GEOGRAPHY, B.S.

Degree Requirements (120 hours)

Program of Study

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Carolina Core</td>
<td>32-44</td>
</tr>
<tr>
<td>2. College Requirements</td>
<td>15-18</td>
</tr>
<tr>
<td>3. Program Requirements</td>
<td>33-49</td>
</tr>
<tr>
<td>4. Major Requirements</td>
<td>24-25</td>
</tr>
</tbody>
</table>

Founding Documents Requirement
All undergraduate students must take a 3-credit course or its equivalent with a passing grade in the subject areas of History, Political Science, or African American Studies that covers the founding documents including the United States Constitution, the Declaration of Independence, the Emancipation Proclamation and one or more documents that are foundational to the African American Freedom struggle, and a minimum of five essays from the Federalist papers. This course may count as a requirement in any part of the program of study including the Carolina Core, the major, minor or cognate, or as a general elective. Courses that meet this requirement are listed [here](https://academicbulletins.sc.edu/undergraduate/founding-document-courses/).

1. Carolina Core Requirements (32-44 hours)

CMW – Effective, Engaged, and Persuasive Communication: Written (6 hours)

*must be passed with a grade of C or higher*

• any CC-CMW courses ([https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/](https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/))

ARP – Analytical Reasoning and Problem Solving (6-8 hours)

• MATH 122* or MATH 141*

• MATH 142* or MATH 170* or MATH 172*

SCI – Scientific Literacy (8 hours)

• Two 4-credit hour CC-SCI courses ([https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/](https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/))

GFL – Global Citizenship and Multicultural Understanding: Foreign Language (0-6 hours)

Demonstration of proficiency in one foreign language equivalent to the minimal passing grade on the exit examination in the 122 course is required. Students can demonstrate this proficiency by successfully completing Phase II of the Proficiency Test or by successfully completing the 122 course, including the exit exam administered as part of that course.

• CC-GFL courses ([https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/](https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/))

It is strongly recommended that students continuing the study of a foreign language begin college-level study of that language in their first semester and continue in that language until their particular foreign language requirement is completed.

GHS – Global Citizenship and Multicultural Understanding: Historical Thinking (3 hours)

• any CC-GHS course ([https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/](https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/))

GSS – Global Citizenship and Multicultural Understanding: Social Sciences (3 hours)

• any CC-GSS course ([https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/](https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/))

AIU – Aesthetic and Interpretive Understanding (3 hours)

• any CC-AIU course ([https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/](https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/))

CMS – Effective, Engaged, and Persuasive Communication: Spoken Component (0-3 hours)

• any overlay or stand-alone CC-CMS course ([https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/](https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/))

INF – Information Literacy (0-3 hours)

• any overlay or stand-alone CC-INF course ([https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/](https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/))

VSR – Values, Ethics, and Social Responsibility (0-3 hours)

• any overlay or stand-alone CC-VSR course ([https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/](https://academicbulletins.sc.edu/undergraduate/carolina-core-courses/))

1 Carolina Core Stand Alone or Overlay Eligible Requirements — Overlay-approved courses offer students the choice of meeting two Carolina Core components in a single course. A maximum of two overlays is allowed. The total Carolina Core credit hours must add up to a minimum of 31 hours. Some programs may have a higher number of minimum Carolina Core hours due to specified requirements.

Select at least one of the following to fulfill a Carolina Core requirement

*must be passed with a grade of C or higher*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 103</td>
<td>Introduction to Geography (*)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 104</td>
<td>Introduction to Physical Geography (*)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 121</td>
<td>Geographies of Global Change (*)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 201</td>
<td>Landform Geography (*)</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 202</td>
<td>Weather and Climate (*)</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 210</td>
<td>Peoples, Places, and Environments (*)</td>
<td>3</td>
</tr>
</tbody>
</table>

2. College Requirements (15-18 hours)

Foreign Language (0-3 hours)

• only if needed to meet 122-level proficiency
Analytical Reasoning (6 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 201</td>
<td>Elementary Statistics (*)</td>
<td>3</td>
</tr>
<tr>
<td>CSCE 102</td>
<td>General Applications Programming (*)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td><strong>6</strong></td>
<td></td>
</tr>
</tbody>
</table>

History (3 hours)

The College of Arts and Sciences requires one additional GHS course beyond the Carolina Core GHS requirement.

- If the Carolina Core GHS requirement is fulfilled by a U.S. history course, the College of Arts and Sciences history requirement must be fulfilled by a non-U.S. history course.
- If the Carolina Core GHS requirement is fulfilled by a non-U.S. history course, the College of Arts and Sciences history requirement must be fulfilled by a U.S. history course.

Social Science and Fine Arts or Humanities (6 hours)

- Social Science (3 hours)
  - The College of Arts and Science requires one 3-hour Social Science Course (https://academicbulletins.sc.edu/undergraduate/arts-sciences/courses-acceptable-social-science/)
- Fine Arts/Humanities (3 Hours)
  - A Bachelor of Science from the College of Arts and Sciences requires one 3-hour Fine Arts/Humanities Course (https://academicbulletins.sc.edu/undergraduate/arts-sciences/courses-acceptable-fine-arts-humanities/)

3. Program Requirements (33-49 hours)

Cognate or Minor (12-18 hours)

Students must complete a cognate (12 hours) or a minor as part of this program. In lieu of a cognate or minor, an additional major may be added to a student’s program of study. Additional majors must include all major courses as well as any prescribed courses noted (*) in the bulletin. Prescribed courses noted in the bulletin may be shared with Carolina Core, College requirements, and Program requirements in the primary program.

Cognate (12 hours)

The cognate must consist of twelve (12) hours of courses at the advanced level, outside of but related to the major. The cognate may be taken in one or more departments or programs.

Courses offered by departments and programs that are acceptable for cognate credit are outlined in the section titled Courses Acceptable for Cognate Credit in Degree Programs in the College of Arts and Sciences (https://academicbulletins.sc.edu/undergraduate/arts-sciences/courses-acceptable-cognate/). Some major programs have specific cognate requirements. It should be emphasized that the cognate is not a second set of elective courses to be chosen at random by the student. Students are urged to consult their major advisors for specific requirements in their major.

All minor courses must be completed in residence at the University.

A list of minor programs of study can be found at Programs A-Z (https://academicbulletins.sc.edu/undergraduate/programs-az/).

Electives (15-37 hours)

120 (or 128) degree applicable credits are required to complete any degree at USC. After the cognate, minor or second major is complete, any additional credits needed to reach 120 (or 128) total credits can be fulfilled by electives. No courses of a remedial, developmental, skill-acquiring, or vocational nature may apply as credit toward degrees in the College of Arts and Sciences. The College of Arts and Sciences allows the use of the Pass-Fail option on elective courses. Further clarification on inapplicable courses can be obtained from the College of Arts and Sciences.

Note: 4-25 hours of electives will be needed to reach hours to graduate, if completing the B.S. with Distinction.

4. Major Requirements (24-25 hours)

A minimum grade of C is required in all major courses.

Concentrations (24-25 hours)

Students must choose one of the following three concentrations:

General Geography (24 hours)

At least two courses for the major must be from the 500-level. GEOG 595 can be used to fulfill up to 3 hours of geography elective credit, but not the 500-level requirement.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 495</td>
<td>Seminar in Geography</td>
<td>3</td>
</tr>
<tr>
<td>Geography Elective: Select two courses at the 200-level or above with advisor’s approval.</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Select 15 hours from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 285</td>
<td>Introduction to Drones for Airborne Spatial Data</td>
<td></td>
</tr>
<tr>
<td>GEOG 310</td>
<td>Topics in Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 311</td>
<td>Cultural Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 312</td>
<td>Geography and Global Geopolitics</td>
<td></td>
</tr>
<tr>
<td>GEOG 313</td>
<td>Economic Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 321</td>
<td>Sustainable Cities</td>
<td></td>
</tr>
<tr>
<td>GEOG 324</td>
<td>Landscapes of the United States</td>
<td></td>
</tr>
<tr>
<td>GEOG 330</td>
<td>The Geography of Disasters</td>
<td></td>
</tr>
<tr>
<td>GEOG 341</td>
<td>Cartography</td>
<td></td>
</tr>
</tbody>
</table>
GEOG 343  Environment and Society  
GEOG 344  Geographies of American Cities  
GEOG 345  Interpretation of Aerial Photographs  
GEOG 346  Climate and Society  
GEOG 347  Water as a Resource  
GEOG 348  Biogeography  
GEOG 349  Cartographic Animation  
GEOG 360  Geography of Wind  
GEOG 363  Geographic Information Systems  
GEOG 365  Hurricanes and Tropical Climatology  
GEOG 370  America's National Parks  
GEOG 371  Air Pollution Climatology  
GEOG 378  World Tourism Geography  
GEOG 510  Special Topics in Geographic Research  
GEOG 511  Planning and Locational Analysis  
GEOG 512  Migration and Globalization  
GEOG 515  Political Geography  
GEOG 516  Coastal Zone Management  
GEOG 521  Landscapes of South Carolina  
GEOG 525  Geographical Analysis of Transportation  
GEOG 530  Environmental Hazards  
GEOG 531  Quantitative Methods in Geographic Research  
GEOG 535  Hazards Analysis and Planning  
GEOG 541  Advanced Cartography  
GEOG 542  Dynamic Cartography  
GEOG 544  Geography of the City  
GEOG 545  Synoptic Meteorology  
GEOG 546  Applied Climatology  
GEOG 547  Fluvial Geomorphology  
GEOG 549  Water and Watersheds  
GEOG 551  Principles of Remote Sensing  
GEOG 552  LiDARgrammetric and Photogrammetric Digital Surface Mapping  
GEOG 554  Spatial Programming  
GEOG 556  WebGIS  
GEOG 560  Source Materials for Geographic Instruction  
GEOG 561  Contemporary Issues in Geography Education  
GEOG 562  Satellite Mapping and the Global Positioning System  
GEOG 563  Advanced Geographic Information Systems  
GEOG 564  GIS-Based Modeling  
GEOG 565  Geographic Information System (GIS) Databases and Their Use  
GEOG 566  Social Aspects of Environmental Planning and Management  
GEOG 567  Long-Term Environmental Change  
GEOG 568  Human Dimensions of Global Environmental Change  
GEOG 569  International Development and the Environment  
GEOG 570  Geography of Public Land and Water Policy  
GEOG 571  Microclimatology  
GEOG 573  Climatic Change and Variability  

GEOG 575  Digital Techniques and Applications in Remote Sensing  
GEOG 581  Globalization and Cultural Questions  
GEOG 590  Beach-Dune Interactions

**Total Credit Hours:** 24

1 Courses used to fulfill Carolina Core or College Requirements may not be used again to fulfill these requirements.

**Geographic Information Science (24-25 hours)**

At least two courses for the major must be from the 500-level. GEOG 595 can be used to fulfill up to 3 hours of geography elective credit, but not the 500-level requirement.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 363</td>
<td>Geographic Information Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select two of the following:</td>
<td>6</td>
</tr>
<tr>
<td>GEOG 341</td>
<td>Cartography</td>
<td></td>
</tr>
<tr>
<td>GEOG 345</td>
<td>Interpretation of Aerial Photographs</td>
<td></td>
</tr>
<tr>
<td>GEOG 531</td>
<td>Quantitative Methods in Geographic Research</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select three of the following:</td>
<td>9</td>
</tr>
<tr>
<td>GEOG 285</td>
<td>Introduction to Drones for Airborne Spatial Data</td>
<td></td>
</tr>
<tr>
<td>GEOG 349</td>
<td>Cartographic Animation</td>
<td></td>
</tr>
<tr>
<td>GEOG 535</td>
<td>Hazards Analysis and Planning</td>
<td></td>
</tr>
<tr>
<td>GEOG 541</td>
<td>Advanced Cartography</td>
<td></td>
</tr>
<tr>
<td>GEOG 542</td>
<td>Dynamic Cartography</td>
<td></td>
</tr>
<tr>
<td>GEOG 551</td>
<td>Principles of Remote Sensing</td>
<td></td>
</tr>
<tr>
<td>GEOG 552</td>
<td>LiDARgrammetric and Photogrammetric Digital Surface Mapping</td>
<td></td>
</tr>
<tr>
<td>GEOG 554</td>
<td>Spatial Programming</td>
<td></td>
</tr>
<tr>
<td>GEOG 556</td>
<td>WebGIS</td>
<td></td>
</tr>
<tr>
<td>GEOG 562</td>
<td>Satellite Mapping and the Global Positioning System</td>
<td></td>
</tr>
<tr>
<td>GEOG 563</td>
<td>Advanced Geographic Information Systems</td>
<td></td>
</tr>
<tr>
<td>GEOG 564</td>
<td>GIS-Based Modeling</td>
<td></td>
</tr>
<tr>
<td>GEOG 565</td>
<td>Geographic Information System (GIS) Databases and Their Use</td>
<td></td>
</tr>
<tr>
<td>GEOG 575</td>
<td>Digital Techniques and Applications in Remote Sensing</td>
<td></td>
</tr>
<tr>
<td>GEOG 495</td>
<td>Seminar in Geography</td>
<td>3</td>
</tr>
</tbody>
</table>

**Geography Elective:** Select one non-GIScience course at the 200-level or above with advisor’s approval from the following list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 201</td>
<td>Landform Geography</td>
</tr>
<tr>
<td>GEOG 202</td>
<td>Weather and Climate</td>
</tr>
<tr>
<td>GEOG 210</td>
<td>Peoples, Places, and Environments</td>
</tr>
<tr>
<td>GEOG 221</td>
<td>Geography of South Carolina</td>
</tr>
<tr>
<td>GEOG 223</td>
<td>Geography of Latin America</td>
</tr>
<tr>
<td>GEOG 224</td>
<td>Geography of North America</td>
</tr>
<tr>
<td>GEOG 225</td>
<td>Geography of Europe</td>
</tr>
<tr>
<td>GEOG 226</td>
<td>Geography of the Middle East</td>
</tr>
<tr>
<td>GEOG 228</td>
<td>Geography of Sub-Saharan Africa</td>
</tr>
<tr>
<td>GEOG 310</td>
<td>Topics in Geography</td>
</tr>
<tr>
<td>GEOG 311</td>
<td>Cultural Geography</td>
</tr>
<tr>
<td>GEOG 312</td>
<td>Geography and Global Geopolitics</td>
</tr>
</tbody>
</table>
Course | Title | Credits
---|---|---
Select one of the following: | | 3
GEOG 341 | Cartography | 
GEOG 345 | Interpretation of Aerial Photographs | 
GEOG 363 | Geographic Information Systems | 
GEOG 551 | Principles of Remote Sensing | 
GEOG 495 | Seminar in Geography | 3
Select 5-6 courses from the following: 1 | 18
GEOG 330 | The Geography of Disasters | 
GEOG 343 | Environment and Society | 
GEOG 346 | Climate and Society | 
GEOG 347 | Water as a Resource | 
GEOG 348 | Biogeography | 
GEOG 360 | Geography of Wind | 
GEOG 365 | Hurricanes and Tropical Climatology | 
GEOG 370 | America's National Parks | 
GEOG 371 | Air Pollution Climatology | 
GEOG 516 | Coastal Zone Management | 
GEOG 530 | Environmental Hazards | 
GEOG 535 | Hazards Analysis and Planning | 
GEOG 545 | Synoptic Meteorology | 
GEOG 546 | Applied Climatology | 
GEOG 547 | Fluvial Geomorphology | 
GEOG 549 | Water and Watersheds | 
GEOG 566 | Social Aspects of Environmental Planning and Management | 
GEOG 567 | Long-Term Environmental Change | 
GEOG 568 | Human Dimensions of Global Environmental Change | 
GEOG 569 | International Development and the Environment | 
GEOG 570 | Geography of Public Land and Water Policy | 
GEOG 571 | Microclimatology | 
GEOG 573 | Climatic Change and Variability | 
GEOG 581 | Globalization and Cultural Questions | 
GEOG 590 | Beach-Dune Interactions | 

Total Credit Hours 24

1 GEOG 201 or GEOG 202 may be used if not used to satisfy Carolina Core or College Requirements.

B.S. with Distinction in Geography (36 hours)
Available to students majoring in Geography who wish to participate in significant research activities in their major field under the supervision of a faculty mentor.

Prerequisite
A minimum GPA of 3.50 in the major, and 3.30 cumulative, is required to apply for a BA or BS with Distinction in Geography.

Requirements
- Students must submit a written application for the BS with Distinction in Geography at least eight months before completion of the degree.
- Written sponsorship agreement from a Geography faculty mentor on file in the department.

Physical/Environmental Geography (24 hours)
At least two courses for the major must be from the 500-level. GEOG 595 can be used to fulfill up to 3 hours of geography elective credit, but not the 500-level requirement.
• An established thesis committee consisting of a tenure-track faculty member in Geography and at least one other tenure-track or research faculty member at the University of South Carolina.
• A written thesis demonstrating significant original work and approved by the thesis committee.
• A public presentation of the Senior Thesis research.
• Successful fulfillment of all requirements below with a minimum GPA of 3.50 in the major and 3.30 cumulative.
• General major requirements, plus 12 additional credit hours including:
  • A minimum of nine credit hours in GEOG 498, or any GEOG 500-level courses (9 hours)
  • GEOG 499

Note: South Carolina Honors College students satisfying the above requirements will graduate with “Honors from the South Carolina Honors College” and with “Distinction in Geography.”