

## Geography Department

### GIS Certificate

Student:		Student ID#:	
Address:		Phone:	

The following courses represent the approved CWU GIS Certificate (effective September 2020)

#### **Required classes (4)**

Course Number	Course Title	Credits	QTR/YR
GEOG 301	Intro. to GIS and Maps	4	
GEOG 403	GIS & Data Management	5	
GEOG 404	GIS Analysis	5	
GEOG 330 or GEOG 411	Airphoto Interpretation or GIS: Programming and Automation	5	

#### **Elective Classes (choose 2, minimum of 8 credits)**

GEOG 330*	Airphoto Interpretation	5	
GEOG 411*	GIS Programming and Automation	5	
GEOG 409	Quantitative Methods	5	
GEOG 417	Workplace GIS	4	
GEOG 430	Remote Sensing	5	
GEOG 485	Topics in GIS or Remote Sensing	varies	
GEOG 490,494, 496**	Cooperative Ed (internship), Applied GIS Project, Independent Study	varies	
CS 110	Programming Fundamentals I	4	
Other classes with Director's permission			

Minimum total credits: 27

\*If not taken as a required class

\*\*Classes with a GIS focus only.

To receive a GIS Certificate, students must maintain a 2.7 average GPA (B-) in the certificate classes with a minimum grade of C-.

It is understood that changes in this program will require submission of a revised course list by the student in consultation with the Director of the GIS program. Revised programs must be approved by the GIS Director and the Geography Department Chair.

Director's Signature \_\_\_\_\_

Date: \_\_\_\_\_

Chair's Signature \_\_\_\_\_

Date: \_\_\_\_\_

8/28/2020