

CURRICULUM GUIDE FOR CHEMISTRY DEPARTMENT

(This is an example. Not all general education courses are listed or noted.)

BS DEGREE WITH A MAJOR IN BIOCHEMISTRY

32-36 semester hours in Chemistry

8 semester hours in Physics I-II

12 semester hours in Biology

4 semester hours in Calculus I

YEAR 1

FALL	COURSE TITLE	CREDITS
BIOL 115	Fundamentals of Cell Biology and Genetics	4
CHEM 110	General Chemistry I	4
MATH 117/ MATH 225	Precalculus with Algebra/ Calculus I	3-4

SPRING	COURSE TITLE	CREDITS
BIOL 116	Ecology, Evolution and Diversity*	4
BIOL 270	Genetics**	4
CHEM 111	General Chemistry II	4

YEAR 2

FALL	COURSE TITLE	CREDITS
CHEM 221	Organic Chemistry I	4
MATH 225	Calculus I (if needed)	4
PHYS 110	Elements of Physics I	4

SPRING	COURSE TITLE	CREDITS
CHEM 222	Organic Chemistry II	4
CHEM 233	Analytical Chemistry	4
PHYS 111	Elements of Physics II	4

YEAR 3

FALL	COURSE TITLE	CREDITS
CHEM 340	Biochemistry	4
CHEM 385	Scientific Information	1

SPRING	COURSE TITLE	CREDITS
CHEM 347	Biochemical Methods (even)	2
CHEM 446	Biochemistry II-Metabolism (even)	3

YEAR 4

FALL	COURSE TITLE	CREDITS
BIOL 350	Advanced Cell Biology (even)	3

SPRING	COURSE TITLE	CREDITS
CHEM 338	Physical Chemistry I***	4
CHEM 499	Capstone-Chemistry Research	2

NOTE: EVEN/ODD REFER TO CALENDAR YEARS.

*BIOL 116 is required for Pre-Med and Pre Pharmacy students, not for the biochemistry major.

**BIOL 270 may be taken in the spring of year 2.

***Please contact the Chemistry department for scheduling of CHEM 338 and electives.

THESE ELECTIVES ARE OPTIONAL***

CHEM 310	Medicinal Chemistry	3
CHEM 435	Molecular Spectroscopy	2
CHEM 436	Separation Methods	2

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(This is an example. Not all general education courses are listed or noted.)

BA DEGREE WITH A MAJOR IN BIOCHEMISTRY

31 semester hours in Chemistry 8 semester hours in Biology 3 or 4 semester hours in Pre-Calculus or Calculus I

YEAR 1

FALL	COURSE TITLE	CREDITS
BIOL 115	Fundamentals of Cell Biology and Genetics	4
CHEM 110	General Chemistry I	4
MATH 117/ MATH 225	Precalculus with Algebra/ Calculus I	3-4

SPRING	COURSE TITLE	CREDITS
BIOL 270	Genetics*	4
CHEM 111	General Chemistry II	4

YEAR 2

FALL	COURSE TITLE	CREDITS
CHEM 221	Organic Chemistry I	4

SPRING	COURSE TITLE	CREDITS
CHEM 222	Organic Chemistry II	4
CHEM 233	Analytical Chemistry	4

YEAR 3

FALL	COURSE TITLE	CREDITS
CHEM 340	Biochemistry	4
CHEM 385	Scientific Information	1

SPRING	COURSE TITLE	CREDITS
CHEM 347	Biochemical Methods	2
CHEM 446	Biochemistry II-Metabolism (even)	3

NOTE: EVEN/ODD REFER TO CALENDAR YEARS.

* BIOL 270 may be taken in the spring of year 2.

YEAR 4

SPRING	COURSE TITLE	CREDITS
CHEM 499	Capstone-Chemistry Research	1