

## Course Project Rubric<sup>1</sup> -- Accidents

### ECN 310 M002, Fall 2023

Overall Evaluation: The report was very well-written on average, and the data work was well executed for the most part. Your project got the highest score on documentation of any of the projects; most of the places where I took off are easily-remedied. If you were to address most of the comments, I would be very happy to share the report with Professor Singleton—I think it would be useful to him (especially if you did it with a full year of data, like for 2022 assuming it's available).

#### **Report (120 out of 140, 85.7%)**

- *Accuracy*: At the end of the results section, you say the first decile has 8-19 employees, but you talk about a firm with only 3 employees. What's going on with the very small firms? Are they in one of your deciles? A key piece of information is missing: what year of data was analyzed?
  - Once I went through your do-file, I understood that the 8-19 is the second decile.
  - I also saw that there were more than three sub-categories of injuries. You should have talked about this and said why you picked the three you do.
- *Citations / academic honesty*: The bibliography has several mistakes, and these flow through to how the papers are referenced in the literature review. Some very specific information about the OSHA data is included in the data section (which is great!), but no reference is provided.
- *Reasoning and analysis*: After working through your documentation, I infer from the file names that you were working on 2023, but that there's only data for the first seven months. But you talk as if your data is annual data (for the whole year). Only having seven months of data would change the conclusions I draw about your data and analysis. I also wonder if you had looked at the 2022 data if things might have been cleaner; that is, if maybe OSHA cleans up the data once all of it is in for the year.
- *Organization and Synthesis*: Having the summary stats all listed out in the text instead of in a table makes them much harder both to find and then to follow.
- *Professional figures*: Figures should have plain language names for the variables instead of the Stata variable names
- *Clarity*: Weird link at the beginning of the lit review. Is a word missing toward the top of page 3? Data section sometimes uses unclear language. The discussion of the construction of the decile variable at the beginning of the results section is impossible to understand. There are also some word choice (what is a smaller distribution?) and subject-verb agreement issues in the results section.

#### **Documentation (70 out of 80, 87.5%)**

- *Reproducibility*:
  - You should include a link to the website from which you downloaded the data in your long README
  - It's great that you included your "graph export" commands. But the directory is set to save these on OneDrive instead of in the appropriate folder on Github
    - You had a tricky situation with the raw data that was too big to store on Github. For reproducibility purposes, it would have been better to leave the steps for downloading and importing the data uncommented and then comment your "use" command that links to a folder that the outsider doesn't have access to (noting the issue in the documentation and that this was a local copy that you had unpacked for your own purposes). Then have the cd command to the Github folder so everything gets saved there.

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<sup>1</sup> Adapted from Huba, M.E., & Freed, J.E. (2000). *Learner-centered assessment on college campuses: Shifting the focus from teaching to learning* (pp. 156-157). Allyn & Bacon: Needham Heights, MA

- Graph export command missing for boxplot
- *Organization and Synthesis:*
  - Link to report in main README is broken
  - Some description of what the “Working Folder” is would be helpful for someone outside our class
  - There’s no link on the main README to the files for compiling the report
  - Good practice would be to get rid of the (2) / (3) / (4) etc. on the ends of filenames. This just makes it harder for someone to follow without adding anything useful as far as I can tell.
  - If you renamed LONGREADME.md to README.md, it would show up on the main page of the Reproducibility Package folder, which is nice for readers but not essential
- *Completeness:*
  - In your master do-file, lines 76-77 should have more detail about why you’re using each condition in the replace statements. Lines 98-133 would be a lot more readable if you did your comment 1, then the code, comment 2, then the code, comment 3 then the code (especially because you list them in a different order). It takes a lot of steps to generate the decile variable; they should be better explained (probably with “// comment” style comments on most of the lines.
- *Clarity:*
  - Typo in high-level README.
  - Old version of abstract (I spotted it because it contains the word “prove” which is a red flag.
  - Lots of typos in the commented documentation in the do-file.

Below are the categories on which your project will be evaluated. Each category is followed by the maximum number of points that can be received in that category. For each category, a project will be given a ranking from 1 to 10 and then weighted by the corresponding point value. For example, *Organization and Synthesis* can receive 20 out of the total of 220 points, so a *Organization and Synthesis* score of 7 will result in 14 out of 20 points.

### Final Submission (140 points)

Components	Sophisticated (10)	Competent (7)	Not yet Competent (3)	Out of 10	Scaled
<i>Motivation</i> (10 points)	Clearly communicates why the topic is interesting / why the readers should care about it. Project fulfills the request of the faculty sponsor.	Motivation is present; at least some reasonable argument is made. Project broadly speaks to the request of the faculty sponsor.	No clear motivation, or motivation is poor or missing. Project broadly fails to meet the request of the faculty sponsor.	10	10
<i>Accuracy</i> (10 points)	Information is accurate. Resources are legitimate when appropriate.	Information is mostly accurate with only a few minor errors. 1 resource may be questionable.	Information is unreliable and/or inaccurate. Resources are not valid.	6	6

<i>Citations / academic honesty</i> (10 points)	All sources are well documented and quoted / paraphrased.	All sources are well documented, but minor mistakes / gaps are present.	Sources are overquoted, documentation hard to follow or poorly cited.	7	7
<i>Reasoning and Analysis</i> (30 points)	Arguments or positions are reasonable and well-justified with evidence from sources or intuition. Extends beyond reference material, providing insightful analysis of complex ideas.	Arguments or positions are reasonable and mostly supported by evidence. In general, displays a clear understanding of the material and concepts.	Contributions are more often based on opinion or unclear views than on reasoned arguments. Positions not supported by evidence. Suggests inability to follow complex lines of argument or arguments are convoluted and difficult to follow.	9	27
<i>Organization and Synthesis</i> (20 points)	Submission successfully breaks the project into relevant parts and is logically organized. Integrates analysis into a coherent whole that the reader can easily follow.	Submission successfully breaks the project into relevant parts and is generally logically organized. Connections between parts are fairly accurate, generally clear and most parts are integrated into a mostly coherent whole. A few minor points may be confusing.	Organization is haphazard. Some parts and the connections between them may be only somewhat accurate, missing or unclear. Reader can follow submission only with effort.	9	18
<i>Professional figures</i> (Greenlaw p. 235) (20 points)	All figures: - have clear title with reference number and clear description; - have a clear role in your “story” - are explained clearly in text with reference number pointing to it; - (graphs) have axes clearly labeled and units clearly identified; - are presented professionally. Appropriate summary stats are included (usually in a table).	One or two figures - do not have a clear role; - are explained somewhat unclearly in text; - have missing / incorrect reference number or unclear description; - have unclear axes or units. All figures are presented professionally. Most summary stats of interest are clearly presented.	At least one figure is presented in an unprofessional manner; or summary stats are missing; or explanations of multiple figures in text are unclear, missing, or not relevant; several figures do not have clear titles (missing, incorrect, or unclear reference numbers or descriptions) or labeling.	9	18
<i>Clarity</i> (20 points)	All sentences are complete and grammatical. All words are chosen for their precise meanings. All new or unusual terms are well-defined. Key concepts are completely explained. Submission has been	All sentences are complete and grammatical. Most words are chosen for their precise meanings. Most new or unusual terms are well-defined. Key concepts are completely explained. Submission	A few sentences are incomplete and/or ungrammatical. Words are not chosen for their precise meanings. Many new or unusual terms are not well-defined. Several explanations are inaccurate or incomplete.	7	14

	spell-checked and proofread and has no errors.	has been spell-checked and proofread and has very few errors.	Submission has several spelling errors.		
<i>Freedom from Bias<sup>2</sup> (e.g., sexism, racism, etc.,) (5 points)</i>	Language and content are free from bias.	Language and content are free from bias with one or two minor exceptions.	Language and content includes some identifiable bias. Some readers will be offended.	10	5
<i>Process (15 points)</i>	All components turned in on time. Comments on draft analysis section are addressed. All communication regarding the project's progress is clear, respectful, and timely.	All components are completed and turned in on time. Most comments on draft analysis section are addressed at least in part. Communication regarding the project's progress is not always clear.	Final submission not on time, or communication about project's progress is either disrespectful or inconsiderately timed. Many comments on draft analysis section not addressed.	10	15

### Documentation and Reproducibility (80 points)

Components	Sophisticated (10)	Competent (7)	Not yet Competent (3)	Out of 10	Scaled
<i>Reproducibility (30 points)</i>	All analysis is easily and fully reproduced using supplied materials.	All analysis is reproducible, but with some difficulty.	Analysis is not reproducible, either due to insufficient or mistaken instructions or missing files.	9	27
<i>Organization and Synthesis (20 points)</i>	Documentation / reproducibility package is logically organized. Integrates data work into a coherent whole that the reader can easily follow.	Documentation / reproducibility package is generally logically organized. Most parts are integrated into a mostly coherent whole. A few minor points may be confusing.	Organization is haphazard. Some parts and the connections between them may be only somewhat accurate, missing or unclear. Reader can follow only with effort.	9	18
<i>Completeness (20 points)</i>	All steps, including each line (or small group of lines) of code in each do-file, are clearly explained. Key choices (e.g., how to deal with outliers) are well justified.	Almost all steps are clearly explained, or all steps are explained but some lack clarity. Key choices (e.g., how to deal with outliers) are justified.	A significant number of steps are not clearly explained. Some key choices (e.g., how to deal with outliers) are not justified.	9	18

<sup>2</sup> See <https://writingcenter.ashford.edu/avoiding-bias> and <https://academicguides.waldenu.edu/writingcenter/scholarlyvoice/avoidingbias>

<i>Clarity</i> (10 points)	All sentences are complete and grammatical (or in bullet point form). All words are chosen for their precise meanings. Key concepts are completely explained. Submission has been spell-checked and proofread and has no errors.	All sentences are complete and grammatical. Most words are chosen for their precise meanings. Key concepts are completely explained. Submission has been spell-checked and proofread and has very few errors.	A few sentences are incomplete and/or ungrammatical. Words are not chosen for their precise meanings. Many new or unusual terms are not well-defined. Several explanations are inaccurate or incomplete. Submission has several spelling errors.	7	7
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