

# CHEMISTRY MAJOR - B.S. (CH-PR)

## Pre-Medicine Concentration

Effective Spring 2017 to present

### First Year

Fall		Credits	Spring		Credits
CHEM 121	Chemical Principles I/Lab	4	CHEM 122	Chemical Principles II/Lab	4
MATH 121	Calculus I	3	MATH 122	Calculus II	3
CHEM 192	Freshman Chem. Seminar	0	PHYS 121	General Physics I/Lab	4
ENGL 103	Writing for Discipline, <u>G.E.</u>	3	CORE 113	First Year Seminar, <u>G.E.</u>	3
HIST XXX	History, <u>G.E.</u>	3	RLST 105	Francis & Glob. Iss., <u>G.E.</u>	3
Soc Sci 1st	Social Science (1 of 2), <u>G.E.</u>	3	CORE 104	Spring Comm. Enrich., <u>G.E.</u>	0
CORE 103	Fall Comm. Enrich., <u>G.E.</u>	0			
		<hr/> 16			<hr/> 17

### Second Year

Fall		Credits	Spring		Credits
CHEM 221	Organic Chemistry I/Lab	4	CHEM 222	Organic Chemistry II/Lab	4
BIOL 111	Biology I/Lab	4	CHEM 251	Quantitative Analysis/Lab	3
PHYS 122	General Physics II/Lab	4	CHEM 292	Sophomore Chem. Seminar	0
ENGL 104	Writing about Literature, <u>G.E.</u>	3	PHIL 205	Reason and Respons., <u>G.E.</u>	3
FNAR XXX	Fine Arts, <u>G.E.</u>	3	LANG XXX	Language, <u>G.E.</u>	3
CORE 211	Wellness, <u>G.E.</u>	0	Soc Sci 2nd	Social Science (2 of 2), <u>G.E.</u>	3
		<hr/> 18	CORE 212	Wellness, <u>G.E.</u>	0
					<hr/> 16

### Third Year

Fall		Credits	Spring		Credits
CHEM 321	Physical Chemistry I/Lab	4	CHEM 322	Physical Chemistry II/Lab	4
CHEM XXX	Chemistry Elective**	3	CHEM 405	Biochemistry I/Lab	4
BIOL XXX	Pre-Professional Elective*	4	CHEM 392	Junior Chem. Seminar	0
MATH 221/306	Mathematics Elective	3	BIOL XXX	Pre-Professional Elective*	4
GETM #1	Ethics Course, <u>G.E.</u>	3	GETM #3	Social Systems, <u>G.E.</u>	3
EXAM 301	Writing Comp. Exam, <u>G.E.</u>	0	GETM #4	Diversity/Comm., <u>G.E.</u>	3
		<hr/> 17			<hr/> 18

### Fourth Year

Fall		Credits	Spring		Credits
CHEM 324	Inorganic Chemistry/Lab	4	CHEM 323	Instrumental Analysis/Lab	3
CHEM XXX	Pre-Professional Elective**	3	CHEM 492	Chemistry Seminar	1
CORE 407	Keystone Seminar, <u>G. E.</u>	3	XXX	Elective	3
XXX	Elective	3	XXX	Elective	3
XXX	Elective	3	XXX	Elective	3
		<hr/> 16			<hr/> 13

### Mathematics Electives

MATH 221	Calculus III	3 or	MATH 306	Differential Equations	3
----------	--------------	------	----------	------------------------	---

\*Pre-Professional Electives (eight or more credits must be taken from the following)

BIOL 211	Comparative Anatomy/Lab	4	BIOL 302	Microbiology/Lab	4
BIOL 205	Anatomy & Physiology I/Lab	4	BIOL 206	Anatomy & Physiology II/Lab	4
BIOL 301	Genetics/Lab	4	BIOL 406	Vertebrate Physiology/Lab	4

\*\*Pre-Professional Electives (three or more credits must be taken from the following)

CHEM 206	Human Toxicology	3	CHEM 305	Environmental Chemistry/Lab	4
CHEM 308	Forensic Chemistry	3/4	CHEM 398/399	Chemistry Internship	3-4
CHEM 401	Spectroscopy	3	CHEM 402	Biophysics	3
CHEM 404	Advanced Organic Chemistry		CHEM 407	Biochemistry II/Lab	4
CHEM 410	Special Topics in Chemistry	3	CHEM 499	Undergraduate Research	1-4
CHEM 501	Independent Study in Chem.	1-8			

G.E. Inner core, under this paradigm, is completed by the end of the second year (except WCE, in 3rd year).  
Thematic minors: GETM course #2 is expected to be completed via one of the upper level science courses.

To obtain an ACS certified degree you must take the following classes: CHEM 121, 122, 192, 221, 222, 251, 292, 321, 322, 323, 324, 392, 398/399 OR 499, 405, and 6 credits of CHEM electives (305, 308, 401, 404, 407, 410, 501).

Note: Sequence of courses may be altered with advisor's approval.

Revised 02/25/2016