

**DEPARTMENT OF GEOGRAPHY**  
**REQUIREMENTS FOR THE MAJOR – CLIMATE CHANGE & LANDSCAPE DYNAMICS EMPHASIS**

Students must complete a minimum of five (5) courses of Geography required coursework (see list below) plus one (1) upper division human geography elective course, in addition to five (5) emphasis core requirements, and a minimum of three (3) emphasis elective requirement courses 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
	<b>Required Courses:</b> ( <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		
	<b>One of the following:</b> ( <i>Upper Division Human Geography Choice List</i> )			
	GEOG 3/5090 – Introduction to Medical Geography <b>OR</b>	3		
	GEOG 3350 – Resource Conservation & Environ. Mgt. <b>OR</b>	3		
	GEOG 3/5375 – Sustainable Transportation <b>OR</b>	3		
	GEOG 3420 – Political Geography <b>OR</b>	3		
IR	GEOG 3/5440 – Global Economic Geography <b>OR</b> ( <i>Spring</i> )	3		
	GEOG 3/5480 – Urban Geography <b>OR</b>	3		
DV	GEOG 3620 – Geography of North America	3		
	<b>Emphasis Required Core:</b> ( <i>required core courses for emphasis</i> )			
	GEOG 3200 – Geomorphology: Mtns, Rivers, Deserts ( <i>Fall</i> )	4		
	GEOG 5205 – Regional and Global Climates ( <i>Fall</i> )	3		
SF	GEOG 5210 – Global Climate Change ( <i>Spring</i> )	3		
CW	GEOG 5270 – Biogeography: Global Patterns of Life ( <i>Spring</i> )	4		
	GEOG 3050 – Problem Solving in Physical Geography	4		
	<b>Emphasis Electives:</b> ( <i>select three elective courses from list</i> )			
	<b>CLIMATE</b>			
	GEOG 5215 – Climate Change and Its Impacts ( <i>Fall</i> )	3		
	GEOG 5275 – Vegetation and Climate Change	3		
	GEOG 5368 – Energy Choices for the 21 <sup>st</sup> Century	3		
	GEOG 5410 – Paleoclimatology	3		
	GEOG 5460 – Popular Literature on Climate Change	3		
	<b>BIOGEOGRAPHY</b>			
AS	GEOG 5230 – Pyrogeography	3		
	GEOG 5275 – Vegetation and Climate Change	3		
	GEOG 5280 – Quaternary Environments	3		
	GEOG 5420 – Pollen Analysis	3		
	GEOG 5712 – Paleoenvironmental Field Methods ( <i>Summer</i> )	3		
	ENVST 5180 – Field Ecology	3		
	BIOL 2355 – Field Botany	2		
	<b>GEOMORPHOLOGY</b>			
	GEOG 5201 – Advanced Topics in Geomorphology: Arid Lands ( <i>alt. Spring</i> )	3		
	GEOG 5202 – Advanced Topics in Geomorphology: Geoarch ( <i>alt. Spring</i> )	3		
	GEOG 3000 – Geo-Excursions in Utah ( <i>alt. Fall</i> )	4		
	<b>HYDROLOGY/CRYOGEOGRAPHY</b>			
AS	GEOG 5290 – Water in Utah ( <i>alt. Fall</i> )	3		
	GEOG 5292 – Snow and Ice	3		
	GEOG 5250 – The Crystal Desert: Antarctica & Global Change	3		
	GEOG 5260 – Snow Dynamics & Avalanche Studies	4		

	GEOG 5360 – Ocean Environments ( <i>Summer</i> )	3		
	GEO 3300 – The Water Planet	3		
	<b>TOTAL COURSES (min. 14)</b>			
	<b>TOTAL RESIDENCY HRS. (18 cr. hrs. at U of U Geog. Dept.)</b>			

\*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
	<b>TOTAL CREDIT HOURS (min. 12 credit hours)</b>			

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

3/22/2017