Salem | STATE UNIVERSITY

Name:_____
Student ID: _____
Date Admitted Into Major:_____

BACHELOR OF SCIENCE
CARTOGRAPHY AND GIS

GENERAL EDUCATION REQUIREMENTS

Competencies

☐	♦ Basic College Math
☐	♦ Reading Comprehension

♣General Education Categories (34-35 credits total)

♦FYS	First Year Seminar				3	
♦W-I	Written Communication - Level I				3	
♦OC	Oral Communication				3	
PGR	Personal Growth & Responsibility				3	
CEA	Creative Expression & Appreciation				3	
WC	World Cultures				3	
HP	The Human Past				3	
CS	Contemporary Society				3	
SR	Scientific Reasoning:	♯ Any SR course			3-4	
		♯ SR Lab course			4	
QR	Quantitative Reasoning				3	

‡ Written Communication (Level II and Level III)

W-II	Written Communication - Level II			☐
W-III	Written Communication - Level III			☐

Minor/Free Electives (43 credits minimum)

May be necessary to take additional credits to attain the minimum 120 credits required for graduation depending on choices made for general education or minor selection.

COURSES IN MAJOR (42 credits total)

Major Core Courses (15 credits)

GPH	115	Global Climate Change	3	
GPH OR GPH	105 110	Introduction to Geography OR World Regions	3	
GPH	140	Intro to Maps & GIS	3	
GPH	301	Intro to Quantitative Geography	3	
GPH	302	Geographic Research	3	

Major Concentration Courses (15 credits)

GPH	245	Cartography	3	
GPH	340	GIS	3	
GPH	344	Remote Sensing	3	
GPH	446	Advanced GIS	3	
GPH OR GPH	343 444	Air Photo Interpretation OR Digital Image Processing	3	

Techniques Electives (6 credits)

GPH OR GPH	343 444	Air Photo Interpretation OR Digital Image Processing	3	
GPH	346	GIS and Business	3	
GPH	347	GIS Applications	3	
GPH	442	Geospatial Programming	3	

Geography Electives (6 credits)

GPH		Geography Elective	3	
GPH		Geography Elective	3	

♥ Students may choose to use support courses to satisfy general education categories, but may not be required to do so. **Note:** If a course is used to satisfy two or more requirements (for example, a support course and Scientific Reasoning requirement), the credits are counted in only one place. Using a course to satisfy more than one requirement does **not** reduce the credit total required for graduation.

♣ Courses used to satisfy the general education requirements of the university must be taken from a minimum of six different academic disciplines. First Year Seminar and Level I Written Communications courses are exempt from this restriction. Courses may not be used to fulfill both major discipline and general education requirements.

♯ These Scientific Reasoning General Education Category courses do not have to be a sequence or be from the same discipline.

‡ Level II and Level III Written Communications Courses may be used to satisfy requirements anywhere else in a student's program of study where they may apply. The credits are counted only in one area.

♦ COMPETENCIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS | ♦ GENERAL EDUCATION CATEGORIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS

Exceptions in the timing of courses will be made for transfer students

Total credits for graduation: 120

Effective: 9/2017