

**UNIVERSITY OF MASSACHUSETTS LOWELL**  
**SCHOOL OF CRIMINOLOGY AND JUSTICE STUDIES**  
**CRIM 3980: CRIMINAL JUSTICE DATA ANALYSIS**  
**SPRING 2017, T/Th 8:00AM-9:15AM**

**INSTRUCTOR:** Matthew M. Sweeney  
**OFFICE HOURS:** T/Th – 9:30AM-12:30PM  
**CLASS LOCATION:** O’Leary Library - 200B

**OFFICE:** Health & Social Sciences, 477  
**E-MAIL:** [Matthew.Sweeney@uml.edu](mailto:Matthew.Sweeney@uml.edu)

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### **COURSE OVERVIEW**

This course is designed to introduce students to computer software packages (i.e. SPSS) that are used to analyze large quantitative data sets common in criminal justice and criminology. This course is seen as the capstone to the research methodological component of the criminal justice and criminology major, and it is intended for upper-level students.

In conjunction with this, students must have an active commitment to participate in their education. **This course is intended to challenge you.** Therefore, your interest, hard work, and ability to manage your time well will likely be required in order for you to excel in this course. In order to do well, it is recommended that you have already passed Criminal Justice Statistics (CRIM 3950) prior to this course, not concurrently.

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### **COURSE OBJECTIVES**

1. To develop the capacity for criminal justice data analysis through the use of selected software packages. You will be provided with opportunities to enhance your ability to use the latest computer applications including Excel, SPSS and PowerPoint to input, process, and interpret data collected in the course of independent research projects.
2. To develop communication skills through effective idea organization, data display and information summary.

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### **REQUIRED MATERIALS**

1. A USB flash drive (any size will do) so you can save your work.
2. Wagner III, William E. (2017). *Using IBM SPSS Statistics for Research Methods and Social Science Statistics*. Sage. ISBN: 978-1-5063-3172-0.
3. An introductory statistics book to refresh your memory on various statistical tests you learned in Criminal Justice Statistics.

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### **READINGS**

This class utilizes one text and may include outside readings and research reports to supplement the material learned. It is expected that you read these prior to attending class.

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### **COURSE CONTENT**

This is a web enhanced course. All of the labs, readings, and assignments can be found on the course’s website in Blackboard. You will also turn your material here.

## CLASS-RELATED COMMUNICATIONS

I utilize the ISIS-based email system to send broadcast announcements to the class, particularly for things such as class cancellations or time-sensitive changes in deadlines or assignments. *It is your responsibility to regularly check your UML email.* If you wish to contact me outside of class hours, the most effective route is almost always e-mail. I will usually respond to all student e-mails within 24 hours. As is the case with Blackboard, if you are experiencing technical difficulties, you must be pro-active and address the issue immediately. All email received will be followed up with a reply within 36 hours during regular business hours. All communication received on weekends/holidays will receive a response within 12 hours of the resumption of normal business hours.

Any e-mail composed and sent to my e-mail account must meet the following criteria **or it will not receive a response**. First, the e-mail must be drafted professionally, as you would any formal letter. This means that it must properly address the instructor, it must be written in formal English – which means it must include proper grammar, spelling, and punctuation – and it should end with a proper closing which includes the sender’s name. Second, the e-mail must be timely, allowing me adequate time to respond. If you ask a question at 1 AM the day an assignment is due for clarification, that does not allow adequate time for a response and I most likely will not be able to help you. Third, you may not submit any material to be graded electronically as an e-mail attachment unless you have cleared it with me first. I will not respond to emails written in the style of informal text messages

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## ATTENDANCE

Just as your future employer will expect you to be at work every day, I expect you to be present physically and mentally for each class. I will not only present new material in class, but I will also “pull things together” that are not in the PowerPoint presentations that can only be obtained by coming to class. **Only** major illness or other family catastrophe will be a justification for missing class and each case will be reviewed separately. As this is an advanced class, using a program most likely unfamiliar to you, the pace is rigorous and attendance is necessary. You are responsible for completing all assignments on time.

Arrive to class on time and do not leave early. If you miss a class, you are responsible for all material covered in class, all announcements, and assignments. Keep in mind that poor planning on your part does not constitute an emergency on mine. I respect those students who must make work, family, or other commitments their top priority. Nevertheless, to benefit from class and to be rewarded with a high grade, you must find time to do the coursework. I do not “give out” grades – you earn them. Therefore, please see me for help if you need it. **Do not wait until it is too late to seek help – communication is important!**

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## GRADING

There are three assignments for the course, each worth 20% of your grade, for a cumulative total of 60%. The final exam, which consists of multiple choice, short answer questions, and interpretation of statistical analyses, is 30% of your grade and is cumulative. Finally, attendance and participation are worth 10% of your final grade.

## GRADING POLICY

Item	Percent
Assignment 1	20%
Assignment 2	20%
Assignment 3	20%
Final Exam	30%
Attendance/Participation	10%
<b>Total</b>	<b>100%</b>

Numeric Grade	Letter Grade
93-100	A
90-92	A-
87-89	B+
83-86	B
80-82	B-
77-79	C+
73-76	C
70-72	C-
63-69	D
<63	F

## LAB WORK

- This class largely involves hands-on learning of software and data analysis. I have prepared self-paced labs for you to complete during most classes.
- **While some time is given during class, there will be times when you will need to finish the lab outside of class time;** the Computer Labs are open in addition to accessing the “VLab” which has SPSS. SPSS also offers a 14-day free trial.
- The labs are designed to complement the upcoming assignment so it is imperative you stay on track. Falling behind is often detrimental to a student’s grade, particularly for these labs. It is important you do them in order and stay up to date as each lab is designed to prepare you for that particular assignment and the labs continuously build off of each other.

## ASSIGNMENTS (25% EACH)

- Three assignments will be required throughout the semester covering a range of topics:
  - I. Comparative analysis of crime trends between two states
  - II. Analysis of survey data on victimization and its impact on university students
  - III. Characteristics related to crime levels at the neighborhood level
- Assignments must be turned in by the start of class; e-mails are not accepted. The details of the assignments will be discussed in class, but each is a culmination of skills developed during labs, combined with knowledge from class lectures.
- Assignments will be passed back as soon as possible. Be aware that I will not hand back the assignments until everyone in the class has submitted their assignment to me.
- For all 3 assignments, you will need to submit a physical copy the day it is due, at the start of class, and upload your assignment to Blackboard by the date and time indicated in the course schedule. Blackboard has built in plagiarism detection software that can assist in ensuring your work is original.
- Assignments handed in late will not be accepted for full credit without a legitimate excuse and/or prior permission per my discretion. Legitimate excuses include major illness, family emergency, and other extremely compelling reasons. Missing class because of work or job-related issues does not qualify as a legitimate excuse. Please notify me as soon as possible in regards to your absence. Documentation, such as a physician’s note, will be required in most cases.

- For each *day* an assignment is late, including submission the day of after the deadline (for example, class is at 8AM and it is handed in at 7PM), results in an eight (8) point deduction. Students have five days to turn in late assignments (maximum loss of 40 points) before the grade is a zero (0). The class will continue to move forward on labs and Assignments, so DO NOT fall behind.
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### **MAKE-UP POLICY**

In cases of emergency, requests for make-up work *may* be discussed with the instructor and will be handled on an individual basis. You should get in touch with me before the assignment is due, not after. Failing to discuss the issue with me prior to the due date will result in any loss of point standing. If the instructor provides a student, without a documented excusal, with an exception, this must be extended to all students. Therefore, the instructor is reluctant to provide individual accommodations without sufficient documentation.

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### **HOW TO DO WELL**

- Attend class as much as possible
  - Read the assigned readings prior to class
  - Save your work in multiple locations
  - Take advantage of the free class time to work on your assignments and get help
  - Bring previous labs to class as much of the material builds on each other
  - Take good notes in class
  - Do work every day: do not leave things for the last minute. Do. Not. Procrastinate.
  - Ask questions if anything is unclear (I cannot read minds!)
  - Meet your classmates and ensure you can get materials if you miss class.
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### **CLASSROOM CONDUCT**

It is expected that you will be in class on time prepared to learn and actively participate in the class. Participation means being present not only physically, but actively listening and contributing to what is going on in class. Students who take notes, ask questions, offer comments, and share experiences relevant to the topics of the day will receive high grades. Students who use their laptops for activities not related to class, do work for other classes, monitor cell phones, text, are habitually late, or frequently go in and out of the classroom during class will lose participation credit. During class it is expected that you will be paying attention or working diligently on lab materials, not using the computers to surf the web, or using your cell phone to text message. In short, you need to be mentally present, not simply physically present.

Disruptive behaviors will not be tolerated. If you are being disruptive, you will be asked to leave and/or referred to the Dean of Students office for disciplinary action. Students are expected to exhibit professional and respectful behavior that is conducive to a mutually beneficial learning environment in the classroom. Disruptive behaviors include: text messaging, listening to music, cell phone use, talking about material other than presented in class, reading newspapers or other non-class material, sleeping, playing games, intentional disruptions, failure to follow instructor's directions, etc. *Using computers for anything other than course work or e-mail during class time is forbidden and is a pet peeve of mine. Do not use them during the class lectures.* **Students who repeatedly violate this will be asked to leave.**

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## COMPUTER LABS

If you wish to use the labs to work outside the class, the O'Leary Library 200A/B computer lab schedule is online here: <http://www.uml.edu/CLASS/Computing-Services/Lab-Schedules.aspx>. The O'Leary 200A/B computer lab is also open most hours, and those computers have all the programs you will need. If you leave your USB drive in any computer lab and it is found, the lab tech will turn it in to the lost and found at the Circulation Desk in the library.

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## STUDENTS WITH DISABILITIES

Students with disabilities who believe that they may need accommodations in this class are encouraged to contact the Office of Student Disability Services at 978-934-4574 as soon as possible to ensure that such accommodations are arranged in a timely fashion.

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## ACADEMIC DISHONESTY/INTEGRITY

It is every student's responsibility to become familiar with the standards of academic integrity at the University. Claims of ignorance, or unintentional error, or of academic or personal pressures are not sufficient reasons for violations of academic integrity. I encourage students to help each other through the labs, but when it comes time to do the assignments, **Do your own work.** <https://www.uml.edu/Catalog/Undergraduate/Policies/Academic-Integrity.aspx>

Cheating, plagiarism, or conspiracy to engage in these activities will not be tolerated. If you are found cheating and/or plagiarizing, it will be forwarded to the university; **no exceptions.**

**Examples of plagiarism** include, attempting to pass off someone else's work as your own, turning in work previously submitted for another class, or quoting/paraphrasing without proper attribution. Consult the University's website for regulations regarding this matter. Examples of academic misconduct include, but are not limited to: cheating on an examination; collaborating with others in work to be presented, contrary to the stated rules of the course; submitting a paper or assignment as one's own work when a part or all of the paper or assignment is the work of another; submitting a paper or assignment that contains ideas or research of others without appropriately identifying the sources of those ideas; getting unauthorized access to examinations or course materials; submitting, without the permission of the current instructor, work previously presented in another course; tampering with the laboratory experiment or computer program of another student; knowingly and intentionally assisting another student in any of the above, including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

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## TECHNOLOGY & DIGITAL WORK

I highly recommend you periodically save your work and e-mail a copy of that work (as an attachment) to yourself for storage at the end of class. Make sure to back up frequently and/or in more than one location. It is incredibly important that you do this as technical failures such as deleting your project folder; forced to backup/upgrade your system and thus losing saved work; issues due to the USB not being unmounted correctly; and device containing the project folder is lost, **will not be accepted.** Plan for such an event by backing up your work often and in more than one place. Furthermore, formatting issues that do not meet an assignment's

requirements because of the use of a different program (i.e. Mac, OpenOffice, Google's Spreadsheets, etc.) is utilized will be graded per the assignment requirements. **DO NOT** save your work on the lab computers – the work may not be there when you return. You also have no idea who else has access your work. If you save your work to the computer and someone else claims it as their own, you are still responsible and will be reported for plagiarism.

## CLASS SCHEDULE

*Note: While the class will generally follow in the order indicated, topics and reading assignments are subject to adjustment based on the pace of the class and other factors.*

Week	Date	Material Covered	Reading
1	Tues, Jan 17	Introduction to the Course	
	Thurs, Jan 19	The Measurement of Crime	
2	Tues, Jan 24	Data Analysis Using Excel <b>Lab 1:</b> Excel Spreadsheets	
	Thurs, Jan 26	Level of Measurement and Graphical Displays of Data	
3	Tues, Jan 31	<b>Lab 2:</b> Excel Charts	
	Thurs, Feb 2	<b>Assignment 1 Distributed</b> Creating the CJ Research in Brief: Planning the 1st Assignment	
4	Tues, Feb 7	<i>Free Time to Work on Labs / Assignment 1 (Attendance Not Required)</i>	
	Thurs, Feb 9	<b>*No Class*</b> - Continue Working on Labs / Assignment 1	
5	Tues, Feb 14	<i>Free Time to Work on Labs / Assignment 1 (Attendance Not Required)</i>	
	Thurs, Feb 16	<b>ASSIGNMENT 1 DUE BY 8:00AM!</b> An Introduction to SPSS <b>Lab 4:</b> SPSS Data Sets	Chapter 1
6	Tues, Feb 21	<b>*No Class* - Monday Class Schedule</b>	
	Thurs, Feb 23	Descriptive Statistics: Measures of Central Tendency and Dispersion	Chapter 4
7	Tues, Feb 28	<b>Lab 5:</b> Univariate Statistics and Formatting Outputs	Chapter 5 Chapter 11
	Thurs, Mar 2	Recoding Data <b>Lab 6:</b> Recoding Data in SPSS	Chapter 2
8	Tues, Mar 7	Bivariate Measures & Significance Testing: Means & the <i>t</i> -Test <b>Lab 7:</b> Continuous Measures: <i>t</i> -Test	Chapter 6
	Thurs, Mar 9	Bivariate Measures & Significance Testing: Contingency Tables & Chi-square <b>Lab 8:</b> Contingency Tables and Chi-Square	Chapter 6
9	Tues, Mar 14	<b>*SPRING BREAK*</b>	
	Thurs, Mar 16	<b>*SPRING BREAK*</b>	
10	Tues, Mar 21	<b>Assignment 2 Distributed</b> <b>Lab 9:</b> Creating a Composite Measure	Chapter 12
	Thurs, Mar 23	<b>Lab 10:</b> Formatting Tables in SPSS	Chapter 11
11	Tues, Mar 28	<i>Free Time to Work on Assignment 2/Associated Labs (Attendance required)</i>	

	Thurs, Mar 30	<i>Free Time to Work on Assignment 2/Associated Labs (Attendance not required)</i>	
<b>12</b>	Tues, Apr 4	<b>Assignment 2 DUE AT 8:00AM!</b> Measures of Association: Correlation & Simple Regression	Chapter 8
	Thurs, Apr 6	<b>Lab 11:</b> Measures of Association: Correlation & Simple Regression <b>ASSIGNMENT 3 DISTRIBUTED</b>	Chapter 8
<b>13</b>	Tues, Apr 11	Explanatory Analysis: Multiple Regression	Chapter 8
	Thurs, Apr 13	<b>Lab 12:</b> Multiple Regression <b>ASSIGNMENT 3 DISTRIBUTED</b>	Chapter 8
<b>14</b>	Tues, Apr 18	Correlation, Simple Regression, Multiple Regression Review	Chapter 8
	Thurs, Apr 20	<i>Free Time to Work on Assignment 3 (Attendance Required)</i> <b>ASSIGNMENT 3 HYPOTHESES/CORRELATION MATRIX DUE BY 9:00AM!</b>	
<b>15</b>	Tues, Apr 25	<i>Free Time to Work on Assignment 3 (Attendance Not Required)</i>	
	Thurs, Apr 27	<b>ASSIGNMENT 3 DUE AT 8:00AM!</b> Course wrap up / Final exam review	

**\*\*\*THE FINAL EXAM WILL OPEN ON SATURDAY, APRIL 29<sup>TH</sup> AT 12:00 AM AND WILL CLOSE ON SATURDAY, MAY 6<sup>TH</sup> AT 2:30 PM\*\*\***

**\*\*\*THE EXAM IS CUMULATIVE AND CONTAINS A MIXTURE OF QUESTIONS, FROM CALCULATIONS, MULTIPLE CHOICE, TRUE/FALSE, FILL IN THE BLANKS, ETC.\*\*\***