



GIST 215 Small Unmanned Aerial Systems Mapping Section Name Section Credit Hours Credits Syllabus

Course Information

Meeting times and location: section meeting_times section location

Catalog description: This course is designed to offer the student the knowledge and software skills necessary to process UAS data into the various deliverable mapping formats such as 3D terrain models, orthographic imagery, and other topographic formats.

Terms offered: Spring Only

Section-specific Course Description:

Course Level Objectives

- I. To understand the principals inherent with and the programmatic interface of Agisoft Photoscan software.
- II. To be able to process gathered UAS data for desired deliverable.
- IV. To complete a UAS autonomous mission and post processing experience.

Required Texts and/or Materials

No text is required for this section

Required Technology and Software

- Canvas

- Chrome, Safari, or Firefox

Course Requirements

1. Use the terminology associated with processing multiple images in a georeferenced environment.
2. Control the Photoscan interface including manipulating the 3D environment.
3. Manipulate 3D processing software to produce deliverable products including, DEMs, orhtophotos, 3D terrain models, contour lines, 3D point clouds, etc. (B,CT,EC,CCE,IT)
4. Complete a full autonomous UAS mission and process the data. (B,CT,EC,CCE,IT)
5. Complete safety checklist
6. Complete equipment checklist
7. Program UAS for autonomous flight
8. Complete UAS autonomous flight
9. Process data gathered

Grading

Final grades are calculated based on the following...

Key Dates to Remember

[Full Academic Calendar](#)

Technical Support

Technical support is available through the San Juan College Help Desk 24/7/365. The help desk can be reached at 505-566-3266 or by creating a ticket at [San Juan College Help Desk](#).

For password reset and and Canvas support, visit the [Student Technology Guide](#) website.

Accessibility/Privacy Policies for all Technology Tools Used

[Accessibility/Privacy Policies for all Technology Tools Used](#)

Student Support

At San Juan College, we are committed to supporting your academic success and overall well-being. We recognize that college life can be challenging and stressful, impacting both learning and personal health. We are here to help you succeed.

Academic Support and Resources

We provide a range of academic support services to help you stay on track on your educational journey. Free resources include tutoring, computer loans, life skills workshops, and so much more. Visit the [Academic Support and Resources](#) webpage to learn more about support and resources available through Academic Advising, the Tutoring Center, the Student Resource Center (formerly Student Achievement Center) and the Testing Center.

Student Support and Resources

If you or someone you know could benefit from counseling, accessibility services, career exploration, veteran transitional assistance, or any of our other support services, visit the [Student Support and Resources](#) webpage where you'll find detailed information about various resources available to you as an SJC student.

We encourage you to take advantage of these free resources to enhance your college experience and ensure your success.

College Policies and Resources for Current Students

The [Student Handbook](#) provides information on student support, student organizations, and student conduct policies at San Juan College.

The San Juan College catalog outlines the [Academic Policies](#) students need to know.

Healthy and Safe Practices for Being on Campus

We want a healthy and safe campus for students, faculty, staff, and guests.

Contagious diseases and your responsibility:

If you have COVID-19 symptoms, fever, flu or even the common cold, you should stay home. Do not come to campus if you are feeling sick. Contact your instructor about missing class (and review your instructor's policies on missed or late work). Being sick does not necessarily excuse you from completing your work on time.

Safety on campus and your responsibility:

If you are on campus and experience or witness an emergency, call 9-1-1 first and then the Department of Public Safety at 505-566-3333 (or just 3333 if calling from a campus phone).

When you are on campus, be aware of your surroundings. If you need an escort to your vehicle, call 505-566-4444 (DPS non-emergency line) or 505-215-3091 (officer on duty line).

The College will send information for campus emergencies through SJC AlertAware, email and the webpage. Stay informed and stay safe.

Inclement Weather Information

Students will receive notification of class delays and cancellations due to inclement weather via the SJC AlertAware and SJC student email. Face-to-face classes will not meet in person; however, students are advised to check with instructors about alternative meeting options, as some may choose to meet via zoom. Hybrid classes will meet as scheduled via zoom. For questions regarding your class delay or cancelation, please contact your instructor.

Online Course Fee

Online Courses - San Juan College requires all online courses to include some form of assessment to demonstrate the mastery of course objectives. This could include exams, capstone projects, e-portfolios, presentations, final papers or other appropriate assessments. The use of a proctoring platform, plagiarism detection software or other method to ensure that assessments are completed by the enrolled student is required.

A course fee of \$5.00 is assessed for all online courses at San Juan College to cover the cost of the above services. Students who are required to take a proctored exam and choose to use a physical testing center outside the SJC Testing Center or SJC Disability Services will be responsible for the cost of using that center.