

Final Project - Rubrics

Project code rubric (30 points)

Code	Excellent	Good	Satisfactory	Poor	Unacceptable
Code for Wrangling (10 points)	<i>9-10 points:</i> The code is completely functional and responds correctly producing the output described as the intention by the student.	<i>7-8 points:</i> The program is mostly functional and responds correctly producing the correct outputs in most cases. There are minor problems with the program implementation, or more efficient ways to code.	<i>4-6 points:</i> The code is marginally functional with numerous errors and/or incomplete code sections.	<i>2-3 points:</i> The code is minimally functional with significant portions of the code missing or incomplete.	<i>0-1 point:</i> The code is not functional, producing no correct outputs, or was not attempted.
Code for Analysis (10 points)	<i>9-10 points:</i> The code is completely functional and responds correctly producing the output described as the intention by the student.	<i>7-8 points:</i> The program is mostly functional and responds correctly producing the correct outputs in most cases. There are minor problems with the program implementation, or more efficient ways to code.	<i>4-6 points:</i> The code is marginally functional with numerous errors and/or incomplete code sections.	<i>2-3 points:</i> The code is minimally functional with significant portions of the code missing or incomplete.	<i>0-1 point:</i> The code is not functional, producing no correct outputs, or was not attempted.
Readability (5 points)	<i>5 points:</i> The code is extremely well organized, properly formatted, and easy to follow.	<i>4 points:</i> The code is reasonably easy to read. There are minor formatting problems.	<i>3 points:</i> The code readable only with significant effort. There is little to no proper formatting.	<i>1-2 points:</i> The code is poorly organized and difficult to read. There is little to no consistency in formatting.	<i>0 points:</i> The code is readable only by the author or someone extremely knowledgeable with its layout and purpose.
Documentation (5 points)	<i>5 points:</i> The code is extremely well documented. Comments are completely consistent with the associated code. There are no spelling errors.	<i>4 points:</i> The code is reasonably well documented. There are minor formatting omissions that would have improved users understanding of code purpose. There may be limited spelling errors.	<i>3 points:</i> The code is marginally documented. There are significant portions of the code that are not documented or documented incorrectly. There are significant spelling errors that detract from the documentation.	<i>1-2 points:</i> The code is poorly documented. There are minimal comments and/or the comments are incorrect.	<i>0 points:</i> The code is not documented.

Report content rubric I (total: 80 - I - 36 points, II - 44)

Content	Excellent	Good	Satisfactory	Poor	Unacceptable
Overall report (20 points)	<p><i>18-20 points:</i></p> <p>The report successfully communicates the goals, procedures and results of the study. Claims are adequately supported. Text and analysis is effectively interwoven. Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.</p>	<p><i>15-17 points:</i></p> <p>The report successfully communicates the goals, procedures and results of the study. Most claims are adequately supported. Text and analysis is effectively interwoven. Uses straightforward language that generally conveys meaning to readers. The language has few errors.</p>	<p><i>10-14 points:</i></p> <p>The report communicates the goals, procedures and results of the study. Most claims are adequately supported. Text and analysis may seem disconnected and/or the language used generally conveys meaning to readers with clarity, although writing may include some errors.</p>	<p><i>5-9 points:</i></p> <p>The goals, procedures and/or results of the study are unclear. Most claims are not adequately supported. Text and analysis are disconnected and/or language used sometimes impedes meaning because of error in usage.</p>	<p><i>0-4 points:</i></p> <p>The goals, procedures, and/or results of the study are unclear. None of the claims are adequately supported. Language impedes meaning because of error in usage.</p>
Originality and creativity (6 points)	<p><i>5-6 points:</i></p> <p>The topic is interesting and substantial, and the student demonstrates considerable creativity, initiative and ambition.</p>	<p><i>4 points:</i></p> <p>The topic is interesting and substantial, and the student demonstrates some creativity, initiative and ambition.</p>	<p><i>3 points:</i></p> <p>The topic is interesting, and the group demonstrates limited creativity, initiative and ambition.</p>	<p><i>1-2 points:</i></p> <p>The topic is trite, pedantic, or trivial, and the student demonstrates limited creativity, initiative and ambition.</p>	<p><i>0 points:</i></p> <p>The topic is trite, pedantic, or trivial, and the student demonstrates no creativity, initiative or ambition.</p>
Data (10 points)	<p><i>9-10 points:</i></p> <p>Description of data and wrangling is excellent. Properties of the data such as the number of observations and variables, sampling methods, as well as any issues with the data (missing values) etc. are clear. The variables are explained well. A reader without subject matter / expert knowledge is not hindered in reading the report or understanding the findings.</p>	<p><i>7-8 points:</i></p> <p>Description of data and wrangling is very strong. Some aspect of the data may be unclear - the meaning of a particular variable or the years of data collection, for example. A reader without subject matter / expert knowledge is not hindered in reading the report or understanding the findings, but may have questions about the data that the report does not address.</p>	<p><i>4-6 points:</i></p> <p>Description of data and wrangling is satisfactory. A few aspects of the data may be unclear - the meaning of a particular variable or the years of data collection, for example. A reader without subject matter / expert knowledge would have questions about the data that the report does not address, which could impact their understanding.</p>	<p><i>2-3 points:</i></p> <p>Description of data and wrangling is minimal. The limited description causes issues for a reader to follow along with the report and its findings.</p>	<p><i>0-1 point:</i></p> <p>The data and wrangling are not described. This is a major issue for a statistical report. How can work be reproducible if these details are not presented?</p>

Report content rubric II (total: 80 - I - 36 points, II - 44)

Content	Excellent	Good	Satisfactory	Poor	Unacceptable
Visualizations (10 points)	<p><i>9-10 points:</i> All visualizations are relevant to the analysis and use effective visual cues. All graphics used are well-suited for the type and scale of data they represent, and there are clear labels and legends.</p>	<p><i>7-8 points:</i> All visualizations are relevant to the analysis and use effective visual cues. All graphics used are well-suited for the type and scale of data they represent. Labeling and legends are not completely clear, have a spelling issue or two, or other minor issues.</p>	<p><i>4-6 points:</i> Most visualizations are relevant to the analysis, but visual cues neither enhance nor detract from the main message. Most graphics used are well-suited for the type and scale of data they represent and/or are cutoff. Labeling and legends not completely clear, or other minor issues. A few visuals may be unnecessary or repetitive.</p>	<p><i>2-3 points:</i> Some visualizations are relevant to analysis, but visual cues are ineffective or not utilized. Some graphics used are not well-suited for the type and scale of data they represent. Unclear labeling and/or legends, or more serious issues. A few visuals may be unnecessary or repetitive.</p>	<p><i>0-1 point:</i> There are no visualizations, or the visualizations are not relevant to the analysis. You likely need a visual to tell us something about the data, etc.</p>
Analysis and Beyond (30 points)	<p><i>25-30 points:</i> All analyses included are appropriate for the variables/relationships under investigation. Any underlying assumptions are discussed, and analyses are carried out correctly. The Beyond topic is well-presented, giving readers a sense of the topic and knowledge of how to implement it.</p>	<p><i>18-24 points:</i> All analyses included are appropriate for the variables/relationships under investigation. Any underlying assumptions are discussed, and most analyses are carried out correctly. The Beyond topic is fairly well-presented, giving readers a sense of the topic and some knowledge of how to implement it.</p>	<p><i>11-17 points:</i> All analyses included are appropriate for the variables/relationships under investigation. Some underlying assumptions are not discussed and/or some analyses are not carried out correctly. The Beyond topic is satisfactorily presented, giving readers a sense of the topic and some knowledge of how to implement it.</p>	<p><i>6-10 points:</i> Some analyses included are not appropriate for the variables/relationships under investigation. Some underlying assumptions are not discussed and/or some analyses are not carried out correctly. The Beyond topic is poorly presented. Readers may be very unclear about the topic and lack knowledge of how to implement it.</p>	<p><i>0-5 points:</i> Analyses are not appropriate for the variables/relationships under investigation. The Beyond topic is not introduced.</p>
References (4 points)	<p><i>4 points:</i> References are included in the text and in the final reference list. All references appear to be included. Citation format is consistent (no specific style specified).</p>	<p><i>3 points:</i> References are included in the text and in the final reference list. All references appear to be included. Citation format may be inconsistent.</p>	<p><i>2 points:</i> References are included in either the text or in the final reference list, but not in both. All references appear to be included. Citation format may be inconsistent.</p>	<p><i>1 point:</i> References are included but issues with citation format make it impossible to be able to use said references.</p>	<p><i>0 points:</i> No references are included. This would be an Honor Code violation. The data comes from somewhere and this source, at a minimum, must be cited.</p>

Presentation rubric (30 points)

Code	Excellent	Good	Satisfactory	Poor	Unacceptable
Organization (10 points)	<i>9-10 points:</i> Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable and is skillful, and makes the content of the presentation cohesive	<i>8 points:</i> Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable within the presentation	<i>7 points:</i> Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is intermittently observable within the presentation	<i>3-6 points:</i> Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is barely detectable within the presentation	<i>0-2 points:</i> Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is not observable within the presentation
Content (10 points)	<i>9-10 points:</i> Central message is compelling (precisely stated, appropriately repeated, memorable, and strongly supported).	<i>8 points:</i> Central message is clear and consistent with supporting material.	<i>7 points:</i> Central message is basically understandable but is not memorable and/or not supported.	<i>3-6 points:</i> Central message can be deduced, but is not explicitly stated in the presentation.	<i>0-2 points:</i> Central message is unclear from the presentation.
Language and delivery (10 points)	<i>9-10 points:</i> Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation compelling, and speaker appears polished and confident. Language in presentation is appropriate to audience.	<i>8 points:</i> Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation interesting, and speaker appears comfortable. Language in presentation is appropriate to audience.	<i>7 points:</i> Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation understandable, and speaker appears tentative. Language in presentation is appropriate to audience.	<i>3-6 points:</i> Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) detract from the understandability of the presentation, and speaker appears uncomfortable. Language in presentation is appropriate to audience.	<i>0-2 points:</i> Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) detract from the understandability of the presentation, and speaker appears uncomfortable. Language in presentation is not appropriate to audience.

Repo Organization rubric (10 points)

Code	Excellent	Good	Satisfactory	Poor	Unacceptable
Organization (10 points)	<i>9-10 points:</i> Files and folders are organized well in the repo. It is clear which files are for which project, and the organization is sensible. There are no extra copies of files (e.g. from moving). The repo would be a good exemplar to share to demonstrate skill with Github.	<i>8 points:</i> Files and folders are organized fairly well in the repo. For most files, it is clear which project they belong with. There may be one or two minor issues with the organization.	<i>7 points:</i> Files and folders are organized somewhat well in the repo. There are issues with organization such that is unclear for many files (but not all) which project they belong to.	<i>3-6 points:</i> Files and folders show a minimal amount of organization. Perhaps files and folder for one project are clear but for the other project, the organization is lacking. An external observer would not be able to navigate the repo easily.	<i>0-2 points:</i> An external observer would not be able to navigate the repo easily. Files and folders are not organized by project.