Tips for Math and Science Classes

- Pre-read the assigned reading before each lesson/class as a warm-up. Get a general idea of what the class will cover and become familiar with content, but don’t worry about trying to understand everything during pre-reading.

- Write a question mark (?) next to or highlight anything you don’t understand. Go to professor office hours or tutoring to get your questions answered.

- Start your homework the same day as the lesson. Do all the homework problems—not just some of them! Practice the problems every day until you understand the underlying principles. Practice makes permanent (in memory).

- It is important to understand the concepts and not just memorize in these subjects. Get tutoring to help you with this and find ways to apply the information and not just recite it.

- It is okay to feel anxiety. Practice and engage with material more to desensitize you to the anxiety.

- Write down every step of the problem. Go back and check your work. Do not work all the same type of problems in a row—mix it up to help your understanding.

- Math and science concepts build. Missing a class puts you behind—go to every class.

- Review notes and assignments every day. These subjects are best learned in short, frequent study sessions. Indicate experiments and demonstrations in your notes.

- It is okay to hit a “knowledge wall”—it takes time to learn new information. You may even feel you go backwards. This is natural and means your mind is wrestling with material and will eventually move forward if you keep practicing. Try breaking complicated material down into its key elements or try to teach it to someone else to help you understand it. Also attempt to apply it to real-life situations.

- Add explanations and labels to diagrams, charts, and formulas. Don’t spend too much time copying the “artwork” of the diagram, but get the gist. Often these are found in your textbook. If your professor allows you to take photos with your phone, do that.

- Use flashcards to study notes. Organize and study symbols, formulas, and vocabulary. Write the term on the front and the description on the back and test yourself regularly. Form a study group and review together.

- Rework your notes after the class. Redraw all the structures, fill in blank spaces, or abbreviated material in your notes. Organize your notes and expand them. If your notes are messy the first time, going back and writing them out again neatly is also a good way to help you reinforce the material.

- Read the assigned lesson again after class and the lesson and then hide your notes and practice recalling the information without seeing it for deliberate memory retrieval practice.
- Study with the Pomodoro technique to lower your stress in timed situations for less test stress.

**Three-Column Method**
The three-column method of notetaking involves dividing the paper into three columns and recording different types of information in each column.

| Name of Lesson | | Course Name Date |
|----------------|-----------------|
| Key Words/Rules/Formulas | Examples/Problems | Explanations/Descriptions |

**Two-Column Method**
The two-column method divides the paper into two columns with a summary portion.

<table>
<thead>
<tr>
<th>Equations/Formulas</th>
<th>Descriptions, Worked Problems</th>
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</thead>
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Key Ideas/Summary