## **BACHELOR OF SCIENCE IN CHEMISTRY**

YE.		CHEMISTRY/BIOLOGY			GENERAL ELECTIVES	MATH/PHYSICS		CORE	TOTAL CREDITS
YEAR 1	FALL	CHEM 110 4 GENERAL CHEMISTRY I Co-Req: MATH 135 or higher	BIOL 110 4 GENERAL BIOLOGY I			MATH 141** 4 PRECALCULUS Pre-Req: Placement Exam or MATH 101		FCWR 101* 3 FOUNDATIONS OF COLLEGE COMPOSITION Pre-Req: Placement or WRIT 100	15
	SPRING	CHEM 150 4 GENERAL CHEMISTRY II Pre-Req: CHEM 110				MATH 170 4 CALCULUS I Pre-Req: Placement Exam, MATH 141 or MATH 136		FOUNDATIONS OF RESEARCH WRITING	FCSP 105  FOUNDATIONS OF SPEECH COMMUNICATION
YEAR 2	FALL	CHEM 210 4 ORGANIC CHEMISTRY I Pre-Req: CHEM 150				MATH 180 4 CALCULUS II Pre-Req: MATH 170	PHYS 170/ 4/5 PHYS 175 PHYSICS REQUIREMENT Co-Req: MATH 170	FCIQ 101 3 FOUNDATIONS OF INQUIRY	15/16
	SPRING	CHEM 250 4 ORGANIC CHEMISTRY II Pre-Req: CHEM 210			GENERAL 3 ELECTIVE	MATH 235 3 APPLIED STATISTICS Pre-Req: MATH 170 OR MATH 310 3 LINEAR ALGEBRA Pre-Req: MATH 180	PHYS 180/ 4/5 PHYS 185 PHYSICS REQUIREMENT Pre-Req: PHYS 170 or PHYS 175 Co-Req: MATH 180	FCWR 304 or 3 FCWR 302 COMMUNICATION FOR TECH. PROFESSIONS OR HEALTHCARE CAREERS Pre-Req: FCWR 151	17/18
YEAR 3	FALL	CHEM 310 4 QUANTITATIVE ANALYSIS Pre-Req: CHEM 150	BIOL 340 4 BIOCHEMISTRY Pre-Req: BIOL 150 and CHEM 210	SCIENCE 3 ELECTIVE (3 or 4 credits)	GENERAL 3 ELECTIVE			PHILOSOPHY CHOICE	17
	SPRING	CHEM 350 3 INSTRUMENTAL ANALYSIS Pre-Req: CHEM 310	CHEM 395 3 INTRODUCTION TO RESEARCH DESIGN Pre-Req: Any 300 level CHEM course	SCIENCE 3 ELECTIVE (3 or 4 credits)	GENERAL 3 ELECTIVE			ICBS 3XX*** 3 BEHAVIORAL SCIENCE CHOICE	15
YEAR 4	FALL	CHEM 410 4 PHYSICAL CHEMISTRY I Pre-Req: CHEM 310 and Co-Req: MATH 170	CHEM 48X 3 RESEARCH LAB PROJECT	SCIENCE 3 ELECTIVE (3 or 4 credits)				ICLT 3XX*** 3 LITERATURE CHOICE	13
	SPRING	CHEM 450 4 PHYSICAL CHEMISTRY II Pre-Req: CHEM 410 and Co-Req: MATH 180	CHEM 470 3 INORGANIC CHEMISTRY Pre-Req: CHEM 310	SCIENCE 3 ELECTIVE (3 or 4 credits)	GENERAL 3 ELECTIVE			ICSS 3XX*** 3 SOCIAL SCIENCES CHOICE	16

CREDITS 122

Science Elective Options (credits)	Manhattan	Old Westbury
CHEM 320 ENVIRONMENTAL CHEMISTRY (3)	FALL ONLY	AS NEEDED
CHEM 455 Computational Chemistry (3)	SPRING ONLY	SPRING ONLY
CHEM 420 PHARMACEUTICAL CHEMISTRY (3)	SPRING ONLY	SPRING ONLY
CHEM 440 DRUG DISCOVERY (3)	AS NEEDED	SPRING ONLY
BIOL 210 HUMAN GROSS ANATOMY (4)	SPRING ONLY	FALL and SPRING
BIOL 310 HUMAN PHYSIOLOGY (4)	FALL ONLY	FALL and SPRING

\*Non-native English speakers take FCWR 111 instead of FCWR 101, and FCWR 161 instead of FCWR 151.

Science Electives must be a 200 level or higher courses. In addition, CHEM 215 is NOT an acceptable science elective. For students that are planning to apply to medical school, you must take BIOL 150 (General Biology II) as one of your science electives as well as PSYC 101 and SOCI 101 for General Electives.

Course names, numbers and/or pre-requisites are subject to change. (Rev. 3/22)

<sup>\*\*</sup> Some students must take both MATH 135 and MATH 136. Both courses are the equivalent of MATH 141.

<sup>\*\*\*</sup>Seminar pre-requisites include: FCWR 151, FCIQ 101, FCSC 101, and FCSP 105.