DARE Assignment for CRJ 102: Criminology

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DARE Project Description

As a member of this course, you are a participant in a CUNY-wide initiative funded by the National Science Foundation designed to improve students' quantitative reasoning skills. Your participation is defined by the completion of a multi-step research project on crime and safety in your neighborhoods. For this project, you will download and analyze data from FBI and other sources. Both your data collection and individual analysis of this data will connect to course concepts, theories, and readings in the field of criminology. You will be guided through each of the steps of the data collection and analysis process, including developing a research question and hypothesis; downloading available data into Google Sheets; creating data tables and graphs, and data analysis and write-up. Along the way, you will think about the advantages and disadvantages of official crime data and their use in criminological research. You will also learn how to utilize key data collection and analysis tools in Google Sheets. (As a result, all students will need to register for a Google account.) Given the cumulative nature of this project, you must prioritize on-time completion of the deliverables at each project step.

General Education Learning Goal: Students will understand and apply the concepts and methods of the social sciences.

DARE Learning Goal: As part of an initiative to integrate quantitative reasoning into college curricula and improve students' quantitative skills, this assignment has several specific goals. You will learn how to:

- Develop a clear and focused research question.
- Select appropriate sources to gather data for answering a research question.
- Import data into Google Sheets.
- Analyze quantitative data using Google Sheets
- Present findings using tables and graphs
- Understand the importance and usefulness of quantitative data analysis for addressing a variety of problems in the real world**.**

Here is what I want you to do:
For this assignment, I would like you to think about crime and safety in your own neighborhood or another community. You will develop a clear research question - a question around which

you will center your research on the issues of crime and safety in your neighborhood. You will access crime and census data for your community for 10 years. Once you find the data, you would need to copy it into Google Sheets. Once the data are in Google Sheets, I would like you to undertake data analysis, including preparing tables and graphs to represent this data in a form that is understandable to your peers. Finally, I would like you to publish a post in OpenLab that will include the tables and graphs and a narrative description of your interpretation of the data. Your peers will have the opportunity to comment on your work.

Here is why I want you to do it: This exercise would allow you to use quantitative reasoning skills, to understand how we measure crime in the United States and better understand the safety of your neighborhood or another community.

Here is how to do it (an overview of the project):

1. Develop a research question and a hypothesis for your project.

2. Go to the FBICrime Data Explorer and filter data by State and download US and state data on crime (violent crime overall, and for homicide, rape, robbery, aggravated assault, and property crimes) for the past 10 years (2010-2020). Go to your local police data (NYPD for most of you) and choose your home precinct. Import it into Google Sheets.

3. Go to the NYU Furman Center's New York City Neighborhood Data Profiles website (your exact neighborhood name may not be included, so pick the one closest to it. It may also be combined with another neighborhood). After you select the neighborhood, you will be redirected to a page for the neighborhood that has descriptions for DEMOGRAPHICS, HOUSING, and NEIGHBORHOOD SERVICES AND CONDITIONS. This is your neighborhood "DATA PROFILE." Download these data and import them to Google Sheets.

4. Once your dataset in Google Sheets is populated, create tables of the main variables in the dataset (including averages and percentages), and an appropriate graph (line graph). Detailed instructions on variables, data and graphs will be provided.

5. Copy graphs and tables as well as add a narrative description of data in a post published in OpenLab. See the video [I will add video] on how to do this and see an example of the assignment [I will provide an example].

Timetable for the DARE Assignment

September 1: DARE Methods Pre-Test

September 6: Submit an OpenLab post describing the neighborhood you pick and your research interests.

September 15: Post research question (related to research interest) in OpenLab; offer feedback on others' posts.

September 22: Post a hypothesis (related to the research question) in OpenLab and offer feedback on others' posts

October 6: Download data from NYPD and FBI Crime Explorer into Google Sheets.

October 15: Download data for your neighborhood from **NYU Furman Center's New York City Neighborhood Data Profiles**.

October 20: Explore data in your dataset, and prepare tables and graphs on your key variables from the research question.

November 15: Draft of Research Report posted in OpenLab.

December 13: Final Research Report

December 15: DARE Methods Post-Test

SCAFFOLDED DARE ASSIGNMENT STEPS

Step One: Complete DARE Methods Pre-Test (Due 9/1)

At the same time that you're conducting your research, the coordinators of the CUNY-wide DARE initiative are researching how students respond to and what they learn from courses infused with quantitative-literacy projects. As part of this research, students in DARE courses across CUNY are being administered assessments designed to measure their attitudes and skills relating to data analysis and quantitative reasoning. These "methods tests" will be administered very early in the semester (Methods Pre-Test) and at the end of the semester (Methods Post-Test). Each of these methods tests counts for 5% of your grade; however, you will NOT be graded on your performance on either test. Additionally, before you take either methods test, you will be given the option to indicate whether or not you want your methods test data to be used for research purposes. If you do opt to allow your assessment data to be used for research purposes, you will be compensated $5 for each assessment that you complete.

Step Two: Determine Research Interest (DUE 9/6)

As we discuss what criminologists study, how, and why, think about what issues related to crime and safety in your neighborhood interest you. What is the most pressing problem in your neighborhood related to crime or disorder? Pick a crime type (homicide, property crime, aggravated assault, etc) that you would be focusing on. This would be your research interest. Then, describe your chosen neighborhood and your research interest in an OpenLab post. Offer feedback on at least two fellow classmates' OpenLab posts, as well.

Here is a video on how to make a post in OpenLab:

BMCC OpenLab WordPress Tutorial: Writing a Post

Step Three: Develop a Research Question (Due 9/15)

A research question is a question around which you center your research. It should be:

> **clear:** it provides enough specifics that one's audience can easily understand its purpose without needing additional explanation.

focused: it is narrow enough that it can be answered thoroughly in the space the writing task allows.

concise: it is expressed in the fewest possible words.

complex: it is not answerable with a simple “yes” or “no,” but rather requires synthesis and analysis of ideas and sources prior to the composition of an answer.

arguable: its potential answers are open to debate rather than accepted facts.

You should ask a question about an issue that you are genuinely curious and/or passionate about.

For this project, your research question should primarily concern analyzing crime trends in your neighborhood and comparing them to crime trends in New York City, the state, and the country overall.

Describe your research question in an OpenLab post. Share feedback on at least two classmates’ research question posts.

Step Four: Develop a Research Hypothesis (Due 9/22)

A research hypothesis is a statement of expectation or prediction that will be tested by research. Based on your research question, your research hypothesis will predict a relationship between variables. Through the analysis of data in the subsequent steps, you provide empirical support for your hypothesis.

If you were interested in exploring how crime rates have changed in your neighborhood/town compared to those in the state and the country overall, you may hypothesize that the crime rates in your neighborhood increased, decreased, or stayed the same in comparison with the state and the national crime rates. You will need to pick a specific crime, such as homicide, and hypothesize on the direction of such change in your neighborhood/town and compare it to the state and national homicide data.

An example of a research hypothesis can be as follows:Homicide trends in Newark NJ will follow the trends in New Jersey and the US, overall. As the homicide rates increase in Newark, NJ so will the state and national homicide rates.

Describe your research hypothesis in an OpenLab post. Share feedback on at least two classmates' research hypotheses.

Step Five: Download Data from NYPD and FBI (Due 10/6)

In this step, you are asked to download crime data from your neighborhood as well as state and national data. Go to the FBI Crime Data Explorer and filter data by State and download US and state data. Go to your local police data (NYPD for most of you, or town's Police Department if you are in NJ, and nearby counties in New York) and choose your home precinct and download historical crime data and then import it into Google Sheets (on separate worksheets).

Share your Google Sheets link in the OpenLab and write a short post reflecting on the data you accessed from this source. Are you surprised by any of the data points? What are your expectations of how this is related to the overall DARE project? Write about the advantages and disadvantages of official crime data. Offer feedback to at least two of your classmates' reflections.

Here is how to download data and import data into Google Sheets: How to import or convert a CSV file into Google Sheets

Here is an example of what data would look like for the precinct you chose **DARE Crime Spreadsheet** **A video and live demonstration of how to download these data will be provided.**

Step Six: Download Neighborhood Profile Data from NYU Furman Center's New York City Neighborhood Data Profiles (Due 10/13)

Go to the NYU Furman Center's New York City Neighborhood Data Profiles website (your exact neighborhood name may not be included, so pick the one closest to it. It may also be combined with another neighborhood). After you select the neighborhood, you will be redirected to a page for the neighborhood that has descriptions for DEMOGRAPHICS, HOUSING, and NEIGHBORHOOD SERVICES AND CONDITIONS. This is your neighborhood "DATA PROFILE." Download these data and import them to Google Sheets.

If you live outside of New York City, you may pick your town overall, as opposed to a neighborhood. Such data can be gleaned from the US Census. I have found information on my town (Bloomfield, NJ) from this site, you can see it here.

Share your Google Sheets link in the OpenLab and write a short post reflecting on the data you accessed from this source. Are you surprised by any of data points? What are your expectations of how this is related to the overall DARE project? Offer feedback to at least two of classmates' reflection.

Here is an example of what data would look like for the neighborhood you chose (see Neighborhood Data Profile sheet): Neighborhood Data Profile

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Step Seven: Analysis - Graphs and Tables (Due 10/20)

Once the data are imported into Google Sheets, you will need to analyze them. The training on how to use Google Sheets will be provided during class in a computer lab. Subsequent training will be offered by appointment.

You will begin to analyze a particular aspect of the data that has been collected. To analyze our data, we will start by summarizing our data using descriptive statistics. You will then explore the relationships between the two variables that interest you (from your research question and hypothesis). This will be represented in tables that include raw and percentage data. Together we will learn to create tables and charts in Google Sheets that can help us display the data related to our research questions of interest. Each student will then compile these tables and charts into an OpenLab post.

For example, you will show a Line Graph of a chosen crime (homicide, for example) in your neighborhood, and rates for this crime at the state, and the national level for the past 10 years. You will also calculate percentage change for your picked crime comparing such percentage change in your neighborhood.

Here is how to create a line graph in Google Sheets:
Make a time series graph in google sheets

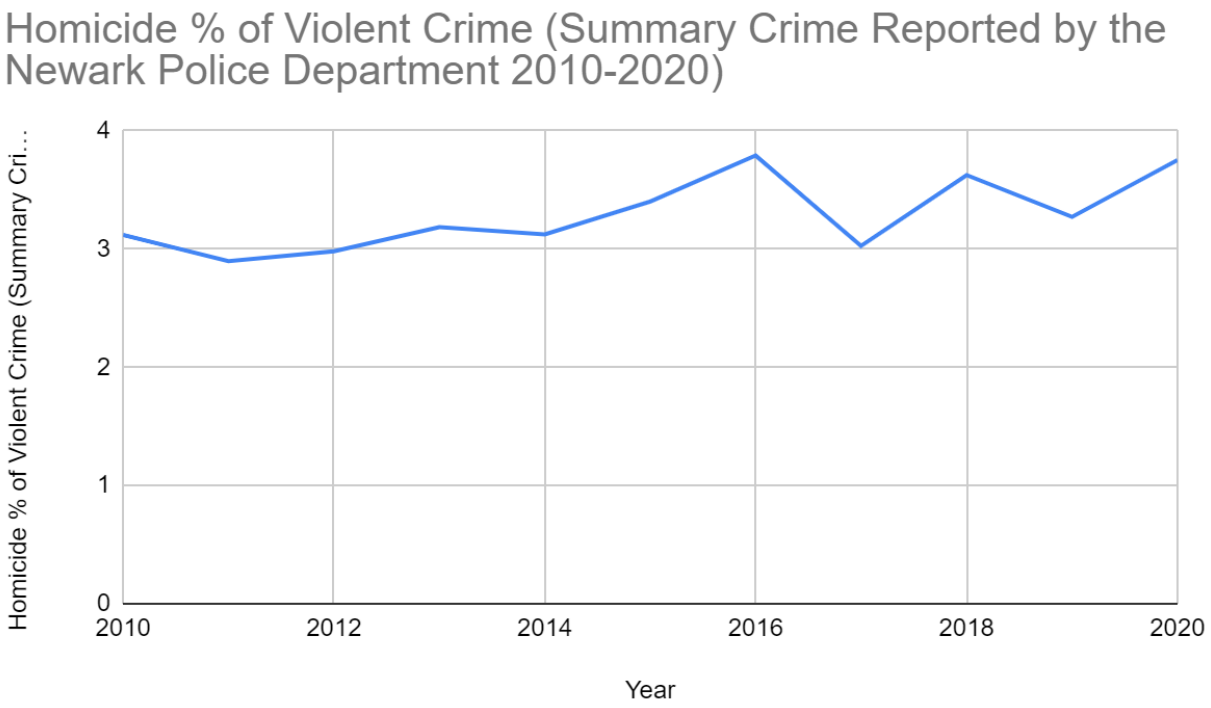
Here is how to calculate percentage change in Google Sheets:
Percentage, Percent Change, Percent Increase, Percent of Total Formulas - Goog…

Here is how to calculate rate per 100,000 for a chosen crime: Crime Rate = Total Crime / Population *100,000 [use population from Step 6]

Your analysis post will include:

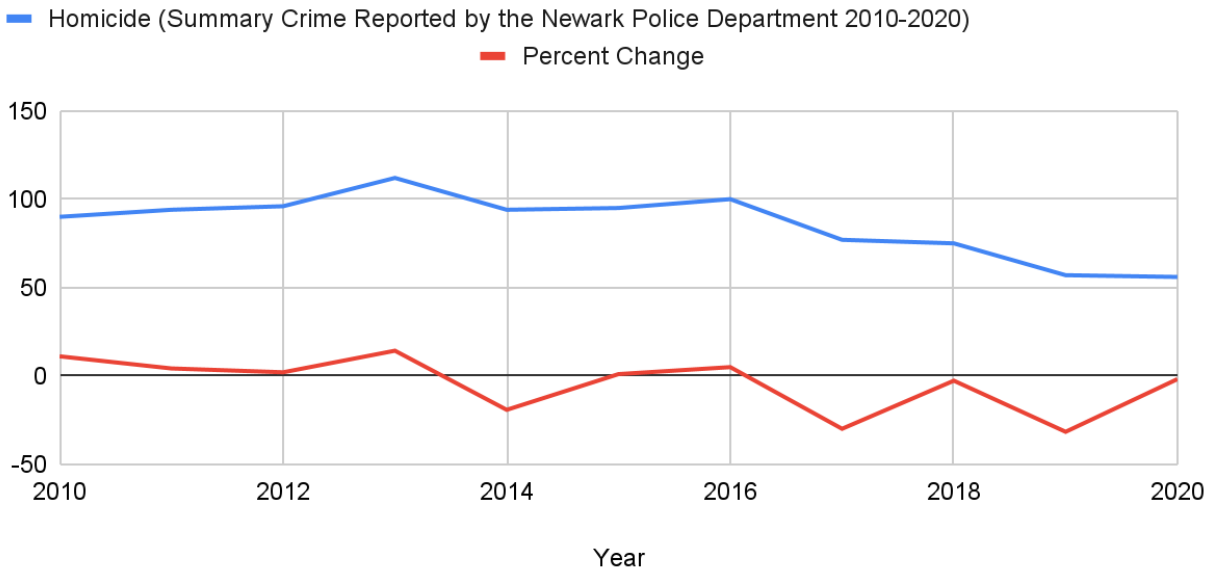
- reflections on your tables (How does your pivot/bivariate table help you to both answer your research question and present your research findings?)
- reflections on your line graph (How does the graph help you to answer and present your research question and findings?);
- Reflection on crime trends in your chosen crime at the local, state and national levels.
- Reflection how the chosen crime (homicide, for example) increased or decreased as a percentage of all violent/property crimes.
- Was your hypothesis supported? Why do you think it was/wasn't so?

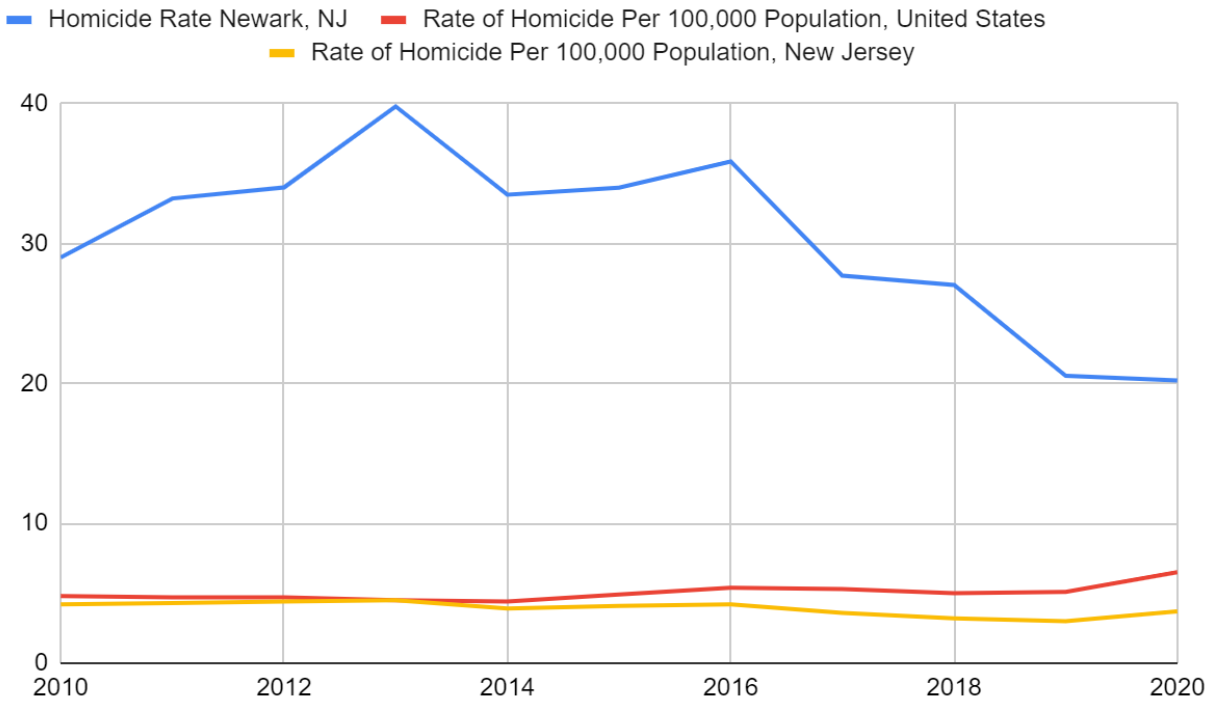
Example of Line Graph of Homicide As Related to All Violent Crime (using Newark NJ Summary Crime Data from FBI) (the chart is linked to data in Google Sheets)



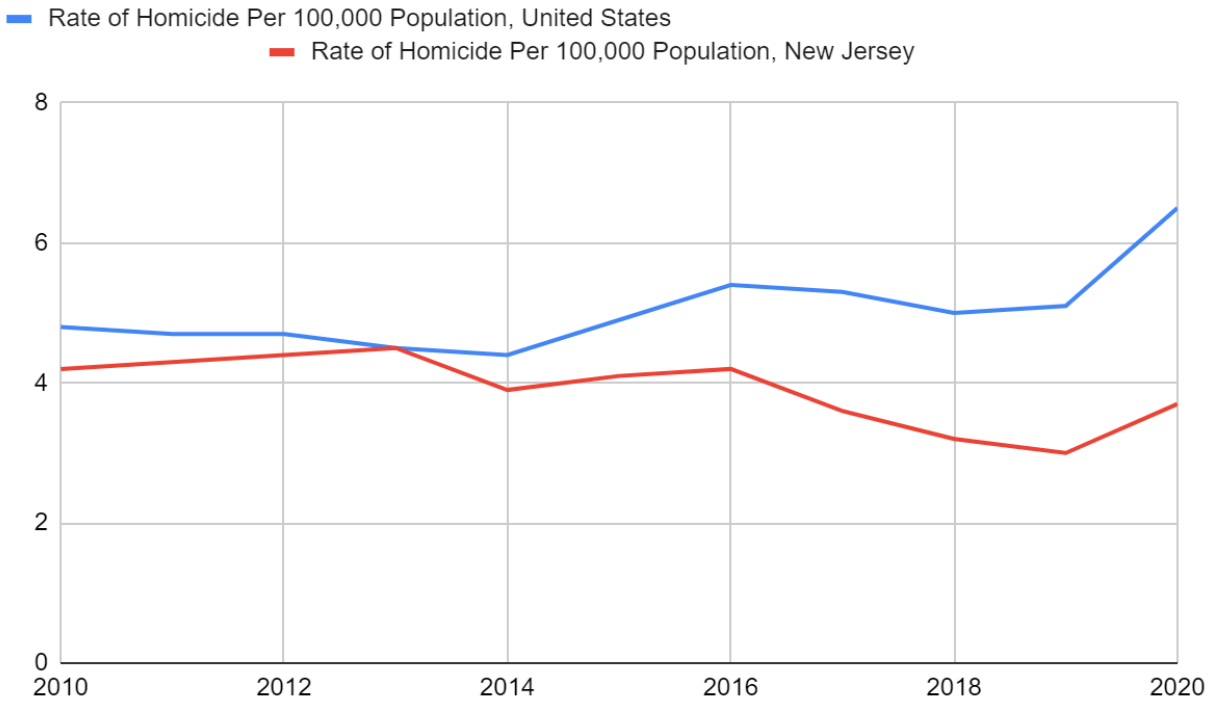
Examples of Line Charts (Crime Data from FBI) (the chart is linked to data in Google Sheets).

Homicide (Summary Crime reported by the Newark Police Department 2010-2020) and Percent Change





Example of a Line Chart Comparing State and National Homicide Rates (the chart is linked to data in Google Sheets).



Share your analysis in the OpenLab and write a short post reflecting on the bullet points above. Offer feedback to at least two of your classmates' reflections.

Step Eight: Draft of the Research Report (Due 11/15)

Draft a five-page research brief research report that formalizes your CRJ 102 DARE Project research results and experience. Address the following:

- **Your research questio**n – what was it and why did you choose it?
- **Your hypothesis** – what was it and why did you settle on it?
- **Your data sources**.
- **Your data analysis process** – describe how you analyzed the data from your research question.

- **Present the table and graph.** How did you construct each? What are the dimensions/axis and components of each? How does each help you to both answer and present your research question and findings?
- **Your written analysis**. What does the data reveal? Was your hypothesis correct or incorrect? Why do you think it was/wasn't so? What do your findings mean? What theory could be helpful in explaining the results?
- **Describe your experience** using the Google Suite to collect, analyze, and present sociological data. How easy/difficult was that experience? What did you like/dislike about it?
- **How would you describe your quantitative reasoning skills** (and confidence in those skills) prior to your participation in this course? How would you describe them now?

Share your draft in the OpenLab reflecting on the bullet points above. Offer feedback to at least two of your classmates' reports.

Step Nine: Submit Final Version of Research Report (Due 12/13)

Your final research report will include the same components as the draft assignment outlined above; however, it should incorporate and reflect on the specific feedback provided on that draft from your peers and me.

Step Ten: Complete DARE Methods Post-Test (Due 12/15)

Consistent with your completion of the DARE Methods Pre-Test in early September, you will complete an end-of-the-semester Methods Post-Test. Again, each of these methods tests counts for 5% of your grade; however, you will NOT be graded on your performance on either test. Additionally, before you take either methods test, you will be given the option to indicate whether or not you want your methods test data to be used for research purposes. If you do opt to allow your methods test data to be used for research purposes, you will be compensated $5 for each methods test that you complete.

Grading

This scaffolded assignment will be graded based on the following table, where each step is worth a certain percentage. This will 50% of your overall grade for the course (the other half will come from 4 exams).

Assignment	**Grade**
Step One	5%
Step Two	10%
Step Three	10%
Step Four	10%
Step Five	10%
Step Six	10%
Step Seven	10%
Step Eight	15%
Step Nine	15%
Step Ten	5%
TOTAL	**100%**

Grading Rubric

	18 - 20	15 - 17	12 - 14	9 - 11	10 and lower
Thesis	Clearly stated and appropriately focused.	Clearly stated by focus could have been sharper.	Thesis phrasing is too simple lacks complexity, or is not clearly worded.	Thesis lacks a clear objective and/or does not fit the content of the paper.	Thesis is not evident.
Tables/Graphs	Tables and graphs are properly formatted and labeled, and are free of quantitative errors.	The tables and graphs are mostly correct, but there are a few errors.	Tables and graphs have several errors.	Tables and graphs have numerous errors.	Tables and graphs are missing or problematic.
Data Analysis	Clear and insightful descriptions and interpretations of the data that are statistically and logically correct.	The data are correctly interpreted, but thoughtful insights are absent.	There are mistakes in data interpretations or insights.	The errors in interpretation are numerous.	The data have not been analyzed or interpreted.
Organization	The paper has an informative title. It is broken down into coherent sections and subsections with informative titles. .	The paper has an informative title. It is broken down into sections.	The paper has an informative title. The paper isn't not clearly broken down into sections.	The paper does not demonstrate clear organization, the title is missing.	Absence of planned organization.
Style and Language	Precise and effective word choice and style.	Generally correct grammar, spelling, and punctuation.	Minimal mistakes in grammar, spelling, and punctuation.	Several awkward and/or unclear sentences; problems with word choice.	No apparent control over sentences structure and word choice.

Completing this assignment will help you achieve the student learning outcomes required in a 100-level criminology class. It will also contribute to developing your capacity for clear, cogent, and well-organized writing, a capacity that is useful to acquire whatever career you'll end up embarking on. Finally, your participation in the DARE program will contribute to developing your capacity for qualitative reasoning for understanding data and interpreting tables and graphs.

Peer Review Assistance

Students are asked to offer review comments for seven of the ten steps of the DARE assignment. The following list of questions will assist students who will be trained in providing peer review.

- How would you sum up the writer's main claim or focus?
- What two big questions do you have about the writer's argument?
- How would getting these questions answered help you as the reader?
- What is the most interesting part of the draft for you? Why?
- What part of the draft is clearest and/or most effective?
- What part is least clear and/or effective?
- What specific suggestions do you have for revising the unclear parts?