

# Taking Notes

## for problem-based courses

Use the first three steps of the study cycle (Preview, Attend, and Review) as a guide for taking effective and efficient notes in class.

### Preview

Preview material before class. Consider creating a reference sheet with guiding information:

- General outline of the materials
- Key terms and equations
- Learning objectives

This helps you understand what is spoken aloud in class, take faster notes, make fewer mistakes, and remember how the information is organized.

Learn the language of the course.

For example, in a math class you should work to know which symbols indicate variables, constants, operators, or other important notations. In a chemistry class, this might include learning key prefixes/suffixes and how they will be used, like nitric/nitrate and nitrous/nitrite.

### Attend

Take handwritten notes. When you take notes, use the fastest method available. Often, this means taking handwritten notes since it can be time-consuming to type equations or other symbols. Handwriting notes can also make it easier to include a quick sketch of a diagram, chart, graph, or other visual example from class.

Pay particular attention to the process of solving problems.

- Focus on capturing explanations and causes as you copy steps to solving example problems.
- Listen for critical thinking cues from the instructor like *why* and *how*.
- Work to be able to explain concepts or processes using logic and words, not only in numbers or steps.
- Take note about how to identify different types of problems. For example:
  - In math, what makes an exponential function different than a logarithmic function or a linear function? How do the equations and graphs differ?
  - In chemistry, what is the difference between dilution and titration? Do you need unit conversions?

### Review

As soon as you can, spend 5–10 minutes reviewing your notes.

- Connect concepts to learning objectives.
- Add additional highlights, markers, notes, or explanations.

Ask yourself questions. What's the clearest topic? What topic is unclear? What blanks or gaps will you fill in when you read the textbook? What's the first question to ask when you get to tutoring, SI, or office hours? Later, this will help you quickly pick up where you left off.

