**Exercise 1**

1. Read the syllabus.

2. Download and install the latest version of R and RStudio (in that order). (If you have a Mac, note the difference between Intel and Apple silicon!)

3. Email me with questions or concerns you haven't had answered and/or what topics you're most excited to cover.

4. Read the following prompt and write about what kind of data you would need, and how you might try to analyze it to meet the company's needs (no more than 1 page):

*You’ve been hired by Patagonia to help evaluate the health of its customer base. While the brand has a strong reputation and loyal following, recent internal reports suggest shifts in who is buying Patagonia products — including changes in age, income level, geographic location, and shopping habits. Your task is to determine how healthy Patagonia’s current customer base is and identify potential gaps or emerging trends.*

5. Submit your response as a Word document on Canvas by the beginning of class Tuesday and be prepared to share with the class.

**Five points total:**

**- One point for reading the syllabus.**

**- One point for installing R and R Studio**

**-One point for emailing Dr. Bale**

**- Two points for providing a reasonable response to the prompt.**

*Your response might look something like this…*

To begin to understand why certain customers convert while others don’t, we could start by collecting data such as the fitness classes each individual participated in, the frequency of their trips to the gym, their attendance at events, and their interactions with email and website promotions. We could also seek to better understand the demographics of these customers, such as age, gender, and income.

With this data, we could then use statistical modeling to try to predict which customers will sign up for memberships. This would allow the gym to tailor its marketing strategy to individual customers, and to increase the likelihood of customer conversion and retention.