For students transition to semester-based courses

BA in Geography with Environmental Option
### I. Lower Division Required Courses (13 units)

- **GEOG 1550 - Cultural Geography** (3)
- **GEOG 1600 - Physical Geography**+ (3)
- **GEOG 2680 - Introduction to Geospatial Sciences**+ (4)

**Select one of the following courses:**

- **GEOG 1700 - Meteorology**+ (3)
- **GEOG 2820 - Spatial Measurement and Elementary Statistics** (3)
- **GEOL 1500 - Earth Revealed**+ (3)
- **GEOL 1550 - Oceanography**+ (3)
- **GEOL 1580 - Natural Disasters**+ (3)
- **GEOL 2200 - Environmental Geosciences** (3)

### II. Upper Division Required Courses (30 units)

#### Methods (6 units)

- **GEOG 3690 - Fundamentals of Geographic Information Systems** (3)

**Select one of the following courses:**

- **GEOG 4630 - Geographic Information Systems (GIS) Applications in Urban Planning** (3)
- **GEOG 4640 - Geographical Information Systems (GIS) Applications in Political Sciences** (3)
- **GEOG 4650 - Geographic Information Systems (GIS) Applications in Environmental Studies** (3)
- **GEOG 4660 - Remote Sensing** (3)
- **GEOG 4680 - Digital Cartography** (3)
- **GEOG 4690 - Spatial Analysis and GIS**

### Quarter-based course that can be used to satisfy this program

- GEOG155 - Cultural Geography (4)
- GEOG160 – Physical Geography (4)
- GEOG 268 - Introduction to Geospatial Sciences (4)
- GEOG 170 - Meteorology+ (4)
- GEOG 2820 - Spatial Measurement and Elementary Statistics (4)
- GEOL 150 - Earth Revealed (4)
- GEOL 155 - Oceanography (4)
- GEOL 158 - Natural Disasters (4)
- GEOL 220 - Environmental Geoscience (4)
<table>
<thead>
<tr>
<th>Model</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>Modeling</td>
<td>GEOG 4820</td>
<td>Multivariate Statistics in Geography</td>
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**Climate (select 2 of the following) (6 units)**

- GEOG 310 - Urban Climatology (3)
- GEOG 3120 - Global Climate Change and the Developing World (3) *(also listed as)*
- GEOL 3120 - Global Climate Change and the Developing World (3)
- GEOG 4100 - Applied Climatology (3)
- GEOL 4330 - Quaternary Geology (3)

**Environmental Geography (select 3 of the following) (9 units)**

- GEOG 3090 - Urban Environmental Pollution (3)
- GEOL 3570 - Urban Geology (3)
- GEOG 4020 - Geomorphology (3)
- GEOG 4030 - Environment and Food Customs (3)
- GEOG 4070 – Biogeography (3)
- GEOG 4150 - Perspectives on Environment (3)
- GEOL 4870 - Watershed Analysis (3)

**Urban Social Dynamics (select 2 of the following) (6 units)**

- GEOG 3760 - Urban Spatial Process and Patterns (3)
- GEOG 4420 - Population Geography (3)
- GEOG 4460 - U.S. Ethnic Communities (3)
- GEOG 4570 - Transportation Geography (3)
- GEOG 4580 - Urban Transportation (3)
- GEOG 4760 - Urban Geography (3)
- GEOG 4880 – Geography and Geopolitics of East Asia and Southeast Asia (3)

**Credits**

- GEOG 482 - Multivariate Statistics in Geography (4)
- GEOG 310 - Urban Climatology (4)
- GEOG 312 - Global Climate Change and the Developing World (4) *(also listed as)*
- GEOL 312 - Global Climate Change and the Developing World (4)
- GEOG 410 - Applied Climatology (4)
- GEOL 433 - Quaternary Geology (4)
- GEOG 309 - Urban Environmental Pollution (4)
- GEOL 357 - Urban Geology (4)
- GEOG 402 - Geomorphology (4)
- GEOG 403 - Environment and Food Customs (4)
- GEOG 407 – Biogeography (4)
- GEOG 415 - Perspectives on Environment (4)
- GEOL 487 - Watershed Analysis (4)
- GEOG 376 - Urban Spatial Process and Patterns (4)
- GEOG 442 - Population Geography (4)
- GEOG 446 - U.S. Ethnic Communities (4)
- GEOG 457 - Transportation Geography (4)
- GEOG 458 - Urban Transportation (4)
- GEOG 476 - Urban Geography (4)
<table>
<thead>
<tr>
<th>Capstone Course: Senior Thesis (3 units)</th>
<th>GEOG495 – Senior Thesis (4)</th>
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<tbody>
<tr>
<td>• GEOG 4950 - Senior Thesis (3)</td>
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<tr>
<td>Semester-based Program Requirements</td>
<td>Quarter-based courses that can be used to satisfy this program requirements</td>
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</tbody>
</table>
## I. Lower Division Required Courses (13 units)
- GEOG 155 - Cultural Geography (3)
- GEOG 160 - Physical Geography (3)
- GEOG 268 - Introduction to Geospatial Sciences (4)
- GEOG 282 - Spatial Measurement and Elementary Statistics (3)

## II. Upper division courses (30 units)

### Technical Core (18 units)
- GEOG 369 - Fundamentals of Geographic Information Systems (4)
- GEOG 466 - Remote Sensing (4)
- GEOG 468 - Digital Cartography (4)
- GEOG 469 - Spatial Analysis and GIS Modeling (4)
- GEOG 482 - Multivariate Statistics in Geography (4)
- GEOG 495 - Senior Thesis (3)

Electives: 3 out of the following 2 groups; at least one for each group (9 units)

### Application courses:
- GEOG 4630 - Geographic Information Systems (GIS) Applications in Urban Planning (3)
- GEOG 4640 - Geographic Information Systems (GIS) Applications in Political Science (3)
- GEOG 4650 - Geographic Information Systems (GIS) Applications in Environmental Studies (3)

### Systematic Core
- GEOG 4070 - Biogeography (3)
III. Electives in geography (3 units)

It could include additional courses from the list of systematic core in geography (see above).

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<tr>
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<td>GEOG 3120</td>
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<td>GEOG 4460</td>
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<td>GEOG 4880</td>
<td>Geography and Geopolitics of East Asia and Southeast Asia</td>
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<td>GEOG 4310</td>
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### Lower Division Required Courses (13 units)

- GEOG 155 - Cultural Geography (3)
- GEOG 160 - Physical Geography (3)
- GEOG 2680 Introduction to Geospatial Sciences (4)
- URBA 1800 Urban World (3)

### Upper Division Required Courses (21 units)

- GEOG 369 - Fundamentals of Geographic Information Systems (3)
- GEOG 370 - World Regions (3)
- GEOG 376 - Urban Spatial Process and Patterns (3)
- GEOG 431 - California (3)
- GEOG 446 - U.S. Ethnic Communities (3)
- GEOG 476 - Urban Geography (3)
- GEOG 495 - Senior Thesis (3)

### Electives (9 units)

Select at least one course from two of the following three groups

#### Methods

- GEOG 4420 - Population Geography (3)
- GEOG 4630 - Geographic Information Systems (GIS) Applications in Urban Planning (3)
- GEOG 4640 - Geographic Information Systems (GIS) Applications in Political Science (3)
- GEOG 4650 - Geographic Information Systems (GIS) Applications in Environmental Studies (3)

- GEOG 442 - Population Geography (4)
- GEOG 463 - Geographic Information Systems (GIS) Applications in Urban Planning (4)
- GEOG 464 - Geographic Information Systems (GIS) Applications in Political Science (4)
- GEOG 465 - Geographic Information Systems (GIS) Applications in Environmental Studies (4)
- GEOG 4660 - Remote Sensing (4)
- GEOG 482 - Multivariate Statistics in Geography
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<tr>
<td>GEOG 4660</td>
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<td>Multivariate Statistics in Geography</td>
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**Environmental**

- GEOG 3090 - Urban Environmental Pollution (3)
- GEOG 3100 - Urban Climatology (3)
- GEOG 3120 - Global Climate Change and the Developing World (3)
- GEOG 3330 - Environment and Development in the Third World (3)
- GEOG 4030 - Environment and Food Customs (3)
- GEOG 4100 - Applied Climatology (3)
- GEOG 4150 - Perspectives on Environment (3)
- SOC 4870 - Environmental Policy, Law, and Society (3)

**Social and Economic**

- GEOG 4570 - Transportation Geography (3)
- GEOG 4580 - Urban Transportation (3)
- GEOG 4880 Geography and Geopolitics of East Asia and Southeast Asia (3)
- POLS 4040 - Urban Government and Politics (3)
- POLS 4060 - Los Angeles City Politics (3)
- POLS 4610 - Dynamics of Urban Administration (3)
- SOC 4300 - Urban Sociology (3)
- GEOG 309 - Urban Environmental Pollution (4)
- GEOG 310 - Urban Climatology (4)
- GEOG 312 - Global Climate Change and the Developing World (4)
- GEOG 333 - Environment and Development in the Third World (4)
- GEOG 403 - Environment and Food Customs (4)
- GEOG 410 - Applied Climatology (4)
- GEOG 415 - Perspectives on Environment (4)
- SOC 487 - Environmental Policy, Law, and Society (4)
- GEOG 457 - Transportation Geography (4)
- GEOG 458 - Urban Transportation (4)
- POLS 404 - Urban Government and Politics (4)
- POLS 406 - Los Angeles City Politics (4)
- POLS 461 - Dynamics of Urban Administration (4)
- SOC 430 - Urban Sociology (4)