

B.A. GEOLOGY CHECKLIST of required courses for major

Courses in Natural Sciences: 5-6 courses, 18 credits minimum*

Course	Credits	When to take:
4-5 Courses* in Chemistry, Calculus and Physics are highly recommended. Additional choices from courses* in the College of Natural Science are acceptable.	15*	1 st or 2 nd year, either semester
*COURSES MUST BE SELECTED WITH CONSULTATION AND APPROVAL OF A GEOLOGY FACULTY ADVISOR		
NATSci 397A – CNS Junior Year Writing <i>fulfills Gen.Ed. "Junior-Year Writing" requirement</i>	3	3 rd or 4 th year, either semester

Introductory Geology Courses: 3 courses, 11-12 credits

Course	Credits	When to take:
GEOSCI 101 – The Earth <i>or take</i>	4	1 st year, either semester
GEOSCI 131 - Experiencing Geology Lab <i>and either</i>	(1)	1 st year, either semester
GEOSCI 103 - Intro to Oceanography <i>or</i>	(4)	1 st year, either semester
GEOSCI 105 - Dynamic Earth	(4)	1 st year, either semester
GEOSCI 201 – History of the Earth	4	1 st or 2 nd year, spring semester
GEOSCI 231 – Geological Field Methods	3	2 nd or 3 rd year, spring semester

Upper Level Geology Courses: 5-7 courses, 24 credits minimum*

Course	Credits	When to take:
Select from 300- to 600-level Geology (odd course numbers) or physical geography (<i>some</i> even course numbers).	18*	3 rd or 4 th year, either semester
*COURSES MUST BE SELECTED WITH CONSULTATION AND APPROVAL OF A GEOLOGY FACULTY ADVISOR		
GEOSCI 494LI – Living on Earth <i>fulfills Gen. Ed "Integrative Experience" requirement</i>	3	3 rd or 4 th year, fall semester

Junior or senior research projects, thesis, or independent study with individual faculty members are strongly encouraged. GEOSci396 and GEOSci496 credits contribute towards Geology-B.A. upper level geology courses.

Upper Level Geology Courses: Not all courses are offered each semester. Consult with faculty for schedule and prerequisites.		
311 – Mineralogy	557 – Coastal Processes	591N – Climate Modeling
321 – Petrology	563 – Glacial Geology	591P – Paleooceanography
415 – Intro to Geochemistry	567 – Planetary Geology	591V – Volcanology
431 – Structural Geology	571 – General Geophysics	595D – Physical Oceanography
445 - Sedimentology	575 – Paleomagnetism	597I – Isotope Geochemistry
515 – X-ray Fluorescence Analysis	587 – Hydrogeology	615 – Organic and Biogeochemistry
517 – Sedimentary Geochemistry	591D – Spatial Data Analysis	627 – Clay Petrology
519 – Aqueous/Enviro. Geochemistry	591E – Ecohydrology	687 – Advanced Hydrogeology
531 – Tectonics	591G – Granites and Rhyolites	691C – Optical Mineralogy
555 – Dynamic Digital Maps	591J – Microprobe Analysis	
Physical Geography electives:		
340 – Quantitative Methods in Geog.	426 – Remote Sensing	510 – Natural Hazards
352 – Computer Mapping	458 – Climate Change	560 – Geomorphology
354 – Climatology	468 – GIS and Spatial Data Analysis	594Q – Advanced Remote Sensing

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