



Strategies for Success in Science Test Taking

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Read the assigned text before class.

Note taking will be easier and you can spend more time listening to how the instructor explains the concepts. You may have already identified questions about the topic and are ready to ask them in class.

Throw away your highlighter.

People typically use highlighters in a mindless way. Read. Stop. Think. Write. Make brief but content rich notes, short lists, labeled diagrams, content maps, etc.

Take careful notes during class.

Don't try to write down every detail, but focus on main points (lists, figures, relationships). If you have read the material you are more likely to be able to appreciate the professor's explanation and identify the most important information. In fact, you should be able to predict some of the questions for an exam, based on points that are emphasized in the lecture.

Participate in class.

Ask questions and participate in discussions. This keeps you mentally engaged and can help identify what you understand well and areas for improvement. The instructor will be able to steer you in the correct direction if you interact. Also, your participation is usually greatly appreciated and duly noted in letters of evaluation in the future. Try to overcome a fear of giving an incorrect answer. If you have a question, likely so do many others in the class. Most professors appreciate your efforts at understanding the material and get clues for areas they need to explain more thoroughly.

Use the book and assigned readings to supplement your notes.

Read your notes and compare with the text so that you can correct definitions, add clarifications, or supplement figure details. Throw away your highlighter (see above). Now is the time to make certain you have precise definitions and understand the subtleties. Lecture notes are usually the primary basis for exams, so use them as guides for which sections of the textbook are most crucial.

Study in multiple small increments.

DON'T CRAM for the test. Either daily or weekly, go over your notes and the text. This helps you to develop a list of questions for office hours or class. Multiple exposure to concepts helps to cement them in your long-term memory. Most science builds on the initial concepts and you need to use them again later, often in other courses. Some students use flash cards or the quiz questions at the end of chapters. Remember that no one picks up a volleyball for the first time and goes to the Olympics the next week.

Go to office hours.

Take advantage of your professor's office hours to ask questions and to assure that you understand major concepts. If you were at a large university you would not likely have this opportunity! Use email or WEB CT to communicate quick questions while you're studying. Prepare a series of questions for your visit. Try to weed out questions you can answer yourself from the text, so that you can focus on more substantive ones in office hours. Go with a friend if you're too shy. Generally, lots of people in class have the same questions.

Keep up with homework and lab assignments.

Vague understanding leads to poor performance on essay and short answer exams.

Study with a group AFTER you've prepared.

Group study can't replace your own preparation. It's important that your group listens and questions your responses carefully. A group that accepts and reinforces incorrect, incomplete, or poor responses is WORSE than no studying! Vague understanding leads to poor performance on essay and short answer exams.

SLEEP!

Don't pull lots of all-nighters...Sleep deprivation impairs your memory and your test performance. In fact, sleep deprivation is a recognized (and prohibited by the Geneva Convention) form of torture! Use coffee, tea, and chocolate in moderation, but NO DRUGS.

Arrive on time for the exam and bring the correct accessories.

Bring a calculator, pencils, formula card if allowed, etc. No cell phones, iPods, Blackberries, etc. please.

Take a deep breath and relax.

Try to remain as relaxed as possible during the test so that you can perform at your peak. We all have some little ritual that relaxes us and sharpens our mental focus. Hide your baby blanket in your backpack, eat your favorite breakfast, wear a lucky shirt!

Look over the exam questions and budget your time.

Decide whether you want to tackle the hardest or easiest question first according to your personal style. DO NOT SPEND TOO MUCH TIME ON A SINGLE QUESTION. Pace yourself and allot enough time for each page.

READ THE QUESTION TWICE.

If you give a great answer to a question different from what the professor asked, you don't get any points! Particularly for a complex essay question or word problem, underline the most important points and make certain you address them. (Where, Why, How, Contrast, etc.) Jot down a rough outline on the side or a list of key words.

Be concise and precise. Answer the question and STOP.

Don't write down everything you know about a topic. The professor will think you don't really know the answer, and you are likely to point out your poor understanding during a 'mind dump'. Also, vague answers yield poor scores because they reflect poor understanding. **Use the correct terms and details.** Scientists are real sticklers for the proper usage of definitions, equations, and facts.

Determine the proper format for an answer. If a discussion is not required, then a phrase may be sufficient. A figure or labeled diagram may greatly enhance your answer and save time. Show your calculations.

If you don't understand a question, ask for clarification.

Point out the specific statement that you don't understand and perhaps ask for a restatement of the problem. State the question in your own words and ask the professor if you have clearly identified the question. However, don't just fish for an answer.

After the test, visit office hours for help.

Ask the professor for help understanding topics that you missed on the exam. Bring your notes and ask for tips on better studying for the next exam. Identify whether you have an understanding problem or

lack clarity in stating your answers. Ask for writing help, if you are misreading questions or if your answers don't address the questions adequately. Don't argue over little points and don't blame the professor or your study partners.

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