

DEPARTMENT OF GEOGRAPHY
REQUIREMENTS FOR THE MAJOR – GEOGRAPHIC INFORMATION SCIENCE (GIS) EMPHASIS

Students must complete a minimum of eight (8) courses of Geography required coursework (see list below) plus five (5) required GIS courses and one (1) elective GIS course for a minimum total of fourteen (14) required Geography courses. All courses for the major must be taken for a letter grade and completed with a C- or better.

RESIDENCY REQUIREMENT: Students must complete at least 18 credit hours in the Department of Geography at the University of Utah.

ALLIED CREDIT REQUIREMENT: 12 credit hours of allied coursework are also required. These courses will generally be in the student's interest/specialization area and can be done in any of the following departments: Atmospheric Sciences; Biology; Chemistry; City and Metropolitan Planning; Civil Engineering; Computer Science; Geology; Math; Parks, Recreation and Tourism; Philosophy; Physics; or any department** in the College of Social and Behavioral Science. *(Aerospace Studies, Anthropology, Economics, Environmental and Sustainability Studies, Ethnic Studies, Family and Consumer Studies, Gender Studies, Health Society and Policy, Military Science, Naval Science, Political Science, Psychology, Sociology)

PROGRAM OF STUDY

Code	Course Number and Title	Credit Hrs	Sem/Year Taken	Grade
	Required Courses (<i>Geography Core Requirements</i>)			
SF	GEOG 1000 – Earth Environments and Global Change	3		
BF	GEOG 1400 – Human Geography	3		
QB/QI	GEOG 3020 – Geographical Analysis (<i>Spring</i>)	4		
	GEOG 3040 – Principles of Cartography (<i>Fall</i>)**	4		
QI	GEOG 3140 – Introduction to GIS (<i>Fall / +online Spring or Summer</i>)**	4		
	One of the following: (<i>Upper Division Physical Geography Choice List</i>)			
	GEOG 3200 – Geomorphology: Mtns, Rivers, Deserts OR (<i>Fall</i>)	4		
	GEOG 3/5205 – Regional and Global Climates OR (<i>Fall</i>)	3		
SF	GEOG 3/5210 – Global Climate Change OR (<i>Spring</i>)	3		
	GEOG 3/5215 – Climate Change and Its Impacts OR (<i>Fall</i>)	3		
AS	GEOG 3/5290 – Water in Utah OR (<i>alternate Fall</i>)	3		
	GEOG 3/5292 – Snow and Ice OR	3		
SF	GEOG 3310 – Introduction to Natural Hazards	3		
	One of the following: (<i>Upper Division Human Geography Choice List</i>)			
	GEOG 3/5090 – Introduction to Medical Geography OR	3		
	GEOG 3350 – Resource Conservation & Environ. Mgt. OR	3		
	GEOG 3/5375 – Sustainable Transportation OR	3		
	GEOG 3420 – Political Geography OR	3		
IR	GEOG 3/5440 – Global Economic Geography OR (<i>Spring</i>)	3		
	GEOG 3/5480 – Urban Geography OR	3		
DV	GEOG 3620 – Geography of North America	3		
	One of the following: (<i>Geography CW Choice List</i>)			
CW	GEOG 3/5270 – Biogeography: Global Patterns of Life OR (<i>Spring</i>)	4		
CW	GEOG 3/5400 – Population Geography (<i>Fall</i>)	4		
	GIS Emphasis Core: (<i>required core courses for emphasis</i>)			
	GEOG 1180 – Introduction to Geo-Programming (<i>hybrid – Fall or Spring</i>)	3		
	GEOG 3170 – GeoData Field Methods (<i>Fall</i>)	3		
	GEOG 5140 – Methods in GIS (<i>Spring / +online Summer or Fall</i>)	4		
	GEOG 5150 – Spatial Data Design for GIS (<i>Fall</i>)	4		
	GEOG 5161 – Capstone in Geographic Information Science (<i>Spring</i>)	3		
	GIS Emphasis Electives: (<i>select one elective course from list</i>)			
	GEOG 5160 – Spatial Modeling with GIS (<i>Spring</i>)	4		
	GEOG 5165 – Web GIS (<i>Spring</i>)	3		
	GEOG 5180 – Geo-processing with Python (<i>Fall</i>)	3		
	GEOG 5190 – GIS for Environmental and Public Health	3		
	TOTAL COURSES (min. 14)			
	TOTAL RESIDENCY HRS. (18 cr. hrs. at U of U Geog. Dept.)			

*GEOG 5940 Internship in Geography may be counted only once toward the major elective requirement and does not count as the required 5000-level elective course

** GEOG 3040 is soon to be discontinued. If you have already taken GEOG 3140: Intro to GIS or plan on taking GEOG 3140 in Summer 2017, you **MUST** take GEOG 3040: Principles of Cartography this Fall 2017 semester!

ALLIED COURSES

Code	Course Number and Title	Credit Hrs	Sem/Year Taken	Grade
	TOTAL CREDIT HOURS (min. 12 credit hours)			

Students who have questions about the major should consult with the undergraduate advisor at 801-581-8218.

3/22/17