

GEOGRAPHY

Undergrad

GEOG Major Requirements for Physical Geography Track

Required Courses

Students must complete the general requirements of the College of Arts and Sciences and the required courses below. In addition to a standard degree in Geography, the Department offers transcribed concentrations in Geographic Information Science, Human Geography, Environment-Society Geography, and Physical Geography. Coursework required for each concentration is listed below. Students must complete at least 37 and no more than 45 credit hours in Geography with grades of C- or better (23 hours must be upper division). No *pass/fail* grades are allowed in the major. Transfer students majoring in Geography must complete at least 12 hours of upper-division Geography courses at CU-Boulder. No course may be used to fulfill more than one requirement for the major. All courses marked with an * can be used to meet College of Arts and Sciences core curriculum requirements.

Required Courses and Semester Credit Hours Human Geography Concentration

- GEOG 1001* Environmental Systems I: Climate and Vegetation - 4
- GEOG 1011* Environmental Systems II: Landscapes and Water - 4
- One of the following human geography courses:
 - GEOG 1962 Geographies of Global Change - 3
 - GEOG 1972 Environment-Society Geography - 3
 - GEOG 1982 World Regional Geography - 3
 - GEOG 1992 Human Geography - 3
- GEOG 3023 Statistics for Geography - 4
- One of the following mapping courses:
 - GEOG 2053 Mapping a Changing World - 4
 - GEOG 3053 Cartography I: Visualization and Information Design - 4
- One of the following methods courses:
 - GEOG 4023 Introduction to Quantitative Methods in Geography (prereq GEOG 3023) - 4
 - GEOG 4043 Cartography II: Interactive and Multi-media Mapping (prereq GEOG 3053) - 4
 - GEOG 4093 Remote Sensing of the Environment - 4

- GEOG 4103 Introduction to Geographic Information Science (prereqs: GEOG 3053; GEOG 3023 or equivalent introductory statistics course) - 4
- GEOG 4173 Research Seminar - 3
- GEOG 4722 Field Methods in Human Geography - 3
- Take one of the following:

Physical Geography Concentration

- Take Calculus I & 2 (one of the following sequences)
 - MATH 1300—5 and MATH 2300—5
 - APPM 1350—4 and APPM 1360—4
- Take three semesters (total) of Physics and Chemistry, including related labs.
 - PHYS 1110—4
 - PHYS 1120 (and PHYS 1140 lab)—5
 - CHEM 1113 (and CHEM 1114 lab)—5
 - CHEM 1133 (and CHEM 1134 lab)—5
- Take two of the following (GEOG 1001 and GEOG 1011, or equivalent, required for all 3000 and 4000 level courses):
 - GEOG 3351 Biogeography—3
 - GEOG 3511 Introduction to Hydrology—4
 - GEOG 3601 Principles of Climate—3
 - GEOG 4241* Principles of Geomorphology—4
- Take two electives from the following list (GEOG 1001 and GEOG 1011, or equivalent, are prereq. for all 3000 and 4000 level courses):
 - GEOG 3251 Mountain Geography—3
 - GEOG 3301* Analysis of Climate—3
 - GEOG 3351 Biogeography—3
 - GEOG 3511 Introduction to Hydrology—4
 - GEOG 3610 Principles of Climate—3
 - GEOG 4120 Special Topics—3
 - GEOG 4173 Research Seminar—3
 - GEOG 4201 Biometeorology—3
 - GEOG 4241* Principles of Geomorphology—4
 - GEOG 4251 Fluvial Geomorphology—4
 - GEOG 4261 Glaciers and Permafrost—3
 - GEOG 4271 Arctic Climate—3
 - GEOG 4311 Watershed Biochemistry—3
 - GEOG 4321 Snow Hydrology—3-4
 - GEOG 4331 Mountain Climatology – 3-4
 - GEOG 4371 Forest Geography—3
 - GEOG 4401 Soil Geography—3
 - GEOG 3930 Internship (3) and GEOG 4990 Senior Thesis (3) may be applied to the concentration on a case-by-case basis.
- Take one upper division elective in Geographic Information Science, Environment and Society, or Human Geography.

- Take upper and lower division electives within Geography if necessary to reach 37 total credits and 23 upper division credits in the major.

* *core curriculum course*