COLLIN COLLEGE
DIVISION OF BUSINESS and COMPUTER SYSTEMS
Course Syllabus

Course Information

Course Number: GISC 1301

Course Title: Cartography and Geography in Geographical Information Systems (GIS) and Global Positioning Systems (GPS)

Course Description: Introduction to the principles of cartography and geography. Emphasis on global reference systems and the use of satellites for measurements and navigation.

Course Credit Hours: 3
Lecture Hours: 2
Lab Hours: 2

Prerequisite/Concurrent Enrollment: GISC 1411

Student Learning Outcomes: Upon successful completion of this course, the student will be able to:

1. Explain the basic concepts of accuracy, precision, and scale in GIS/GPS. (SCANS: F1 – F16)
2. Summarize GPS elevations and the operating environment for GPS. (SCANS: F1 – F16)
3. Create spatial data with real time GPS data. (SCANS: C1, C3, C5, C6, C8, C10 – C14)
4. Recognize discrepancies in data presentations. (SCANS: C1, C3, C5, C6, C8, C10 – C14)
5. Import GPS data into GIS. (SCANS: C1, C3, C5, C6, C8, C10 – C14)
6. Evaluate data before transformation for scale and accuracy. (SCANS: C1, C3, C5, C6, C8, C10 – C14)
7. Measure "real world" distance and area on maps, and correctly relate the two. (SCANS: C1, C3, C5, C6, C8, C10 – C14)
8. Acquire geographic information directly using GPS, and merge it with existing information. (SCANS: C1, C3, C5, C6, C8, C10 – C14)
9. Manage the geographic information in a dynamic database situation. (SCANS: C1, C3, C5, C6, C8, C10 – C14)

Secretary's Commission on the Acquisition of Necessary Skills (SCANS) - SCANS skills are a group of foundational skills and workplace competencies that the Secretary's Commission on the Acquisition of Necessary Skills established as vitally important for workplace success in the 21st century. In Collin's workforce programs, the SCANS skills are developed and reinforced throughout the curriculum to provide students with an opportunity to hone these skills/competencies in the context of their education. Over the course of an entire degree program, the successful student is expected to demonstrate all of the SCANS skills and competencies as part of their education. The SCANS Foundation Skills and Workplace Competencies are described at: http://www.collin.edu/academics/programs/Workforce_SCANS_Skills_Syllabi_Code_Key.pdf

Withdrawal Policy: See the current *Collin Registration Guide* for the last day to withdraw.

Collin College Academic Policies: See the current *Collin Student Handbook*.

Americans with Disabilities Act: Collin College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal opportunity. It is the student's responsibility to contact the ACCESS office, SCC D140 or 972.881.5898 (V/TTD: 972.881.5950) to arrange for appropriate accommodations. See the current *Collin Student Handbook* for additional information.