
Forest Resources Information Systems

Description:

Concepts, principles, and applications of forest informatics, remote sensing, and global/local positioning, emphasizing applications in forest resource management are introduced. Topics include: geospatial data sources and data collection, data structures and quality, map projections, and remote sensing, Global Positioning System (GPS), spatial and tabular data analyses, cartographic modeling and layout. Computer and field laboratory exercises provide practical experiences that complement the lectures.

Meetings:

Live Section:

- Lecture Hours: Mon and Tue periods 5-6 (2:00-4:45): (Reed302) Conference by Polycom
- Computer Lab Hours: Wed periods 5-6 (2:00-4:45): (MCCB2103)
- Field Lab Hours: Thr period 2-3 (9:30 -12:15 p): (Field/WEIM 1084...check schedule)

Distance Section(s):

- Lecture Hours: Mon and Tue: Recorded lectures (link will be posted after each class)
- Computer Lab Hours: Wed periods 5-6 (2:00-4:45): online virtual classroom by Elluminate
- Field Lab Hours: Thr period 2-3 (9:30 -12:15 p): (Field/WEIM 1084...check schedule)

Office Hours:

-Using phone/email/Elluminate for Plant City instructors
_Live (by appointment) for teaching assistant and Mr. Joe Aufmuth

Website:

<https://lss.at.ufl.edu> (Sakai system)

Instructors:

- Amr Abd-Elrahman, Plant City, Phone: 813.757.2283, Email: aamr@ufl.edu
- Joe Aufmuth, UF Map Library, Phone: 352.273.0367, Email: mapper@uflib.ufl.edu
- Justin Harris, Plant City, Phone: 813.757.2183, Email: justin98@ufl.edu

Teaching Assistants:

- David Fox, NewinsZiegler, Phone: 352.846.2374, Email: dafoxfl1@ufl.edu
- John Dooner, Newins-Ziegler, Email: jdooner@ufl.edu

Objectives:

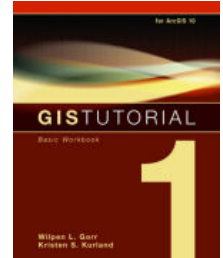
At the conclusion of this course, the student will be able to:

- Implement basic spatial measurement techniques
- Read maps and use GPS and compass for navigation
- Recognize map projections and their geodetic implications
- Utilize aerial and satellite imagery and other sources of digital data
- Assess and Integrate GPS data into geospatial databases
- Practice vector and raster geospatial analyses
- Implement ArcGIS software in building and analyzing GIS data

Resources

REQUIRED TEXTBOOK (LAB EXERCISES):

Gorr, Wilpen L. and Kristen S. Kurland, *GIS Tutorial 1*, ESRI Press-fourth edition, ISBN: 978-1589482593. **A new book is required** to do the exercises on your PC, as it includes a 180 day trial license for the ArcGIS software .



HIGHLY RECOMMENDED TEXTBOOK

Paul Bolstad (2008). *GIS Fundamentals* (3rd edition). Eider Press. ISBN: 9780971764729.

Note: The second edition version of the book will work too.

ADDITIONAL MATERIALS:

- Reading and multimedia assignments will be issued as needed
- Links to websites covering GIS topics and data sources will be given throughout the course period.

Grading:

Grading Item	Grade Percentage	Description
GIS Tutorials	30%	This includes lab participation, performing assigned tutorials from ‘GIS Tutorial’ book and submitting lab reports. Please see the ‘Computer Labs’ section for more details.
Class Participation	5%	Class participation includes class attendance and participation in field/online/ group discussions. Please see the ‘Participation’ section for more details.
Exams	40%	Two <i>in-class</i> exams will be delivered. Exact exam dates will be posted in the course schedule table and online on the course website (Sakai).
Field Labs	25%	At least three field labs through the semester. Please see the ‘Field Labs’ section for more details.

Grading Scheme:

Please note that we are using the + and - grading scale encouraged by UF. For more information about the new grading system, please visit <http://www.isis.ufl.edu/minusgrades.html>

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
Corresponding Course Score	95-100	90-94	85-89	80-84	75-79	70-74	65-69	60-64	55-59	50-54	45-49	0-44
Grade Points	4	3.67	3.33	3	2.67	2.33	2	1.67	1.33	1	0.67	0

Computer Labs

Unless announced differently, laboratory sessions will be conducted on Wednesdays according to the schedule either live in MCCB2103 (for the live section) or using the Elluminate virtual classroom software. (for the Distance students, Please see ‘[Using Elluminate Software](#)’ section).

During the lab sessions, the students will mainly perform the step-by-step activities in the ‘GIS Tutorial 1’ book. The software and data needed to perform the tutorials (ArcGIS 10) are on the CDs that come with the text book.

More lab activities will be issued as needed throughout the semester. Please note that the ArcGIS software works under the Microsoft Windows operating system. If you have an Apple Mac machine, you need to have the dual boot feature and boot to Windows in order to properly run the ArcGIS software on your machine.

A summary lab report on each chapter (tutorials) that includes tutorial objectives and snapshots of the screens captured while applying the tutorial steps is due on Thursday of the week following the lab activities. For example, if activities for chapter 2 and 3 in the book are scheduled for the July 11th Wednesday lab session, the chapter lab report will be due on Thursday July 19th. PLEASE MAKE SURE THAT YOUR SCREEN CAPTURES INCLUDE THE COMPUTER DATE AND TIME AT THE LOWER RIGHT CORNER OF THE SCREEN. Your report should also include the answers to the questions within the tutorials. You may choose to enrich the reports with other items such as summary of learnt skills or alternative methods to achieve objectives for extra (5) points. This report should be considered as your notes for future referencing of the tutorials.

Late Policy – Reports turned in after the due date will be deducted points. To receive all points, the reports must be turned in no later than two weeks past the due date. One week late will result in a 25% reduction in points. Two weeks late will result in a 50% reduction in points. Lab reports will not be accepted after two weeks from the assignment deadline.

Participation

Discussion topics will be created on the course website. The students are encouraged to introduce new discussion items, initiate discussions on the course e-learning website (Sakai), and enrich course resources with online material. Computer lab (Wednesdays) and in-class (for students registered in the live section) participation will be considered part of this grade.

Field Labs

At least three field labs will be conducted during the semester. Field lab participation is mandatory for all students. The time frame for each lab is one week. Lab description, data, activities, time frame, and deliverables will be announced at the course e-learning website (Sakai) and discussed in the lab sessions (Thursdays). Pre-lab preparation/assignment may be required. Grade will be assigned based on field attendance, performed activities and lab deliverables. Few student deliverables may be chosen for in-class presentation and discussion.

Lecture/Lab Schedule:

There are two sections for this course, a live section and a distance section. Both sections have the same deadlines; however, the lecture and computer lab sessions are delivered differently. Please check syllabus attachments for the schedules for the differing sections. Please be sure to follow the schedule for the section for which you are registered. Deadlines in the schedule are flexible and subject to change according to course progress. Please check this document frequently for updates.

Using Elluminate Software:

Laboratory sessions (for the Distance section) and office hour meetings (per request) will be conducted virtually using the **Elluminate virtual classroom software**. The software is accessed by clicking a link posted by the instructor through Sakai. The instructor will schedule the sessions and post the link to you earlier in the semester. You should click on the link each time you need to join the lab (or the office hour) sessions.

The following [link](#) explains the minimum computer requirements and the instructions to connect to a session. Generally, current computer configurations satisfy this requirement. You should have [Java](#) installed on your machine <http://www.java.com/en/> in order for the software to work. A microphone is also needed to communicate with the instructors and the students attending the session. For more instructions on how to start using the Elluminate software, please refer to the "Important HOW TO's" folder at the course Sakai system website.

Academic Honesty Policy:

In 1995 the UF student body enacted a new honor code and voluntarily committed itself to the highest standards of honesty and integrity. When students enroll at the university, they commit themselves to the standard drafted and enacted by students. In adopting this honor code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the university community. Students who enroll at the university commit to holding themselves and their peers to the high standard of honor required by the honor code. Any individual who becomes aware of a violation of the honor code is bound by honor to take corrective action. The quality of a University of Florida education is dependent upon community acceptance and enforcement of the honor code. **The Honor Code: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.** On all work submitted for credit by students at the university, the following pledge is either required or implied: **"On my honor, I have neither given nor received unauthorized aid in doing this assignment."** The university requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior. Students should report any condition that facilitates dishonesty to the instructor, department chair, college dean or Student Honor Court. (*Source: 2007-2008 Undergraduate Catalog*) It is assumed all work will be completed independently unless the assignment is defined as a group project, in writing by the instructor. This policy will be vigorously upheld at all times in this course.

Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Additional Gainesville Campus Resources:

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. Both the Counseling Center and Student Mental Health Services provide confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance. The Counseling Center is located at 301 Peabody Hall (next to Criser Hall). Student Mental Health Services is located on the second floor of the Student Health Care Center in the Infirmary.

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- *University Counseling Center*, 301 Peabody Hall, 392-1575, www.counsel.ufl.edu
 - *Career Resource Center*, CR-100 JWRU, 392-1602, www.crc.ufl.edu/
 - *Student Mental Health Services*, Rm. 245 Student Health Care Center, 392-1171, www.shcc.ufl.edu/smhs/
 - Alcohol and Substance Abuse Program (ASAP)
 - Center for Sexual Assault / Abuse Recovery & Education (CARE)
 - Eating Disorders Program
 - Employee Assistance Program
 - Suicide Prevention Program

Accommodations for Students with Disabilities:

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. 0001 Reid Hall, 392-8565, www.dso.ufl.edu/drc/