



MISSION STATEMENT & STUDENT LEARNING OUTCOMES for GIS

Review Year:

2026

Division:

Arts & Humanities

Discipline/Program/Department:

GIS

Contact

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Mission Statement

The mission of the Geospatial Information Systems program at Southwestern Illinois College is to equip students with the knowledge, disposition, and skills to design, acquire, analyze, and visualize georeferenced data – prepared to leverage geospatial technology towards problem-solving and decision-making that enhances quality of life and fosters economic growth in our region.

Program/Discipline Curriculum Map

I = Introduce: Student is first exposed to the concept/idea and is requested to apply the concept in a limited scope.

E = Emphasize: Student applies concept(s) in varying/multiple situations of greater complexity than when initially introduced.

R = Reinforce: Student may be expected to understand the concept upon taking the course and utilizes the concept in conjunction with other concepts/ideas to solve problems.

PROGRAM/DISCIPLINE OUTCOMES

COURSE PREFIX AND NUMBER

Graduates of this program/discipline shall be able to:

Design and maintain orderly geodatabases and GIS projects – avoiding dataset duplication, maintaining metadata, and choosing meaningful naming conventions for geodatabase feature classes, attribute fields, project views, *et cetera*. Preserving order as geodatabases and projects grow in size and complexity is not only part and parcel of efficient, effective data and project management; it also supports Southwestern Illinois College's broader mission of promoting student competency in the following core areas: CRITICAL THINKING, COMPUTER LITERACY.

Prepare data for use in GIS projects – referencing cloud-based content, cleaning & joining tables, georeferencing imagery, and collecting field data – examining the character and quality of the data to determine appropriate use(s). Pairing a *know-what* of one's data with the *know-how* of incorporating data into a GIS project is not only prerequisite to maintaining the integrity of subsequent analysis; it also supports Southwestern Illinois College's broader mission of promoting student competency in the following core areas: CRITICAL THINKING, COMPUTER LITERACY.

Analyze geospatial data for problem-solving and decision-making – building data integrity safeguards and modeling efficiencies into querying, geoprocessing, and editing workflows where appropriate. Exercising both the *know-how* and *know-when* to apply various editing and analysis tools to both vector and raster data is not only key to accomplishing GIS project goals; it also supports Southwestern Illinois College's broader mission of promoting student competency in the following core areas: CRITICAL THINKING, COMPUTER LITERACY.

Produce and publish maps that communicate both intent and content effectively – tailoring projection, layout, generalization, symbolization, and labeling choices to map purpose and audience. Creating cartographically sound deliverables is not only part and parcel of visually communicating GIS project results to stakeholders; it also supports Southwestern Illinois College's broader mission of promoting student competency in the following core areas: CRITICAL THINKING, COMPUTER LITERACY.

GIS 100	GIS 101	GIS 102	GIS 103		
I	R	R	I		
I		I	I		
I		I	I		
I	I		R		

Map Comments:

Core Competency Map

CORE COMPETENCIES		COURSE PREFIX AND NUMBER					
Communication Skills		GIS 100	GIS 101	GIS 102	GIS 103		
1. Computer Literacy		X	X	X	X		
2. Oral Communications							
3. Writing							
Reasoning Skills							
4. Critical Thinking		X	X	X	X		
5. Quantitative Literacy							
Citizenship							
6. Personal Accountability							
7. Civic And Social Accountability							