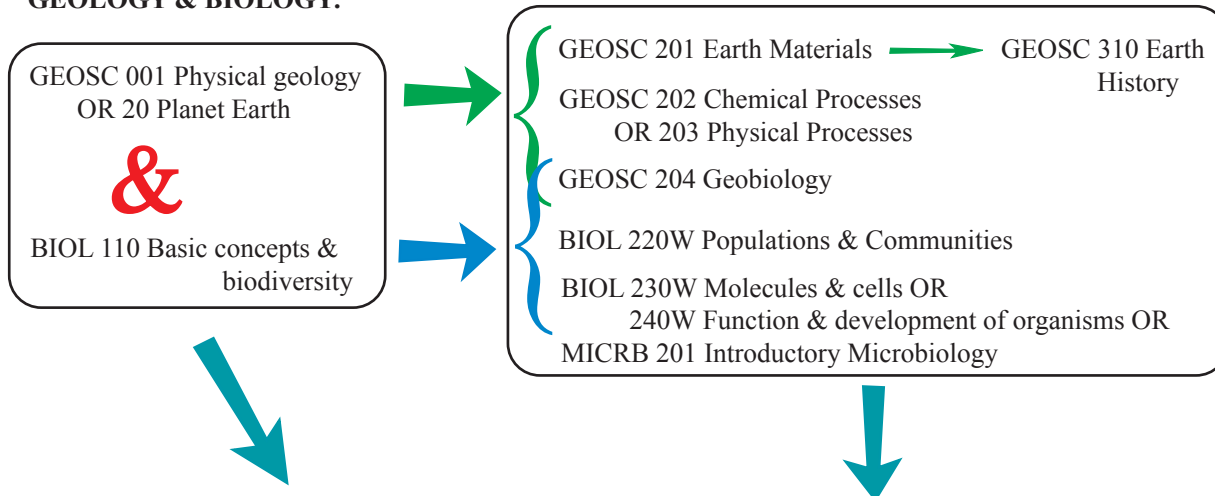


PENN STATE GEOBIOLOGY BS PROGRAM

**NOTE: arrows represent course sequencing requirements (prerequisites).
Additional prerequisites from the cognate sciences or math are not shown.**

REQUIRED COURSES:

GEOLOGY & BIOLOGY:



ELECTIVES: 12 credits (usually four courses) are required from the following list of advanced geobiology electives. Prerequisites are listed in parentheses after each course. Prerequisites from the cognate sciences are omitted, as are introductory geology or biology prerequisites.

Biogeochemistry track electives (recommended for pre-Med or environmental careers):

GEOSC 452 Hydrogeology
GEOSC 419 Organic Geochemistry of
Natural Waters & Sediments
GEOSC 412 Water resources
GEOSC 413 Techniques in geochemistry
(GEOSC 202 or 412 or equivalent)
GEOSC 410 Marine biogeochemistry
BIOL 435 Ecology of lakes & streams
BIOL 406 Symbiosis
SOILS 412W Soil ecology
BIOL 419 Ecological & environmental problem solving

OR

Evolution, Paleobiology & Geology track electives
(recommended for museum science or
geoscience graduate school):

GEOSC 465 Structural Geology (GEOSC 203 & 310)
GEOSC 424 Paleontology (GEOSC 310 or equivalent)
GEOSC 439 Stratigraphy (GEOSC 310)
GEOSC 420 Paleobotany (GEOSC 310 or equivalent)
GEOSC 425 Micropaleontology (GEOSC 204)
GEOSC/BIOL 474 Astrobiology
ANTH 401 Human Evolution (ANTH 021)
BIOL 428 Population Genetics
BIOL 405 Molecular Evolution

& 17-18 credits of additional electives supportive of the student's interests are also required.

COGNATE SCIENCES & MATH:

MATH 140, 141 Calculus with analytical geometry
CHEM 110-114 Chemical principles (2 sems. + labs)
PHYS 211, 213 General physics

OTHER ADDITIONAL REQUIRED COURSES:

ENGL 15 Rhetoric & composition
OR 30 Honors freshman composition
2 of 3: ENGL 202C Technical writing,
CAS 100 Effective speech,
EMSC 100S EMS Freshman seminar

REQUIRED CAPSTONE COURSES:

GEOSC 472a Summer Field
School (GEOSC 310)
GEOSC 494W & 496 Senior Thesis
(no listed prerequisites.....)