COURSE SYLLABUS & OUTLINE. GEOGRAPHY 5311. Spring 2018.

Law Enforcement GIS (CRN 20186)

3 Units Credit.

Lecture: Monday evening 6 pm to 8 pm, research time 805-850 pm. In The Woodlands Center room 209. A fieldtrip to the Montgomery County Emergency Communications District and or Hospital district is likely.

Text: GIS and Crime Analysis, Fahui Wang, IGI Global 2005.

Instructor: Dr. Mark Leipnik. Office Hours: Tu. 10-11 in LDB room 323 phone: Ex. 3698, e-mail GEO_MRL@SHSU.EDU. Lecture notes are being prepared and will be periodically updated and available via the SHSU Blackboard facility as PDF files. Bonus questions and midterm structure and review will also be posted on Blackboard. These notes may be brought into a word processing package, expanded to leave space for class notes, printed out, brought to class, and used to prepare for exams, but should not substitute for attentive participation in class**.**

Summary of Exam & Assignment Due Dates, Points, and Grading

Date	Assignment	Points
February 12	Paper Topic	25
March 5	Midterm I	300
March 26	Reference List	50
April 23-30	Presentations	100
May 7	Research Paper Due	225
May 7	Final Exam	300

Grading: Grades are based on a 1,000-point total for the semester. The midterms are each worth 300 points, the research paper 400 (consisting of 25 for topic, 50 for reference list, 100 for PowerPoint presentation and 225 for report which can be a word document, hard copy or PDF). Note that there are 30-point bonus questions on each exam, these can add points to your score but you cannot receive over 300/300 points in any case.

A = 900-1,000 points.

B = 750-899 points.

C = 600-749 points.

D = 500-599 points.

F = less than 499 points.

Course Specific Policies

Attendance: Attendance in class is vital it will be taken at the beginning of each class. Students that are more than five minutes late will be considered absent. The first three absences will not result in any loss of points, but for each absence thereafter, 25 points will be deducted.

Tests and Assignments: There will be two midterms. Both midterms may have matching, true/false, multiple choice, short answer, and essay questions. They will be based on the lectures and on material in the assigned readings from the book. Both exams will have bonus questions that require use of the Internet outside of class time to research answers the topic of the bonus questions will be made available a week in advance. The first midterm will be on March 19 and will be worth 300 points. The second exam (final) will be on May 7 from 830-1030 pm but may be moved earlier in day based on consent of students. It will be worth 300 points.

There will be a written individual research project/presentation that will involve writing a 20-30 page research paper. Maps and figures count toward the page total as do cover page and reference section. A 15-20 minute PowerPoint presentation will be made on the topic of the research paper. The presentations will be made during the last two class meetings; April 23-30.

Selection of a topic must be made by February 12, a list of references must be prepared and submitted by March 26 and the final paper must be submitted by May 7. The topic is worth 25 points, the reference list is worth 50 points, the PowerPoint presentation is worth 100 points and the research paper itself is worth 225 points. The total research paper is worth 400 points. We will agree on a topic from the list of potential topics (see the end of the syllabus) or one you submit if acceptable to instructor, topics will be determined on a basis of 1st person to request the topic.

Other General University Policies

Academic Honor: All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in academic experiences both in and out of the classroom.

Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of academic dishonesty including, but not limited to, cheating on examinations or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials. At a minimum the student will receive a failing grade on the assignment in which dishonesty was involved, thus for a quiz worth 25 points copying of answers would result in the loss of those 25 points.

Classroom Rules of Conduct: Students are expected assist in maintaining a classroom environment that is conducive to learning. Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university. Cellular telephones and pagers must be turned off before class begins. Students are prohibited from eating or drinking in class, using tobacco products, making offensive remarks, Reading newspapers, sleeping, talking at inappropriate times, wearing inappropriate clothing, or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive may be eaten by honey badgers and or reported to the dean as per tribal traditions/policy.

Students with a Disability: It is the policy of Sam Houston State University that no otherwise qualified disabled individual shall, solely by reason of his/her handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any academic or Student Life program or activity. Disabled students may request assistance with academically related problems stemming from individual disabilities by contacting the Director of the Counseling Center in the Lee Drain Annex or by calling (936) 294-1720. Any student seeking accommodations should go to the Counseling Center and Services for Students with Disabilities in a timely manner and complete a form that will grant permission to receive special accommodations.

Visitors in The Classroom: Unannounced visitors to the classroom must present a current, official SHSU identification card to be permitted in the classroom. They must not present a disruption to the class by their attendance. If the visitor is not a registered student, it is at the instructor's discretion whether or not the visitor will be allowed to remain in the classroom. This policy is not intended to discourage occasional visiting of classes by responsible persons.

Religious Holidays: Students who are absent from class for the observance of a religious holy day are allowed to take an examination or complete an assignment scheduled for that day within reasonable time after the absence. The period of time during which assignments and exams will be excused includes travel time associated with the observance of the religious holy day.   A student who wishes to be excused for a religious holy day must present the instructor of each scheduled class that he/she will be absent from class for religious reasons with a written statement concerning the holy day(s) and the travel involved. The instructor should provide the student with a written description of the deadline for the completion of missed exams or assignments. In such cases, the student will be required to take the test or submit the assignment early—unless there are good reasons for not being able to do so and the instructor has agreed to those reasons.

GEO 5375 Law Enforcement GIS Spring 2014 Schedule

Week 1. Lec. 1. Handout syllabus, go over policies, Potential Research Topics   (M. Jan. 22)

    Lec. 2. History of Crime Mapping.

Part I: GIS & Crime Mapping

Week 2.   (M. Jan. 29)

    Lec. 3. Background on GIS.

    Read: Chapter 1 in Wang.

    Lec. 4. Background on Other Geospatial Technologies.

Week 3.   (M. Feb 5)

    Lec. 5. Computerized Crime Incident Mapping.

    Lec. 6. Crime Patterns, Spatial/Temporal Analysis.

    Read: Chapters 2, 3, 4 & 5 in Wang.

Week 4. Lec. 7. Crime & Demographic Data.   (M. Feb. 12)

    Lec. 8. Statistical Issues.

    Select Research Paper/presentation Topic (25 Points)   Th. Feb. 7.

    Read: Chapters 12, 13, 14, 15 & 16 in Wang.

Week 5. Lec. 9. Processing GIS Data: Geocoding & Cartographic Issues.   (M. Feb. 19)

    Lec. 10. Community Oriented Policing and Deployment.

    Read: Chapters 20, 21, 27 & 28 in Wang.

Week 6. Lec. 11. Jurisdictional & Boundary Issues.   (M. Feb. 26)

    Lec. 12. Geographic Profiling and Serial Crime Case Studies

    Read: Chapters 6, 7, 8, 9, 10 and 11 in Wang.

Week 7. **Class meeting 13.   Midterm I (300 points).**   (M. March 5)

Week 8. _____SPRING BREAK MARCH 12-17 _____

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Week 9. Lec 14. Crime Maps on the Web and Community Outreach   (M. March 19)

        Lec. 15. Tracking, Surveillance, Monitoring, Drones

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Week 10. Lec. 16. Mapping Registered Sex Offenders   (M. March 26).

        Lec 17 Restrictions on RSO's.

Submit Paper Reference List (50 points)

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Week 11. Lec. 18. Corrections & Community Supervision,   (M. April 2)

  Probable presentation by Doug Dretke Director CMIT, Former Director: Texas Prison System.

        Lec. 19. GST in Community Supervision and Corrections.

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Week 12. Lec. 20. Critical Incident Response & Public Safety.   (M. April 9)

        Lec. 21. Counter Terrorism: Law Enforcement/ Military Continuum.

        THIS TOUR WILL BE DURING THE DAY PROBABLY ON APRIL 9.

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Week 13. Lec. 22. Cyber Security & Crime (Tracking Location of IP Addresses)   (M April 16)

        (M April 16)

        Lec. 23. Use of Geospatial Technologies by Criminals (Case Studies).

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Week 14. Class Meeting. 24.   PRESENTATIONS BY STUDENTS   (M April 23)

Note I will be conducting (well stumbling through) a field sobriety test and laser and radar gun demonstration in company with my Field Studies class and a Police officer (either HPD or University or both), you are invited to attend the demonstration it takes place 2-320 PM probably on Tuesday April 24 along Veterans Memorial Drive.

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Week 15. Class meeting 25.   Presentations by Students   (M. April 30)

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Week 16.   **Research Paper Due**   **(M. May 7.)**

               FINAL (2nd) EXAM

(scheduled 8:30-10:30 pm but may be moved to 6-8 pm depending on circumstances).

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Potential Graduate Research Projects

You may develop a topic but it has to involve criminal justice, national security, public safety, or geospatial technologies in some manner and be approved by the instructor. You must plan on being able to write a 20-30 page paper (this includes maps and images, cover page and reference section). I leave the rest of the structure up to your judgment, but 18 pages of maps are unlikely to be acceptable. You must make a 20-30 minute Power Point presentation covering the material under study.

Potential Research Paper Topics: Law enforcement GIS potential projects

1. Analyze location, and details of 3 years of homicides in Milwaukie Wisconsin. Include analysis of race of victim, gender of victim, age of victim, age race and gender of offender if known. Compare with demographic composition of city. If possible also look at gang turf related issues and disappearances.

2. Examine methods used to geocode crime locations by different law enforcement agencies, including by street centerline, by call for service 911 address matching, by GPS and by building footprint address matching focus on spatial accuracy and precision and time and cost involved in different methods.

3. Find examples of minority majority communities in the USA with low crime rates. This includes Native American, Hispanic and African American majority communities. Determine if these rates reflect age of residents, st6ability, economic factors or a failure to report crimes.

4. Analyze the crime rates and jurisdictional boundary issues of the Kansas City MO area.

5. Analyze the New Year's Eve mass sexual assault and robberies in Cologne Germany including the impact of crowd control efforts, lack of Police and the origin of the offenders. Use GIS to construct a model of the cathedral and train station area.

6. Map and analyze attacks using cars and trucks carried out by ISIS or attackers claiming affiliation with ISIS also include a historical analysis of other mass casualty attacks involving use of cars or trucks against pedestrians or cyclists.

7. Map and analyze rape and murder rates on Indian reservations. In particular focus on the Pine Ridge Indian Reservation including historical conflict starting in the 1970's involving AIM and GOON.

8. Identify the most active "red light district" in 10 largest metropolitan areas in the US. Map the area and determine factors such as density of motels, jurisdictional boundaries, proximity to a major highway and other factors that account for the location and extent of these areas. Also compare changes in location of these "zones" over time and in response to regulations.

9. Explore the use of smart phones to provide maps and data to police including limitations such as misuse and failure during major emergencies due to too much traffic on networks.

10. Explore cases of failure of GPS monitoring. Including large number of excisions, cases where GPS monitoring devices were cut off, crimes committed successfully while under monitoring and data failures and lack of response to violations.

11. Map and analyze the activities of the International criminal court including the Yugoslavian civil wars, African wars and other activities.

12. Identify the top five states with the consistently highest rates of crime in the decade of the 2000's and the years 2010-2015. This includes homicide, rape, assault, car theft, burglary and robbery, also DUI, drug related arrests, registered sex offenders and prisoners. Are there regional patterns? How consistent are the rankings? Are their racial or demographic or historical factors at work. If you include Washington D.C. or Puerto Rico do the rankings change?

13. Identify the best five states with the consistently lowest rates of crime in the decade of the 2000's and the years 2010-2015. This includes homicide, rape, assault, car theft, burglary and robbery, also DUI, drug related arrests, registered sex offenders and prisoners. Are there regional patterns? How consistent are the rankings? Are their racial or demographic or historical factors at work. If you include Washington D.C. or Puerto Rico do the rankings change?

14. Analyze the changing territories of Mexican drug cartels over the past 3 decades. Include Sinaloa cartel, Tijuana cartel, Juarez cartel, Gulf cartel, Los Zetas, Knights Templar, Nuevo Generation de Jalisco, Beltran Leyva organization. Analyze transportation routes, growing areas for opium, ports, money laundering centers and rise and decay of different groups over time.

15. Map pirate attacks including Somali, Niger delta, Molucca Straits/South China Sea and Honduran Coast pirates, show routes taken by captured ships, counter attacks, defensive measures and mode of attacks. Also discuss evolution over time and causal factors.

16. Map and analyze factors involved in home invasion robberies of Asian and Indian store owners. Including proximity of homes and businesses, race of victims and criminals, involvement of Asian, Colombian, Salvadorian and other gangs and potential safeguards. In particular examine the "micro-scale" geography of these crimes in particular the location of break-ins, and the proximity of homes and garages to neighbors.

17. Map analyze and compare two famous shootouts in the wake of bank robberies the Norco robbery and the North Hollywood shootout. Map route to and from robberies, layout of banks, location of officers and tactics used by both sets of bandits.