

### Project 3 Grading Rubric

Each aspect of the project will be graded on a competency-based scale ranging from Exceeds expectations to Meets expectations, Needs improvement, Unsatisfactory, and Failing. These levels approximately correspond to grades A, B, C, D, and F, respectively. Half grades may be assigned to work that falls between two proficiency levels.

	Exceeds expectations	Meets expectations	Needs improvement	Unsatisfactory	Failing
<b>Introduction</b>	The introduction provides a clear explanation of the question and the dataset used to answer the question, including a description of all relevant variables in the dataset. <b>10pts</b>	Introduction has minor flaws, e.g. is too short or too long. <b>8pts</b>	Introduction has one major flaw, such as not describing the relevant variables in the dataset. <b>6pts</b>	Introduction has multiple major flaws. <b>4pts</b>	Entirely incorrect/not attempted. <b>0pts</b>
<b>Justification of approach</b>	The chosen analysis approach and visualizations are clearly explained and justified. <b>10pts</b>	Justification of approach has minor flaws, e.g. is too short or too long. <b>8pts</b>	Justification of approach has one major flaw, e.g. a visualization is not justified or is incorrect. <b>6pts</b>	Justification of approach has multiple major flaws. <b>4pts</b>	Entirely incorrect/not attempted. <b>0pts</b>
<b>Question</b>	Question is interesting, appropriate for the dataset, and conceptual. <b>10pts</b>	Question is conceptual and appropriate for the dataset but lacks depth or insight. <b>8pts</b>	Question is either overly technical or vague, or prompts one particular analysis. <b>6pts</b>	Question is not a question or does not relate to the given dataset. <b>4pts</b>	Not attempted, or, using an invalid dataset (outside the specified date boundaries). <b>0pts</b>
<b>Code</b>	Code is correct, easy to read, properly formatted, and properly documented. <b>10pts</b>	Code is correct but has minor problems with formatting or documentation. <b>8pts</b>	Code has minor flaws, is missing data wrangling component, or includes extraneous parts. <b>6pts</b>	Code has major flaws. <b>4pts</b>	Entirely incorrect/not attempted. <b>0pts</b>
<b>Analysis</b>	Analysis approach is appropriate for the given question and dataset. <b>5pts</b>	Analysis approach is mostly appropriate but has some minor issues. <b>4pts</b>	Analysis approach has one major problem. <b>3pts</b>	Analysis approach has multiple problems. <b>2pts</b>	Entirely incorrect/not attempted. <b>0pts</b>
<b>Modeling requirement</b>	Project uses either multiple regression models on subsets of data or PCA or clustering. <b>10pts</b>				Project does not use any of the required analysis methods. <b>0pts</b>
<b>Visualization</b>	The visualizations are appropriate, easy to read, properly labeled, and nicely styled. <b>10pts</b>	The visualizations have minor flaws, such as with legibility or labeling, or the chosen geom is suboptimal, or there are minor problems with styling. <b>8pts</b>	The visualizations have substantial flaws with legibility or labeling, or are confusing, or have not been styled. <b>6pts</b>	The visualizations have major flaws, i.e., are barely comprehensible or entirely inappropriate. <b>4pts</b>	Entirely incorrect/not attempted. <b>0pts</b>
<b>Visualization requirement</b>	All requirements are satisfied: different geoms, color mapping or faceting in at least one figure, one compound figure. <b>5pts</b>		At least one requirement is not satisfied. <b>3pts</b>	At least two requirements are not satisfied. <b>2pts</b>	Entirely incorrect/not attempted. <b>0pts</b>
<b>Discussion of results</b>	Discussion of results is clear and correct, and it has some depth without begin excessively long. <b>10pts</b>	Discussion of results is mostly clear and correct, but has minor inaccuracies or lacks some depth. <b>8pts</b>	Discussion has one substantial flaw but is otherwise acceptable. <b>6pts</b>	Discussion has multiple flaws in logic. <b>4pts</b>	Entirely incorrect/not attempted. <b>0pts</b>
<b>Reproducibility</b>	All required files are provided. Quarto file renders without issues and reproduces pdf. <b>10pts</b>	All required files except pdf are provided. Quarto file renders without issues and produces a pdf. <b>8pts</b>	Quarto file requires minor modification to render. <b>6pts</b>	Quarto file requires major modification to render, or is not provided, or key data file is missing. <b>4pts</b>	Not attempted, or, using an invalid dataset (outside the specified date boundaries). <b>0pts</b>
<b>Presentation</b>	Entire document is well structured and easy to follow. No extraneous materials. <b>10pts</b>	Document is mostly well structured, but some aspects are confusing or difficult to follow. <b>8pts</b>	Document has several deficiencies, such as excessive extraneous materials, misplaced figures, code, or text, or is otherwise confusing. <b>6pts</b>	Document is near impossible to comprehend. <b>4pts</b>	Incomprehensible/not attempted. <b>0pts</b>
<b>Points total:</b>	<b>100</b>	<b>80</b>	<b>60</b>	<b>40</b>	<b>0</b>