

CHEM 3719/L , Organic Chem 1/Lab	4
CHEM 3719R , Recitation/Org Chem 1	1
CHEM 2604/L , QuantAnalysis/Lab	5
PHYS 2610/L ² , GenPhysics 1/Lab	<u>5</u>
Total	15

Spring Semester

CHEM 3720/L , OrganicChem 2/Lab	4
CHEM 3720R , Recitation/Org Chem 2	1
PHYS 2611/L ² , GenPhysics 2/Lab	5
BIOL 2601/L ³ , Molecules and Cells	4
GER ⁴	<u>3</u>
Total	17

YEAR THREE

Fall Semester

CHEM 3785 , Biochemistry 1	3
CHEM 3785L , Biochemistry 1 Lab	1
BIOL 2602/L, Organisms and Ecology	4
BIOL 3702/L ⁵ , Microbiology	4
Statistics 3717 or 3743, Statistical Methods or Probability and Statistics	<u>4</u>
Total	16

Spring Semester

CHEM 3786 , Biochemistry 2	3
CHEM 5876 , Enzyme Analysis	2
CHEM 3739/L, Physical Chem/Lab	4
BIOL 3705/L, Human Gross Anatomy	4
GER	<u>3</u>
Total	16

YEAR FOUR

Fall Semester

CHEM 4850 , Chemistry Research	1
BIOL 3730/L, Human Physiology	5
GER	6
GER Speech – COMST 1545	<u>3</u>
Total	15

Spring Semester

Any Economics Course(ECON 2610 strongly recommended)	3
Upper Level GER ⁶	7
GER	<u>3</u>
Total	13

*124 total semester hours (sh) required for the BA degree, of which 39 sh are in Chemistry.

¹Placement exams in English, Math, and Foreign Language (FNLG) are required before registration in classes. ENGL 1550 & 1551 must be completed by 62 sh. FNLG through level 2600 required unless satisfied through placement exam.

²Courses in physics may be applied to the GER Natural Science (NS) requirement.

³Biology minor is included in the curriculum.

⁴GER requirements in the Knowledge Domain: 2-3 courses in Societies & Institutions (SI); 2 courses in Personal & Social Responsibilities (PS); 2-3 courses in Artistic & Literary Perspectives (AL). For BA CHEM majors, SI + PS + AL must equal seven courses, all other requirements for the GER Knowledge Domain are met through the major. **For the Pre-Pharmacy track, GER courses ECON 2610 (SI) and PSYCH 1560 (SI) are strongly recommended.**

⁵BIOL 3702L, Microbiology Laboratory, is designated as a writing-intensive course. In order to complete the Basic Skills GER requirements, BA Chemistry/Pre-Pharmacy students therefore need to take one additional writing-intensive course, two critical thinking-intensive courses, and one oral communication-intensive course, which they should take from their GER courses in the Knowledge Domain.

⁶Students must complete at least 48 sh of upper-division courses (3700 or higher) to graduate from YSU with a baccalaureate degree. BA Chemistry/Pre-Pharmacy students will complete 41 of these 48 sh as part of the Chemistry, Biology, and Math requirements for the major.

NOTES:

- Grades of C or better are required in the major and minor.
- Classes taken or repeated out of sequence will not count toward graduation. **Check prerequisites.**
- Residency rule states that the last 30 sh must be completed at YSU; 16sh in major, 21 sh in upper division courses.
- “Intent to Graduate” Form must be filed by 93 sh.