

Example Schedule of Courses for the proposed undergraduate certificate with B.S. in Geography

While it should be possible to complete a Geography B.S. degree and the proposed Atmospheric Sciences Certificate in four years, it will require careful planning beginning in the first semester of the freshman year.

See a more general [example](#) not specific to Geography.

Freshman, Fall Semester

GEOG 1112/L (a)	Introduction to Weather and Climate (4)
GEOG 1101/D (a, b)	Introduction to Human Geography (3)
MATH 1113 (b, d)	Precalculus (3)
	Two courses to meet core and college requirements (foreign language course recommended)

Freshman, Spring Semester

GEOG 1113/L (a)	Introduction to Landforms (4)
MATH 2200/L (b, d)	Analytical Geometry and Calculus w/ Lab (or honors equiv.) (4)
CHEM 1211 (b, d)	Freshman Chemistry I (or CHEM 1311 or CHEM 1411)
	Two courses to meet core and college requirements (foreign language course recommended)

Sophomore, Fall Semester

GEOG 3120	Weather Analysis (3)
MATH 2210/L (a)	Integral Calculus w/ Lab (or honors equiv.) (4)
PHYS 1211/L (b, d, f)	Intro. Physics – Mechanics and Thermodynamics, Waves (4)
	Two courses to meet core and college requirements (foreign language course recommended)

Sophomore, Spring Semester

GEOG 3110	Climatology (3)
MATH 2500 (d)	Multivariable Calculus (3)
PHYS 1212/L (b, d, f)	Intro. Physics - Electricity and Magnetism, Optics (4)
CSCI 1301/L (b, d)	Introduction to Computing and Programming (4)
	One course to meet core and college requirements

Junior, Fall Semester

GEOG/ENGR 4112 (a, e)	Atmospheric Dynamics (3)
	OR Atmospheric Sciences Elective (3)
GEOG 3620 or 3630 (a)	Intro. to Economic Geog. OR Intro. to Urban Geog. (or any 3000- or 4000-level human geography course) (3)
GEOG 3510/L (a)	Cartography and Graphics (4)
MATH 2700 (d)	Elementary Differential Equations (3)
	One course to meet core and college requirements

Junior, Spring Semester

ENGR/GEOG 4111 (a, e) *Atmospheric Thermodynamics (3)*
ENGR 4131 OR *Atmospheric Radiation (3)*

GEOG 4120 *Synoptic Meteorology/Climatology (3)*
GEOG 4160 AND *Satellite Meteorology/Climatology (3)*
GEOG 4150 OR *Physical Climatology (3)*

Two-three courses to meet [core and college requirements](#)

Senior, Fall Semester

GEOG/ENGR 4111 (a, e) *Atmospheric Dynamics*
OR *Atmospheric Sciences Elective*

Three course to meet [core and college requirements](#)

Senior, Spring Semester

ENGR/GEOG 4111 (a, e) *Atmospheric Thermodynamics*
ENGR 4131 OR *Atmospheric Radiation*

GEOG 4120 *Synoptic Meteorology/Climatology (3)*
GEOG 4160 AND *Satellite Meteorology/Climatology (3)*
GEOG 4150 OR *Physical Climatology (3)*

Shading indicates courses offered only every-other year.
Italicized courses indicate core courses for the certificate.

- a. Meets a requirement for B.S. in Geography
- b. Meets a University Core requirement
- c. Meets a Franklin College of Arts and Sciences requirement
- d. Necessary prerequisites for core courses in certificate
- e. Register for the GEOG listing
- f. PHYS 1111 and 1112 cannot be used as substitutes

University Core and Franklin College Requirements

University Core requirements

Area A: Essential Skills

Need:

ENGL 1101

ENGL 1102

Included above:

MATH 1113 meets the math requirement

Area B: Institutional Options

Requires 4-5 semester hours in consultation with adviser

Area C: Humanities and Fine Arts

Requires two humanities/fine arts courses

This requirement will be met by completing the Franklin College foreign language requirement. Several courses meeting this requirement also meet the Franklin College literature requirement.

Area D: Science, Mathematics and Technology

Requires two lab science courses and one math or technology course

Included above:

GEOG 1112/L, 1113/L and MATH 2200 meet the Area D requirements.

Area E: Social Sciences

Requires 12 hours

Recommended:

POLS 1101/D is recommended for students to also meet Constitution requirements

HIST 2111 (or 2112) is recommended to meet Georgia history requirement and Franklin College history requirement

GEOG 1101/D, 3620 and 3630 will meet this requirement

Included above:

GEOG 1101/D and GEOG 3620 (or 3630), listed above as part of the Geography major, meet 6 hours of this requirement

Area F: Courses Related to the Program of Study

Requires 18 hours

Need:

GEOG 2300 or STAT 200

Included above:

MATH 2210/L, CSCI 1301/L, PHYS 1211/L and 1212/L meet this requirement

Franklin College of Arts and Sciences requirements

The following requirements must be met by students majoring within a program in the Franklin College of Arts and Sciences:

1. Equivalent of three semesters of a foreign language. (Two classes also meet University Core Area C requirement.)
2. One course in literature
3. One course in History (can be met with HIST 2111 or 2112, which are also recommended for University Core Area C and Georgia history requirement)
4. Two courses in social science (GEOG 1101/D, required of Geography majors, and POLS 1101, recommended in University Core Area C and for the Constitution requirements, also meet this requirement)
5. Two courses in fine and performing arts, philosophy and religion
6. One course in physical sciences (several courses listed above meet this requirement)
7. One course in biological sciences (MARS 1020 recommended)
8. One multicultural course (can be met with GEOG 1103)
9. One semester hour of physical education