Slide Formatting Guide

BIOE 498/598 PJ

Spring 2022
Assignment Name

Names/e-mail addresses for all group members
Introduction and Research Questions

- What motivated you to study this system?
- Define the factors and the response.
- What questions are you trying to answer (big picture)?
Description of the Data

- Input factors, units, and ranges
- Response units and range
- Number of observations and replicates; if there were duplicates, say how many were averaged.
Methods

- What approach did you take?
  - Example: We build a statistical model that predicts $X$ using $Y$ and $Z$.
- Avoid jargon and technical terms. Simply explain the overall approach.
Results

▶ Results are factual based on the data and/or model.

▶ Write the results in words, including the effect sizes.
  
  ▶ **Example:** Applying fertilizer in January increased yields 1.1-fold over treating in April

▶ Only describe the practically and statistically significant results. This avoids you needing to say “significantly’’ for every result.

  ▶ **Exception:** Mention any effect that you expected to be significant but wasn’t.
  
  ▶ **Example:** No change in yield between broadcast and plowed fertilizer applications.
Conclusions

- Conclusions are subjective based on your interpretation of the results and/or judgment.
  - **Example:** Treating in January increased yield by 10%, but this benefit needs to be compared to the costs of accessing the fields early.
- If asked, include next steps or follow-up experiments/analyses.
  - **Example:** We estimate another 8 runs are needed to determine if time of application and method of application interact.
Supplementary slides

- The all data, code, and plots used in the analysis.