

University of Central Florida
College of Community Innovation and Education
Department of Criminal Justice

CCJ6073-0W61: Data Management Systems for Crime Analysis

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Office hours: On-line available 9 – 5 Monday - Friday
Phone, Zoom, or Skype
Tuesday 3 – 5 and Thursday 2 – 5 (by appointment)

Fall 2022 Syllabus

Course Description

This 3.0 credit hour course provides the requisite skills needed for efficient data management. The manipulation and conversion of crime data to useful information is a basic requisite to accomplish data-driven management and support intelligence-led policing. Several data management applications are examined in detail. The theory and practice of crime analysis and mapping techniques will be examined.

Course Materials and Required Texts

Note: Cengage offers several options. There are bound versions, loose leaf, and eBook. I would recommend a printed version. It appears the loose leaf is the best option. You will need these texts for reference in subsequent crime analysis courses. It is important to keep the texts for reference for the subsequent courses.

Bound:

Freund, Steven M. and Joy L. Starks. *Shelly Cashman Microsoft Office 365 & Excel 2019: Comprehensive, 1st ed.* Boston, MA. Cengage Learning. ISBN: 978-0-357-02640-3.

Cable, Sandra E. and Ellen F. Monk. *Shelly Cashman Microsoft Office 365 & Access 2019: Comprehensive, 1st ed.* Boston, MA. ISBN: 978-0-357-02639-7

Note: Select one or the other, but not both bound and loose leaf. I prefer the loose leaf because it is easier use in that you place the pages in a 3-ring notebook and the pages lay flat.

Loose leaf:

Shelly Cashman Series® Microsoft® Office 365 & Excel 2019: Comprehensive, Loose-leaf
Print ISBN: 978-1-357-02640-3

Shelly Cashman Series® Microsoft® Office 365 & Access 2019: Comprehensive, Loose-leaf
Print ISBN: 978-0-357-02639-7

Course Goals

The first goal is to recognize that data management is critical for crime analysis. All analyses depend on the quality of available data. Most raw data that is stored in records management systems of criminal justice agencies are not in a form that is directly useable for analysis. Furthermore, the nature of analysis itself will require some data manipulation wherein the actual data form and format must be modified. Data input errors, storage formats, and other qualities make it necessary for the analyst to have sufficient skills and techniques to ensure the data is error free and suitable for analysis. This is typically known as "cleaning the data".

The second goal is for students to acquire the basic skills, knowledge, and tools required for efficient data management. Many affordable applications are available; however, the predominant application tools will be examined in detail.

The final goal is for the student to acquire and demonstrate the practical and theoretical knowledge to develop a viable data set ready for analysis and data visualization. A component of this goal is to understand the basics of developing and testing a research question.

Course Requirements

Learning Activities: A detailed schedule of the course objectives and lesson plan is available in the Course Schedule details.

Exercises: Applied exercises will be assigned on a weekly basis. Two types of exercises are required. First, a limited selection of textbook exercises will be assigned. Second, applied exercises (modules) will also be assigned. The applied exercises will consist of real-world data problems. Exercises must be completed in a timely manner. All exercises and modules are due on the following Sunday by 11:59 P.M., after the assignment date (see the course schedule for details). All assignments must be submitted via Webcourses. Late submissions may not be accepted or penalized by 50%.

Midterm: See class schedule. The examination will be based on required readings, class exercises, and software proficiency.

Final Exam: Due 11 December, 11:59 P.M. This exam will be the same format as the mid-term.

No make-up examinations will be allowed unless there is a clear and convincing situation that has occurred beyond the students control. If you know you cannot take the examination during the scheduled time, you must notify the instructor at least one week in advance of the scheduled examination date.

Software Requirements: All students must use Microsoft Excel and Access 2019. UCF provides the applications at no charge via your Knights account. Please contact the UCF Help Desk if you have a problem downloading Microsoft Office 365 from UCF.

Course Grading

Late Assignments are not accepted. Upload your assignment well before the cut-off date and time. If you wait until the last few minutes before the assignment expires your submission may be rejected due to high Webcourses traffic volume.

If you have a known conflict before the assignment is due, please contact me: [My email address](#)
I check this e-mail address many times each day. I will check Webcourses e-mail less frequently. You can call me any time prior to 10:00 P.M. ET seven days per week: 407 484-1573. In you need assistance, please call.

Grading Considerations	Total Points	Weight
Apply Your Knowledge text books exercises (14@30 points each)	420	15%
Applied Modules (14@30 points each)	420	15%
Midterm	100	35%
Final	100	35%
Total	1,040	100%

The grading system uses a weighted method. The raw scores are weighted. Each category of scores such as Apply Your Knowledge, Applied Modules, Midterm, and Final have their own weight values. To calculate a weight, you use this formula: ((assignment value/Total possible assignment value) * weight)). An example is for the final exam: (Final grade 90/Total possible points 100) *.35 = .315 (.315 x 100 = 31.5%). More information here: [How to calculate weighted grades](#) (only raw scores are used; not average scores)

Percentage Breakdown	Grade
90 – 100	A
80 - 89	B
70 - 79	C
60 – 69	D
0 – 59	F

General Policies and Procedures

Student conduct policies are detailed in the 2021 - 2022 (or most recent edition) University of Central Florida Golden Rule: <http://www.goldenrule.sdes.ucf.edu/>. All students should review and be familiar with the Golden Rue and specifically Section F. Rules of Conduct of this university policy

Violations listed below will be prosecuted.

- *Cheating*: Improper application of any information or material that is used in evaluating academic work. This includes using written, visual, or oral materials or assistance obtained from another student, or person, without permission. These materials pertain to quizzes, examinations, course assignments, or projects. Knowingly allowing another student to copy from examinations, quizzes, or any other assignments. The distribution of any class materials

that include examination components or other course materials with the permission of the instructor. Using or possessing course materials that include quizzes, examinations, or modules without authorization from the instructor.

- *Plagiarism*: Using the words or ideas of others as yours without permission from the owner. You must properly designate ownership of intellectual property (words, ideas, graphics, charts, graphs, tables) using conventional citation methods provided by accepted styles such as APA, MLA, Chicago, or others. When paraphrasing or using the words and ideas of others, the material must be properly cited. Purchasing or downloading a paper from another source, or service, is plagiarism. Using the work of another student and representing it as your own is a violation of this section. Plagiarism is a serious violation of the Golden Rule and will result in grade reduction and/or other sanctions. See [How to Recognize Plagiarism](#)
- *Unauthorized Group Work*: You are required to work independently. Using collaborative work(s), unless authorized by the instructor, is cheating.
- *Multiple Submissions of the Same Academic Work*. Submitting the same work for credit in two courses without the instructor's permission is prohibited.

Academic Integrity/Plagiarism

Plagiarism and Cheating of any kind on an examination, quiz, or assignment will result at least in an "F" for that assignment (and may, depending on the severity of the case, lead to an "F" for the entire course) and may be subject to appropriate referral to the Office of Student Conduct for further action. See the UCF Golden Rule for further information. I will assume for this course that you will adhere to the academic creed of this University and will maintain the highest standards of academic integrity. In other words, don't cheat by giving answers to others or taking them from anyone else. I will also adhere to the highest standards of academic integrity, so please do not ask me to change (or expect me to change) your grade illegitimately or to bend or break rules for one person that will not apply to everyone.

Many incidents of plagiarism result from students' lack of understanding about what constitute plagiarism. However, you are expected to familiarize yourself with UCF's policy on plagiarism. All work you submit must be your own scholarly and creative efforts. UCF's Golden Rule defines plagiarism as follows: "whereby another's work is used or appropriated without any indication of the source, thereby attempting to convey the impression that such work is the student's own."

Ethics

As reflected in the UCF creed, integrity and scholarship are core values that should guide our conduct and decisions as members of the UCF community. Plagiarism and cheating contradict these values, and so are very serious academic offenses. Penalties can include a failing grade in an assignment or in the course, or suspension or expulsion from the university. Students are expected to familiarize themselves with and follow the University's Rules of Conduct (see <http://www.osc.sdes.ucf.edu/>).

Grading Policy/Assignment Values

A = 90 or greater

B = 80 – 89

C = 70 – 79

D = 60 – 69

F = Less than 60

A = Excellent performance. Clearly stands out as an excellent performer. Has unusually sharp insight into material and initiates thoughtful questions. The student sees many sides of any issue. Articulates well and writes logically and clearly. Integrates ideas previously learned from this and other disciplines; anticipates next steps to progression of ideas. These are all features of critical thinking. Uses the APA (American Psychological Association) style without error. All writing is grammatically correct with proper composition and punctuation. Student adheres to all course instructions.

B = Above average performance. Grasps subject matter at a level considered to be good to very good. The student actively participates in the class discussion. Speaks and writes well. The student accomplishes more than the minimum requirements. Work is high quality. Very limited grammatical or punctuation problems. High APA compliance level.

C = Average performance. The student demonstrates a satisfactory comprehension of the subject matter. Accomplishes only the minimum requirements on quizzes and assignments. Competent. The student can communicate at an acceptable level for a college student. Has satisfactory understanding of all basic concepts.

D = Below average performance. The student demonstrates understanding at the most rudimentary level. Quality and quantity of work is below average and marginally acceptable.

F = Failing performance. Work is not acceptable and/or timely. Quality and quantity of work fails to demonstrate a marginal understanding of learning objectives and their application. Academic credit is not earned.

Library Skills

Since this course requires writing several research papers, you are expected to know how to use the library's resources. If you are not familiar with using the library, please ask for assistance from the library's personnel, take workshops provided by the library, or visit the library's website (<http://library.ucf.edu/>).

University Writing Center

University Writing Center

Colbourn Hall 105

Satellite Locations: Main Library, Rosen Library, online

407-823-2197

<http://uwc.cah.ucf.edu/>

The University Writing Center (UWC) offers writing support to students from first year to graduate in every discipline. Tutors provide help at every stage of the writing process, including understanding assignments, researching, drafting, revising, incorporating sources, and learning to proofread and edit. The UWC's purpose is not merely to fix or edit papers, but to teach writing strategies that can be applied to any writing situation. Consultations are available for individuals and small groups. You may schedule a 45-minute appointment by clicking the Success Resources tab on Webcourses, calling the UWC at 407-823-2197, or through the UWC website.

The Writing Center has a direct link in Webcourses. On-line support is available.

Course Accessibility Statement

It is my goal that this class be an accessible and welcoming experience for all students, including those with disabilities that may impact learning in this class. If anyone believes the design of this course poses barriers to effectively participating and/or demonstrating learning in this course, please meet with me (with or without a Student Accessibility Services (SAS) accommodation letter) to discuss reasonable options or adjustments. During our discussion, I may suggest the possibility/necessity of your contacting SAS (Ferrell Commons 185; 407-823-2371; sas@ucf.edu) to talk about academic accommodations. You are welcome to talk to me at any point in the semester about course design concerns, but it is always best if we can talk at least one week prior to the need for any modifications.

Webcourses (Canvas)

Webcourses is an online course management system (accessed through my.ucf.edu and then the "Online Course Tools" tab) which will be used as a medium for turning in assignments and a forum for communicating with your teammates. Under the "Discussion" section, you will have a designated forum section. My recommendation is to check Webcourses every 2-3 days for updates from your teammates or myself.

Enrollment Verification

All faculty members are required to document student's academic activity at the beginning of each course. Refer to the course schedule of assignments to complete this requirement. Failure to do so will result in a delay in the disbursement of your financial aid.

Internet Usage

You will be expected to have daily access to the internet and email, since I will be emailing you constantly about assignment updates, additions, and changes. All students at UCF are required to obtain a Knight's Email account and check it regularly for official university communications. If you do not own a computer, there are computer accessible to you in all UCF's computer labs, and most computer labs have computers connected to the internet. For further information on computer labs, please see the following website: http://registrar.sdes.ucf.edu/webguide/index_quickfind.aspx.

Diversity and Inclusion

The University of Central Florida considers the diversity of its students, faculty, and staff to be a strength and critical to its educational mission. UCF expects every member of the university community to contribute to an inclusive and respectful culture for all in its classrooms, work environments, and at campus events. Dimensions of diversity can include sex, race, age, national origin, ethnicity, gender identity and expression, intellectual and physical ability, sexual orientation, income, faith and non-faith perspectives, socio-economic class, political ideology, education, primary language, family status, military experience, cognitive style, and communication style. The individual intersection of these experiences and characteristics must be valued in our community.

Title IX prohibits sex discrimination, including sexual misconduct, sexual violence, sexual harassment, and retaliation. If you or someone you know has been harassed or assaulted, you can

find resources available to support the victim, including confidential resources and information concerning reporting options at www.shield.ucf.edu and <http://cares.sdes.ucf.edu/>

Notifications in Case of Changes to Course Modality

Depending on the course of the pandemic during the semester, the university may make changes to the way classes are offered. If that happens, please look for announcements or messages in Webcourses@UCF or Knights email about changes specific to this course.

COVID-19 and Illness Notification

Students who believe they may have a COVID-19 diagnosis should contact UCF Student Health Services (407-823-2509) so proper contact tracing procedures can take place.

Students should not come to campus if they are ill, are experiencing any symptoms of COVID-19, have tested positive for COVID, or if anyone living in their residence has tested positive or is sick with COVID-19 symptoms. CDC guidance for COVID-19 symptoms is located here: (<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>)

Students should contact their instructor(s) as soon as possible if they miss class for any illness reason to discuss reasonable adjustments that might need to be made. When possible, students should contact their instructor(s) before missing class.

In Case of Faculty Illness

If the instructor falls ill during the semester, there may be changes to this course, including having a backup instructor take over the course. Please look for announcements or mail in Webcourses@UCF or Knights email for any alterations to this course.

Course Accessibility and Disability COVID-19 Supplemental Statement

Accommodations may need to be added or adjusted should this course shift from an on-campus to a remote format. Students with disabilities should speak with their instructor and should contact sas@ucf.edu to discuss specific accommodations for this or other courses.

In-Class Recording Policy

Students may, without prior notice, record video or audio of a class lecture for a class in which the student is enrolled for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach enrolled students about a particular subject. Recording class activities other than class lectures, including but not limited to lab sessions, student presentations (whether individually or part of a group), class discussion (except when incidental to and incorporated within a class lecture), clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, private conversations between students in the class or between a student and the faculty member, and invited guest speakers is prohibited. Recordings may not be used as a substitute for class participation and/or class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements

may constitute a violation of the University's Student Code of Conduct as described in the Golden Rule.

Campus Safety Statement

Emergencies on campus are rare, but if one should arise in our class, we will all need to work together. Everyone should be aware of the surroundings and familiar with some basic safety and security concepts.

- In case of an emergency, dial 911 for assistance.
- Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Please make a note of the guide's physical location and consider reviewing the online version at http://emergency.ucf.edu/emergency_guide.html.
- Familiarize yourself with evacuation routes from each of your classrooms and have a plan for finding safety in case of an emergency. (Insert class-specific details if appropriate)
- If there is a medical emergency during class, we may need to access a first aid kit or AED (Automated External Defibrillator). To learn where those items are located in this building, see <http://www.ehs.ucf.edu/AEDlocations-UCF> (click on link from menu on left). (insert class specific information if appropriate)
- To stay informed about emergency situations, sign up to receive UCF text alerts by going to my.ucf.edu and logging in. Click on "Student Self Service" located on the left side of the screen in the tool bar, scroll down to the blue "Personal Information" heading on your Student Center screen, click on "UCF Alert", fill out the information, including your e-mail address, cell phone number, and cell phone provider, click "Apply" to save the changes, and then click "OK."
- If you have a special need related to emergency situations, please speak with me during office hours.
- Consider viewing this video (<https://youtu.be/NIKYajEx4pk>) about how to manage an active shooter situation on campus or elsewhere.

Deployed Active-Duty Military Students

If you are a deployed active-duty military student and feel that you may need a special accommodation due to that unique status, please contact your instructor to discuss your circumstances.

CJ6073 - Data Management Systems for Crime Analysis

[Dr. K. Michael Reynolds](#)

Fall 2022 Schedule

EXCEL EXERCISES

Note: The following exercises are subject to change

Week	Excel Text Book Assignments	Apply Your Knowledge	Weekly Assignments
8/22	MS Office 365: Excel 2019 1. Excel 2019: Creating a Worksheet and a Chart	Apply Your Knowledge (AYK) EX 1-66 Due 8/29, 11:59 P.M	Verification of Student Activity (Webcourses Assignments) <u>Due 8/27, 11:59 P.M.</u> Module 1 Due 8/28, 11:59 P.M.
8/29	2: Formulas, Functions, and Formatting	Apply Your Knowledge (AYK) EX 2-50: Due 9/4, 11:59 P.M	Module 2 Due 9/4, 11:59 P.M
9/5	3: Working with Large Worksheets, Charting, and What-If-Analysis	Apply Your Knowledge (AYK) EX 3-61: Due 9/11, 11:59 P.M	Module 3 Due 9/11, 11:59 P.M
9/12	4: Financial Functions, Data Tables, and Amortization Schedules	Apply Your Knowledge (EX 4-50) Due 9/18, 11:59 P.M.	Module 4 Due 9/18, 11:59 P.M
9/19	5: Working with Multiple Worksheets and Workbooks	Apply Your Knowledge (EX 5-58) Due 9/25, 11:59 P.M	Module 5 Due 9/25, 11:59 P.M.
9/26	6: Creating, Sorting, and Querying a Table	Apply Your Knowledge (EX 6-56) Due 10/2 11:59 P.M.	Module 6 Due 10/2, 11:59 P.M
10/3	7. Creating Templates, Importing Data, and Working with SmartArt, Images, and Screenshots	Apply Your Knowledge (EX 7-77) Due 10/9, 11:59 P.M.	Module 7 Due 10/9, 11:59 P.M..
10/10	8. Working with Trendlines, PivotTables, Pivot Charts, and Slicers 9. Formula Auditing, Data Validation, and Complex Problem Solving (only work pages EX 9-1 – EX 9-23)	Apply Your Knowledge (EX 8-64) Due 10/16, 11:59 P.M. No AYK for Module 9 required	Module 8 Due 10/16, 11:59 P.M.
10/17	Midterm	Midterm: Due 10/23, 11:59 P.M. The midterm covers assignments through the week of 10/10. The format will be like a weekly module	

EXCEL/ACCESS EXERCISES

Note: The following exercises are subject to change

Week	Access Textbook Assignments	Apply Your Knowledge	Weekly Assignments
Microsoft Access			
10/24	1. Databases and Database Objects: An Introduction	Apply Your Knowledge (AC 1-42) Due 10/30, 11:59 P.M.	Module 9 Due 10/30 11:59 P.M.
10/31	2. Querying a Database	Apply Your Knowledge (AC 2-59) Due 11/6, 11:59 P.M.	Module 10 Due 11/6, 11:59 P.M.
11/7	3. Maintaining a Database	Apply Your Knowledge (AC 3-54) Due 11/13, 11:59 P.M.	Module 11 Due 11/13, 11:59 P.M.
11/14	4. Creating Reports and Forms 5. Multiple-Table Forms	Apply Your Knowledge (AC 4-53) Due 11/20, 11:59 P.M. Apply Your Knowledge (AC 5-48) Due 11/20, 11:59 P.M.	Module 12 Due 11/20, 11:59 P.M. Module 13 Due 11/20, 11:59 P.M.
11/21	Thanksgiving		
11/28	6. Advanced Report Techniques	Apply Your Knowledge (AC 6-67) Due 11/27, 11:59 P.M.	Module 14 Due 11/27 11:59 P.M.
12/6	Final exam will be released on 12/5 and due 12/11 , 11:59 P.M. The final will only cover Access using a format like weekly module assignments		

* All assignments are due the following Sunday no later than 11:59 P.M. Late submissions not accepted.