SOUTHEAST COMMUNITY COLLEGE
CONSTRUCTION MANUFACTURING AND TECHNOLOGY DIVISION
Geographic Information Systems Technician Program
Revision Date: August 22, 2022
Syllabus Statements

I. CATALOG DESCRIPTION

Course Number:	GIST1130
Course Title:	Data Acquisition and Management
Prerequisite(s):	GIST1110
Catalog Description:	A broad overview of the many capabilities of GIS software will be explored. Students will receive a diverse sampling of industries, scenarios, and workflows that highlight the board appeal and many core functions offered by GIS. Students will explore some common geographic data formats and learn about sources of data and maps that can be incorporated into a GIS project.
Credit Hours:	3
Class Hours:	45
Lab Hours:	0
Total Contact Hours:	45

II. COURSE OBJECTIVES: *Course will:*

A. Introduce students to the functionality of GIS software.
B. Introduce the fundamental concepts of GIS data creation and management.
C. Discuss quantitative techniques for the collection, classification, integration, and management of geographic data.
D. Show how to utilize available tools to create desired outcomes.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

A. Student Learning Outcomes**:** *Student will be able to:*
  1. Demonstrate basic proficiency to collect, record, and utilize spatial data.
  2. Describe and explain the similarities and differences between data formats.
  3. Create and edit data to produce a desired result.
  4. Describe and apply best practices in data organization and management.

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

A. Acquiring and managing data
B. Data formats and storage
C. Exploring geospatial relationships
D. Creating and editing spatial data.
E. Facilitating Workflows
F. Data acquisition
G. Analyzing spatial and temporal patterns
H. Determining needed data
I. Producing a desire map product.

V. INSTRUCTIONAL MATERIALS

A. Required Text(s): Law, Michael and Collins, Amy, *Getting to Know ArcGIS Pro,* (Refer to CID and/or instructor for current edition)

B. Other Sources: Internet and computer access

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, although determined by the individual instructor, traditionally includes a combination of the following:

1. Assignments

2. Discussions

3. Projects

4. Quizzes/Exams