

# COURSE TITLE:

**COURSE NUMBER:** 

Introduction to GIS and GPS Applications

GIS 2041

# COURSE DESCRIPTION (with prerequisites):

This course teaches the basic concepts of geographic information systems (GIS) and introduces global positioning systems (GPS), related software program orientation, field data collection, and basic procedures in the techniques of these applications. Practical experience in local projects related to agriculture, civil engineering, and government operations will be highlighted. The student will complete a series of tutorials, exercises, and projects. Prerequisite: GIS 1060. 3 semester credit hours.

# NAME(S) OF INSTRUCTORS:

As Assigned

### EFFECTIVE ACADEMIC YEAR:

2023-2024

## **REQUIRED TEXTBOOKS AND INSTRUCTIONAL MATERIALS:**

Integrating GIS and The Global Positioning System By Karen Steede-Terry Printed By ESRI Press, Redlands, CA. ISBN: 9781879102811

## **GRADING POLICY:**

The standing of a student in each course is expressed by one of the following letters and corresponding grading system:

- A 90 100
- B 80 89
- C 70 79
- D 60 69
- F 59 or less

The Chipola Catalog provides policies and procedures regarding the grading system. A student's Grade Point Average is derived from the grading system/quality point scale.

# ATTENDANCE AND WITHDRAWAL POLICIES:

Chipola College expects regular attendance of all students and for all instructors to record attendance daily. Students who are absent from classes for any reason other than official college activities must satisfy the instructor concerned that the absence was due to illness or other clearly unavoidable reasons. Otherwise, the student may suffer grade loss at the discretion of the instructor. Chipola policy allows each instructor to specify in the Instructor

First Day Handout whether or not an absence is excusable and what effect the absence or tardy may have on the grade.

A student is allowed to repeat a course a maximum of three (3) times. On the third attempt a student (1) must bear the full cost of instruction (unless waived by Student Services), (2) cannot withdraw, and (3) must receive a grade.

#### MAKE-UP POLICY:

Chipola allows each instructor to specify in the Instructor First Day Handout the makeup policy.

### ACADEMIC HONOR CODE POLICY:

Students are expected to uphold the Academic Honor Code, which is based on the premise that each student has the responsibility to (1) uphold the highest standards of academic honesty in his/her own work; (2) refuse to tolerate academic dishonesty in the college community; and (3) foster a high sense of honor and social responsibility on the part of students. Further information regarding the Academic Honor Code may be found in the Chipola Catalog, Student Governance section.

### STUDENTS WITH DISABILITIES POLICY:

Chipola College is committed to making all programs and facilities accessible to anyone with a disability. Chipola's goal is for students to obtain maximum benefit from their educational experience and to effectively transition into the college environment. Students with disabilities are requested to voluntarily contact the Office of Students with Disabilities to complete the intake process and determine their eligibility for reasonable accommodations.

### NOTICE OF EQUAL ACCESS/EQUAL OPPORTUNITY AND NONDISCRIMINATION:

Chipola College does not discriminate against any persons, employees, students, applicants or others affiliated with the college in regards to race, color, religion, ethnicity, national origin, age, veteran's status, disability, gender, genetic information, marital status, pregnancy or any other protected class under applicable federal and state laws, in any college program, activity or employment.

Wendy Pippen, Associate Vice President of Human Resources, Equity Officer and Title IX Coordinator, 3094 Indian Circle, Marianna, FL 32446, Building A, Room 183C, 850-718-2269, pippenw@chipola.edu.

### LIBRARY AND ON-LINE REFERENCE MATERIALS:

The library is a comprehensive learning resource center providing information in print, electronic, and multimedia format to support the educational objectives of the College. On-line catalogs, e-books, and electronic databases can be accessed through the Library Resources link within your course in Canvas or by using the *Search* icon on the Chipola Library website at <u>www.chipola.edu/library</u>. If you have questions about database usage, consult the "How to Use the Chipola Databases" on the Library website or call the Library at 850/718-2274 during regular hours. Library hours are posted each semester at the building entrance and on the Library website. See your Instructor First Day Handout for individual instructor recommendations and resources.

## **TECHNOLOGY RESOURCES:**

The college's learning management system is **Canvas**. Classes become available on Canvas on the first day of the semester. It is the student's responsibility to log onto the Canvas system the first day of class to establish the first day of attendance and to check announcements. All official class communication must be through Canvas. For further information, contact your instructor or the Director of Learning Resources. The Canvas support hotline is available online in live chat and on the phone, toll-free, at 855-308-2812 for any issues utilizing Canvas. The **Technology Center**, located in the library, is equipped with computer workstations. Lab hours are posted each semester at the building entrance and on the Library website.

#### FREE TUTORING RESOURCES:

The <u>A</u>cademic <u>C</u>enter for <u>E</u>xcellence (**ACE**) Lab, located in Building L, offers free tutoring from 8 a.m. to 5 p.m. and is equipped with computer workstations. ACE lab hours are posted each semester at the room entrance and on the website. Additionally, live online tutoring conferences and individual tutoring sessions are available for a variety of courses through ACE@Home. For a conference schedule or to schedule an individual appointment, visit "ACE Tutoring" in the left navigation from any course in Canvas.

### ELECTRONIC DEVICE USAGE STATEMENT:

Classrooms should be free of all unnecessary distractions from the task of learning. Therefore, as a general rule, students should silence and avoid use of all electronic devices (laptops, phones, tablets, etc.) not being used for coursework. Consult first-day handouts for any specific policies related to the use of electronic devices in the classroom, as they may vary depending upon the nature of the course or the guidelines of the instructor. Faculty reserve the right to regulate the use of electronic devices and their accessories in class.

## **DISCIPLINE SPECIFIC COMPETENCIES / LEARNING OUTCOMES:**

Program Learning Outcome: Use technology to organize, acquire, and convey information in drawings and reports.

Linking Course-level Student Learning Outcomes with Discipline-Specific Competencies, Assessment Methods, and Artifacts		
COURSE-LEVEL STUDENT LEARNING OUTCOMES FOR GIS 2041	DISCIPLINE-SPECIFIC GENERAL EDUCATION COMPETENCIES	ASSESSMENT METHODS FOR COURSE LEVEL STUDENT LEARNING OUTCOMES (see Notes below)
Upon successful completion of this course, the student will be able to:		
<ol> <li>Synthesize the basic terminology used in the geographic information process.</li> </ol>	Understand and apply GIS.	H, T, Q
<ol> <li>Compare GPS equipment.</li> <li>Formulate and analyze</li> </ol>	Understand and apply GIS.	H, T, Q
geographic information to determine trends.	Understand and apply GIS.	H, T, Q
<ol> <li>Evaluate Location Survey Manual and other Florida Department of Transportation manual.</li> </ol>	Understand and apply GIS.	Η, Τ, Q
5. Synthesize sources of geographic information from national, local, state, and private sources.	Understand and apply GIS.	H, T, Q
<ol> <li>Formulate the use of county soil survey by soil conservation service – USDA assisted by GIS data.</li> </ol>	Understand and apply GIS.	Н, Т, Q
Notes: Assessment Codes         BO - Behavioral Observation         Cap Proj - Capstone Course         CF - Cumulative Final         Clin - Clinicals         CP - Case Plan         CS - Case Study         J - Jury	Port - Portfolio Prac - Practicum Pre/ Post - Pre-/Post-T Proj - Projects PS - Problem Solving Q - Quizzes	SD - Skills Demonstration SE - Natl or State Standardized Sk - Ck Skills Check-Off SP - Skills Performance T - Tests

## MEANS OF ACCOMPLISHING STUDENT LEARNING OUTCOMES:

JP - Judged Perf/Exh Obs - Teacher Observ

OT - Objective Tests

#### In-Person

E - Essays

The instructor will:

DB - Discussion Board

**DE** - Documented Essays

- 1. Lecture and lead class discussions.
- 2. Assign readings from textbooks and/or other sources to supplement lectures.
- 3. Provide supplemental materials that align with the material presented in the textbook as appropriate.

R - Recital

RP - Research Papers

**RPT** - Report/Presentation

UT - Unit Tests

W - Writing Assignments

- 4. Design assignments, quizzes, discussions, etc., to help students engage with the course material.
- 5. Use other teaching strategies to assist students in examining and understanding course materials as needed.
- 6. Provide timely feedback on assignments.
- 7. Hold weekly office hours to address questions and student needs outside of class time.

The students will:

- 8. Attend class regularly and be attentive to lectures.
- 9. Engage with class discussion.
- 10. Participate in student discussion groups.
- 11. Read assigned readings.
- 12. Complete assignments, quizzes, discussion boards, etc., as assigned by the instructor.

<u>Online</u>

- The instructor will:
- 13. Lead class discussions.
- 14. Assign textbook and/or other readings.
- 15. Provide supplemental materials that align with the material presented in the textbook as appropriate.
- 16. Design assignments, quizzes, discussions, etc., to help students engage with the course material.
- 17. Use other teaching strategies to assist students in examining and understanding course materials as needed.
- 18. Provide timely feedback on assignments.
- 19. Hold weekly virtual office hours to address questions and student needs.

The students will:

- 20. Engage with the course regularly.
- 21. Engage with class discussions.
- 22. Participate in student discussion groups.
- 23. Read assigned readings.
- 24. Complete assignments, quizzes, discussion boards, etc. as assigned by instructor.

## ASSIGNMENT AND/OR COURSE OUTLINE

See your Instructor First Day Handout for individual instructor assignment schedule.