

# Biology



Biology is the scientific study of life.

The associate of science (AS) with a concentration in biology at Lee College is designed for students who plan to transfer to a four-year college or university with the goal of completing a bachelor's degree in biology or related field.

The AS biology area of concentration fulfills most prerequisites for entry to many professional programs, including BS nursing, physician's assistant, clinical laboratory science, dental hygiene, and pharmacy programs. In some fields, an AS with a concentration in biology will prepare you for entry level technical or assistant positions.

**Many careers require education beyond the associate degree. Students should work with their advisor to tailor course selections to align with their chosen transfer university. The transfer plan(s) on this page shows a tailored example for a university commonly chosen by Lee College students. However, students may choose to continue their education at any university.**

## What Will I Learn?

Students will develop laboratory skills and gain a basic scientific understanding of life from the smallest microscopic organisms to the human body and entire ecosystems. Students will also learn critical thinking and problem-solving skills appropriate for a profession in biology.

[View Program Learning Outcomes](#)

## "What Can I Do With This Course of Study?"

An Associate of Science will prepare you for entry-level technical or assistant positions in education and analytical laboratories. It is also the first step toward transfer and a Bachelor of Science or advanced degree in biology. Possible careers fields include medical, biotech, pharmaceutical, natural resource conservation, agricultural sciences, education, and many more.

### Biology UHCL Transfer Plan

Please note that MATH 1314 & MATH 2412 are pre-requisites for MATH 2413. This plan includes course options for transferring into the BIOLOGICAL SCIENCE BS program at the University of Houston-Clear Lake. The plan includes more than the 60 hours required for an Associate of Science and allows students to complete both an Associate of Arts and an Associate of Science prior to transfer.

**Foundations: These are the courses students need in order to progress in their career/college pathway, as they either provide a certificate or lay the groundwork for moving to the next set of courses.**

|                 | Lee College                             | UHCL              |
|-----------------|---|-------------------|
| Course          | Course Title                            | Counts Toward     |
| EDUC 1200       | Learning Frameworks                     | PSYC 1100         |
| ENGL 1301       | English Composition 1                   | WRIT 1301         |
| BIOL 1406       | General Biology 1;<br>Lecture and lab   | BIOL 1106/1306    |
| CHEM 1411       | General Chemistry 1;<br>Lecture and lab | CHEM 1111/ 1311   |
| ARTS 1303 or 04 | Art History 1 OR Art<br>History 2       | ARTS 1303 or 1304 |
| SPCH 1315       | Principles of Public<br>Speaking        | COMM 1315         |

**Knowledge Building: These courses further the students' knowledge in the area of study and increase their preparation for the degree completion.**

|           | Lee College                             | UHCL           |
|-----------|---|----------------|
| Course    | Course Title                            | Counts Toward  |
| MATH 2413 | Calculus 1                              | MATH 2413      |
| BIOL 1407 | General Biology 2;<br>Lecture and lab   | BIOL 1107/1307 |
| CHEM 1412 | General Chemistry 2;<br>Lecture and lab | CHEM 1112/1312 |
| ENGL 1302 | English Composition 2                   | WRIT 1302      |
| HIST 1301 | History of the United<br>States to 1877 | HIST 1301      |
| GOVT 2305 | Federal Government                      | POLS 2305      |
| PHYS 1401 | College Physics 1;<br>Lecture and lab   | PHYS 1101/1301 |

**Completion: These are the courses the student needs in order to complete the degree plan and prepare to enter the workforce.**

|                        | <b>Lee College</b>                                      | <b>UHCL</b>            |
|------------------------|---|------------------------|
| <b>Course</b>          | <b>Course Title</b>                                     | <b>Counts Toward</b>   |
| HIST 1302              | History of the United States since 1877                 | HIST 1302              |
| GOVT 2306              | Texas Government  | POLS 2306              |
| CHEM 2423              | Organic Chemistry 1; Lecture and lab                    | CHEM 2123/2323         |
| HUMA 1301              | Introduction to Humanities 1                            | HUMA 1301              |
| BIOL 2421              | Microbiology  | BIOL 2121/2321         |
| PSYC 2301 or SOCI 1301 | Introduction to Psychology or Introduction to Sociology | PSYC 2301 or SOCI 1301 |
| PHYS 1402              | College Physics 2; Lecture and lab                      | PHYS 1102/1302         |

## **University of Texas Medical Branch-Galveston 2+2 Clinical Laboratory Science Program**

Clinical Laboratory Science (CLS) is a critical field in health professions that provides the science-based testing necessary for diagnosis and treatment of human disease. CLS is an ideal career for students that are passionate about science and health care, but would prefer to work behind the scenes rather than in direct patient care.

The UTMB-Galveston Clinical Laboratory Science Program offers a Bachelor of Science in Clinical Laboratory Science 2+2 track that accepts prerequisites from all public and private institutions. Students can complete all of the required 60 hours of prerequisites for the B.S. in CLS program at Lee College prior to matriculation. Students can also apply as early as September 1st of each calendar year for the following years class that starts in late August. Students may also apply after completing 30 of the 60 prerequisite hours. Students are encouraged to apply to the CLS program early.

The following Lee College Courses and course options satisfy the 60 prerequisite hours.

| <b>Subject and Course Number</b> | <b>Course Title</b>                                | <b>Credit Hours</b> |
|----------------------------------|--|---------------------|
| ENGL 1301                        | English Composition 1                              | 3                   |
| ENGL 1302                        | English Composition 2                              | 3                   |
| SPCH 1315 or ENGL 2311           | Principles of Public Speaking or Technical Writing | 3                   |
| HIST 1301                        | History of the United States to 1877               | 3                   |
| HIST 1302                        | History of the United States since 1877            | 3                   |
| GOVT 2305                        | Federal Government                                 | 3                   |

|   |                               |   |
|---|-------------------------------|---|
| GOVT 2306                                 | Texas Government              | 3 |
| BIOL 1406                                 | General Biology 1             | 4 |
| <sup>1</sup> BIOL 1407                    | General Biology 2             | 4 |
| BIOL 2421                                 | Microbiology                  | 4 |
| <sup>1</sup> BIOL 2401                    | Human Anatomy & Physiology I  | 4 |
| BIOL 2402                                 | Human Anatomy & Physiology II | 4 |
| CHEM 1411                                 | General Chemistry 1           | 4 |
| CHEM 1412                                 | General Chemistry 2           | 4 |
| <sup>2</sup> MATH 1314                    | College Algebra               | 3 |
| Choose from any, PSYC or SOCI             | Social/Behavioral Sciences    | 3 |
| Choose from any HUMA                      | Humanities                    | 3 |
| Choose from any ARCH, ARTS, DRAM, or MUSI | Visual or Performing Arts     | 3 |

Biology and Chemistry courses must be for science majors and include laboratories.

<sup>1</sup>BIOL 1407 and BIOL 2401 are recommended to satisfy Biological Science and Science Electives coursework. <sup>2</sup>The mathematics prerequisite is satisfied by college algebra of higher. Overall GPA must be 2.0 or higher with all prerequisite courses having a passing grade of C or higher.

For more information, contact the Department of Clinical Laboratory Sciences, 301 University Blvd., Galveston, TX 77555-1140 • 409.772.3055, [clsadmin@utmb.edu](mailto:clsadmin@utmb.edu)

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[Contact an Advisor](#)