



The State University
of New York

Transfer Path

Discipline: Biology

SUNY transfer paths outline the knowledge and skills that are essential for students to complete during their first two years of study for a major in a given discipline. The coursework described below will meet degree requirements at all SUNY campuses offering majors in the above discipline. If you complete this coursework successfully, you will be well-positioned to finish your degree with an additional two years of study at your SUNY transfer college.

Use this transfer path to discover both courses related to your major and general education requirements that will prepare you for transfer. Click on each course to view a course description. Then, to map your first two years of courses, visit [Planning Your Coursework](#).

Lower-Division Major Requirements

Required Introductory Courses:

- [General Biology I \(with lab\)*](#)
- [General Biology II \(with lab\)*](#)
- [General Chemistry I \(with lab\)](#)
- [General Chemistry II \(with lab\)](#)
- Math course(s) leading to a placement of 'Ready for Calculus'

Intermediate Courses. In consultation with your advisor, choose a minimum of 5 courses from the list below. The selections should be made on both your interests and the specific requirements of the biology program into which you want to transfer.

Cognate Courses:

- [Organic Chemistry I \(with lab\)](#), [Organic Chemistry II \(with lab\)](#) OR
- [Analytical Physics I \(with lab\)](#), [Analytical Physics II \(with lab\)](#) (for BS degree track) OR
- [General Physics I \(with lab\)](#), [General Physics II \(with lab\)](#) (for BA degree track)
- [Statistics](#)
- [Calculus I](#)
- [Calculus II](#)

Biology Courses:

- [Genetics \(with lab\)](#)
- [Cell Biology \(with lab\)](#)
- [Ecology \(with lab\)](#)
- [Microbiology \(with lab\)](#)
- [Anatomy & Physiology \(with lab\)](#)
- [Embryology \(with lab\)](#)
- [Developmental Biology \(with lab\)](#)
- [Molecular Biology \(with lab\)](#)
- [Botany \(with lab\)](#)
- [Zoology \(with lab\)](#)

Lower-Division Major Requirements

Recommended courses based on selected program tracks below:

Biochemistry, Cell/Molecular Biology, Microbiology

- [Genetics \(with lab\)](#)
- [Organic Chemistry I \(with lab\)](#)
- [Organic Chemistry II \(with lab\)](#)
- [Calculus I](#)
- [Calculus II](#)

Organismal Biology/Physiology

- [Ecology](#) OR [Genetics \(with lab\)](#) OR other Intermediate Biology course with lab
- [Organic Chemistry I \(with lab\)](#)
- [Organic Chemistry II \(with lab\)](#)
- [Calculus I](#)
- [Statistics](#)

Ecology/Conservation/Environmental Biology

- [Genetics \(with lab\)](#)
- [Ecology](#)
- [Organic Chemistry I \(with lab\)](#)
- [Calculus I](#)
- [Statistics](#)

Health Sciences

- [Genetics \(with lab\)](#)
- [Organic Chemistry I \(with lab\)](#)
- [Organic Chemistry II \(with lab\)](#)
- [Statistics](#)
- [Introduction to Psychology](#) OR [Introduction to Sociology](#) OR [Anatomy and Physiology I \(with lab\)](#)

Biology (BA)

- [Genetics \(with lab\)](#)
- [Organic Chemistry I \(with lab\)](#) OR [General Physics I \(with lab\)](#) OR [Analytical Physics I \(with lab\)](#)
- [Calculus I](#)
- [Statistics](#)



Advising Notes

The Introductory and Intermediate courses listed in the Lower Division Major Requirements section are specifically related to your field of study and are part of the requirements for graduation in your baccalaureate major. You must complete all Introductory as well as five courses under the Intermediate courses list. Completing only the Introductory courses will probably allow you to graduate with the equivalent of a BA in Biology in two or three more years, but probably not with a BS (depending on the transfer campus' major program tracks). Generally, the appropriate selection of Intermediate courses should allow you to graduate with a Biology baccalaureate in two additional years.

Check with your receiving campus for specific recommendations for their Biology tracks. BS degree programs may require a year each of Calculus, Organic Chemistry and University Physics (calculus based). BA degree programs may require fewer cognates.

Intermediate level courses have prerequisites: Biology courses may require a year of General Biology (or equivalent); Organic Chemistry requires a year of General Chemistry (or equivalent); and University Physics requires a year of Calculus. Statistics and Calculus have specific math placement pre-requisites (see your advisor).

Unless otherwise noted, courses that include online labs are not currently guaranteed for transfer across all campuses. Those courses and their online labs may be evaluated for transfer on a case-by-case basis by the receiving campus. Check with your advisor to see what restrictions and options may apply.

General Biology I & II should be taken at the same institution (consult your receiving campus).

There may be additional courses in your major which would transfer, or courses which could be substituted for one of the above. These may be established on a case by case basis. Please see an advisor at your transfer campus to explore those options.



General Education Requirements

General Education courses are related to key academic disciplines and may be outside your field of study. To earn a SUNY bachelor's degree, you must earn 30 credits in at least seven of the following ten skill areas, and demonstrate two competencies. For AS programs in Engineering, students must satisfy five of the following ten skill areas.

Skill Areas:

- Basic Communication (required)
- Mathematics (required)
- American History
- Other World Civilizations
- Foreign Language
- Social Sciences
- Humanities
- The Arts
- Natural Sciences
- Western Civilization

Competencies:

- Critical Thinking (required)
- Information Management (required)

General Education requirements vary by campus and by major. However, if you satisfy the SUNY General Education Requirement (SUNY-GER) area at one campus with a grade of C or higher, you will have met that SUNY-GER area at every other SUNY campus. Visit [Campus Requirements](#) to determine the skill areas required by each campus and the courses available within those areas.

Note: The lower division major requirements outlined in this document will be implemented for SUNY students entering Fall, 2015. Check with your campus advisor for more information regarding current requirements.

Last updated: April, 2014