

STAT512 HW10

See Canvas calendar for due date.

15 points total

Note: This assignment will not be graded in detail. You will receive full credit for anything that looks reasonable.

Instructions: Find a scientific journal article related to your research or use one of the example articles that are available from Canvas. If you use your own article, it will be helpful (but not required) to use an article where the analysis approach was covered in STAT511/512. Read (or skim) the article focusing on the design, statistical analysis and results sections.

1. Provide a citation for the article.
2. **Read the study description.** Briefly describe the study design. Is this an experiment or an observational study?
3. What is the sample size? Is a sample size justification included?
4. **Read the analysis description.** Briefly summarize the analysis approach. If the analysis has multiple parts, it is fine to focus on just a portion of the analysis. Did the authors provide enough detail that you feel you could recreate the results (if you had the data available)?
5. What software was used for the analysis? If R was used, did the authors reference specific packages? Is there any code or functions mentioned in the body of the article?
6. What types of summary statistics are included? If means are presented, is standard deviation or SE shown?
7. What types of summary graphs are included?
8. **Read the results section.** Briefly describe the type of information provided. For example, a multiple regression analysis might present the estimated coefficients and SE. A one-way ANOVA analysis might include pairwise comparisons of means.
9. Feel free to make any other comments about the article.