The mission of Concord University is to provide quality, liberal arts based education, to foster scholarly and creative activities, and to serve the regional community (http://www.concord.edu/academics/).
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Geography 411: GIS Design and Application
CRN 20516, Section 01

Spring 2019	**Professor:** Dr. Tom Saladyga
3 Credits	**Office**: Admin 125B
Prerequisites: GEOG 311	**Email:** saladygat@concord.edu
Meeting Time: M 2:00-4:30	**Website:** www.saladyga-EGL.com
Room: Admin 124 (Spatial Analysis Lab)	**Office Hours:** MW 10-11/1-2; TR 11-12
	Phone: 304-384-6040

Course Description:
This project-based course builds upon the topics and concepts covered in GEOG 311 (GIS and Cartography). Emphasis is placed on the use of Geographic Information Systems (GIS) in solving real-world problems (from Academic Catalog).

The "real world" project this semester will focus on Brush Creek watershed located in Mercer County, West Virginia. We will concentrate our efforts on two objectives: (1) Create a detailed land cover map for Brush Creek watershed using image classification methods and (2) Evaluate the quality of wetlands within the watershed using GIS and field-based rapid assessments. This work will be presented at Undergraduate Research Day (April 18th) and summarized in a written report.

Course Management System:
Blackboard - https://elearn.concord.edu. Sign in with your MYCU user name and password.

This course is organized in Blackboard as follows:
- **Welcome Page:** Look here for course announcements throughout the semester. Announcements will also be sent to your CU email account.
- **Syllabus:** View and download the course syllabus here.
- **Course Materials:** Readings and project-related materials will be posted here.

Required Textbook (open access):
Essentials of Geographic Information Systems, Campbell and Shin (Saylor Foundation, 2011)
*Additional readings will be provided in Blackboard throughout the semester.

Course software:
We will be using an industry standard software package in this course. This is ESRI's ArcGIS software platform, which is available on computers in Admin 124 (Spatial Analysis Lab) and Admin 123. You may also choose to purchase the ArcGIS platform for $100/year and install it on your own computer. However, this is not required. It is available ONLY for the Windows operating system (not Mac).

This Course Addresses the Following Concord University Educational Goals:
Skill Outcome 1 – Effective inter-communication skills and literacy adapted as needed for the demands of various kinds of discourse: listening and speaking, reading and writing, numeracy, graphic communication, non-verbal communication, and media and technological literacy.
Sill Outcome 4 – An ability to analyze, synthesize, and integrate elements, information and ideas.

Course Learning Objectives:

1. Manage, analyze, and display spatial data using standard GIS software (ESRI's ArcGIS 10.x).
2. Identify and solve geographic problems using creative thought and the analytical tools provided by GIS.
3. Communicate geographic information in a formal presentation to a general audience.

National Standards:

All geography courses rely on the "Geography for Life" standards put forward by the Association of American Geographers, The National Geographic Society, and the National Council for Geographic Education.

Course Requirements and Expectations:

Communication:

It is your responsibility to email me (at saladygat@concord.edu) with any questions you might have during the semester. I will respond to your email within 12 hours. I will not respond to an email that resembles a text message. This means that you must include an appropriate salutation (Dr. Saladyga, Professor S, etc.), use complete sentences, and include your name.

Late Work:

All work is expected to be completed/submitted on time. **Ten percentage points will be deducted for each calendar day an assignment is late.**

Computer Issues:

Computer issues cannot be used as excuse for late or incomplete work.
For technical issues concerning Blackboard, contact the Concord University IT Help Desk:
http://hub.concord.edu/technology/node/12. You must also have a backup plan if your computer is having issues. This may including borrowing a computer from a friend or using a computer on campus or at a public library.

Grade Breakdown:

	Points	% Total
□ Attendance/Class Participation	100	20
□ Land Cover Map	50	10
□ Wetland Buffer Analysis	50	10
□ URD Presentation	100	20
□ Project Report	100	20
□ Final Exam	100	20
TOTAL	500	

Grading Scale

Grade	Percent
A	90-100
B	80-89
C	70-79
D	60-69
F	<60

Course Schedule:

	Date	Topic	Reading/Assignment Due
Week 1	Mon 1/14	Course introduction/ GIS review	
Week 2	Mon 1/21	No class meeting – MLK Day	
Week 3	Mon 1/28	GIS project management/ Image classification literature	**Readings TBA**
Week 4	Mon 2/4	Image classification in ArcGIS	
Week 5	Mon 2/11	Image classification in ArcGIS continued…	
Week 6	Mon 2/18	National Wetland Inventory (NWI)/ Wetland assessment literature	**Land Cover Map Due; Readings TBA**
Week 7	Mon 2/25	Wetland buffer analysis	
Week 8	Mon 3/4	Wetland buffer analysis continued…/ Preparation for rapid assessments	**Wetland Buffer Analysis Due**
	---------- Spring Break ----------		
Week 9	Mon 3/18	Wetland rapid assessments (in the field)	
Week 10	Mon 3/25	Wetland rapid assessments (in the field)	
Week 11	Mon 4/1	Data entry and analysis	
Week 12	Mon 4/8	Data analysis continued…	
Week 13	Mon 4/15	Project Presentation Workshop	
	Thurs 4/18	*Undergraduate Research Day at Concord*	
Week 14	Mon 4/22	Project Writing Workshop	
Week 15	Mon 4/29	Project Writing Workshop	**Project Report Due**
Finals Week	TBA	**Final Exam**	

This schedule is subject to change. Students are responsible for changes announced in class.

Institutional Information and Policies

Accessibility/Accommodations:

Concord University is committed to responding to the needs of students with disabilities as defined by the Americans with Disabilities Act. Please inform your instructor at the beginning of the class semester if you have a disability and are requesting accommodations. It is your responsibility to self-disclose that you are requesting accommodations. The University and instructor will provide you with a reasonable accommodation. You should register with CU's Disability Services Office, located in the Athens campus Jerry and Jean Beasley Student Center, Bottom Floor, across from the Campus Post Office. The Disability Services Office phone is 304-384-6086 or you can email the Director, Nancy Ellison, at nellison@concord.edu for assistance.

Academic Dishonesty

Academic dishonesty is morally unacceptable as well as destructive to the learning and teaching atmosphere. Academic dishonesty includes the giving or receiving of improper help on examinations or assignments, falsifying documents, and plagiarism (the act of stealing and using, as one's own, the ideas or the expression of the ideas of another). Such dishonesty can lead to a variety of penalties — including but not limited to failure of assignment, failure of course, loss of institutional privileges, or dismissal from the University. (See University Catalog Academic Policies and Procedures.)

Concord University Honor Code
A Concord University Honor Code was approved by students, staff, faculty, administration, and the CU Board of Governors. The Code states:
"As a member of the Concord University Community I will act with honesty and integrity in accordance with our fundamental principles and I will respect myself and others while challenging them to do the same."
The Honor Code is intended to unite the Concord community behind a culture of honesty, integrity, and civility.

Class/Online Attendance Policy
Regular class attendance is part of a student's academic obligation at Concord. Irregular attendance may affect academic performance adversely and is detrimental to the atmosphere of a class. (See University Catalog Academic Policies and Procedures.)

Emergency Alert System
In an effort to increase safety and security on our campus, Concord University encourages everyone to register for instant text message alerts. Alerts will only be used for security and safety notices. All students, faculty, and staff are eligible to receive text message alerts on their cell phones or email alerts. Please contact the IT Help Desk for further assistance (304-384-5291).

Emergency Information
Emergency/courtesy telephones are located at the main entrance of each residence hall and at various other locations on campus. Emergency telephones can be identified by the flashing blue light and will provide the user with a direct link to Public Safety at the press of a button. To report an on-campus emergency, call 304-384-5357 or 911. The Office of Public Safety is located on the bottom floor of the Rahall Technology Center. For further emergency information go to:
http://www.concord.edu/administration/office-public-safety.

Inclement Weather Policy
As a general policy, the University will remain in normal operations during adverse weather conditions. In the event of severe weather conditions, the following may occur:

> University Closure
> No students or employees are to report.
>
> Classes Cancelled
> Students do NOT report BUT employees are expected to report to work at their normal time.
>
> Operating on an Inclement Weather Delay
> Under this schedule, all 8 a.m. classes will start at 10 a.m. Students and faculty will follow the Inclement Weather Schedule. (See http://www.concord.edu/emergency-alerts for Athens/Beckley Inclement Weather Schedules.)
> *Announcements invoking the late schedule or other options referenced above are aired on area radio and television stations and are sent as text and email messages to those enrolled for this service.*

Student Conduct
In classrooms, online, laboratories, and during any activities that are part of course requirements, students are expected to observe reasonable rules of conduct.

Technology Services
Contact the CU Help Desk at extension 5291 from campus or 304-384-5291 off campus. You may also e-mail cuhelpdesk@concord.edu.

This syllabus is subject to change based on the needs of the class. Please check it regularly.