GES Course Prerequisite Chart

starting 2026

pay attention to prereqs and when classes are offered!

→ prerequisite

⇢ corequisite or other option

F = offered Fall
S = offered Spring
sum = offered summer

Introductory and Gen Ed Classes

(no prerequisites)

Gen Ed Science Inquiry
GES 1101: Introduction to Physical Geology (F/S/sum)
GES 1102: Introduction to Historical Geology (F/S/sum)
GES 1103: Environmental Change, Hazards, and Resources (F/S/sum)
GES 1104: Water: Mountains to Sea (F/S/sum)
GES 1105: Oceanography (F/S/sum)

GES 1010 (F/S)
Introduction to Environmental Science

Gen Ed ILE/SCL
GES 2301 (S) - *same as AS 2301*
Energy Extraction in Appalachia

Gen Ed ILE/HUM
GES 1842 (F)
Dinosaurs: then and now

Gen Ed SCL
GES 1050 (F/S/sum)
Conservation of Natural Resources in a Changing Climate

Major Classes

(one or more prerequisites, shown by arrows and text above class name)

GES 2250 (F/S)
Evolution of the Earth

permission of instructor
GES 2353 (F/S)
Public and K-12 Outreach in Geological and Environmental Sciences

permission of instructor
GES 2451 (S)
Geological Sample Preparation

permission of instructor
GES 3857 (spring break)
Field Course in Geology and Environmental Science

permission of instructor
GES 3810 (sum)
The Reef Environment and Geology of Modern Carbonate Systems

PHY 1103 or PHY 1150; MAT 1110
GES/PHY 3160 (S)
Geophysics

GES 2752 (F/S)
Environmental Science Field Methods

GES 2751 (F/S)
Geology Field Methods I

RC 2001 (pre or coreq)
GES 2750 (F/S)
Preparation for Careers in the Earth and Environmental Sciences

GES 3025 (S)
Paleontology

permission of instructor
GES 2857 (sum)
Paleontology Field and Museum Methods ("Triassic Trip")

GES 3751 (sum)
Geology Field Methods II

or

GES 3110 (F)
Environmental Regulation and Enforcement

GES 3150 (F)
Structural Geology

MAT 1110
GES 3120 (F)
Paleoclimatology

GHY 2812
GES 3140 (S)
Quantifying Environmental Change

or

GES 3264 (F/S)
Paleontology Laboratory Techniques and Analytical Methods

depends on course
GES 2530-2549
Selected Topics

depends on course
GES 3530-3549
Selected Topics

depends on course
GES 4530-4549
Selected Topics

CHE 1101/1110, CHE 1102/1120
GES 3310 (F)
Global Biogeochemical Cycles

GES 3800 (S)
Stratigraphy and Sedimentology

MAT 1110
GES 3170 (S)
Critical Zone Science

six hours GES classes
GES 3333 (F)
Geomorphology

four hours GES classes
GES 3680 (S)
Geoarchaeology

six hours GES classes
GES 3703 (S)
Issues in Environmental Geology

CHE 1101/1110
GES 3220 (F)
Fundamentals of Mineralogy

GES 3715 (S)
Petrology and Petrography

PHY1150, MAT1110
GES 3455 (F)
Quantitative Data Analysis for Earth and Environmental Scientists

senior standing
STT 2810 or STT 2820
GES 4025 (S)
Introduction to Multivariate Data in Earth and Life Sciences

senior standing
MAT 1110, PHY 11XX
GES 4705 (S)
Engineering Geology

GES 4751 (sum)
Field Methods III

senior standing
MAT 1110, PHY 11XX
GES 4630 (F)
Hydrogeology

GES 1101

GES 1101

GES 2250 with a C- or better

GES 2250 with a C- or better

GES 2250 with a C- or better

GES 2250 with a C- or better, 2750 as pre or coreq

Independent Research, Theses, Internships, and Capstone/Senior Seminars

permission of instructor
GES X500 (F/S/sum)
Independent Study

junior standing or higher, permission of chair
GES 4900 (sum)
Internship

GLY majors only, final semester of senior year
GES 4210 (F/S)
Geology Seminar

ENV majors only, final semester of senior year
GES 4209 (F/S)
Environmental Science Seminar

senior standing, min GPA 3.25, permission of instructor
GES 4501 (F/S)
Senior Honors Research

GES 4501, senior standing, min GPA 3.25, permission of instructor
GES 4510 (F/S)
Senior Honors Thesis