## **BACHELOR OF SCIENCE IN BIOTECHNOLOGY**

YEAR TERM		BIOLOGY/CHEMISTRY			MANAGEMENT/ELECTIVES		MATH/PHYSICS	CORE		TOTAL CREDITS
YEAR 1	FALL	BIOL 110 4 GENERAL BIOLOGY I		CHEM 110 4 GENERAL CHEMISTRY I Co-Req: MATH 135 or higher			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	BIOL 150 4 GENERAL BIOLOGY II Pre-Req: BIOL 110		CHEM 150 4 GENERAL CHEMISTRY II Pre-Req: CHEM 110			MATH 170 4 CALCULUS I Pre-Req: Placement Exam, MATH 141, MATH 136	FCWR 151* 3 FOUNDATIONS OF RESEARCH WRITING Pre-Req: FCWR 101	FOUNDATIONS OF INQUIRY	18
YEAR 2	FALL	BIOL 233 4 GENETICS Pre-Req: BIOL 150 and CHEM 150 NYC – Spring Only	BIOL 250 3 BIOSTATISTICS Pre-Req: BIOL 110 & MATH 170	CHEM 210 4 ORGANIC CHEMISTRY I Pre-Req: CHEM 150			PHYS 175 5 PRE-MED PHYSICS I Co-Req: MATH 170			16
	SPRING	BIOL 350 3 BIOINFORMATICS Pre-Req BIOL 233 and BIOL 250	BIOL 238 3 INTRO. TO BIOTECH Pre-Req: BIOL 150	CHEM 250 4 ORGANIC CHEMISTRY II Pre-Req: CHEM 210			PHYS 185 5 PRE-MED PHYSICS II Pre-Req: PHYS 175	FCSP 105 3 FOUNDATIONS OF SPEECH COMMUNICATION		18
YEAR 3	FALL	BIOL 235 4 MICROBIOLOGY Pre-Req: BIOL 150	BIOL 340 4 BIOCHEMISTRY Pre-Req; BIOL 150 and CHEM 210	BIOL 336 3 MOLECULAR BIOLOGY				ICBS 3XX*** 3 BEHAVIORAL SCIENCE CHOICE	FCWR 304 or 3 FCWR 302 COMMUNICATION FOR TECH. PROF. OR HEALTHCARE CAREERS Pre-Req: FCWR 151	17
	SPRING	BIOL 432 3 CELL BIOLOGY  NYC – Fall Only	BIOL 395 3 INTRODUCTION TO RESEARCH LITERATURE Pre-Req: Any 300 level BIOL or CHEM course					ICSS 3XX*** 3 SOCIAL SCIENCES CHOICE	ICPH 3XX*** 3 PHILOSOPHY CHOICE	12
YEAR 4	FALL	BIOL 341 3 GENETIC ENGINEERING Co-Req: BIOL 233	CHEM 420 3 PHARMACEUTICAL CHEMISTRY Pre-Req: BIOL 340	BIOL /CHEM 48X BIOL 493 or BIOL 494 RESEARCH PROJECT LAB OR RESEARCH III or INDEPENI		GENERAL 3 ELECTIVE		ICLT 3XX*** 3 LITERATURE CHOICE		15/16
	SPRING	BIOL 442 3 BIOPROCESSING Pre-Req: BIOL 340 and BIOL 341 SPRING ONLY	CHEM 440 3 DRUG DISCOVERY Pre-Req: CHEM 420 or BIOL 456	SCIENCE 3 ELECTIVE	SCIENCE 3 ELECTIVE	GENERAL 3 ELECTIVE				15

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Science Elective Options (credits)	Manhattan	Old Westbury	Science Elective Options (credits)	Manhattan	Old Westbury
BIOL 210 HUMAN GROSS ANATOMY (4)	SPRING ONLY	FALL and SPRING	BIOL 331 VIROLOGY (3)	SPRING ONLY	SPRING ONLY
BIOL 310 HUMAN PHYSIOLOGY (4)	FALL ONLY	FALL and SPRING	BIOL 336 MOLECULAR BIOLOGY (4)	AS NEEDED	AS NEEDED
BIOL 241 DEVELOPMENTAL BIOLOGY (4)	AS NEEDED	SPRING ONLY	BIOL 346 IMMUNOLOGY (3)	AS NEEDED	AS NEEDED
BIOL 312 PATHOPHYSIOLOGY (3)	AS NEEDED	SPRING ONLY	BIOL 461 CANCER BIOLOGY (3)	AS NEEDED	FALL ONLY
BIOL 315 NEUROSCIENCE (3)	FALL ONLY	SPRING ONLY	BIOL 456 PHARMACOLOGY (3)	i	FALL and SPRING
			CHEM 470 INORGANIC CHEMISTRY (3)	FALL ONLY	FALL ONLY

<sup>\*</sup>Non-native English speakers take FCWR 111 instead of FCWR 101, and FCWR 161 instead of FCWR 151. Course names, numbers and/or pre-requisites are subject to change

Science Electives must be a 200 level or higher courses. In addition, BIOL 215 or CHEM 215 are not acceptable science electives.

<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.