

GIS 6901 - Introduction to Geographic Information Science

Fall 2026 Syllabus, Section 01, CRN 43181,

Credit hours: 3

Instructor

Bradley Shellito

Email: bashellito@ysu.edu

Public Instructor Information

Instructor Professional Qualifications:

FAA Certified Remote Pilot, 2025

YSU Distinguished Professor, 2024

Ph. D., Michigan State University, 2001

M.A., The Ohio State University, 1996

Bachelor's of Science, Youngstown State University, 1994

Instructor Office Location: 2115 Moser Hall

Instructor Office Phone: 330-941-7190

Instructor Email: bashellito@ysu.edu

Preferred Contact Method: email

How to Refer to me: Dr. Shellito

Course Description

6901. Introduction to Geographic Information Science. Introduction to the principles of collection, storage, manipulation, retrieval, analysis and visualization of spatial data in a computer environment. Designed to support graduate research efforts. No credit if taken GIS 5810. Prereq.: permission of instructor. 3 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Discovering GIS and ArcGIS Pro 3rd edition	Shellito	9781319597122

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	ArcGIS Account and ArcGIS Pro Setup PDFs on Blackboard	What Are ArcGIS Pro and ArcGIS Online?	ArcGIS Accounts Due
8/31	Module 1	What is GIS and Geospatial Data?	HOA 1 Due
9/7	Module 2	What is Attribute Data in GIS?	HOA 2 Due
9/14	Module 3	How Do You Make a Map in GIS?	HOA 3 Due
9/21	Module 4	How Do You Make a Web Map in GIS?	HOA 4 Due, Take Exam 1
9/28	StoryMap Project PDF on Blackboard	How Do You Make a Story Map?	
10/5	Module 5	How Do You Obtain Data for GIS?	HOA 5 Due, Project Proposals Due
10/12	GIS and Census Data Materials on Blackboard	How Do You Use Census Data and Dashboards in GIS?	

10/19	Module 6	How Do You Create Data for GIS?	HOA 6 Due, Bonus HOA 1 Due, Bonus HOA 2 Due
10/26	Module 7	How Do You Edit Data for GIS and Assess Data Quality?	HOA 7 Due
11/2	Module 8	What is Spatial Analysis?	HOA 8 Due, Take Exam 2
11/9	Module 9	What is Geoprocessing?	HOA 9 Due
11/16	Module 10	What Is Geocoding and Address Matching?	HOA 10 Due
11/23		Completing Projects and the Thanksgiving Holiday	
11/30	Module 11	What Is Network Analysis in GIS?	HOA 11 Due, StoryMap Projects Due
12/7		Final Exam Closes December 10 at 5pm	Take Exam 3

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.