

GIST-120 GPS & SURVEYING METHODS 4 CREDITS

SYLLABUS

CATALOG DESCRIPTION

This course provides an overview of global positioning systems. Topics include the theory, implementation, and operations of global positioning systems. Learn the fundamentals of acquiring GIS data using GPS technology, and understand surveying methods important for use in a GIS.

Prerequisites: None

Semester Offered: Fall

COMMON STUDENT LEARNING OUTCOMES

Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...

BROAD AND SPECIALIZED LEARNING

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

CRITICAL THINKING

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

CULTURAL AND CIVIC ENGAGEMENT

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

EFFECTIVE COMMUNICATION

Students will exchange ideas and information with clarity in multiple contexts.

INFORMATION LITERACY

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

INTEGRATING TECHNOLOGIES

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

COURSE LEARNING OUTCOMES

Upon successful completion of the course, the student will be able to...

1. Acquire a basic understanding of the principles, functions, and origins of GPS.
2. Acquire a general knowledge of the most current GPS receivers and post processing software.
3. Acquire a general knowledge of data model designs.

A copy of this approved syllabus is on file in the dean's office.
Updated 12/14/18

4. Master field techniques used for GIS data capture utilizing GPS receivers.
5. Acquire the skills necessary to post-process GPS data and prepare it for a variety of applications.
6. Acquire a general knowledge of planar surveying methods, techniques, and data accuracy.