*Biotechnology (A.S. Degree) **

Joint Degree (City College)

FALL 2023-SPRING 2024

Footnotes:

[1]Students with English Proficiency Index (EPI) of 0-49 enroll in corequisite course ENG 100. Students with EPI of 50-64 enroll in corequisite course ENG 110. Students with EPI of at least 65 (or other English proficiency qualification) enroll in ENG 111. Students with ESL need should take appropriate ESL course(s) (Sequence: ESL 01->02->03->09) before enrolling in ENG 110.

[2] Students are eligible to enroll in MTH 28 if they have successfully completed an elementary algebra math intervention at a CUNY college (e.g., Math Proficiency Workshop, CUNY Start Math, Math Start, or MTH 5), or if they are CUNY Math proficient AND have the appropriate math background in high school. See the Mathematics Course Placement page in the College Catalog.

[3]Students not eligible for MTH 28 or higher courses enroll in corequisite course MTH 28.5. However, note that students with Math Proficiency Index of 39 or lower are strongly encouraged to enroll in Math Start/CUNY Start.

[4]See Degree map at: http://www.bcc.cuny.edu/academics/academic-advising/degree-maps/ for semester-by-semester sequence.

[5]Students who do not place out of MTH 28 should select PHY 11 so as not to exceed the 60 credits limit for the program.

[6]Only students who place out of MTH 28 will have free electives and can use one elective credit toward CHM 31.

***Note:**
In order to apply for graduation, students must complete all required courses with appropriate grades, complete two writing intensive courses, and have a minimum GPA of 2.0.

REQUIRED COMMOM CORE

☐ A ☐ A	**English Composition**[1] ENG 100[1] **OR** ENG 110[1] **OR** ENG 111; **AND** ENG 112 **OR** ENG 113 **OR** ENG 114 **OR** ENG 115 **OR** ENG 116	6
☐ **B**	**Mathematical and Quantitative Reasoning**[2] MTH 28[2] College Algebra and Elementary Trigonometry **OR** MTH 28.5[3] **(Corequisite)**	3
☐ **C**	**Life and Physical Sciences** BIO 120 Biology I: Molecules, Cells, and Genes	4
	Subtotal:	**13**

FLEXIBLE COMMON CORE

Students can complete no more than two courses from any one discipline or interdisciplinary field.	
☐ **A World Cultures and Global Issues**	3
☐ **B US Experience in its Diversity**	3
☐ **C Creative Expression**	3
☐ **D Individual and Society**	3
☐ **E Scientific World** BIO 121 Biology II: Organisms, Biodiversity, and Systems **AND** MTH 30 Pre-Calculus Mathematics	8
Subtotal:	**20**

MAJOR REQUIREMENTS[4]

☐ BIO 55	Genetics	3
☐ BIO 56	Cell and Molecular Biology with an Introduction to Biotechnology	4
☐ CHM 11	General College Chemistry I	4
☐ CHM 12	General College Chemistry II	4
☐ ELECTIVES[3]	Free Electives[3]	0-3
☐ MTH 31	Analytic Geometry & Calculus I	4
☐ MTH 37	Elements of Calculus and Statistics	4
☐ PHY 11[5] **OR** ☐ CHM 31[6]	PHY 11 College Physics I[5] **OR** CHM 31 Organic Chemistry I[6]	4-5
	Subtotal:	**27**
	TOTAL:	**60**