



## BS Biology Degree in 4 Years w/Microbiology Concentration 2017-2018

### School of Life Sciences

Catalog Year: Fall 2017-2018 ♦ Catalog Expires: Summer 2028 ♦ Graduation: Spring 2021

Biological Sciences majors must complete BIOL 196, BIOL 197, CHEM 121A, 121L, CHEM 122A, 122L, MATH 181 or MATH 127 or MATH 128, ENG 102 or ENG 114 or HON 100 with a C or better (C- is not sufficient) as prerequisites for enrollment in any upper division biology course.

|                                | First Semester                                     |   | Second Semester                                 |           |
|--------------------------------|--|---|---|-----------|
|                                | Course   | Credits   | Course  | Credits   |
| <b>1st Year</b>                | → ENG 101 English Composition I [placement req'd]  | 3   | → ENG 102 Composition II                        | 3         |
|                                | → MATH181 Calculus I [placement required]          | 4   | → CHEM122A & 122L General Chemistry II          | 4         |
|                                | Choose First Year Seminar (SCI-101 recomm.)        | 2   | BIOL 196 Mod. Biol. I OR BIOL 197 Mod. Biol. II | 4         |
|                                | → CHEM121A & 121L General Chemistry I              | 4   | HIST 100 or PSC 101 US NV Consitution           | 4         |
|                                | BIOL 196 Mod. Biol. I OR BIOL 197 Mod. Biol. II    | 4   |   |           |
|                                | <b>Total First Semester:</b>                       | <b>17</b>   | <b>Total Second Semester:</b>                   | <b>15</b> |
| <b>2nd Year</b>                | Third Semester                                     |   | Fourth Semester                                 |           |
|                                | Course   | Credits   | Course  | Credits   |
|                                | → CHEM 241 Organic Chemistry I lecture             | 3   | → CHEM 242 Organic Chemistry II lecture         | 3         |
|                                | → CHEM 241L Organic Chemistry I lab                | 1   | → CHEM 242L Organic Chemistry II lab            | 1         |
|                                | → PHYS 151 General Physics I                       | 4   | → PHYS 152 General Physics II                   | 4         |
|                                | Choose Social Science Field 1                      | 3   | General Electives 100-400 level                 | 3         |
| Choose Second Year Seminar     | 3  | Choose Humanities Field 1                                     | 3   |           |
| <b>Total Third Semester:</b>   | <b>14</b>  | <b>Total Fourth Semester:</b>                                 | <b>14</b>                                       |           |
| <b>3rd Year</b>                | Fifth Semester                                     |   | Sixth Semester                                  |           |
|                                | Course   | Credits   | Course  | Credits   |
|                                | → CHEM 474 Biochemistry I                          | 3   | → Upper Division Biology Course                 | 4         |
|                                | → BIOL 300 Genetics or BIOL 304 Molecular Genetics | 4   | → BIOL 415 Evolution                            | 3         |
|                                | → BIOL 351 Microbiology                            | 4   | → Upper Division Biology Course List A          | 3         |
|                                | General Electives 100-400 level                    | 3   | General Electives 100-400 level                 | 3         |
| <b>Total Fifth Semester:</b>   | <b>14</b>  | → STAT 391 App. Stats for Bio Sci or STAT 491 Stats for Sci I | 3   |           |
| <b>Total Sixth Semester:</b>   |  | <b>Total Sixth Semester:</b>                                  | <b>16</b>                                       |           |
| <b>4th Year</b>                | Seventh Semester                                   |   | Eighth Semester                                 |           |
|                                | Course   | Credits   | Course  | Credits   |
|                                | → Upper Division Biology Course List B             | 3   | → Upper Division Biology Course from list*      | 3         |
|                                | → Upper Division Biology Course from list*         | 3   | → Upper Division Biology Course List C          | 3         |
|                                | → Upper Division Biology Course from list*         | 3   | → Upper Division Biology Course any list        | 2         |
|                                | Choose Humanities Field 2                          | 3   | Choose Fine Arts                                | 3         |
| Choose Social Science Field 2  | 3  | General Electives 100-400 level                               | 1   |           |
| <b>Total Seventh Semester:</b> | <b>15</b>  | Choose Social Science Field 3                                 | 3   |           |
| <b>Total Eighth Semester:</b>  |  | <b>Total Eighth Semester:</b>                                 | <b>15</b>                                       |           |

**Notes**

→ course has a prerequisite--see reverse side for course sequences or go to the UNLV online catalog at <http://catalog.unlv.edu/>

\*A minimum of three courses from: BIOL 405 Molecular Biology, BIOL 409 – Virology, BIOL 418 Microbial Ecology, BIOL 453 – Immunology, BIOL 460 Microbial Physiology, BIOL 464 Bacterial Pathogenesis, BIOL 470 Topics in Applied Microbiology, BIOL 485 Microbial Genetics

AA minimum of six (6) credits are required, to be composed of a three-credit multicultural course and a three-credit international course that may simultaneously fulfill other general education requirements. A single course may not simultaneously meet both the multicultural and international requirements. Discuss with your Academic Advisor!

It is strongly recommended that students interested in biomedicine or attending graduate school take additional appropriate upper-division biology courses and research units to meet their elective credit requirements.

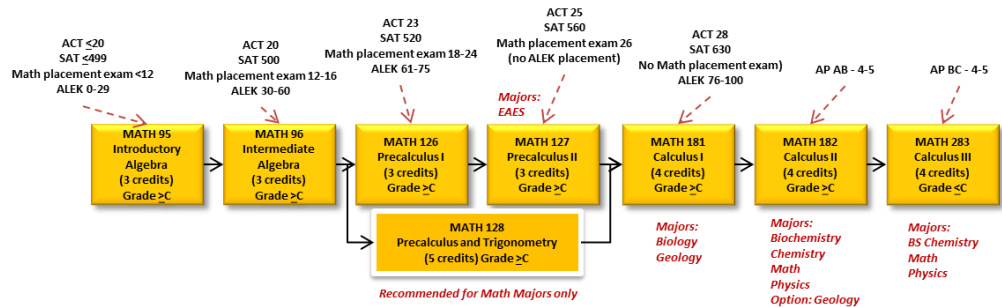
The minimum number of semester credits required for a bachelor's degree for a student graduating under the regulations of the 2016 - 2017 Undergraduate Catalog is 120. At least half of the credits required for a baccalaureate degree at the institution must be earned at a four-year institution.

A candidate for the baccalaureate degree must complete the last 30 UNLV semester credits in uninterrupted resident credit as a declared major in the degree-granting college. A student must declare a major prior to enrolling in their last 30 UNLV resident credits.

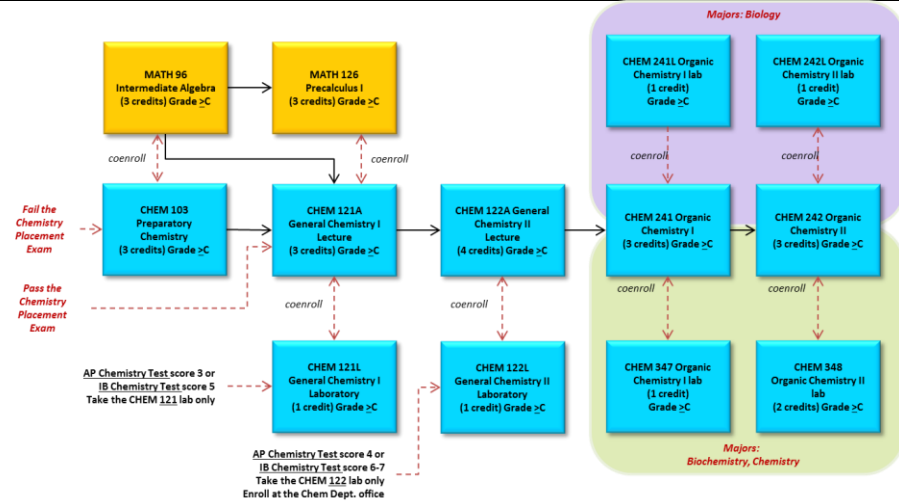
In order to graduate, an undergraduate student must have a minimum cumulative grade point average of 2.00 for the total of all college-level credit attempted at the University of Nevada, Las Vegas (UNLV GPA). College and department GPA requirements must also be met.

# LOWER DIVISION PREREQUISITE COURSE SEQUENCES FOR BIOLOGY MAJORS

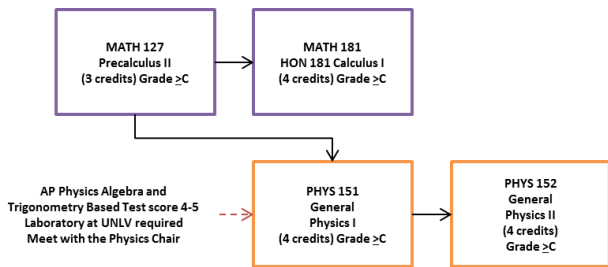
## Lower Division Math Sequence



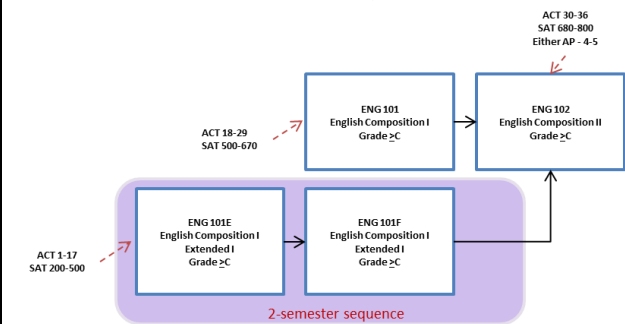
## Lower Division Chemistry Sequence



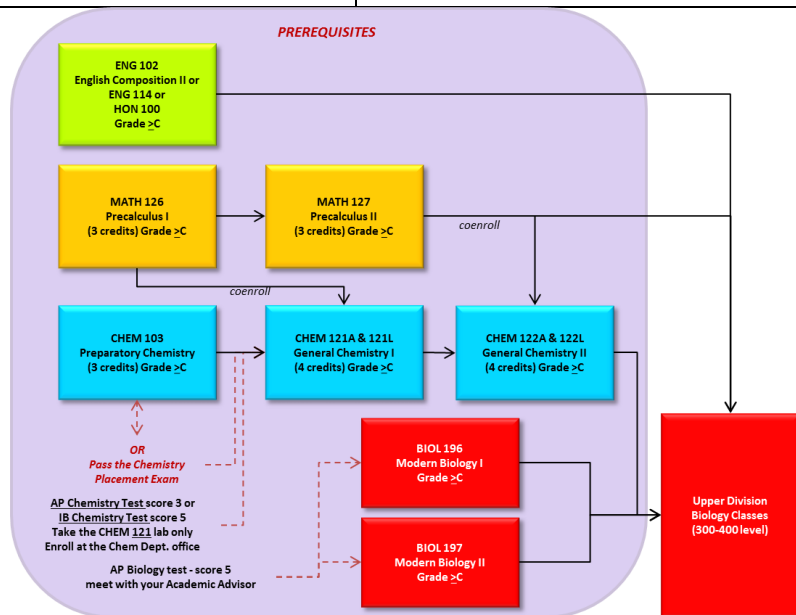
## Lower Division Physics Sequence



## Lower Division English Sequence



## Lower Division Biology Sequence



Read the UNLV Catalog for Upper Division Course Prerequisites <http://catalog.unlv.edu/>