

Biology, A.S.

HEGIS: 5604.00

PROGRAM CODE: 01039

PROGRAM DIRECTOR: Dr. Kristin Polizzotto

DEPARTMENT: BIOLOGICAL SCIENCES

The Biology AS degree is designed to provide students with the foundational courses in biology, chemistry, and mathematics in preparation for transfer to baccalaureate programs. Concentrations in Allied Health Transfer or Biology Transfer provides students the opportunity for additional focus on a specific area of interest within the field. Courses promote understanding of modern biological principles, application of methods and process of life science, foster independent thinking, address biology's relevance to modern societal issues, and support quantitative reasoning, scientific writing, and research.

The curriculum presented here applies to students who started the major in Fall 2026 or Spring 2027. If you enrolled as a matriculant prior to that, please see the *College Catalog* for the year you started the major as a matriculant for the curriculum requirements that apply to you.

Consultation with the Program Advisor is required.

Degree Maps:

Degree Map for Biology, A.S. - Allied Health Transfer Concentration (**see below**)

Degree Map for Biology, A.S. - Biology Transfer Concentration (**see below**)

Your Degree Map contains the suggested term-by-term course sequence for your academic path towards graduation.

To ensure successful and timely completion of your degree, it is recommended that you meet with your academic advisor to discuss your unique map.

Please note some courses *may* only be offered once and academic year.

Program Learning Outcomes:

Upon successful completion of the Biology degree program requirements, graduates will:

1. identify and apply the methods and process of life science
2. demonstrate proficiency in quantitative reasoning as it relates to life science data
3. demonstrate an understanding of evolution
4. demonstrate an understanding of the relationship between structure and function
5. demonstrate an understanding of genetics
6. demonstrate an understanding of the pathways of energy and matter that maintain a particular environment in living systems

7. demonstrate an understanding of the levels of biological organization and the interactions among these levels
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College Requirements:

English and Math proficient as determined by the CUNY Proficiency Index, unless otherwise exempt, or successful completion of any required developmental course(s).

Civic Engagement Experiences:

One (1) Civic Engagement experience satisfied by Civic Engagement Certified or Civic Engagement Component course or approved outside activity.

Writing Intensive Requirement:

One (1) Writing Intensive Course in any discipline is required.

Required Core (4 Courses, 13 Credits):

When Required Core Courses are specified for a category, they are required for the major

- ENG 1200 - Composition I 3 Credit(s)
 - ENG 2400 - Composition II 3 Credit(s)
 - **Mathematical & Quantitative Reasoning Course 3 Credit(s)***
 - MAT 9010 - Introduction to Mathematics with College Algebra 3 Credit(s) **or**
 - MAT 9B0 - College Algebra for STEM Majors 3 Credit(s) **or**
 - MAT 900 - College Algebra 3 Credit(s)
 - **Life & Physical Sciences Course***
 - BIO 1300 - General Biology I 4 Credit(s)
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Flexible Core (6 Courses, 19 Credits):

When Required Core Courses are specified for a category they are strongly suggested and/or required for the major

One course from each Group A to D (Group E is satisfied by the courses shown). **No more than two courses can be selected from the same discipline**

A. World Cultures and Global Issues Designated Course

B. U.S. Experience in its Diversity Designated Course

C. Creative Expression Designated Course

D. Individual and Society Designated Course

E. Scientific World Designated Course*

- BIO 1400 - General Biology II 4 Credit(s)
 - MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics 3 Credit(s)
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Major Requirements (3 Courses, 11 to 12 Credits):

- CHM 1100 - General Chemistry I 4 Credit(s)
 - CHM 1200 - General Chemistry II 4 Credit(s)
- AND**
- CP 1100 - Introduction to Computers and Computer Applications 4 Credit(s) **or**
 - BIO 6000 - Computer Applications in Bioinformatics 3 Credit(s) **or**
 - CIS 6000 - Computer Applications in Bioinformatics 3 Credit(s)
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Concentrations (2 Courses, 8 Credits):

Select **one (1)** of the following concentrations:

Allied Health Transfer (2 Courses, 8 Credits):

- BIO 1100 - Human Anatomy and Physiology I 4 Credit(s)
 - BIO 1200 - Human Anatomy and Physiology II 4 Credit(s)
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Biology Transfer (2 Courses, 8 Credits):

- BIO 2100 - Comparative Anatomy 4 Credit(s) **or**
 - BIO 2200 - Developmental Biology 4 Credit(s) **or**
 - BIO 5000 - General Microbiology 4 Credit(s) **or**
 - BIO 5200 - Marine Biology 4 Credit(s) **or**
 - BIO 5300 - Ecology 4 Credit(s) **or**
 - BIO 5800 - Recombinant DNA Technology 4 Credit(s) **or**
 - BIO 5900 - Genetics 4 Credit(s) **or**
 - BIO 6500 - Molecular and Cellular Biology 4 Credit(s)
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Electives:

8 to 9 credits sufficient to meet required total of 60 credits

Allied Health Transfer Option, Suggested Elective:

- BIO 9100 - Biostatistics 4 Credit(s) or
- MAT 9100 - Biostatistics 4 Credit(s)

Transfer to a Physician Assistant Program, Suggested Elective:

- BIO 5100 - Microbiology in Health and Disease 4 Credit(s)
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Notes:

* This program has a waiver to require particular courses in the Common Core, otherwise more than the minimum credits for the degree may be necessary.

Total Credits: 60

Degree InformationCatalog Year: **2026 - 2027**Plan: **Biology AS**Sub Plan: **Allied Health**Required Credits: **60**General RequirementsReq GPA: **2.0**Req Residential Credits: **30**Req Pathways Credits: **32**Req Civic Engagement: **1**Req Writing Intensive: **1****1**

Session A

COURSE	CRS
ENG 1200	3
BIO 1300	4
MAT 9010 or MAT 9B0 or MAT 900 (NEED MIN. GRADE C)	3
Choose 1: Flexible Core U.S. Experiences in Its Diversity	3

Session B

COURSE	CRS
ENG 2400	3

SEMESTER CRS: 16

2

Session A

COURSE	CRS
BIO 1400	4
CHM 1100*	4
CHM 100*	0
MAT 1400 (NEED MIN. GRADE C)^	3

Session B

COURSE	CRS
ELECTIVE	3

SEMESTER CRS: 14

3

Session A

COURSE	CRS
BIO 1100	4
CHM 1200	4
Choose 1: Flexible Core Creative Expression	3
ELECTIVE	3

Session B

COURSE	CRS
CP 1100	4

SEMESTER CRS: 18

4

Session A

COURSE	CRS
BIO 1200	4
Choose 1: Flexible Core Individual & Society	3
Choose 1: Flexible Core World Cultures & Global Issues	3
ELECTIVE	2

Session B

COURSE	CRS
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SEMESTER CRS: 12

NOTE: The term-by-term course sequence takes into account necessary Prerequisites, Corequisites, and Pre-/Co-requisites**NOTE: Select ONE (1) WRITING INTENSIVE course & ONE (1) CIVIC ENGAGEMENT course. Some courses meet BOTH requirements, see CUNYfirst to determine course status**Important Notes:

*Based on the Chemistry Ready Placement Score, students may test directly into CHM 1100 and not be required to take CHM 100. Contact the Physical Sciences Department for Chemistry Ready Placement information.

^Minimum grade of "C" required to advance to MAT 1500 - Calculus I

Degree InformationCatalog Year: 2026 - 2027Plan: Biology ASSub Plan: BiologyRequired Credits: 60General RequirementsReq GPA: 2.0Req Residential Credits: 30Req Pathways Credits: 32Req Civic Engagement: 1Req Writing Intensive: 1

1

Session A

COURSE	CRS
ENG 1200	3
BIO 1300	4
MAT 9010 or MAT 9B0 or MAT 900 (NEED MIN. GRADE C)	3
Choose 1: Flexible Core U.S. Experiences in Its Diversity	3

Session B

COURSE	CRS
ENG 2400	3

SEMESTER CRS: 16

2

Session A

COURSE	CRS
BIO 1400	4
CHM 1100*	4
CHM 100*	0
MAT 1400 (NEED MIN. GRADE C)^	3

Session B

COURSE	CRS

SEMESTER CRS: 11

3

Session A

COURSE	CRS
Slct One from: BIO 2100, 2200, 5000, 5200, 5300, 5800, 5900, 6500	4
CHM 1200	4
Choose 1: Flexible Core Creative Expression	3
Elective	4

Session B

COURSE	CRS
Choose 1: Flexible Core World Cultures & Global Issues	3

SEMESTER CRS: 18

4

Session A

COURSE	CRS
Slct One from: BIO 2100, 2200, 5000, 5200, 5300, 5800, 5900, 6500	4
Choose 1: Flexible Core Individual and Society	3
CP 1100	4
Elective	4

Session B

COURSE	CRS

SEMESTER CRS: 15

NOTE: The term-by-term course sequence takes into account necessary Prerequisites, Corequisites, and Pre-/Co-requisites

NOTE: Select ONE (1) WRITING INTENSIVE course & ONE (1) CIVIC ENGAGEMENT course. Some courses meet BOTH requirements, see CUNYfirst to determine course status

Important Notes:

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