Course Tag Reflection Exemplar
Informational Literacy & Technological Agility

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GEO 484: GIS for Urban Environments

Identify the course learning objectives <u>in the syllabus</u> that are clearly aligned to <u>Information Literacy & Technological Agility</u> and respective assignment(s).

1. Conceptualize and critique proper GIS project design and implementation - students evaluate the use of spatial data in published research studies.
2. Find quality spatial data to support your GIS analysis projects - students identify and evaluate publicly available and secondary data.
3. Manage spatial and non-spatial data using geodatabases and ArcGIS Online - students collect and organize spatial data in GIS technology platforms.
4. Document and share GIS data using metadata and map packages - students responsibly share data by providing details about how and why data were collected and used.
5. Use advanced geospatial tools and spatial extensions in GIS projects - students critically apply GIS technologies to a real-world problem.
6. Apply advanced cartographic techniques to design professional maps - students responsibly create and share professional-quality maps.
7. Develop a GIS project portfolio - students use geospatial technologies to create a professional portfolio of their work.

Explain the connection between specific assignment(s) and <u>Information Literacy & Technological Agility</u>. At least 30% of the course grade must engage students in <u>the selected competency</u> for the course to be tagged.

4 GIS lab assignments require students to apply geospatial analysis to real world questions in the domains of urban housing, crime, health and human services, food access. Students reflect on their spatial analysis, interpret results, and articulate the results of their analysis in writing. (32% of final grade).

Reading reflections require students to critically examine how urban scholars and urban planners use GIS analysis to advance research. (20% of final grade).

A final poster presentation requires students to apply spatial analysis techniques to an urban question of their choice. Students must articulate a research question, use spatial analysis to answer the question, and discuss whether/how well their spatial analysis answers their question(s) (30%).

82% of the course grade relates to this competency.

Describe in detail the <u>instructional strategies</u> faculty use to intentionally teach <u>Information Literacy & Technological Agility</u> in the course.

The instructor demonstrates how to locate credible spatial data, how to read, interpret, and create spatial metadata that meets federal (FGDC) and international (ISO) standards. The instructor demonstrates how to critically evaluate the methodology of a study that uses GIS to answer a research question and then asks students to evaluate 4 studies. Students also choose an additional study's methodology to evaluate.

Demonstrations occur through lecture, technology demonstration, one-on-one lab instruction, and peer to peer knowledge/technology shares.

Describe the feedback tool(s) faculty use to support students' competency development on <u>Information Literacy & Technological Agility</u>.

The instructor provides verbal feedback during reading reflection discussions, written feedback on assignments, written feedback on project proposals and the final project evaluation. Reading reflections and the final project presentation use a rubric for evaluation.