Crime Analysis (Special Topics) – Crim 4396
Fall 2019 Syllabus

Course Information
Time: Tuesday/Thursdays, 10:00 AM to 11:15 AM
Class Location: GR 3.402A [Computer Lab]

Professor Contact Information
Dr. Andrew P. Wheeler – but call me Andy!
Email: Andrew.Wheeler@utdallas.edu
Office Hours: Monday, 9:00 to 12:00, Office is GR 3.530

The quickest way to reach me is via email. I am frequently in my office, so feel free to stop by whenever (knock if the door is closed). Otherwise you can email to set up an appointment time.

Course Description

The course provides an introduction to crime analysis. It focuses on types of analytical techniques regularly used by crime analysts, including strategic, tactical, and administrative oriented analysis. A focus on the class is developing numerical skills in office products (mostly Excel), using examples with real crime data. It also discusses ethical considerations crime analysts face.

Student Learning Objectives/Outcomes

By the end of the course you will be able to:

- Know how to conduct time series analysis of crime trends, and tell if an intervention reduced crime.
- Be familiar with crime pattern analysis and geographic offender profiling
- Know how to identify spatial hot spots of crime and chronic offenders, and what tactics police departments undertake to reduce crime in response to those problem people/places.
- Have a portfolio of work to illustrate your analytical skills using Excel, Access, and other Microsoft Office products

---

Required Textbooks and Materials

The required text for the course is:

- *Crime Analysis with Crime Mapping*. 4th Edition. Rachel Boba Santos. SAGE.

Expected readings are listed in the class schedule, but I reserve the right to amend the reading list (either require new/different readings or take off some readings) given class progression and other unforeseen circumstances.

Grading Policy

The final grade for the course will be the accumulation of assignments, class participation, a final project, and a final exam. The requirements for the final project will be further detailed in a separate handout, but the distribution of the proportion for grades will be as follows

- Assignments – 60% of final grade [120 points]
- Class Participation – 10% of the final grade [20 points]
- Final Project – 15% of final grade [30 points]
- Final Exam – 15% of final grade [30 points]

Assignments will each be graded on a 10 point scale. There will be 13 assignments in the course, so there is a built-in 10 point extra credit. The total number of points for all of the graded material in the course is 200 points. Letter grades corresponding to the total number of points is as follows:

A	180-200
B	160-179
C	140-159
D	120-139
F	Below 120

Class participation is based on coming to class, participating in discussions, helping fellow classmates in the computer lab time, and asking questions when fellow classmates give presentations.

Course & Instructor Policies

For my homework policy, all homeworks should be turned in as a PDF on ELearning before the designated time. Any late homework will be automatically docked 5 points (out of a total possible of 10), but can be turned in any time before the final day of class.

If you are sick and are unable to make it to class, just send me an email. A university approved class absence excuse will be needed if you cannot make it to class on either days exams are given or when other students are doing presentations.

Assignments & Academic Calendar

Below is a listing of the approximate weekly class schedule. Typically the class will go with a lecture on Tuesday, and on Thursday a computer lab assignment will be given.

For the readings column, they will be expected to be done for the week they are listed (e.g. on 8/27 you are expected to have read *Santos Chapter 4, Crime Analysis Process and Application* before you have come to that class). If the schedule is changed anytime during the semester I will forward you a new copy of the class schedule via email. I will state homework assignments due for the next week at the end of class.

Readings: Santos Chapter 1, Crime Analysis and Profession
Class 1, Tuesday 8/20: Intro to class, go over syllabus
Class 2, Thursday 8/22: First lab, creating charts and tables in Excel

Readings: Santos Chapter 4, Crime Analysis Process and Application
Class 3, Tuesday 8/27: Descriptive Analysis
Class 4, Thursday 8/29: Intro to Pivot tables in Excel

Readings: Santos Chapter 7, Crime Analysis Purpose and Audience
Class 5, Tuesday 9/3: Time series analysis of crime trends
Class 6, Thursday 9/5: Intro to formulas in Excel

Readings: Santos Chapter 6, Geographic Data and Crime Mapping
Class 7, Tuesday 9/10: Geographic Hot Spots of Crime
Class 8, Thursday 9/5: Cleaning strings, repeat address mapping in Excel

Readings: Santos Chapter 11, Describing and disseminating known patterns
Class 9, Tuesday 9/17: Within day analysis & Near-repeat analysis
Class 10, Thursday 9/19: Near-repeat calculator, writing up findings in Word

Readings: Santos Chapter 3, Evidence based policing and the role of crime analysis
Class 11, Tuesday 9/24: Analysis to see if intervention reduced crime
Class 12, Thursday 9/26: Weighted displacement analysis, creating Powerpoint pres.

Readings: Santos Chapter 8, Repeat incidents and tactical data collection
Class 13, Tuesday 10/1: Tactical analysis of serial crimes
Class 14, Thursday 10/3: Conduct analysis and create bulletin in Publisher

Readings: Santos Chapter 12, SARA process
Class 15, Tuesday 10/8: Problem solving (SARA, Crime Triangle)
Class 16, Thursday 10/10: OUT OF TOWN NO CLASS [project proposal due]

Readings: IACA White paper on Social Network Analysis for Law Enforcement
Class 17, Tuesday 10/15: Gangs and Social Network Analysis
Class 18, Thursday 10/17: Introduction to Access and SQL

Readings: IACA White paper on Prioritizing Offenders
Class 19, Tuesday 10/22: Chronic Offenders
Class 20, Thursday 10/24: Creating weighted offender scores in Access

Readings: Bonkiewicz, L. (2015). Bobbies and baseball players: Evaluation Patrol Officer Productivity Using Sabermetrics. *Police Quarterly* 18(1): 55-78.

Class 21, Tuesday 10/29: Officer level metrics (outputs vs outcomes)
Class 22, Thursday 10/31: Dashboard in Excel and macro recorder

Readings: Ferguson, Rise of Big Data Policing, Chapters 3 & 4
Class 23, Tuesday 11/5: Applications of Predictive Analytics in Policing & Ethics
Class 24, Thursday 11/7: Technology in crime analysis & Ethics

Readings: Ferguson, Rise of Big Data Policing, Chapters 8 and 9
Class 25, Tuesday 11/12: TBD
Class 26, Thursday 11/14: TBD

Readings: **None**
Class 27: Tuesday 11/19: Open class to work on final projects
Class 28: Thursday 11/21: Open class to work on final projects

Thanksgiving Break

Readings: **None**
Class 29, Tuesday 12/3: Final project presentations
Class 30, Thursday 12/5: Final project presentations

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to http://go.utdallas.edu/syllabus-policies for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.

Comet Creed
This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

"As a Comet, I pledge honesty, integrity, and service in all that I do."