

GIST-270-ADVANCED GIS 4 CREDITS

SYLLABUS

CATALOG DESCRIPTION

Advanced topics in GIS will be covered. Emphasis will be placed on research methods, analysis, and GIS project planning, implementation, and management. Students will select a project of interest to develop throughout the semester. Students may select a research topic, build a GIS, or design a user application working in group or individually. This is a capstone course for the GIST degree.

Prerequisites: GIST-201

Semester Offered: Fall or as Needed

Common Student Learning Outcomes

Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...

BROAD AND SPECIALIZED LEARNING

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

CRITICAL THINKING

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

CULTURAL AND CIVIC ENGAGEMENT

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

EFFECTIVE COMMUNICATION

Students will exchange ideas and information with clarity in multiple contexts.

INFORMATION LITERACY

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

INTEGRATING TECHNOLOGIES

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

Course Learning Outcomes

Upon successful completion of the course, the student will be able to...

1. Develop a GIS project by:
 - a. Identifying a purpose/problem to achieve/solve
 - b. Research related topics

- c. Develop concept theory
- d. Develop and Implement GIS analysis for stated purpose/problem
- e. Report/Present

Course Learning Outcomes

Upon successful completion of the course, the student will be able to...

1. Critically think about specific issues that may have geographic solutions. (BSL, CCE, CT)
2. Develop narrative discussion of issue and its relevance. (CT, EC)
3. Review literature related to issue. (BSL, CT)
4. Plan research approach. (CT)
5. Identify anticipated results of research. (BSL, CT)
6. Perform analysis and evaluate results. (BSL, CT, IT)
7. Consolidate narrative and report/present on project.t (CT, EC)