

## Homework Guidelines

### **Purpose of Homework**

Homework is meant to help *you*. We assign weekly homework so that you can test your own grasp of what we have covered in class. That will show you and us what you fully understand and what gaps there are, so that we can address this with you or with the whole class. You can collaborate with classmates, but we want to see ***your*** work.

We have split the homework up into small pieces, but that means there is something due twice or thrice a week. We hold you to deadlines and discourage late homework because you need to gauge your understanding at the time you are learning. This way, any misunderstandings can be cleared up before we move on to the next material, which will usually build on what we just did.

### **Grading Homework**

We grade homework on a scale of 0-5, focusing on how much you engaged with the assignment and its presentation, not on whether your final answers matched ours.

### **Answering a Calculation-type Question**

You don't have to write out the questions we assigned, but you must give your answer enough context so that we know what you mean; you cannot just write down a number or equation. Explain your notation and any ideas that you are using. Be explicit about your reasoning for your own sake, and so that we can comment on it. Sometimes this helps us clear up a problem you are having (probably our fault), and sometimes we learn a different way of looking at ideas based on what you write.

For instance, here is a question and how it should be answered:

*You are standing in front of a solid wall, and you clap your hands. The sound returns to you 0.6 seconds after you clapped. How far away is the wall?*

The distance the sound travels in its round trip is twice the distance to the wall ( $d$ ). The velocity of sound is 344 m/s. So,

$$\text{Distance} = \text{Velocity} \times \text{Time}$$

$$2 \times d = (344 \text{ m/s}) \times (0.6 \text{ s}) = 206 \text{ m}$$

The wall is  $d = 103 \text{ m}$  away.

### **Answering a Verbal Question**

Many questions require a short verbal answer. Your answer must be written in complete sentences, not just a few words. Again, contextualize your answer so we can tell what question you are answering. That will help you, too.

### **Response to Reading**

We will often ask you to respond to what you read, often asking about what struck you as engaging or puzzling. Give us useful feedback so we know when you want a fuller explanation or you see an area of interest that we should explore in class.