### GIS II- ENVS 464(G) Professor: Dr. Katie Helen Costigan Email: <u>Costigan@louisiana.edu</u> Office: Hamilton 332 Office hours: By appointment

## Lecture: TR 9:30-10:45

### Text/Background readings

There is no formal textbook for this class. Instead, relevant chapters from different books/research articles will be selected to complement topic discussions. The .pdf files will be posted on Moodle under the "Readings" section.

### **Course catalogue description**

Emphasis on practical GIS applications, advance GIS software skills, map development, and modeling.

### **Costigan's description**

Applications of GIS technology for scientific discovery and exploration will be used as case study examples. The use of GIS for society's benefit is highlighted mainly in the form of access to spatial information and impacts of scientific assessments with a spatial emphasis on human populations. Lab activities will familiarize students with GIS tools to the degree where students completing the course should be able to conduct their own analysis using GIS. *This is a not introductory course. If you do not have the prereq or equivalent work experience, you will do poorly in this class.* 

### Assignments and grading

The final grade will be based on the total number of points scored out of a total possible of 100.

Points are distributed in the following manner: <u>Undergraduates:</u> Exams: 30%; Participation/Attendance: 10%; Assignments: 60%

Graduates:

Exams: 30% Assignments: 50%; Final project: 20%;

*Exams*: There will be two exams. You will be examined on your knowledge of the material presented during lecture, prior to and up to the time of the exam, including those readings associated with the writing assignments. There will be no make ups for missed exams.

EXAM DATES: October 12; December 5 8-10:30

*Participation/Attendance*: If you have more than three absences, you will begin to loose points for attendance- no matter if you have a physician's note. These are easily forged.

*Assignments* There will be assignments throughout the course related to material we have covered. Students are expected to complete the assignments in the timeframe outlined by Costigan. There will be no make ups for missed or late assignments unless first approved by Costigan. Grammar and spelling count. Be sure to proof read your assignments-- if there are more than five typos; it will be handed back to you. A huge emphasis of this course will be on cartography- make your maps look NICE. Be sure to refer to the grading rubric here when making your maps.

## Grading rubric

This rubric is designed to emphasize both the technical and artistic aspects that are essential to making effective maps. It is easy to make maps with GIS, but making good and effective maps (the work cartographers used to do) requires careful thought and skill. Cartography is a skill, not a lost art.

The 6 C's and their definitions are:

- 1. **Colorful** (but not cluttered) *An effective use of color to distinguish features and emphasize key aspects of your map.*
- 2. **Creative** (but not confusing) *There are lots of creative ways to display your geographic data and analyses*
- 3. Correct All analyses, calculations and labels are correct
- 4. **Context** (location, coordinates, projections, scale, orientation, setting) *All maps* should have enough context for the user to discern where it is, what its about and what the scale is within the context that its presented (e.g. stand-alone map vs. within a report).
- 5. **Convincing** (fit for purpose) *All maps have a purpose, and your map should be effective at conveying the message it is intended to.*
- 6. **Consistent** There should be logical, graphical and typographic consistency both within a single map and amongst multiple maps in the same assignment or project.

I will refer to this as the 6Cs often.

# **Costigan's Policies**

# Cheating

Instructors or their designated substitutes will monitor examinations, quizzes, and assignments for signs of plagiarism. Plagiarism is committed by an author when he or she uses the words of another writer without giving appropriate credit. The plagiarist presents work as though it were created by his or her own mind and hand, but in fact, the words come from someone else. Plagiarism is unethical, illegal, and morally wrong. It is unethical because it is a misrepresentation, illegal because it infringes on copyright laws, and morally wrong because it is intellectual theft.

All assignments and exams are to be completed individually, unless otherwise stated by the instructor. Students are expected to adhere to the standards of academic honesty. Students are expected to avoid plagiarism completely. All written products in this course will be investigated for potential plagiarism using web-based software and library search techniques.

Cheating, falsification of information or plagiarism (using the work of others as your own) will be grounds for a **zero** on the particular assignment and, depending upon the severity and number of occurrences, a failing grade in this course.

**No laptops, phones, or unnecessary electronic devices without permission of instructor** (see the manuscript by Mueller and Oppenheimer, The Pen Is Mightier Than the Keyboard: Advantages of Longhand Over Laptop Note Taking) If you text or use a mobile phone in class, you will be asked to leave for the remainder of the lecture.

### Communication

Please post all course-related questions in the General Discussion Forum on Moodle so that the whole class may benefit from our conversation. f you find any problems with an assigned lab, please post a thread to the relevant lab forum on the moodle discussion forum. Please email your instructor for matters of a personal nature. The instructor will reply to course-related questions and email within 24-48 hours.

### Honor System

Plagiarism is committed by an author when he or she uses the words of another writer without giving appropriate credit. The plagiarist presents work as though it were created by his or her own mind and hand, but in fact, the words come from someone else. Plagiarism is unethical, illegal, and morally wrong. It is unethical because it is a misrepresentation, illegal because it infringes on copyright laws, and morally wrong because it is intellectual theft.

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## **Disability Accommodations**

Students needing academic accommodations for a disability must first be registered with the Office of Disability Services (ODS) to verify the disability and to establish eligibility for accommodations. Students may call 337-482-5252 or visit the ODS office in the Conference Center, room 126. Once registered, students should then schedule an appointment with Dr. Costigan to make appropriate arrangements.

### **Course Schedule**

Below is the tentative schedule for Fall 2017. Dr. Costigan reserves the right to change at any time