Interamerican University of Puerto Rico
Aguadilla Campus
Department of Science Technology

Sequential Bachelor of Science in Biotechnology

Effective Date: 2018

FIRST YEAR – FIRST SEMESTER

CODE	COURSE	CRS.
BIOL 1101	General Biology I (concurrent requirement BIOL 1103)	3
BIOL 1103	Biology Skills Laboratory I (concurrent requirement BIOL 1101)	1
GEEN 1101 GEEN 1201 GEEN 2311	English I (One of them according to the results of the College Board)	3
GEIC 1010	Information and Computer Technologies	3
GEMA 1200	Fundamentals of Algebra	3
GESP 1101	Literature and Communication: Narrative and Poetry	3
TOTAL		16

FIRST YEAR – SECOND SEMESTER

CODE	COURSE	CRS.
BIOL 1102	General Biology II (BIOL requirement 1101 and 1103)	3
CHEM 1111	General Chemistry I (GEMA 1200 requirement)	4
GEEN 1102 GEEN 1202 GEEN 2312	English II (One of them according to the results of the College Board)	3
GESP 1102	Literature and Communication: Essay and Theatre	3
MATH 1500	Pre-calculus	5
TOTAL		18

SECOND YEAR – FIRST SEMESTER

CODE	COURSE	CRS.
BIOL 2013	Skills Lab II (BIOL 1103 and CHEM 1111 requirement)	1
BIOL 3010	Genetics (BIOL 1102 and GEMA 1200 requirement)	3
BIOL 3105	General Microbiology (BIOL 1102, BIOL 1104 and CHEM 1111 requirement)	4
CHEM 2212	General Chemistry II (MATH 1500 or 1511 and CHEM 1111 requirement)	4
GEEN 1103 GEEN 1203 GEEN 2313	English III (One of them according to the results of the College Board)	3
GESP 2203	Literature and Worldview	3
TOTAL		18

SECOND YEAR – SECOND SEMESTER

CODE	COURSE	CRS.
BIOL 2153	Biostatistics (MATH 1500 or MATH 1512 and BIOL 1102 requirement)	3
BIOT 3250	Molecular Biotechnology (BIOL 3010 and BIOL 3105 requirement)	3
CHEM 2221	Organic Chemistry I (requirement CHEM 2212)	4
GEHS 2010	Historical Process of Contemporary Puerto Rico	3
PHYS 3001	General Physics I (MATH 1500 or MATH 1512 requirement)	4
TOTAL		16

THIRD YEAR – FIRST SEMESTER

CODE	COURSE	CRS.
BIOL 3405	Immunology (BIOL 3105 requirement)	3
BIOL 4604	Cellular and Molecular Biology (BIOL 3010 or BMSC 2010 and CHEM 2221)	3
CHEM 2222	Organic Chemistry II (requirement CHEM 2221)	4
GEHP 3000	Integral Health and Quality of Life	3
GEPE 3010 GEPE 3020 GEPE 3030	Art Appreciation Music Appreciation Theatre Appreciation (Select one of three courses)	3
TOTAL		16

THIRD YEAR – SECOND SEMESTER

CODE	COURSE	CRS.
BIOT 3750	Recombinant DNA Technology (BIOL 3010 and BIOT 3250 requirement)	3
BIOT 4620	Tissue Culture and Technical Applications (BIOL 4604 requirement)	3
CHEM 3320	Analytical Chemistry (requirement CHEM 2212 and MATH 1500 or MATH 1512)	4
GEEC 2000	Entrepreneurial Culture	3
PHYS 3002	General Physics II (PHYS 3001 requirement)	4
TOTAL		17

FOURTH YEAR – FIRST SEMESTER

CODE	COURSE	CRS.
BIOL 4433	Industrial Microbiology (BIOL 3105 and CHEM 2212 requirement)	3
BIOT 4954	Research Methods (requirement 15 credits in natural sciences in the areas of biology, chemistry or biotechnology and authorization from the Department Director)	3
CHEM 4220	Biochemistry (requirement CHEM 2222 and CHEM 3320)	4
GEHS 3020 GEHS 3050 GEHS 4020 GEHS 4030	Global Society Human Formation, Society and Culture Ancient and Medieval Western Civilization Modern and Contemporary Western Civilization (Select one of four courses)	3
TOTAL		13

FOURTH YEAR – SECOND SEMESTER

CODE	COURSE	CRS.
BIOT 4710	Agricultural and Environmental Biotechnology (requirement BIOT 3750 and BIOL 4433)	3
BIOT 4928	Protein Purification and Analysis (BIOL 4604 and CHEM 4420)	3
ELECTIVE COURSES	Elective Course (Choose a course)	3
GECF 1010	Christian Faith	3
GEPE 4040	Ethics and Social Responsibility	3
TOTAL		15

REQUIREMENTS FOR THE BACHELOR

DEGREE REQUIREMENTS	CREDITS
General Education Requirements	45
Concentration requirements	45
Related requirements	37
Elective courses	3
TOTAL	130

NOTES:

In the English curriculum, the student will take one of the following sequences according to PAA score:
Level 1 – Elementary: PAA score up to 440
Level 2 – Intermediate: PAA score up to 441-580
Level 3 – Advanced: PAA score 581 or higher

You will need to obtain a minimum grade of C in the Biotechnology (BIOT) courses that are part of the Concentration Requirements.
Obtain a minimum average concentration of 2.50.