Top 10 Strategies for Studying Biology



Concepts first, application and integration later

BIO is full of complex terminology that all works together. When looking at a diagram and seeing how all the different components and terms integrate, it can be extremely overwhelming. To make it less complicated, start with memorizing the terms first and learning what they mean, before you start applying them to problems and connecting them to other concepts. Flash cards are a really good way to help with memorization.

Use the diagrams and pictures from the textbook

Biology is full of illustrations and they can be really helpful when learning how all the different components of a cell work together. Redrawing, tracing, labeling, or printing out diagrams are all helpful when figuring out the application of each term.

The textbook should be used to fill in the gaps

Biology textbooks are extremely detailed and thorough. They will usually go more in depth than what the professor is requiring you to know. Use class materials like power points, handouts, and notes for your primary info, and use the textbook to fill in the areas you are unsure of. Use the highlighted definitions, diagrams, and examples listed in the margins. They also usually have great practice problems!

Use Mnemonics as memory aids

The number of terms that you will learn in biology is quite intimidating. Use popular biology Mnemonics that you can find online or create your own!

Use concept mapping

Concept mapping involves writing terms and connecting them to each other with arrows based off of how they apply to each other. These can be really helpful study techniques!

Utilize the internet

Biology can be difficult to understand when simply reading about it from a book. Don't be afraid to look up videos. CFAR has videos explaining some difficult topics in BIO. Khan Academy and YouTube can also be really useful for visual learners because there are often really colorful visuals, as well as fun explanations.

Practice tests

Practice, practice, practice. Your textbook will most likely have many practice problems that may even be similar to the types of questions you will see on an exam. Test yourself using these problems, as well as ones you can find online. Once you have finished taking your practice test, correct yourself, and then adjust your studying to focus on the areas you struggled with the most.

Studying with friends

Sometimes talking through concepts with others can be more useful than studying alone. Find others that are in your class and try to teach each other the information. Collaborate and see if they have any study methods you have never used before that you would like to implement!

Create your own study guide

This can help you to organize your notes in a way that makes sense to you. Even if a study guide is provided, writing one out yourself will help with memory retention, and you can use your own organizational system.

Review terminology after class

Reviewing in small pieces will make studying for an exam easier in the long run!



For more STEM resources, check out: unh.edu/cfar/stem-resources

