



	<u>Instructor</u>	<u>Teaching Assistants</u>
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Office Hrs.	Posted on CANVAS	Posted on CANVAS

Term:	Spring 2019
Lectures:	001- Monday: 8:00 - 9:40 am Location: Glover 130
	002- Monday: 12:00 - 1:40 pm Location: Military Science 200
Lab Location:	Natural Resources 232
Course Credits:	4

Welcome!

..... to the world of maps, computers, gps, gis, aerial photos, and satellite images !

Course Overview

This course has been designed to provide natural resource students with an introductory, comprehensive and integrated foundation of the geospatial science disciplines of Global Positioning Systems (GPS), Geographic Information Systems (GIS) and Remote Sensing (RS) for natural resource applications.

Course Goals and Objectives

At the end of the course, students will have the ability to create (digitize) and manipulate (edit) geospatial data, create professional map output products, perform straightforward vector and raster analysis, be able to use GPS in conjunction with GIS projects, have an understanding of database management, and be able to incorporate aerial photos and satellite imagery into GIS projects.

Course Prerequisites

Junior Level Standing and familiarity with the basic Microsoft Office products: Excel, Powerpoint, and Word.

Required Texts and Materials

Please acquire a USB flash drive for storing and managing data.
There are NO Required textbooks.

Important Dates to Remember

Course Drop Deadline (with "W"): March 25, 2019 (Monday after Spring Break)

Spring Break: March 18-22, 2019

Last Day to Process a "University Withdrawal": May 10, 2019

Library & Research Help

The CSU Libraries Help Desk provides basic research and technical assistance either in person at Morgan Library or by phone at 970-491-1841. Virtual assistance is also available via the Libraries' Ask Us chat and email services

<http://colostate.edu/help/ask-us>

Course Policies

Assignments

Most assignments are to be submitted on CANVAS on or before the date specified by the lab instructor. Generally that will be 1 week from the date assigned. Assignments are due at the beginning of your registered lab period. You will be able to view feedback on your graded assignments on CANVAS. Check your grades often and view feedback. It will help with subsequent assignments.

"Working Together" Policy

- It is acceptable to ask other students for help on understanding procedures for a given assignment, BUT each student is to hand in their OWN UNIQUE assignment (see section on "academic integrity". It is NOT acceptable for a group (2 or more) of students to do an assignment together and simply change the name on their respective papers. It will be at the discretion of the instructors to determine what constitutes "unique".
- Those who turn in identical assignments will receive a ZERO for that lab WITH the opportunity to re-do it on their OWN for half credit.

Late Work Penalties:

<i>If homework is submitted after due date</i>	<i>Penalty taken from total number of points possible</i>
1 day to 1 week	Up to 25%
1 to 2 weeks	Up to 50%
After 2 weeks	Not accepted

There can be exceptions for those who have been severely ill and provide a doctor's note. Consideration is also given for family emergencies. Discuss your situation with the instructor.

Graded Assignments

- After an assignment is graded, you should examine the comments (viewable on CANVAS) made by the grader. There could be helpful hints that will assist you on subsequent assignments. If you missed points, determine why you missed those points. Most points are missed from not following directions or submitting incomplete assignments.
- If you are getting grades of less than 60% due to miscomprehension of the material, seek out help from an instructor. These assignments can be resubmitted for up to half the missing points. For example, a 10/40 could be raised to a 25/40. You will have 1 week (from the date the original grade was entered) to obtain help from an instructor and then resubmit the assignment. Resubmissions will not be accepted after 1 week from the date the original grade was recorded.

Extra Credit Policy:

There are NO extra credit assignment opportunities in this class, however, the instructor may give extra credit quizzes during lecture periods.

Grades of "Incomplete":

Per university policy, an instructor may assign temporary grade of Incomplete to a student who demonstrates that he or she could not complete the requirements of the course due to circumstances beyond the student's control and not reasonably foreseeable. A student must be passing a course at the time that an Incomplete is requested unless the instructor determines that there are extenuating circumstances to assign an Incomplete to a student who is not passing the course. When an instructor assigns an Incomplete, he or she shall specify in writing using the Department Incomplete Grade Form the requirements the student shall fulfill to complete the course as well as the reasons for granting an Incomplete when the student is not passing the course. The instructor shall retain a copy of this statement in his or her grade records and provide copies to the student and the department head or his or her designee. (Section I.6 of the *Academic Faculty and Administrative Professional Manual*)

Disability Access:

Colorado State University is committed to providing reasonable accommodations for all persons with disabilities. Students with disabilities who need accommodations must first contact the Student Disability Center (SDC) before requesting accommodations from the professor. The Student Disability Center (SDC) <https://disabilitycenter.colostate.edu/> is located in room 100 of the General Services Building. Their phone is (970) 491-6385 (V/TDD). Students who need accommodations in this course must contact the professor at the beginning of the semester to discuss needed accommodations.

Attendance Policy: *"Showing up is half the battle".*

Attending lecture periods will enhance the students understanding of the concepts that will be applied in the laboratory sessions. There are no pre-planned points associated with lecture attendance but as mentioned earlier, the instructor may give occasional extra credit quizzes during lecture. These quizzes can only be made up if the students have a valid excused absence (see below).

Attending laboratory sessions is where the student will learn to put course concepts into action and also acquire the necessary skills to work with geographic information systems. Often, there will be products created during lab that will be submitted for points at the end of lab. If the student misses a lab, they are responsible for making up the missed in-class work (within one week of the missed lab). Late penalties may apply.

Attending exams (which will be given during lecture periods) are mandatory. If you have a valid reason (excused absence) for missing an exam, discuss this with the instructor BEFORE the exam date. If you are ill on the day of an exam, inform the instructor by email that you will not be there.

Excused Absences: *Students must inform their instructors prior to an anticipated absence and take the initiative to make up missed work in a timely fashion. Instructors will make reasonable efforts to enable students to make up work which must be accomplished under the instructor's supervision (e.g., examinations, laboratories). In the event of a conflict in regard to this policy, individuals may appeal using established University procedures.*

For the purposes of this regulation, University-sanctioned activities include competitions, events and professional meetings in which students are officially representing the institution. Appropriate sanctioned activities include Intercollegiate athletics, Collegiate club sports and competitions, Conferences and workshops recognized by the University not related to academics, Commitments on behalf of the University (ASCSU, band, etc.), and Professional activities recognized by the University related to academics. Department heads or their designated representatives must approve sanctioned professional and departmental activities. Other sanctioned activities must be approved by the appropriate program director on record with the Division of Student Affairs offices or the Department of Athletics.

Religious Accommodation:

Participation in special religious observances may provide a legitimate reason for an excused absence. The student is responsible for discussing this with the instructor prior to the absence.

Final Exam Policy:

Final examination week is part of the regular semester. Attendance shall be consistent with University policy.

If a student has three or more final examinations (not classes) scheduled for the same day or if conflicts of examination times occur, the student may negotiate a time change with the instructors involved. If the parties involved cannot find a mutually agreeable time, the Registrar's Office indicates which courses must be changed.

Note: The Registrar's Office must be notified at least one week prior to Final Examination Week to allow instructors time to make appropriate accommodations. It is the student's responsibility to initiate negotiations.

Any student who has a conflict with the examination schedule must inform the instructor as soon as possible before the examination. If an agreement cannot be reached between the instructor and student as to the appropriateness of a make-up examination the student should appeal to the department head.

<http://www.registrar.colostate.edu/final-exams>

Professionalism Policy:

Please arrive on time for all class meetings. If you arrive late, slip in quietly to a seat without disturbing the class. Please silence your phones, iPods, etc. during all classroom and lab lectures. Those not heeding these simple rules of etiquette will be subject to possible public humiliation administered by the instructor. When emailing the instructor or TAs, please include your name, course number, and lab section in your email.

Academic Integrity:

The Department of Forest and Rangeland Stewardship takes academic integrity seriously. At minimum, academic integrity means that no one will use another's work as their own. The CSU writing center defines plagiarism this way:

Plagiarism is the unauthorized or unacknowledged use of another person's academic or scholarly work. Done on purpose, it is cheating. Done accidentally, it is no less serious. Regardless of how it occurs, plagiarism is a theft of intellectual property and a violation of an ironclad rule demanding "credit be given where credit is due."

Source: (Writing Guides: Understanding Plagiarism.

<http://writing.colostate.edu/guides/researchsources/understandingplagiarism/plagiarismoverview.cfm>.

Accessed, May 25, 2012)

If you plagiarize in your work you could lose credit for the plagiarized work, fail the assignment, or fail the course. Each instance of plagiarism, classroom cheating, and other types of academic dishonesty will be addressed according to the principles published in the CSU General Catalog (see page seven, column two:

<http://www.catalog.colostate.edu/FrontPDF/1.6POLICIES1112f.pdf>).

Of course, academic integrity means more than just avoiding plagiarism. It also involves doing your own reading and studying. It includes regular class attendance, careful consideration of all class materials, and engagement with the class and your fellow students. Academic integrity lies at the core of our common goal: to create an intellectually honest and rigorous community. Because academic integrity, and the personal and social integrity of which academic integrity is an integral part, is so central to our mission as students, teachers, scholars, and citizens, we will ask to you sign the CSU Honor Pledge as part of completing all of our major assignments. While you will not be required to sign the honor pledge, we will ask each of you to write and sign the following statement on your papers and exams: ***"I have not given, received, or used any unauthorized assistance."***

Tentative Course Schedule and Important Dates to Remember

<u>Week of</u>	<u>Lecture Topics (Mondays)</u>	<u>Laboratory</u>
Jan. 21	No Lecture - Martin Luther King Day	1. Course Introduction; Maps on the Web
Jan. 28	Map Scale; Cartography	2. Introduction to ArcGIS
Feb. 4	More Basic Cartography	3. A) Projections, Coordinate systems, Datums B) Map Design
Feb. 11	RS: Airphoto Interpretation	4. Introduction to Airphotos / Photo Scale
Feb. 18	Exam 1	5. Airphoto Interpretation
Feb. 25	GPS: concepts	6. GPS: Waypoints / Navigation
Mar. 4	GIS: Data Structure and Database Management	7. A) GPS: Tracklog Collection / Data Export B) GIS: Database Management
Mar. 11	GIS: Data Capture	8. Data Entry Methods
----- Mar. 18 -----	----- SPRING BREAK -----	----- NO LABS -----
Mar. 25	GIS: vector analysis	9. Vector Analysis
Apr. 1	GIS: Raster data	10. Downloading / manipulating external data
Apr. 8	Exam 2	11. In class lab practical
Apr. 15	GIS: raster analysis	12. Raster Analysis methods
Apr. 22	RS: Multispectral Sensors	13. Image Analysis
Apr. 29	RS: Image Processing	14. Image Classification
May 6	Final Exam (tentative)	15. The "Final" Lab

Basis for Final Grade

Survey of Knowledge (Exam) 1	10%
Survey of Knowledge (Exam) 2	10%
The Final Survey of Knowledge	10%
Weekly Exercises (combined)	55% (based on the 600 points below)
The "Not-So-Big Assignment"	<u>15%</u>
	100%

Weekly Exercises (by points)

Scale Problem Assignment	20
Lab 1 – Part 1 (in lab)	10
Lab 1 – Part 2 (assignment)	30
Lab 2 – in lab assignment	5
Lab 2m - map assignment	20
Lab 3 – in lab assignment	5
Lab 3 - assignment	40
Lab 4 – in lab assignment	20
Lab 4m - map assignment	20
Lab 5 – in lab assignment	20
Lab 5m - map assignment	20
Lab 6 - assignment	40
Lab 6m - map assignment	20
Lab 7a - assignment	40
Lab 7b – assignment	40
The Boolean Assignment	20
Lab 8 - assignment	40
Lab 9 – in lab assignment	5
Lab 9 - assignment	80
Lab 10 – in lab assignment	5
Lab 10 – "Not-So-Big Assignment" is assigned during Lab 10	
Lab 11 – in lab assignment	20
Lab 12 – in lab assignment	20
Lab 13 – in lab assignment	20
Lab 14 – in lab assignment	20
Lab 15 – in lab assignment	<u>20</u>
	600 total

Grading Scale (%)

>90	A
80-90	B
70-80	C
60-70	D
<60	F