SOUTHEAST COMMUNITY COLLEGE
CONSTRUCTION MANUFACTURING AND TECHNOLOGY DIVISION
Geographic Information Systems Technician Program
Revision Date: August 21, 2023
Syllabus Statements

I. CATALOG DESCRIPTION

Course Number:	GIST 2120
Course Title:	Geodatabase Design and Management
Prerequisite:	GIST 1110
Catalog Description:	This course introduces the design, development, and management of geospatial databases, including multi-user enterprise geodatabases. In addition to learning about relational database design, students will construct and maintain spatial databases.
Credit Hours:	3
Class Hours:	45
Lab Hours:	0
Total Contact Hours:	45

II. COURSE OBJECTIVES: *Course will:*

A. Introduce students to geodatabases.
B. Provide students with the ability to design a geodatabase.
C. Provide students with the ability to implement the design and to build a geodatabase.
D. Provide students with the ability to use the power of a geodatabase.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES

A. Student Learning Outcomes: *Student will be able to*:
- **1.** Describe functionality, applications and limitations associated with common GIS and CAD formats that can be stored in a geodatabase.
- **2.** Explain central concepts in GIS database management.
- **3.** Create properly designed geodatabases.
- **4.** Implement and apply relations, rules and domains using a geodatabase.

B. General Education Learning Outcomes (GELOs)
- **1.** GELO 3: Critical Thinking & Problem Solving
  Outcome 1: Collect, identify, interpret and analyze data

IV. CONTENT/TOPICAL OUTLINE (*course outline may provide more detailed information*)

A. Geodatabase overview
B. Geodatabase architecture
C. Design of a geodatabase
D. Building a geodatabase
E. Data management

V. INSTRUCTIONAL MATERIALS

A. Required Text(s): TBD
B. Other Resources: Internet and computer access (Not a tablet or phone)

VI. METHODS OF PRESENTATION/INSTRUCTION

A. Methods of presentation typically include a combination of the following:
- **1.** Module overviews
- **2.** Video presentations
- **3.** Readings and resources

VII. METHODS OF EVALUATION

A. Methods of evaluation typically include a combination of the following:

1. Assignments
2. Discussions
3. Projects
4. Quizzes/Exams