



## Associate of Science, Biology

### Bachelor's Degree Transfer Major

2018–2019

#### DESCRIPTION:

The Associate of Science degree is designed to satisfy the first two years of a bachelor's degree in majors that require advanced math or science. Formal agreements have been made with colleges and universities which allow for coursework taken in the Associate of Science degree program at Columbus State to transfer and apply to a bachelor's degree.

The Associate of Science degree Biology transfer major is the study of life and living organisms and is a popular pathway to health professional programs (dentistry, medicine, optometry, occupational therapy, pharmaceutical sciences, pharmacy, physical therapy, veterinary medicine) since some required pre-professional courses are embedded in this major.

#### ADMISSION REQUIREMENTS:

Students may begin this degree during any semester upon admission to the college. Eligibility for specific courses will be determined by evaluation of ACT or SAT scores, previous college credits, and Columbus State placement testing results (if required). Course descriptions and prerequisites are outlined in the Columbus State catalog at <http://www.cscs.edu/academics/catalog/>.

#### ONGOING REQUIREMENTS:

All students must satisfactorily complete at least 61 credit hours of approved courses (a minimum of 20 credit hours must be completed at Columbus State) with an overall grade point average of 2.0 or better for all college-level courses completed at Columbus State. Consult with an Arts and Sciences Academic Advisor for Columbus State degree and graduation planning, assistance with developing and achieving academic goals, and information about transfer resources. Students should research program and admission requirements for their specific intended four-year institution and major early in their college career.

#### OPPORTUNITIES FOR GRADUATES:

##### Transfer:

The Associate of Science degree Biology transfer major is designed for students who are planning to transfer to a four-year college or university with the goal of completing a bachelor's degree in Biology or a related life sciences major. Graduating with the Associate of Science degree includes completion of the Ohio Transfer Module. As a result, Associate of Science graduates have fulfilled most of their general education requirements and once admitted to the four-year program, will be focused on upper-level major courses.

##### Career:

Research educational requirements, expected earnings, and job market predictions using the online Career Coach tool at <https://cscs.emsicc.com>.

**DEGREE REQUIREMENTS (A.S., BIOLOGY):****FIRST SEMESTER**

| Course   | Term     | Credits   | Milestones/Progress Check  |
|--|----------|-----------|--|
| ENGL 1100 or ENGL 1101 Composition I           | AU/SP/SU | 3         | <ul style="list-style-type: none"> <li>Consult an Arts and Sciences Academic Advisor early on to help you select courses required by your transfer institution of choice.</li> </ul> |
| CHEM 1171 General Chemistry I                  | AU/SP/SU | 5         |  |
| COLS 1100 First Year Experience Seminar        | AU/SP/SU | 1         |  |
| <b>BIO 1113 Biological Sciences I</b>          | AU/SP/SU | 4         |  |
| MATH 1149 Trigonometry or MATH 1151 Calculus I | AU/SP/SU | 4         |  |
| <b>Accumulated Credits Earned</b>              |          | <b>17</b> |  |

**SECOND SEMESTER**

| Course   | Term     | Credits   | Milestones/Progress Check  |
|--|----------|-----------|--|
| CHEM 1172 General Chemistry II   | AU/SP/SU | 5         | <ul style="list-style-type: none"> <li>Connect with appropriate University advisor at the Columbus State Transfer Center; visit transfer campus.</li> <li>Apply for eligible major scholarships for next AU term.</li> </ul> |
| <b>BIO 1114 Biological Sciences II</b>   | AU/SP/SU | 4         |  |
| ENGL 2767 Composition II: Writing about Science & Tech. or other Intermediate Composition course * | AU/SP/SU | 3         |  |
| MATH 1151 Calculus I   | AU/SP/SU | 5         |  |
| <b>Semester hours/Credits</b>  |          | <b>17</b> |  |
| <b>Accumulated Credits Earned</b>  |          | <b>34</b> | <b>Halfway point to A.S. degree!</b>   |

**SUMMER SEMESTER**

| Course                                 | Term     | Credits   | Milestones/Progress Check  |
|--|----------|-----------|--|
| Social and Behavioral Science course * | AU/SP/SU | 3         | <ul style="list-style-type: none"> <li>Consult an Arts and Sciences Academic Advisor early on to help you select courses required by your transfer institution of choice.</li> </ul> |
| Historical Study course *              | AU/SP/SU | 3         |  |
| <b>Semester hours/Credits</b>          |          | <b>6</b>  |  |
| <b>Accumulated Credits Earned</b>      |          | <b>40</b> |  |

**FOURTH SEMESTER**

| Course  | Term     | Credits   | Milestones/Progress Check  |
|---|----------|-----------|--|
| <b>CHEM 2251 Organic Chemistry</b>                          | AU/SP/SU | 5         | <ul style="list-style-type: none"> <li><b>Submit petition to graduate</b></li> <li>Re-connect with appropriate University advisor at the Columbus State Transfer Center; visit transfer campus.</li> <li>Submit transfer admission application.</li> </ul> |
| <b>CHEM 2254 Organic Chemistry I Lab</b>                    | AU/SP/SU | 3         |  |
| Literature, Culture & Ideas, Visual/Performing Arts course* | AU/SP/SU | 3         |  |
| Social and Behavioral Science course *                      | AU/SP/SU | 3         |  |
| <b>Semester hours/Credits</b>                               |          | <b>14</b> |  |
| <b>Accumulated Credits Earned</b>                           |          | <b>54</b> |  |

**FIFTH SEMESTER**

| Course                                      | Term     | Credits      | Milestones/Progress Check                                       |
|---|----------|--------------|---|
| <b>CHEM 2252 Organic Chemistry II</b>       | AU/SP/SU | 5            | <p style="text-align: center;"><b>Ready for Graduation!</b></p> |
| <b>CHEM 2255 Organic Chemistry II Lab</b>   | AU/SP/SU | 3            |   |
| <b>Science Elective – see choices below</b> | AU/SP/SU | 4-5          |   |
| <b>Semester hours/Credits</b>               |          | <b>12-13</b> |   |
| <b>Accumulated Credits Earned</b>           |          | <b>66-70</b> |   |

**Science Electives:**

BIO 2215 Microbiology (4 cr.)

BIO 2300 Human Anatomy (4 cr.)

PHYS 1200 Algebra-based Physics (5 cr.)

\*Full list of course options: <https://www.csc.edu/academics/transfer/degrees.shtml>

AU: Autumn Semester/SP: Spring Semester/SU: Summer Semester

Requirements subject to change.