

GIST-250 Advanced Database Concepts

4 CREDITS

SYLLABUS

CATALOG DESCRIPTION

As an integral part of GIS, the associated relational database system is used for query and analysis operations that aid in solving spatial problems. This introduction to relational database systems includes topics of; database models, query language, database design, data definition, data dictionaries and linking databases to GIS.

Prerequisites: GIST 151

Semester Offered: Spring

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. To understand the various methods and skills of mapping location and quantity.
- 2. To understand and use GIS to determine properties of inside-outside, distance and parametric change in data.
- 3. To understand the theory and practice of geospatial distribution, patterns and clustering.

A copy of this approved syllabus is on file in the dean's office. Updated 12/14/18

- 4. To understand the theory and practice of designing a successful geodatabase.
- 5. To understand how to appropriately work with geospatial data.
- 6. To understand how to use a GIS to perform geospatial analysis and produce corresponding map(s) reports.