

Bachelor of Science, Major in Biology and Minor in Earth Science Program Grid

Note: This program grid is provided for guidance only. Degree completion is based on courses completed successfully and is subject to all applicable requirements and procedures in effect. Students should consult the B.Sc. Degree Advisor to confirm program requirements for their chosen degree.

| Course Number | Course Name | Credits | Upper- Level Credits | Notes |
|-----------------------------|--|---------|----------------------------|-------|
| English 1 | 100-level English | 3 | | 1 |
| English 2 | 100-level English | 3 | | 1 |
| MATH 121 | Calculus I | 4 | | |
| MATH 122 | Calculus II | 4 | | |
| Non-Science 100-499 | Non-Science Elective I | 3 | | 2 |
| Non-Science 100-499 | Non-Science Elective II | 3 | | 2 |
| BIOL 121A and 121L | Introductory Zoology | 4 | | |
| BIOL 123A and 123L | Intro. Cellular & Molecular Biology | 4 | | |
| CHEM 140A and 140L | Chemistry Fundamentals I | 4 | | |
| CHEM 141A or 142A, and 142L | Chemistry Fundamentals II | 4 | | |
| PHYS 111 | Physics for the Life Sciences I | 4 | | |
| PHYS 112 | Physics for the Life Sciences II | 4 | | |
| BIOL 200 | Introduction to Cell Biology | 3 | | |
| BIOL 201 | Principles of Biochemistry | 3 | | |
| BIOL 202 | Ecology | 3 | | |
| BIOL 210 | Microbiology I | 4 | | |
| BIOL 212 | Genetics | 3 | | |
| BIOL 223 | Botany | 3 | | |
| CHEM 231 | Organic Chemistry I | 4 | | |
| CHEM 232 | Organic Chemistry II | 4 | | |
| MATH 203 | Biometrics | 3 | | |
| BIOL 305 | Animal Physiology | 3 | 3 | |
| BIOL 402 | Evolution | 3 | 3 | |
| BIOL 403 | Current Topics in Biology | 3 | 3 | |
| BIOL 300-499 | Upper-Level Biology Elective I | 3 | 3 | 3 |
| BIOL 300-499 | Upper-Level Biology Elective II | 3 | 3 | 3 |
| BIOL 300-499 | Upper-Level Biology Elective III | 3 | 3 | 3 |
| BIOL 300-499 | Upper-Level Biology Elective IV | 3 | 3 | 3 |
| BIOL 300-499 | Upper-Level Biology Elective V | 3 | 3 | 3 |
| BIOL 300-499 | Upper-Level Biology Elective VI | 3 | 3 | 3 |
| BIOL 300-499 | Upper-Level Biology Elective VII | 3 | 3 | 3 |
| GEOL 111 | Discovering Planet Earth | 4 | | |
| GEOL 112 | Understanding Earth's History | 4 | | |
| GEOL 115 | Lab & Field Studies in Earth Science | 3 | | |
| GEOL 200-299 | 200-Level Earth Science Elective | 3 | | 4 |
| GEOL 200-299 | 200-Level Earth Science Elective | 3 | | 4 |
| GEOL 200-299 | 200-Level Earth Science Elective | 3 | | 4 |
| GEOL 300-499 | Upper-Level Earth Science Elective I | 3 | 3 | 5 |
| GEOL 300-499 | Upper-Level Earth Science Elective II | 3 | 3 | 5 |
| GEOL 300-499 | Upper-Level Earth Science Elective III | 3 | 3 | 5 |
| GEOL 300-499 | Upper-Level Earth Science Elective IV | 3 | 3 | 5 |
| | TOTAL: | 136 | 42 | |

See notes on the next page /...

NOTES:

- 1. The Degree English Requirement can be met as follows:
 - Two of ENGL 115 (or 117), 125 (or 127), 135, 204, or an INTR course that includes a ENGL course exemption; or,
 - LBST 111 and 112.
- 2. Non-Science Electives can be any courses outside of the Science discipline numbered 100-499. The following courses may not be counted to meet this requirement, although they may be counted as general electives:
 - Any course beginning with the following discipline identifiers: AQUA, ASTR, BIOL, CHEM, CSCI, ENGC, ENGE, ENGM, ENGR, FISH, FRST, GEOL, MATH, PHYS, RMOT, QUME, and SCIE.
 - Anthropology: ANTH 111, 213, 214, 341B, 342, 343, 344, 350, 351, 352, 353 361, 401, 430, 449, 460.
 - Geography: GEOG 211, 212, 221, 226, 228, 326, 328, 372, 373, 374, 376, 426, 428.
 - Psychology: PSYC 204, 205, 300A, 300B, 301, 302, 305, 315, 316, 318, 319, 323, 324, 345, 365, 400, 415, 419, 445, 490, 491, 498A.
 - Kinesiology: KIN 201, 220, 301, 302, 400, 401.
- 3. Upper-Level Biology Electives can be any BIOL course numbered 300-499.
 - Up to 12 credits from following courses may be counted towards this requirement: FISH 322, FISH 324, FRST 328, FRST 351, FRST 352, GEOG 328, GEOG 373, RMOT 306, RMOT 357, RMOT 400, and RMOT 401.
 - Students have the option to complete a research project in their final year:
 BIOL 490 (3 credits) or 491 (6 credits). Consult the Chair of the Biology Department.
- 4. The 200-Level Earth Science Electives can be chosen from GEOL 200, 201, 202, or 206.
 - Note: Students should check upper-level course prerequisites to guide selection of the 200-Level Earth Science Electives.
- 5. Upper-Level Earth Science Electives can be any GEOL course numbered 300-499.
 - Up to 3 credits from the following courses may be counted towards this requirement: CHEM 301, 302; GEOG 326, 328, 372, 373, 374, 376, or 426.