

## Bachelor of Science, Minor in Earth Science, Minor in Geography 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	3		
MATH 122	Calculus II	3		
Non-Science 100-299	Non-Science Elective	3		2
Science 100-299	Lower-Level Science Elective	4		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	Mineralogy and Petrology	3		
GEOL 201	Sedimentology and Stratigraphy	3		
GEOL 202	Earth Structures	3		
GEOL 206	Field Geology and Geol. Mapping	3		
GEOL 300-499	Upper-Level Geology Elective I	3	3	4
GEOL 300-499	Upper-Level Geology Elective II	3	3	4
GEOL 300-499	Upper-Level Geology Elective III	3	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
GEOG 101	Environmental Geography	3		6
GEOG 211	Atmospheric Environments	3		
GEOG 212	Earth Environments	3		
GEOG 226 or 228	200-Level Geography Option	3		
MATH 211	Statistics I	3		
GEOG 328	Geographic Information Systems	3	3	
GEOG 372, 373, 374 or 376	Upper-Level Geography Option I	3	3	7
GEOG 372, 373, 374 or 376	Upper-Level Geography Option II	3	3	7
GEOG 372, 373, 374 or 376	Upper-Level Geography Option III	3	3	7
GEOG 300-499	Upper-Level Geography Elective I	3	3	8
GEOG 300-499	Upper-Level Geography Elective II	3	3	8
Elective 300-499	Upper-Level Elective I	3	3	9
Elective 300-499	Upper-Level Elective II	3	3	9
Elective 100-499	General Elective I	3		10
Elective 100-499	General Elective II	3		10
Elective 100-499	General Elective III	3		10
Elective 100-499	General Elective IV	3		10
Elective 100-499	General Elective V	3		10
Elective 100-499	General Elective VI	3		10
Elective 100-499	General Elective VII	3		10
Elective 100-499	General Elective VIII	3		10
	TOTAL:	123	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 ENGL course exemption; or,
  - LBST 111 and 112.
- Non-Science Elective can be any course 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, 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.
- Lower-Level Science Electives can be courses numbered 100-299 in any science discipline, except GEOG and GEOL courses. These courses are required to satisfy the Lower-Level Sciences Requirement of the Bachelor of Science degree. Options of science disciplines include:
  - AQUA, ASTR, BIOL, CHEM, CSCI, ENGC, ENGE, ENGM, ENGR, FISH, FRST, GEOL, MATH, PHYS, RMOT and SCIE.
  - Some 100-level science courses are worth 4 credits. Each 4-credit first year course taken increases the total credit requirement of the degree by one additional credit.
- 4. Upper-Level Geology Electives can be any GEOL course numbered 300-499.
- 5. Upper-Level Earth Science Electives can be any course chosen from the following lists:
  - GEOL courses numbered 300-499; or,
  - CHEM 301, 302; GEOG 326, 328, 372, 373, 374, 376, or 428.
- 6. GEOG 101 will be applied towards the Non-Science Elective Requirement (6 credits) for the Bachelor of Science degree and therefore 3 more credits (i.e., Non-Science Elective I) are required to meet this requirement.
- 7. For the Upper-Level Geography Option, three courses must be chosen among GEOG 372, 373, 374 or 376.
- 8. Upper-Level Geography Electives can be any GEOG course numbered 300-499.
- 9. Upper-Level Electives can be courses in any discipline numbered 300-499.
- 10. General Electives can be courses in any discipline numbered 100-499.