## Biology

Program: Life Sciences
Program Code:
LF_LFBI
Academic Area:
Science, Technology, Engineering and Mathematics
Type:
Associate in Science
CIP Code:
26.0101

## Program Statement

This program is designed for students who plan to transfer to a 4-year institution and major in Biology or another Life Science field. The goal is to provide students with the necessary skills and background to be successful at a 4-year institution.

## Program Information

- This program is designed to prepare students for transfer to a 4-year institution to major in Biology or another Life Science field, and will give them a foundation for work in Pre-Med, Pre-Vet and other Health Science fields.
- Students will take a variety of transferable General Studies courses, as well as select Biology Elective courses in their area of interest.
- After completion of the degree, students have a strong foundation in Biology that will allow them to be successful in their next program.


## After Bristol

- With an Associates in Science - Life Sciences Biology degree, students will be able to transfer to a 4-year institution with a solid background in Biology that will allow them to take upper level Biology classes at their next institution.
- Bristol participates in the statewide MassTransfer program and has developed many program-to-program transfer articulation agreements which guarantee admission and credit transfer. For a complete listing of eligible MassTransfer programs, current Bristol articulation agreements, and to complete an A2B Program Search, visit the Transfer Services website to review which credits will be transferred and applied to your degree.


## Degree Requirements

## General Courses

| Course \# | Title | Credits |
| :--- | :--- | :--- |
| ENG 101 | Composition I: College Writing | 3 |
| ENG 102 | Composition II: Writing about Literature | 3 |
| COM 104 | Fundamentals of Public Speaking | 3 |
| CSS 101 | College Success Seminar | 1 |
| PSY 101 | General Psychology | 3 |
|  | MTH 152, MTH 172 or MTH 214 | $7-8$ |
|  | HST 111,112,113 or 114 | 3 |

## Elective Courses

| Course \# | Title | Credits |
| :--- | :--- | :--- |
|  | GVT or SOC Electives | 6 |
|  | Information Literacy Elective | $0-3$ |
|  | Multicultural and Social Perspectives Elective | 3 |

## Program Courses

| Course \# | Title | Credits |
| :--- | :--- | :--- |
| BIO 121 | Fundamentals of Biological Science I | 4 |
| BIO 122 | Fundamentals of Biological Science II | 4 |
| BIO 230 | Seminar in Scientific Literature and Research Design | 3 |
| CHM 113 | Fundamentals of Chemistry I | 4 |
| CHM 114 | Fundamentals of Chemistry II | 4 |

## Program Electives

Choose 12 credits from the following (at least 2 courses must be lab courses):

| Course \# | Title | Credits |
| :--- | :--- | :--- |
| AGR 214 | Sustainable Agriculture | 4 |
| BIO 126 | Introduction to Biotechnology | 3 |
| BIO 127 | Introduction to Biotechniques | 4 |
| BIO 129 | Field Biology | 4 |
| BIO 130 | The Biology and Behavior of Birds | 4 |
| BIO 154 | Human Physiology | 4 |
| BIO 205 | Animal Behavior | 4 |
| BIO 220 | Introduction to Nutrition | 3 |
| BIO 132 | Marine Biology | 4 |
| BIO 233 | Human Anatomy and Physiology I | 4 |
| BIO 234 | Human Anatomy and Physiology II | 4 |
| BIO 235 | Fundamentals of Ecology | 4 |
| BIO 239 | Elements of Microbiology | 4 |
| BIO 240 | Cell Biology | 4 |
| BIO 250 | Introduction to Immunology | 4 |
| CHM 225 | Biochemistry | 4 |
| CHM 235 | Organic Chemistry I | 4 |
| CHM 236 | Organic Chemistry II | 4 |
| INT 210 | Internship Experience I | 3 |
| PHY 211 | General Physics I | 4 |
| PHY 212 | General Physics II | 4 |
| SCI 115 | Science and Care of Plants | 4 |
| SCI 119 | Coastal Science | 4 |
| SCI 240 | Introduction to Oceanography | 4 |
|  |  | 4 |

## Recommended Course Sequence - Semester 1

| Course \# | Title | Credits |
| :--- | :--- | :--- |
| BIO 121 | Fundamentals of Biological Science I | 4 |
| CHM 113 | Fundamentals of Chemistry I | 4 |
| COM 104 | Fundamentals of Public Speaking | 3 |
| CSS 101 | College Success Seminar | 1 |
| ENG 101 | Composition I: College Writing | 3 |

## Recommended Course Sequence - Semester 2

| Course \# | Title | Credits |
| :--- | :--- | :--- |
| ENG 102 | Composition II: Writing about Literature | 3 |
| BIO 122 | Fundamentals of Biological Science II | 4 |
| CHM 114 | Fundamentals of Chemistry II | 4 |
|  | MTH 152 or MTH 172 | $3-4$ |
|  | Information Literacy Elective | $0-3$ |

Recommended Course Sequence - Semester 3

| Course \# | Title | Credits |
| :--- | :--- | :--- |
| BIO 230 | Seminar in Scientific Literature and Research Design | 3 |
|  | MTH 172 or MTH 214 | 4 |
| HST 111, 112, 113 or 114 | 3 |  |
| GVT or SOC Elective | 3 |  |
|  | Program Elective | 3 |

Recommended Course Sequence - Semester 4

| Course \# | Title | Credits |
| :--- | :--- | :--- |
|  | Program Elective | 3 |
|  | Program Elective | 3 |
| PSY 101 | General Psychology | 3 |
|  | Multicultural and Social Perspectives Elective | 3 |
|  | GVT or SOC Elective | 3 |
|  | Total credits: | $\mathbf{6 2 - 6 7}$ |

## Category Descriptions

## MTH 152, MTH 172 or MTH 214

Credits: 7-8

## Choose two of the following:

| Course \# | Title | Credits |
| :--- | :--- | :--- |
| MTH 152 | College Algebra | 3 |
| MTH 172 | Precalculus with Trigonometry | 4 |
| MTH 214 | Calculus I | 4 |

## HST 111, 112, 113 or 114

Credits: 3
Choose one of the following:

| Course \# | Title | Credits |
| :--- | :--- | :--- |
| HST 111 | The West and the World I | 3 |
| HST 112 | The West and the World II | 3 |
| HST 113 | United States History to 1877 | 3 |
| HST 114 | United States History from 1877 | 3 |

## GVT or SOC Electives

Credits: 6
Choose two Government (GVT) or Sociology (SOC) electives.

## Information Literacy Elective

Credits: 0-3
Information Literacy Elective can be waived for students who have successfully completed two online or hybrid courses.

Choose one of the following:

| Course \# | Title | Credits |
| :--- | :--- | :--- |
| CIS 110 | Basic Computing Skills | 3 |
| CAD 101 | Computer Aided Drafting | 3 |
| EGR 103 | Computer Skills for Engineers and Technicians | 3 |

## Multicultural and Social Perspectives Elective

Credits: 3
Choose one of the following

| Course \# | Title | Credits |
| :--- | :--- | :--- |
| ENG 217 | Writings from the Margins of Contemporary American Literature | 3 |
| ENG 257 | Contemporary African-American Women's Writing | 3 |
| ENG 259 | Native American Novels | 3 |
| HST 113 | United States History to 1877 | 3 |
| HST 114 | United States History from 1877 | 3 |
| HST 252 | African-American History | 3 |
| HST 259 | History of North American Indian Peoples | 3 |
| HST 265 | Immigration and Ethnicity in American History | 3 |

