

Homework 2

BIOE 498/598 PJ

Spring 2022

Due Monday, 2/28 before 5pm. Submit answers on Gradescope.

Your task is to design, run, and analyze your own experiment. You can choose any (appropriate) topic for your experiment subject to the following rules.

1. Your design must have four or five two-level factors and eight runs.
2. You must measure a single, continuous response.
3. You must replicate your design (sixteen total runs). You may (optionally) include duplicates if needed.

After designing and running your experiment, you should analyze your data using the workflow in Homework 1 plus an analysis on the statistical significance of your effect sizes.

Describe your results in a set of slides using the formatting guide for this assignment. The slides (except the supplement) should be created for someone *without* detailed DOE experience.