

## Biotechnology (A.S. Degree) Joint Degree (City College)

### REMEDIAL/ESL SEQUENCE (if required)

ESL 1 (8) ▶▶  ESL 2 (6) ▶▶  ESL 3 (6) ▶▶  ENG 9 (4)

ENG 1<sup>1</sup> (4) ▶▶  ENG 2<sup>1</sup> (4)

RDL 1<sup>1</sup> (4) ▶▶  RDL 2<sup>1</sup> (6)

MTH 1<sup>2</sup> (4) ▶▶  MTH 5<sup>2</sup> (6) ▶▶  MTH 6<sup>2</sup> (6)

CHM 2<sup>5</sup> (4)

### GRADUATION REQUIREMENTS

GPA ≥ 2.0  Writing Intensive 1  Writing Intensive 2

### FRESHMAN SEMINAR

FYS11

<sup>1</sup>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).

<sup>2</sup>MTH 1/MTH 5/MTH 6 are no longer offered. STEM students who are CUNY Math Proficient, or have Math developmental need will now enroll in corequisite course MTH 28.5.

<sup>3</sup>For MTH 28 enrollment, CUNY Math Proficient STEM students 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.

<sup>4</sup>Only students who place out of MTH 28 will have free electives. Students who place out of MTH 28 can use one elective credit toward CHM 31. Students who do not place out of MTH 28 should select PHY 11 so as not to exceed the 60 credit limit for the program.

<sup>5</sup>CHM 2 is a pre-requisite for CHM 11. Students can place out of CHM 2 by taking a Department administered Chemistry Placement Exam or by having a score of 75 or higher on the NYS High School Regents Chemistry exam.

**Note:** To be accepted in the B.S. program at City College, students must have a 2.75 GPA in their science courses.

## RECOMMENDED 2-YEAR ACADEMIC PLAN

SEMESTER I Freshman		Credits
<input type="checkbox"/> ENG 100 <sup>1</sup> <b>OR</b> ENG 110 <sup>1</sup> <b>OR</b> ENG 111	English Composition I <sup>1</sup> ( <b>Required Core A</b> )	3
<input type="checkbox"/> MTH 28 <sup>2,3,4</sup> <b>OR</b> MTH 28.5	College Algebra and Elementary Trigonometry <b>OR</b> Corequisite ( <b>Required Core B</b> ) <sup>2,3,4</sup>	3
<input type="checkbox"/> BIO 11	General Biology I (Life and Physical Science) ( <b>Required Core C</b> )	4
<input type="checkbox"/> Flexible Core A-D	Select <b>ONE</b> course from any Flexible Core A-D	3
<b>Subtotal:</b>		<b>13</b>

SEMESTER II Freshman		Credits
<input type="checkbox"/> ENG 112 <b>OR</b> ENG 113 <b>OR</b> ENG 114 <b>OR</b> ENG 115 <b>OR</b> ENG 116	English Composition II ( <b>Required Core A</b> )	3
<input type="checkbox"/> CHM 11 <sup>5</sup>	General College Chemistry I <sup>5</sup> ( <b>Major Requirement</b> )	4
<input type="checkbox"/> BIO 12	General Biology II ( <b>Flexible Core E</b> )	4
<input type="checkbox"/> MTH 30	Pre-Calculus Mathematics ( <b>Flexible Core E</b> )	4
<b>Subtotal:</b>		<b>15</b>

SEMESTER III Sophomore		Credits
<input type="checkbox"/> CHM 12	General College Chemistry II ( <b>Major Requirement</b> )	4
<input type="checkbox"/> MTH 31	Analytic Geometry & Calculus I ( <b>Major Requirement</b> )	4
<input type="checkbox"/> BIO 55	Genetics ( <b>Major Requirement</b> )	3
<input type="checkbox"/> Flexible Core A-D	Select <b>ONE</b> course from a different Flexible Core Area	3
<input type="checkbox"/> Flexible Core A-D	Select <b>ONE</b> course from a different Flexible Core Area	3
<b>Subtotal:</b>		<b>17</b>

SEMESTER IV Sophomore		Credits
<input type="checkbox"/> BIO 56	Cell and Molecular Biology ( <b>Major Requirement</b> )	4
<input type="checkbox"/> PHY 11 <sup>4</sup> <b>OR</b> CHM 31	College Physics I <sup>4</sup> <b>OR</b> Organic Chemistry I ( <b>Major Requirement</b> )	4-5
<input type="checkbox"/> MTH 37	Elements of Calculus and Statistics ( <b>Major Requirement</b> )	4
<input type="checkbox"/> Flexible Core A-D	Select <b>ONE</b> course from a different Flexible Core Area	3
<input type="checkbox"/> Free Elective <sup>4</sup>	Free Elective to complete 60 credits <sup>4</sup>	0-3
<b>Subtotal:</b>		<b>15-16</b>

**TOTAL: 60**