**2019-2020**

**Degree Map:** [**Biotechnology (BS)**](https://www.york.cuny.edu/produce-and-print/contents/bulletin/school-of-arts-and-sciences/biology/biotechnology-bs)

Department of Biology

School of Arts & Sciences | York College | CUNY

Academic Core 4E03 | 718-262-2700

The following is a **suggested** plan of study for completion of this degree program.

The goal of a Degree Map is to ensure that students graduate with no more than 120 credits and in four years.

* All students should speak with an academic advisor about their academic programs.

**This document is not a substitute for academic advisement.**

* Students are encouraged to take Winter and Summer courses to facilitate their progress towards graduation.
* Transfer students do not need to take all courses in the plan; they should consult with an academic advisor.

| Course | Credit | Course | Credit |
| --- | --- | --- | --- |
| **FIRST YEAR - FALL** | **14** | **FIRST YEAR - SPRING** | **15** |
| English Composition (EC): ENG 125 | 3 | English Composition (EC): ENG 126 | 3 |
| Mathematical & Quantitative Reasoning (MQR): Math 120\*@ | 4 | Scientific World (SW):  CHEM 108\* + CHEM 109\* | 5 |
| Life & Physical Science (LPS): BIO 201\* | 4 | Creative Expression (CE)‡ | 3 |
| College Option: HE 111 | 3 | Additional Flexible Core Course:  BIO 202\* (SW) | 4 |

| Course | Credit | Course | Credit |
| --- | --- | --- | --- |
| **SECOND YEAR - FALL** | **16** | **SECOND YEAR - SPRING** | **16** |
| US Experience in its Diversity (USED)‡ | 3 | Individual & Society (IS)‡ | 3 |
| MATH 121\*@ | 4 | College Option: Foreign Language† | 3 |
| BIO 301 (WI) | 4 | PHYS 113 + PHYS 115 | 5 |
| CHEM 111 + CHEM 112 | 5 | CHEM 231 | 3 |
|  |  | CHEM 232 | 2 |

| Course | Credit | Course | Credit |
| --- | --- | --- | --- |
| **THIRD YEAR - FALL** | **14** | **THIRD YEAR - SPRING** | **14.5** |
| College Option: Foreign Language† | 3 | World Culture & Global Issues (WCGI)‡ | 3 |
| BIO 412 or CHEM 412 | 3 | BTEC 302 | 4 |
| PHYS 114 + PHYS 116 | 5 | BTEC Elective\* | 4.5 |
| CHEM 233 | 3 | Minor Course or Free Elective | 3 |

| Course | Credit | Course | Credit |
| --- | --- | --- | --- |
| **FOURTH YEAR - FALL** | **15** | **FOURTH YEAR - SPRING** | **15.5** |
| Minor Course or Free Elective‡ | 3 | Writing Intensive (WI): BTEC 480 (WI) | 5 |
| College Option: Writing Requirement: BTEC 489 (WI) | 3 | BTEC Elective\* | 4.5 |
| BTEC 352 | 3 | Minor Course or Free Elective | 3 |
| Minor Course or Free Elective | 3 | Minor Course or Free Elective | 3 |
| Minor Course or Free Elective | 3 |  |  |

* York students are required to complete (pass) three (3) Writing intensive (WI) courses: two (2) in the lower division (100-200 level) and one (1) in the upper division (300-level).
* If you transferred to York College with credit for General Education requirements, you must still complete one (1) WI course in the upper division within your major. If your major has no upper division WI course, you must take a WI course chosen in consultation with your major advisor.
* B.S. students must complete 60 credits of liberal arts – See Bulletin.
* Students are strongly encouraged to select a Minor program of study, in consultation with an academic advisor, especially those planning to attend graduate school. Minor courses would replace the “free electives” in the Degree Map.

†Foreign language courses are determined through placement by the Foreign Language Department, AC-3C08

‡The Biology Department recommends students take Writing-Intensive courses within the Flexible Core requirements.

If not WI, two additional WI courses must be taken in place of free electives before graduation.

**Notes for Biotechnology Major Requirements**

\* These courses can also be taken to satisfy Core Curriculum requirements.

\*\* BTEC 480 and BTEC 489 are the upper division WI courses in the major.

@Students that do not place directly into MATH 121 may need to take up to 8 credits of MATH prerequisites, MATH 120 (4 credits) and/or (MATH 102 (1 credit) or MATH 104 (3 credits) or MATH 115 (4 credits)). Those courses subtract from the free-electives total. Students that elect to take MATH 104 or MATH 115 as pre-requisites for MATH 120 risk exceeding 120 credits in the completion of their major.

**NOTE:** Students interested in graduate studies are strongly advised to take BIO 320, CHEM 234, 321, 322 and MATH122 and 221. Research experience is also strongly recommended.

**Required Core:** English Composition (EC); Mathematical & Quantitative Reasoning (MQR); Life & Physical Science (LPS)

**Flexible Core:** World Cultures & Global Issues (WCGI), U.S. Experience in its Diversity (USED), Creative Expression (CE), Individual & Society (IS), Scientific World (SW)