# LAB 1 PROTOCOL: Homeostasis, Data Collection, and Data Analysis

This is the first lab in the series for a reason: If you engage with this lab it will allow you to frame the rest of the semester within the guiding concept for this course - homeostasis.

This lab is not as active as the future labs. There will be a lot more pre-lab reading than future labs. The reading is important to introduce you to concepts that you will be discussing as a class. Also, you will need to take the time to really internalize the concepts taught today in order to be successful in this course (and in your physiological education)

**Activity 1: Homeostasis**. Your professor will be leading a discussion on homeostasis which will include various examples of homeostasis and also what happens when homeostasis is not maintained. Please realize that you can choose to really jump in and actively take part in lab discussions and you will be rewarded with much deeper learning and understanding that you would if you just passively listen.

**Activity 2: Graphing.** Your professor will be leading a discussion of the two standard graphing variables: the Independent and Dependent Variables. You will need to really understand the relationship between these two variables in order to read graphs this week and to create graphs in Lab 2

**Activity 3: Recognizing and Avoiding Fallacious Reasoning.** You will watch and take notes on a movie about fallacious reasoning. You will need to be able to identify and avoid using this kind of reasoning in your research projects this semester.

**Activity 4: Circadian Rhythm.** Your professor will be leading a discussion on the physiological basis of an individual’s circadian rhythm. She/he will be introducing the POPS project and your first individual measurements that you will be recording between Lab 1 and Lab 2.

POPS PROJECT:

This first measurement of your own physiological parameters will require you to record both quantitative and qualitative data. Make sure to be as accurate and specific as possible for both types of data.

For the next 4 days you must keep track of when you go to sleep and when you wake up. In addition, if you have any sleep disruptions please note the duration and cause of those as well. Take these times into account and figure the total sleep time

Also, please note if you have any time in the afternoons/evening in which you feel a “slump” – meaning that you are notably tired and craving a nap. Is this slump associated with eating or fasting times?