## Biotechnology (A.S. Degree)

Joint Degree (City College)
FALL 2022-SPRING 2023

REMEDIAL SEQUENCE (if required)

| $\square$ ESL 1 (8) * | $\square$ ESL 2 (6) * | $\square \mathrm{ESL} 3(6)$ 》 $\square$ ENG $9(4)$ |
| :---: | :---: | :---: |
| $\square$ ENG $1^{11}(4)$ - | $\square$ ENG ${ }^{11}$ (4) |  |

$\square E N G 2^{1}(4)$
$\square$ RDL $1^{11}$ (4) " $\square$ RDL $^{1}{ }^{1}$ (6)
$\square$ MTH $1^{2}$ (4) * $\square$ MTH $5^{2}$ (6) 》 $\square$ MTH $6^{2}$ (6)

## $\square$ CHM 2 (4)

## GRADUATION REQUIREMENT

| $\square$ GPA $\geq 2.0$ | $\square$ Writing Intensive 1 | $\square$ Writing Intensive 2 |
| :--- | :--- | :--- | FRESHMAN SEMINAR

## $\square$ FYS 11

${ }^{1}$ ENG 1/ENG 2 \& RDL 1/RDL 2 are no longer offered. Students with ENG/RDL developmental need will now enroll in corequisite course ENG 100 (if English Proficiency Index is 0-49), OR ENG 110 (if English Proficiency Index is $50-64$ ).
${ }^{2}$ MTH 1/MTH $5 /$ MTH 6 are no longer offered. They have been replaced by MTH 28/28.5. Students who 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) are eligible for MTH 28.
${ }^{3}$ For MTH 28 enrollment, a new student must be CUNY Math Proficient, and will also have to meet one of the following criteria:

Mathematics high school GPA of at least 70 and successful completion of a course beyond Algebra 1 OR New York State Regents Trigonometry Score of at least 65, OR New York State Regents Common Core Algebra 2 Score of at least 65.
${ }^{3}$ Only students who place out of MTH 28 will have free electives, and can use one elective credit toward CHM 31.
${ }^{4}$ See Degree map at: http://www.bcc.cuny.edulacademics/academic-advising/degree-maps/ for semester-bysemester 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.
NOTE: For acceptance to the B.S. program at the City College, students must have a 2.75 GPA in their science courses.

## REQUIRED COMMON CORE

| $\begin{aligned} & \square A \\ & \square A \end{aligned}$ | English Composition ${ }^{1}$ <br> ENG $100^{1}$ OR ENG $110^{1}$ OR ENG 111; AND ENG 112 OR ENG 113 OR ENG 114 OR ENG 115 OR <br> ENG 116 | 6 |
| :---: | :---: | :---: |
| $\square \mathrm{B}$ | Mathematical and Quantitative Reasoning ${ }^{2}$ <br> MTH $28^{3}$ College Algebra and Elementary Trigonometry OR MTH $28.5^{2}$ (Corequisite) | 3 |
| $\square \mathrm{C}$ | Life and Physical Sciences BIO 11 General Biology I | 4 |
| Subtotal: |  | 13 |


| FLEXIBLE COMMON CORE (Course list at: http://www.bcc.cuny.edu/pathways/?p=Flexible-Common-Core) |  |
| :--- | :---: |
| Students can complete no more than two courses from any one discipline or interdisciplinary field. |  |
| $\square$ A World Cultures and Global Issues | 3 |
| $\square$ B US Experience in its Diversity | 3 |
| $\square$ Creative Expression | 3 |
| $\square$ Individual and Society | Subtotal: |
| $\square$ E Scientific World |  |
| BIO 12 General Biology II AND MTH 30 Pre-Calculus Mathematics |  |

## MAJOR REQUIREMENTS ${ }^{4}$

| $\square$ BIO 55 | Genetics | 3 |
| :--- | :--- | :---: |
| $\square$ BIO 56 | Cell and Molecular Biology with an Introduction <br> to Biotechnology |  |
| $\square$ CHM 11 | General College Chemistry I | 4 |
| $\square$ CHM 12 | General College Chemistry II | 4 |
| $\square$ ELECTIVES 3 | Free Electives ${ }^{3}$ | 4 |
| $\square$ MTH 31 | Analytic Geometry \& Calculus I | $0-3$ |
| $\square$ MTH 37 | Elements of Calculus and Statistics | 4 |
| $\square$ PHY 115 OR | PHY 11 College Physics I ${ }^{5}$ OR <br> CHM 31 Organic Chemistry I | Subtotal: |

