

**Geography Major Checksheet**  
**GEOSPATIAL AND ENVIRONMENTAL ANALYSIS OPTION**  
(For students graduating in calendar year 2009)

**Bachelor of Arts in Geography - College of Natural Resources**

Student \_\_\_\_\_  
Advisor \_\_\_\_\_

Required hours in Geography: Minimum of 33 plus 3 hours of approved electives plus  
STAT 3604 (39 hours). Minimum number of hours for degree is 120.

**Major Requirements**

**Fundamentals in Geography: 12 credit hours**

1. 1004: Human Geography \_\_\_\_\_
2. 1014: World Regions \_\_\_\_\_
3. 1104: Physical Geography \_\_\_\_\_
4. 2314: Maps and Mapping \_\_\_\_\_

**Regional Geography and International Development:  
6 credit hours from following; at least 3 credits at the  
3000-4000 level**

1. \_\_\_\_\_
2. \_\_\_\_\_

- 2034: Geography of Global Conflict (Area 7)  
2054: Introduction to World Politics (Areas 3, 7) (cross-listed  
with PSCI and IS)  
2064: The Global Economy and World Politics (Areas 3, 7)  
(cross-listed with PSCI and IS)  
2134: Geography of Global Economy (Area 7)  
3104: Environmental Problems, Population,  
and Development (Area 7)  
3204: Geography of Middle America  
3244: The U.S. City  
3464: Appalachian Communities  
(cross-listed with HUM, EDHL  
FCD, SOC and UAP)  
4054: Geography of Wine  
4074: Medical Geography (Area 7)  
4204: Geography of Resources (Area 7)  
4244: Geography of Europe  
4764: International Development (Core Area 7)  
(cross-listed with UAP and SOC)

**Statistics: 3 credit hours**

STAT 3604: Stat for Social Sciences

NOTE: The overall and in-major GPA required for graduation is 2.0. To make satisfactory progress towards the Geography degree, upon completion of 60 hours, students must have completed 15 hours in Geography. Courses for in-major GPA computation include all GEOG courses, approved cognate electives, and SPIA 2004.

**Geospatial and Environmental Analysis:  
15 credit hours**

Select at least 2 courses from each of the following two groups ("Mapping and GIS" and "Environmental Analysis").

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**Mapping and GIS**

- 3314: Cartography  
4084: Introduction to GIS  
4314: Spatial Analysis in GIS  
4324: Algorithms in GIS  
4384: Arc/Info GIS  
4844: Soil Interpretation Using GIS  
(cross-listed with CSES and ENSC)

**Environmental Analysis**

- 3114: Intro. Meteorology (cross-listed with GEOS)  
3304: Geomorphology  
(cross-listed with CSES and GEOS)  
3404: Mountain Geography  
4044: Biogeography (cross-listed with BIOL)  
4354: Introduction to Remote Sensing

**Geography and Cognate Electives: 3 credit hours**

**1. One GEOG elective or cognate elective from the following \_\_\_\_\_**

- FIW 2114: Principles of Fisheries and Wildlife Management (Pre: BIOL 1006 or BIOL 1106)  
FIW 4454: Vertebrate Pest Management  
FIW 4464: Human Dimensions of Fisheries and Wildlife (Pre: FIW 2114)  
FIW 4614: Fish Ecology  
FOR 2314: Forest Biology and Dendrology (Pre: BIOL 1006 or BIOL 1106)  
FOR 2324: Dendrology Laboratory  
FOR 2554 (LAR 2554): Nature & American Values  
FOR 4114: Info Tech for Natl Resrce Mgt (Pre: GEOG 2314)  
FOR 4214: Forest Photogrammetry and Spatial Data Proc.  
FOR 4374: Forested Wetlands (Pre: CSES 3114 or CSES 3134)  
NR 4984: Global Seminar-Environment and Sust. Systems  
SPIA 2004 Computer Appl. in Social Science Research  
WOOD 3334: Non-Timber Forest Products  
WOOD 3784: World Forests and Forest Products

## Curriculum for Liberal Education Requirements

### Area 1: Writing and Discourse (6 to 12 credit hours depending on placement)

ENGL 1105 \_\_\_\_\_  
 ENGL 1106 \_\_\_\_\_  
 or ENGL H1204 \_\_\_\_\_

or COMM 1015 \_\_\_\_\_  
 COMM 1016 \_\_\_\_\_  
 Or advanced placement

**AND** 6 credits writing intensive classes:

At least one Writing Intensive Course in Major GEOG 3224 \_\_\_\_\_ or GEOG 3234 \_\_\_\_\_  
 One other Writing Intensive Course (may be in the major) \_\_\_\_\_

### Area 2: Ideas, Cultural Traditions, and Values (6 credit hours)

Approved courses \_\_\_\_\_

### Area 3: Society and Human Behavior (6 credit hours)

Geography major covers this area

### Area 4: Scientific Reasoning and Discovery (8 credit hours)

6 credit hours of lecture (2 approved courses) \_\_\_\_\_

2 credit hours of related laboratory (2 approved labs) \_\_\_\_\_

### Area 5: Quantitative and Symbolic Reasoning (6 credit hours)

Approved mathematics sequence (Approved mathematics sequence includes Math 1016/Math 2015).

### Area 6: Creativity and Aesthetic Experience (1 credit hour)

Approved course \_\_\_\_\_

### Area 7: Critical Issues in a Global Context (3 credit hours)

Geography major covers this area

**Foreign Language:** A sequence of two (2) foreign language courses is required for graduation unless two (2) high school credits of the same foreign language or six (6) transfer credit hours of foreign language have been earned. These credits do not count toward graduation. See catalog section on “Graduation Requirements.”

### Visual Expression, Writing and Speaking :ViEWS Requirement Requirements in Geography<sup>1</sup>

(A) Writing Communication(select two)	(B) Visual Communication	(C) Oral Communication(select one)
<b>GEOG 2134:</b> Geography of the Global Economy <b>GEOG 3204:</b> Geography of Middle America <b>GEOG 3244:</b> The U.S. City <b>GEOG 3304:</b> Geomorphology <b>GEOG 3404:</b> Mountain Geography <b>GEOG 3464:</b> Appalachian Communities <b>GEOG 4044:</b> Biogeography <b>GEOG 4054:</b> Geography of Wine <b>GEOG 4074:</b> Medical Geography <b>GEOG 4204:</b> Geography of Resources <b>GEOG 4244:</b> Geography of Europe <b>GEOG 4404:</b> Approaches for International Development	<b>GEOG 2314:</b> Maps and Mapping (Required for all majors)	<b>GEOG 3104:</b> Environmental Problems, Population, and Development <b>GEOG 3314:</b> Cartography <b>GEOG 4044:</b> Biogeography <b>GEOG 4074:</b> Medical Geography <b>GEOG 4314:</b> Spatial Analysis in GIS <b>GEOG 4324:</b> Algorithms in GIS <b>GEOG 4354:</b> Intro. to Remote Sensing <b>GEOG 4384:</b> ArcInfo GIS

**For more information about the Geography major and careers contact:**

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<sup>1</sup> Students who entered Virginia Tech prior to the fall of 2005 will have to meet the writing intensive requirements listed above instead of the ViEWS requirement even if they graduate after 2008. Please see your advisor to handle this.