

BIOLOGY, B.S.

Cell and Molecular Biology Concentration

This concentration is designed for students who desire a strong understanding of cellular function at the molecular level. It is designed to provide a solid foundation in cellular function and genetic control of biological processes to support the exploration of disease etiology. It is appropriate for students who wish to attend graduate or professional schools.

Integrative Biology Concentration

This concentration is designed for students who desire a strong, diverse background in the biological sciences. It is designed to introduce students to the wholeness of biology through an integrative perspective of the structure and function of biological systems with strong training in information analysis. It is appropriate for students who wish to attend graduate or professional schools.

Requirements for a Major in Biology, B.S.

| Code | Title | Hours |
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Thirty-five semester hours including the following: ¹

Required Courses

Biology Core

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|---------------------------------------|---|---|
| BIO 1305 & BIO 1105 or BIO 1405 | Modern Concepts of Bioscience and Modern Concepts of Bioscience Laboratory Investigations of Modern Biology Concepts I | 4 |
| BIO 1306 & BIO 1106 or BIO 1406 | Modern Concepts of Bioscience, continued and Modern Concepts of Bioscience Laboratory Investigations of Modern Biology Concepts II | 4 |
| BIO 2306 & BIO 2106 | Genetics and Genetics Laboratory | 4 |
| BIO 4001 | Achievement Test | 0 |

Select one concentration from the following: 23

Cell and Molecular Biology (<https://catalog.baylor.edu/undergraduate/college-arts-sciences/academic-departments/biology/biology-bs/bio-cell-molecular/>)

Integrative Biology (<https://catalog.baylor.edu/undergraduate/college-arts-sciences/academic-departments/biology/biology-bs/integrative-bio/>)

Subtotal 35

Required Courses in Other Fields ²

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|-------------------------|--|---|
| CHE 1301 & CHE 1101 | Basic Principles of Modern Chemistry I and General Chemistry Laboratory I | 4 |
| CHE 1302 & CHE 1102 | Basic Principles of Modern Chemistry II and General Chemistry Laboratory II | 4 |
| CHE 3331 | Organic Chemistry I | 3 |
| CHE 3332 | Organic Chemistry II | 3 |
| CHE 3238 | Organic Chemistry Laboratory | 2 |
| MTH 1321 | Calculus I | 3 |
| MTH 1322 or STA 2381 | Calculus II Introductory Statistical Methods | 3 |

Select one of the following sequences: 8

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| PHY 1408 & PHY 1409 | General Physics for Natural and Behavioral Sciences I and General Physics for Natural and Behavioral Sciences II |
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| PHY 1420 & PHY 1430 | General Physics I and General Physics II |
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| PHY 1420 & PHY 1409 | General Physics I and General Physics for Natural and Behavioral Sciences II |
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Total Hours 65

¹ A grade of "C" or better in all biology courses used in the major and a GPA of 2.0 or higher on all BIO courses completed.

² A grade of "C" or better in all courses required in other fields.