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 | 4  4 |
| BIOL 304 General Ecology⋆  BIOL 304L General Ecology Lab⋆ | 4 |
| 1 | THM3 3/400 THM3 X00 | Theme III Elective Upper Division⋆  Theme III Elective | 4  4 |
| 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 | 4  4  4  2  4 |
| 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

⬜