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|  | **Topic** | **Pre-Class Notebook Submission** |
| 9/2 | *No In-Person Class Meeting (Administrative Holiday)* | *N/A* |
| 9/9 | Course Introduction  Syllabus Overview/Contract | *N/A* |
| 9/16 | Data Sources & Cleaning | “Hello World” Introduction to Jupyter |
| 9/23 | Question Formulation & Variable Types  *(any survey data that include respondent demographics)* | (1) Create four 10x2 tables that has a variable name in the first column and a value for that variable in the second column, for 10 observations  (2) Space for students to identify which levels of measurement are appropriate, following each table output  (3) Space for students to provide an example of a research question they could pose and answer using the variables and their 10 observed scores offered in each table |
| 9/30 | Central Tendency  *(Chapter 2, Dataset 1)* | (1) Compute the mode, median, and the mead of a sample of values randomly selected from the uploaded dataset;  (1a) Some space where they write out a rationale for which value is most representative of the sample drawn from the dataset  (2) Compute the mode, median, and the mead of a sample of values randomly selected from the uploaded dataset, this time including outliers and zeros  (2a) Some space where they write out a rationale for which value is most representative of the sample drawn from the dataset |
| 10/7 | Variability & Spread  *(Chapter 3, Dataset 1)* | (1) Compute standard deviations for sample of values randomly selected from the uploaded dataset  (1a) Provide 5 opportunities to see how what’s calculated changes with the random sample that’s chosen  (2) Compute standard deviations for the total population of the uploaded dataset  (3) Some space where they write out the implications for the observed differences in the six values |
| 10/14 | Visual Distribution  *(any dataset)* | (1) Using any available dataset to create a:  Histogram; bar graph; line graph; pie chart  (2) Opportunities for them to manipulate axes, intervals, etc.  (3) Depending on the dataset chosen, space for students to write out which images are appropriate for which sort of data interpretation |
| 10/21 | Correlation & Validity  *(any dataset)* | (1) Five opportunities to create scatterplot, representing samples from whatever available dataset  (2) Space beneath each scatterplot for to write out an interpretation of the scatterplot |