

# GEOG 155: GIS DATA ACQUISITION AND MANAGEMENT

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## In Workflow

1. GEOG Chair (schmidmc@csus.edu)
2. NSM College Committee Chair (mikkel.jensen@csus.edu)
3. NSM Dean (datwyler@csus.edu)
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6. Dean of Undergraduate (gardner@csus.edu)
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8. Catalog Editor (catalog@csus.edu)
9. Registrar's Office (k.mcfarland@csus.edu)
10. PeopleSoft (PeopleSoft@csus.edu)

## Approval Path

1. Thu, 12 Sep 2024 01:08:29 GMT  
Matt Schmittlein (schmidmc): Approved for GEOG Chair
2. Thu, 24 Oct 2024 17:01:41 GMT  
Mikkel Jensen (mikkel.jensen): Approved for NSM College Committee Chair
3. Thu, 24 Oct 2024 17:12:13 GMT  
Chris Taylor (ctaylor): Approved for NSM Dean

## History

1. Feb 14, 2024 by Anna Patterson (anna.kp)

## New Course Proposal

Date Submitted: Thu, 12 Sep 2024 00:40:52 GMT

**Viewing: GEOG 155 : GIS Data Acquisition and Management**

**Last approved: Wed, 14 Feb 2024 15:02:45 GMT**

**Last edit: Thu, 24 Oct 2024 17:01:03 GMT**

Changes proposed by: Anna Patterson (219679266)

**Contact(s):**

Name (First Last)	Email	Phone 999-999-9999
Anna Patterson	anna.kp@csus.edu	9162784272

**Catalog Title:**

GIS Data Acquisition and Management

**Class Schedule Title:**

Data Acquisition & Management

**Academic Group: (College)**

NSM - Natural Sciences & Mathematics

**Academic Organization: (Department)**

Geography

**Will this course be offered through the College of Continuing Education (CCE)?**

No

**Catalog Year Effective:**

Fall 2025 (2025/2026 Catalog)

**Subject Area: (prefix)**

GEOG - Geography

**Catalog Number: (course number)**

155

**Course ID: (For administrative use only.)**

203658

**Units:**

3

**Is the ONLY purpose of this change to update the term typically offered or the enforcement of existing requisites at registration?**

No

**In what term(s) will this course typically be offered?**

Fall, Spring

**Does this course require a room for its final exam?**

Yes, final exam requires a room

**This course complies with the credit hour policy:**

Yes

**Justification for course proposal:**

no changes other than to have LOs assessment strategies align to paired course with proposed GEOG 255. Also adding that 155 is now required in the GISci concentration and GIS minor in the dept (Form Bs previously submitted and accepted. Not sure why this form was indicating "no" as updated Form As were submitted at the time)

**Course Description: (Not to exceed 90 words and language should conform to catalog copy.)**

This course focuses on acquisition and management of geospatial datasets and addresses the interpretation of a variety of data formats available in global information systems (GIS). It explores concepts of geospatial data management strategies, primary GIS data creation, secondary data acquisitions, and leveraging leading-edge geospatial data deployments.

**Are one or more field trips required with this course?**

No

**Fee Course?**

No

**Is this course designated as Service Learning?**

No

**Is this course designated as Curricular Community Engaged Learning?**

No

**Does this course require safety training?**

No

**Does this course require personal protective equipment (PPE)?**

No

**Does this course have prerequisites?**

Yes

**Prerequisite:**

GEOG 109 or GEOG 209

**Prerequisites Enforced at Registration?**

Yes

**Does this course have corequisites?**

No

**Graded:**

Letter

**Approval required for enrollment?**

No Approval Required

**Course Component(s) and Classification(s):**

Laboratory  
Lecture

**Laboratory Classification**

CS#16 - Science Laboratory (K-factor=2 WTU per unit)

**Laboratory Units**

1

**Lecture Classification**

CS#02 - Lecture/Discussion (K-factor=1WTU per unit)

**Lecture Units**

2

**Is this a paired course?**

Yes

**Please confirm that it complies with the Paired Courses Policy and enter the course with which it is paired:**

GEOG 255

**Is this course crosslisted?**

No

**Can this course be repeated for credit?**

No

**Can the course be taken for credit more than once during the same term?**

No

**Description of the Expected Learning Outcomes and Assessment Strategies:**

List the Expected Learning Outcomes and their accompanying Assessment Strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers). Click the plus sign to add a new row.

	Expected Learning Outcome	Assessment Strategies
1	Clearly communicate and document standard operating procedures in GIS data acquisition and management processes	labs, portfolio, final project
2	Demonstrate development and use of structured naming conventions and file management systems	labs, portfolio, final project
3	Identify the fundamentals of database systems, design techniques, and their use in organizations	labs, quizzes, portfolio
4	Create and alter databases using standard relational database management systems (DBMS) and geodatabase structures	labs, final project
5	Develop entity-relationship diagrams, relational schemas, and data dictionaries given a set of business rules	labs, portfolio
6	Define, design, and implement attribute domains	labs, quizzes, portfolio, final project
7	Write database queries using Structured Query Language (SQL) for a variety of data definition and data manipulation scenarios	labs, quizzes, portfolio, final project
8	Define and identify differences between data and file types	labs, quizzes, portfolio, final project
9	Describe what metadata is, why it's important, and applicable standards for capturing and documenting metadata	labs, portfolio, final project
10	Acquire primary geospatial data using GPS and visualize using geospatial software	labs, portfolio, final project
11	Identify and communicate strategies to, and then acquire, secondary geospatial data (ex: Census, DEMs, imagery, boundaries) and visualize using geospatial software	labs, portfolio, final project

**Attach a list of the required/recommended course readings and activities:**

proposedsyllabus\_GEOG255.docx

**Is this course required in a degree program (major, minor, graduate degree, certificate?)**

Yes

**Has a corresponding Program Change been submitted to Workflow?**

Yes

**Identify the program(s) in which this course is required:**

**Programs:**

BA in Geography (Geographic Information Science)

Minor in Geographic Information Science

**Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer)?**

No

**Will there be any departments affected by this proposed course?**

No

**I/we as the author(s) of this course proposal agree to provide a new or updated accessibility checklist to the Dean's office prior to the semester when this course is taught utilizing the changes proposed here.**

I/we agree

## **University Learning Goals**

**Undergraduate Learning Goals:**

Competence in the disciplines  
Intellectual and practical skills  
Integrative learning

**Is this course required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?**

No

## **GE Course and GE Goal(s)**

**Is this a General Education (GE) course or is it being considered for GE?**

No

Key: 14451