Bachelor of Science (BS)	**2017-2018**	**Program of Study for Geography Majors**
Degree Code 241*		**GEOGRAPHIC INFORMATION SYSTEMS**
Concentration Code 241D		

Student Name: _____   Date_____

I.   GENERAL EDUCATION CURRICULUM 44

Some general education requirements may be double-counted in the major with departmental approval. Please see your advisor for information

II.   MAJOR REQUIREMENTS 66

2.0 major GPA is required for graduation. Major GPA calculation will include <u>all</u> courses taken in the major department, plus any other courses under II. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

A.   Program Core Requirements (45 hours)

GHY 1010	_____ (3)	Introduction to Physical Geography	
GHY 1020	_____ (3)	Geographic Diversity & Globalization	**OR** GHY 1040 _____ (3) Intro to Human Geography
GHY 2310	_____ (3)	Cartographic Design & Analysis	
GHY/PLN 2812	_____ (3)	Geospatial Data and Technology	
GHY 3000	_____ (3)	Communicating Geographic Information **[WID]** *(Pre: RC 2001; Jr standing)*	
GHY 3310	_____ (3)	Environmental Remote Sensing	
GHY/PLN 3800	_____ (3)	Introduction to Quantitative Methods	
GHY 3812	_____ (3)	Introduction to GIS *(Pre: GHY 2310, 2812)*	
GHY 4810	_____ (3)	Digital Image Processing *(Pre: GHY 2812, 3310; Sr standing)*	
GHY 4812	_____ (3)	Advanced GIS *(Pre: GHY 3812; Sr standing)*	
GHY 4814	_____ (3)	Principles of GeoComputation *(Pre: GHY 3812; Sr standing)*	
GHY/PLN 4830	_____ (3)	Professional Development in Geography & Planning **[CAP]**	
GHY 4900	_____ (6)	Internship in Geography & Planning	
PLN 2410	_____ (3)	Town, City, & Regional Planning	

B.   Elective Courses: (9 hours) Choose one from each area:

1. PHYSICAL GEOGRAPHY (3 hours)
GHY 3100_____ (3) Weather & Climate *(Pre: GHY 1010 or 1011)*
GHY 3110_____ (3) Ecoregions & Dynamic Landforms
GHY 3130_____ (3) Geography of Biodiversity
GHY 3320_____ (3) Environmental Issues in Appalachia
GHY 3600_____ (3) Climate Change, Snow & Ice *(Pre: GHY 1011)*
GHY 4620_____ (3) Atmospheric Circulation *(Pre: GHY 3100; Sr stg)*
GHY 4820_____ (3) Geographical Hydrology *(Pre: GHY 3100, 3110; Sr stg)*

3. REGIONAL GEOGRAPHY (3 hours)
GHY 3011 _____ (3) Europe Past & Present
GHY 3012 _____ (3) US and Canada
GHY 3013 _____ (3) North Carolina
GHY 3014 _____ (3) Geography of Latin America
GHY 3015 _____ (3) Geography of Asia
GHY 3016 _____ (3) Geography of the American South
GHY 3017 _____ (3) Spain & North Africa

2. HUMAN GEOGRAPHY (3 hours)
GHY 3210_____ (3) Economic Geography *(Pre: 1 intro course GHY/ECO)*
GHY 3700_____ (3) Geography of Food
GHY 4005_____ (3) Geography of Health & Disease
GHY 4200_____ (3) Urban Geography
GHY 4230_____ (3) Political Geography
PLN 4240 _____ (3) Sustainable Transportation Planning *(Pre: Sr. stdg)*

Authorized substitutions or waivers: _____
_____
_____

C. Geography Electives (9 hours at 3000 or 4000 level; a maximum of 6 s.h. of 3000 or 4000 planning courses may be applied)

_____   _____   _____

_____   _____

D. Approved Computer Programming & Application Courses (3 hours) _____

III.   MINOR (optional)

IV. Departmental Graduation Check (Student will receive a senior check from the Dean's Office via email)

Advisor: _____   Date: _____

Chair: _____   Date: _____   Sent to Dean's Office Date: _____

V.   ELECTIVES (taken to total 122 hours for the degree).......................................<u>12</u>

2 semester hours of free electives must be outside the major discipline.   **122**