LA SIERRA UNIVERSITY

BIOLOGY: BIOMEDICAL SCIENCE BS PATHWAY Total Units Required: 190 units

**Required Course Listings**

This breakdown shows a Biology: Biomedical Science BS Pathway to be completed in 4 years at La Sierra University. All courses with a star (⋆) indicate a prerequisite or multiple prerequisites for the class. Courses with a dagger (†) are only offered in years ending with an odd number (e.g. 2022-2023 school year) and courses with a double dagger (‡) are only offered in years ending with an even number (e.g. 2023-2034 school year). By following the suggested/required sequencing all necessary prerequisite courses will be fulfilled. Please consult the Bulletin, Records, or your Guided Pathways Advisor for more information about prerequisites.

| **Major Requirements (106 units)** |  | **General Education Requirements (84 units)** |
| --- | --- | --- |
| ***Course Course Title***  | ***Units*** 4 | ***Course***  | ***Course Title***  | ***Units*** |
| BIOL 111 General Biology I⋆  |
| UNST 101  | First Year Seminar  | 3 |
| BIOL 111A General Biology Seminar  | 0 | ENGL 111  | College Writing I  | 3 |
| BIOL 111L General Biology I Lab⋆  | 1 | ENGL 112  | College Writing II⋆  | 3 |
| BIOL 112 General Biology II⋆  | 4 | ENGL 113  | College Writing III⋆  | 3 |
| BIOL 112L General Biology II Lab⋆  | 1 | WDLG 151  | World Language I  | 4 |
| BIOL 113 General Biology III⋆  | 4 | WDLG 152  | World Language II⋆  | 4 |
| BIOL 113L General Biology III Lab⋆  | 1 | WDLG 153  | World Language III⋆  | 4 |
| BIOL 205 Sophomore Biology Seminar  | 2 | HLSC 120  | Lifetime Fitness  | 2 |
| BIOL 235 Biostatistics⋆  | 4 | SSCI 20X-SL  | SSCI Theme Course (with Service Learning)  | 4 |
| BIOL 301 Cell & Molecular Biology⋆  | 4 | THM1 X00  | Theme I Elective  | 4 |
| BIOL 301L Cell & Molecular Biology Projects Lab⋆  | 1 | HUMN 10X  | HUMN Theme Course  | 4 |
| BIOL 302 Genetics⋆  | 4 | THM2 X00  | Theme II Elective  | 8 |
| BIOL 302L Genetics Project Lab⋆  | 1 | RLGN 304 RELB X00  | Adventism in Global Perspective⋆ Theme IIIBiii - Scripture Elective  | 44 |
| BIOL 304 General Ecology⋆ BIOL 304L General Ecology Lab⋆  | 4 |
| 1 | THM3 3/400 THM3 X00  | Theme III Elective Upper Division⋆ Theme III Elective  | 44 |
| BIOL 350 Colloquium BIOL 405 Biology Seminar  | 0 |
| 2 | NSCI 40X-SL  | NSCI Theme Course (with Service Learning)⋆  | 4 |
| BIOL 3/400-M Biomedical Science Upper Division Elective⋆ BIOL 3/400-SLBiology Upper Division Elective (with Service Learning)⋆ CHEM 111 General Chemistry I CHEM 111L General Chemistry I Lab CHEM 112 General Chemistry II⋆ CHEM 112L General Chemistry II Lab⋆ CHEM 113 General Chemistry III⋆ CHEM 113L General Chemistry III Lab⋆ CHEM 281 Organic Chemistry I⋆  | 20 4 4 1 4 1 4 1 4 | UNST 404B MATH 121 MATH 122 elct 3/400 elct X00  | Senior Seminar: Religion, Values & Social Responsibility in Biology College Algebra Trigonometry & Analytical Geometry⋆ Upper Division Elective Elective  | 44424 |
| CHEM 281L Organic Chemistry I Lab⋆  | 1 |  |  |  |
| CHEM 282 Organic Chemistry II⋆  | 4 |  |  |  |
| CHEM 282L Organic Chemistry II Lab⋆  | 1 |  |  |  |
| MATH 131 Calculus I⋆  | 4 |  |  |  |
| PHYS 231A/B Physics I (General or University)⋆  | 4 |  |  |  |
| PHYS 231L General Physics I Lab⋆  | 1 |  |  |  |
| PHYS 232A/B Physics II (General or University)⋆  | 4 |  |  |  |
| PHYS 232L General Physics II Lab⋆  | 1 |  |  |  |
| PHYS 233A/B Physics III (General or University)⋆  | 4 |  |  |  |
| PHYS 233L General Physics III Lab⋆  | 1 |  |  |  |

**Sequencing**

Biology: Biomedical Science BS Pathway in 4 years at La Sierra University.

| Year 1 **Fall Quarter (15 units)**  |  | Year 1 **Winter Quarter (17 units)**  |  | Year 1  | **Spring Quarter (17 units)** |
| --- | --- | --- | --- | --- | --- |
| Course ***Course Title***  | ***Units***  | Course ***Course Title***  | ***Units***  | Course  | ***Course Title***  |
| BIOL 111 General Biology I⋆  | 4 ⬜  | BIOL 112 General Biology II⋆  | 4 ⬜  | BIOL 113  | General Biology III⋆  |
| BIOL 111A General Biology Seminar  | 0 ⬜  | BIOL 112L General Biology II Lab⋆  | 1 ⬜  | BIOL 113L  | General Biology III Lab⋆  |
| BIOL 111L General Biology I Lab⋆  | 1 ⬜  | MATH 122 Trigonometry & Analytical Geometry⋆  | 4 ⬜  | MATH 131  | Calculus I⋆  |
| MATH 121 College Algebra  | 4 ⬜  | ENGL 112 College Writing II⋆  | 3 ⬜  | ENGL 113  | College Writing III⋆  |
| ENGL 111 College Writing I  | 3 ⬜  | UNST 101 First Year Seminar  | 1 ⬜  | UNST 101  | First Year Seminar  |
| HLSC 120 Lifetime Fitness  | 2 ⬜  | HUMN 10X HUMN Theme Course  | 4 ⬜  | THM2 X00  | Theme II Elective  |
| UNST 101 First Year Seminar  | 1 |  |  |  |  |
|  |  |  |  |  |  |
| **Year 2 Fall Quarter (16 units)**  |  | **Year 2 Winter Quarter (14 units)**  |  | **Year 2**  | **Spring Quarter (16 units)** |
| ***Course Course Title***  | ***Units***  | ***Course Course Title***  | ***Units***  | ***Course***  | ***Course Title***  |
| BIOL 301 Cell & Molecular Biology⋆  | 4 ⬜  | BIOL 205 Sophomore Biology Seminar  | 2 ⬜  | BIOL 235  | Biostatistics⋆  |
| BIOL 301L Cell & Molecular Biology Projects Lab⋆  | 1 ⬜  | BIOL 302 Genetics⋆  | 4 ⬜  | BIOL 304  | General Ecology⋆  |
| CHEM 111 General Chemistry I  | 4 ⬜  | BIOL 302L Genetics Project Lab⋆  | 1 ⬜  | BIOL 304L  | General Ecology Lab⋆  |
| CHEM 111L General Chemistry I Lab THM3 X00 Theme III Elective elct X00 Elective **Year 3 Fall Quarter (17 units)** ***Course Course Title*** BIOL 3/400-MBiomedical Science Upper Division Elective⋆ CHEM 281 Organic Chemistry I⋆  | 1 ⬜ 4 ⬜ 2 ⬜ ***Units*** 4 ⬜ 4 ⬜  | CHEM 112 General Chemistry II⋆ CHEM 112L General Chemistry II Lab⋆ elct X00 Elective **Year 3 Winter Quarter (17 units)** ***Course Course Title*** BIOL 3/400-MBiomedical Science Upper Division Elective⋆ CHEM 282 Organic Chemistry II⋆  | 4 ⬜ 1 ⬜ 2 ⬜ ***Units*** 4 ⬜ 4 ⬜  | CHEM 113 CHEM 113L elct 3/400 **Year 3** ***Course*** BIOL 350 BIOL 3/400-M | General Chemistry III⋆ General Chemistry III Lab⋆ Upper Division Elective **Spring Quarter (16 units)** ***Course Title*** Colloquium Biomedical Science Upper Division Elective⋆ |
| CHEM 281L Organic Chemistry I Lab⋆  | 1 ⬜  | CHEM 282L Organic Chemistry II Lab⋆  | 1 ⬜  | WDLG 153  | World Language III⋆  |
| WDLG 151 World Language I  | 4 ⬜  | WDLG 152 World Language II⋆  | 4 ⬜  | THM1 X00  | Theme I Elective  |

***Units***

⬜ 4 ⬜ 1 ⬜ 4 ⬜ 3 ⬜ 1 ⬜ 4 ⬜

***Units***

⬜ 4 ⬜ 4 ⬜ 1 ⬜ 4 ⬜ 1 ⬜ 2

***Units***

⬜ 0

⬜ 4

⬜ 4 ⬜ 4 ⬜ SSCI 20X-SLSSCI Theme Course (with Service

Learning)4 ⬜ THM2 X00 Theme II Elective 4 ⬜ THM3 3/400 Theme III Elective Upper Division⋆ 4

| **Year 4 Fall Quarter (15 units)**  |  | **Year 4 Winter Quarter (17 units)**  |  | **Year 4**  | **Spring Quarter (13 units)** |
| --- | --- | --- | --- | --- | --- |
| ***Course Course Title***  | ***Units***  | ***Course Course Title***  | ***Units***  | ***Course***  | ***Course Title***  |
| BIOL 405 Biology Seminar  | 2 ⬜  | BIOL 3/400-MBiomedical Science Upper Division Elective⋆ | 4 ⬜  | BIOL 3/400-SL | Biology Upper Division Elective (with Service Learning)⋆ |
| BIOL 3/400-MBiomedical Science Upper Division Elective⋆ | 4 ⬜  | PHYS 232A/B Physics II (General or University)⋆  | 4 ⬜  |  | PHYS 233A/B Physics III (General or University)⋆  |
| PHYS 231A/B Physics I (General or University)⋆  | 4 ⬜  | PHYS 232L General Physics II Lab⋆  | 1 ⬜  | PHYS 233L  | General Physics III Lab⋆  |
| PHYS 231L General Physics I Lab⋆  | 1 ⬜  | RELB X00 Theme IIIBiii - Scripture Elective  | 4 ⬜  | UNST 404B | Senior Seminar: Religion, Values & Social Responsibility in Biology |
| NSCI 40X-SLNSCI Theme Course (with Service Learning)⋆ | 4 ⬜  | RLGN 304 Adventism in Global Perspective⋆  | 4 |  |  |

***Units***

⬜ 4

⬜ 4 ⬜ 1 ⬜ 4

⬜