

Study Tips for Biology Online

Studying for biology classes is very different from studying for history or English classes. Strategies that worked well in those classes, may not work well here. Also, studying for online classes is quite different from studying for face-to-face classes. The following are study strategies that work particularly well for online biology classes. You probably won't have time to try all of these strategies, but pick a few that you think may help and try those. The key is to find as many different ways to work with the information that you are given.

Class Assignments & resources

- ❖ Start the assignments early. Some assignments may require more time than others. Also, you may have questions about the assignments and you'll want to have enough time to get those questions answered.
- ❖ Ask questions if anything in the assignment is unclear. Your instructors likely has a forum for questions – use it! Remember, the instructor is here to help you. One of the biggest mistakes made by online students is thinking they are on their own. The instructors are here to help – but we don't know you need help unless you ask.
- ❖ If the instructor has additional resources, be sure to look at them.
 - If there is an instructor video or written document – be sure to read it.
 - If there is a list of helpful web links – be sure to look at them.
 - If there are optional resources – don't skip them, these are often very helpful! Optional videos can be a very low-stress way to study. Just watching a video isn't difficult and doesn't take a lot of time, but it can help you understand the concepts.

Studying for the test

- ❖ Write your own test. If you had 20 (or 50, or 100) questions that you could ask about this information – what would you ask? What topics are the most important? How would you ask questions about each of these topics? Knowing what will be on a test is a difficult skill – but, with practice, you should be able to figure it out.
- ❖ Find a study group. Talk through the subject matter and make sure everyone understands it, or quiz each other. This is a great resource to make sure that you aren't misunderstanding the concepts.

- It can be difficult to form study groups online. However, ask the instructor if you can send an announcement asking for volunteers. Many students would benefit from this – they may just be waiting for someone else to take the lead.

Strategies for memory-based tests

The strategies below are particularly useful for topics that have a lot of vocabulary or names.

- ❖ Flashcards, an old favorite. The key to flashcards is to write VERY LITTLE on the card. Some students even cut the cards in half so they don't write too much on them.
 - Some tips for how to make good flashcards:
 - One side of the card should have 1 vocabulary word on it and the other side should have a definition or picture
 - Alternatively, you could write 1 question on the front side, and the answer on the back.
 - Some tips for using flashcards:
 - Make sure to study the flashcards in both directions (looking at the word and saying the definition, and looking at the definition and saying the word).
 - You may also want to practice looking at the definition and writing the word on a piece of paper. After all, you will be asked to WRITE the answer on a test not SAY the answer. (These are very different skills – being able to say a word does not mean you will be able to write it).
 - Keep them with you. Study them as you wait in line or as the microwave is going. The key here is – a little studying more often is better than a lot of studying for a short time.
 - Make piles with your flashcards. A pile for the information you know and a pile for the information you forgot. Then take the second pile and go through it again – and again, put the cards into 2 piles. This way you spend more time studying the cards that you are having a difficult time with.
- ❖ Make up stories about the information. For example "So Long To Pinky, Here Comes The Thumb" to help you remember the bones in the hand.
- ❖ Look for online quizzes.

- ❖ Photocopy pictures from the book (and remove the labels). Make ~5 copies of each picture. Hang these pictures all over your house (your family will have to deal with it!) As you walk by each picture label 1 thing on the picture. Next time you walk by it label something else. Soon you will have labeled most of the items on the picture. When you have 1 or 2 left – if you know them, label them – if you don't know them, study them.
- ❖ Get a coloring book. There are some very good coloring books on the market. They have coloring books for most of the topics you will study. These are a great resource, and a good way to learn certain material. Again, the key is a little at a time. Color one page over lunch, one as you are watching TV after dinner, etc.
 - If you can't afford a coloring book (they can be a bit pricey) - Photocopy or trace the pictures from the textbook – then color and label them. (Make a few copies of these pictures and remove the labels)

Study strategies for concept-based tests

These strategies work best for classes and topics that discuss processes.

- ❖ The following is a method to help you learn a difficult process (for example, if you have to learn all the steps of aerobic respiration). When you are comfortable with one of these steps, move on to the next level of difficulty.
 - Draw, trace, or photocopy a picture of the process from your book (remove the label). Write the vocabulary words that relate to the process on another sheet of paper (put the words in alphabetical order). Be able to put the right term in the right place on the picture.
 - Now try to label the picture without the terms in front of you.
 - Now look at the list of vocabulary words. Write a paragraph explaining the process.
 - Now take a blank sheet of paper and draw the picture from scratch, without any words in front of you. Label and color code the picture you have drawn.
 - Now take a blank sheet of paper and draw the process backwards. (Hey, why not!)
 - Ask yourself what if... What would happen if something went wrong with the first step of the process. What would happen if something went wrong with the second step of the process. Etc. Etc..

- ❖ Explain what you learned in class to your roommate or family member. Ask them if they understand what you have explained. Pretend you are the instructor – how would you present the information? (You may lose a few friends, but you will get a better grade – what are your priorities?) 😊. Einstein said: “You know you understand something when you can explain it to your grandmother”.
- Also try:
 - Explaining the process out-loud to yourself. Hearing it may help you remember.
 - Explain the process to a classmate and ask them for feedback.
 - Explain the process to your instructor. This way you can be sure that you didn't miss anything.

There are many other good study strategies. Talk to your classmates or teacher if you want more ideas.