

If you have been admitted to Johns Hopkins, you have been academically successful in the past. You likely have preferred and effective methods for studying, but some of those techniques might not transfer easily to studying science. You might have to adjust and refine your studying techniques to meet the rigors of science course work at the college level. As you begin to study science and then eventually prepare to take the MCAT, we want to stress a few key points and offer some study techniques that may help you in your transition to studying science and serve as supplements to your current methods.

Successful scientific endeavor requires a tremendous attention to and command of detail.

Trying to master the sciences without memorizing any formulas or reactions is like trying to master a language without learning any vocabulary (remember: you will not have an equation sheet to refer to when you take the MCAT!). You need more than just the "big picture" to succeed. You will be asked to assimilate and retain vast quantities of information. As a result, **time management** and **attention to detail** will become extremely important skills, both now and in medical school. The strategies listed below have been effective for premedical students in the past, and you may wish to consider trying them.

Many premedical courses are taught in large lecture-style presentations, using textbooks to reinforce material. **The most important and relevant material is usually that which is explicitly covered and/or hinted at during the lecture.** An exam cannot include all of the material presented in class or available to you in the textbook. Your job is to determine, isolate, and focus on the most

to understand and remember concepts later on when studying. If you pay attention and take good notes, you should get a sense of the most relevant points made by the professor.

It is most effective to review your notes in the proximity to the day's lecture to be most effective. This doesn't take that long (20 to 30 minutes at the most) but can be very effective in using short-term memory to both reinforce and clarify concepts. Here are some helpful tips:

- Review your notes for a class on the **same day** that you took them.

- While going through a detailed reading of the text, simultaneously consult your lecture notes pertaining to that material. This will help you to focus on the most important points contained in the text using clues gathered from the lecture and class notes.

Reading the textbook should be an **interactive process**: class notes will guide you in determining which parts of a chapter you should study in detail and which you can skim or skip. **Examine charts, graphs, and illustrations**--these can prove to be some of the most valuable parts of a chapter, and can be very important in understanding material and preparing for exams. When appropriate, copy into your notes detailed explanations from the text that supplement or clarify points made in the lecture. Now is the time to use the blank spaces you left on each notebook page during lecture.

Students in science classes must also consider the following:

Solving Problems is more applicable to general chemistry, physics, and organic chemistry than biology. Working through problems based on the concepts you learn in lecture and in the texts provides a definitive test of your understanding. **This is especially important in physics.** If you can solve several randomly chosen exercises, then you have reason to feel confident in your understanding of the material.

Using Flashcards is an effective way to memorize equations and other bits of necessary information. It takes time to make the cards themselves, but again, you are reviewing the material even as you create a new study tool. The convenience of flashcards is unsurpassed: you can take a handful with you and use them in between classes, during free time, etc.

Study Review

Day of class

Prior to the next class

Insert selected notes back into textbook

s a v e d

Text Book

s p a c e

Solved Problems

Instructor Slides

Class notes

THE DAY BEFORE NOTES

Concepts:
- term memory
- one blanks
- lead of the lecture

Key Concepts:
- integration
- triangulation
- active learning
- command of detail

Once again prepare for the next class

Prepare for class

