

# Homework 1

## Type all homework.

Due date: See syllabus. Turn in on Bruin Learn.

You may use any R package to answer these questions.

All data sets are available on the book web site <https://robweiss.faculty.biostat.ucla.edu/book-data-sets> in text formats. Data sets are described briefly in the book appendix A.

1. Five articles are provided on the book author's web site (<https://robweiss.faculty.biostat.ucla.edu/biostat236>): Counsell et al 2007, HLP working group 2007, Ponsford et al 2014, Rabiolo et al 2020, and Li et al 2021. Read enough of each article to answer the following questions. After the first question, you need only answer the questions for the articles that analyze longitudinal data.

Read enough of each article to answer the following questions as best possible:

- (a) Does this article analyze longitudinally collected data?
  - (b) How many repeated measurements were taken over time?
  - (c) When were they taken, measuring from baseline?
  - (d) Did the authors use a longitudinal analysis?
  - (e) What is the name of the analysis used?
  - (f) Name two key responses.
  - (g) What covariates were used?
  - (h) What software was used?
2. Problem 12, chapter 1, page 26.
  3. (a) Do problem 10, chapter 1, pages 25 and 26. Use anthropometry 2 data set. Time is measured in years from the day intervention started. To convert to days, multiply time by 365.25 which will produce nice round numbers.  
  
(b) One of the questions is not easily answerable only from the data set. Identify that question and explain how in real life you would figure that question out.