431 Quiz 1 INSTRUCTIONS for Fall 2022

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Due 2022-10-10 at 9 PM: Version 2022-10-05 00:17:44

Instructions for Students

There are 24 questions on this Quiz, and the eventual PDF you'll receive is 26 pages long. Be sure you have all 26 pages when you get the actual Quiz. (These instructions are **four** pages long.) It is to your advantage to answer all 24 Questions. Your score is based on the number of correct responses, so there's no chance a blank response will be correct, while a guess might be, so you should definitely answer all of the questions.

0.1 The Google Form Answer Sheet

All of your answers should be placed in the Google Form Answer Sheet, which will be found (once the Quiz starts) at **LINK TO BE PROVIDED**. All of your answers must be submitted through that Google Form by 9 PM on Monday 2022-10-10, and no extensions will be made available, so do not wait until Monday evening to submit. We will only accept responses through the Google Form.

The Google Form's final question requires you to type in your full name to affirm that you followed the rules for the Quiz. You must complete that affirmation before you can submit your responses. After submission (like a Minute Paper) you will be emailed a copy of your submission, with a link allowing you to edit your responses.

If you wish to work on some of the quiz and then return later, do so by [1] completing the final question (the affirmation) by typing in your full name, and then [2] submitting the quiz. You will then receive a link at your CWRU email which will let you return to the quiz as often as you like without losing your progress.

0.2 Getting Help During the Quiz

This is an open book, open notes quiz. You are welcome to consult the materials provided on the course website and that we've been reading in the class, but you are not allowed to discuss the questions on this quiz with anyone other than Professor Love and the teaching assistants. You will be required to complete a short affirmation that you have obeyed these rules as part of submitting the Quiz.

If you need clarification on a Quiz question, you have exactly two ways of getting help:

1. You can ask your question in a private question to the instructors on Campuswire, or
2. You can ask your question via email to **431-help at case dot edu**.

While the complete Quiz is available, we will not answer questions about the Quiz except through the two approaches listed above. We promise to respond to all questions received before 5 PM on 2022-10-10 at that time, if not sooner.

- Specific questions are more likely to get helpful answers.
- We will not review your code or your English for you.
- We will not tell you if your answer is correct, or if it is complete.
- We will email all students if we find an error in the Quiz that needs fixing.

0.2.1 When Should I ask for help?

We recommend the following process.

- If you encounter a tough question, skip it, and build up your confidence by tackling other questions.
- When you return to the tough question, spend no more than 10-15 minutes on it. If you still don't have it, take a break (not just to do other questions) but an actual break.
- When you return to the question, it may be much clearer to you. If so, great. If not, spend 5-10 minutes on it, at most, and if you are still stuck, ask us for help.
- This is not to say that you cannot ask us sooner than this, but you should **never, ever** spend more than 20 minutes on any question without asking for help.

0.3 Scoring and Timing of the Quiz

Question 7 is worth 8 points, and the other 23 questions are worth 4 points each, summing to 100 points. The questions are not in any particular order, and range in difficulty from "things I expect everyone to get right" to "things that are deliberately tricky".

The Quiz is meant to take 4-6 hours. I expect most students will take 3-8 hours, and some will take as little as 2 or as many as 10. It is not a good idea to spend a long time on any one question.

Dr. Love will grade all Quizzes, and you should have your result by 5 PM on Wednesday 2022-10-12.

0.4 Writing Code into the Google Form

Occasionally, we ask you to provide a single line of code. If not otherwise specified, a single line of code in response should contain no more than two pipes, although you may or may not need the pipe in any particular setting. Moreover, do not include the `library` command at any time for any of your code. Assume in all questions that all relevant packages have been loaded in R.

0.5 The Data Sets for this Quiz

When the Quiz is available, we will provide **four** data sets that are mentioned in the Quiz. You will find them in our Shared Google Drive in the Quiz 1 folder. They may be helpful to you.

I will also provide an R Markdown file and an HTML file, described in Question 07.

0.6 Packages used in Developing this Quiz

This doesn't mean you need to use all of these packages or even that I used them all, but it does mean that I did not add any additional packages to this list in building the quiz or the answer sketch. You will note that the `mosaic` package is not listed here, but I did use the `favstats` function from that package using the `mosaic::favstats()` approach in preparing this material.

```r
library(broom)
library(Epi)
library(equatiomatic)
library(glue)
library(ggrepel)
library(ggridges)
library(gt)
library(kableExtra)
library(simputation)
library(janitor)
library(naniar)
library(patchwork)
library(tidyverse)

theme_set(theme_bw())
```