

Hints on How to Succeed in College Classes

The Key to Success: Study Time

The single most important key to success in any college course is to spend enough time studying. A rule of thumb is that you should expect to study about 2 to 3 hours per week *outside* of class for each unit of credit. For example, a student taking 15 credit hours should expect to spend 30 to 45 hours each week studying outside of class. Combined with time in class, this works out to a total of 45 to 60 hours spent on academic work—not much more than the time a typical job requires, and you get to choose your own hours. Of course, if you are working while you attend school, you will need to budget your time carefully.

As a rough guideline, your study time might be divided as shown in the table below. If you find that you are spending fewer hours than these guidelines suggest, you can probably improve your grade by studying longer. If you are spending more hours than these guidelines suggest, you may be studying inefficiently; in that case, you should talk to your instructor about how to study more effectively.

<i>If Your Course Is:</i>	<i>Time for Reading the Assigned Text (per week)</i>	<i>Time for Homework Assignments (per week)</i>	<i>Time for Review and Test Preparation (average per week)</i>	<i>Total Study Time (per week)</i>
<i>3 credits</i>	2 to 4 hours	2 to 3 hours	2 hours	6 to 9 hours
<i>4 credits</i>	3 to 5 hours	2 to 4 hours	3 hours	8 to 12 hours
<i>5 credits</i>	3 to 5 hours	3 to 6 hours	4 hours	10 to 15 hours

General Strategies for Studying

- Budget your time effectively. One or two hours each day is more effective, and far less painful, than studying all night before homework is due or before exams. *Note:* Research shows that it can be helpful to create a “personal contract” for your study time (or for any other personal commitment), in which you specify rewards you’ll give yourself for success and penalties you’ll assess for failings.
- Engage your brain. Learning is an active process, not a passive experience. Whether you are reading, listening to a lecture, or working on assignments, always make sure that your mind is actively engaged. If you find your mind drifting or falling asleep, make a conscious effort to revive yourself, or take a break if necessary.
- Don’t try to multitask. Research shows that human beings simply are not good at multitasking: When we attempt it, we do more poorly at all of the individual tasks. And in case you think you are an exception, the same research also shows that those people who believed they were best at multitasking were actually the worst! So when it is time to study, turn off your electronic devices, find a quiet spot, and give your work a focused effort of concentration. And if you are using a device to study (such as with an e-book or online homework), turn off e-mail, text, and other alerts so that they will not interrupt your concentration.
- Don’t miss class, and come prepared. Listening to lectures and participating in class activities and discussions is much more effective than reading someone else’s notes or watching a video later. Active participation will help you retain what you are learning. Also, be sure to complete any assigned reading *before* the class in which it will be discussed. This is crucial, since class sessions are designed to help reinforce key ideas from the reading.
- Use your textbook effectively. For a science book, for example: Begin by identifying the learning goals of an assigned chapter, and get an overview of key concepts by studying the illustrations and reading their captions. Next, read the chapter twice: On the first pass, read only the narrative, skipping any optional or boxed features; on the second pass, include the boxed features, and make notes on the pages to remind yourself of ideas you may want to review later. After you complete the reading, check your understanding by trying some of the end-of-chapter problems or any on-line quizzes or tutorials that may be available.
- Start your homework early. The more time you allow yourself, the easier it is to get help if you need it. If a concept gives you trouble, first try additional reading or studying beyond what has been assigned. If you are still having trouble, ask for help: You surely can find friends, peers, or teachers who will be glad to help you learn.
- Working together with friends can be valuable in helping you understand difficult concepts. However, be sure that you learn *with* your friends and do not become dependent on them.

Preparing for Exams

- Rework problems and other assignments; try additional questions to be sure you understand the concepts. Study your performance on assignments, quizzes, or exams from earlier in the term.
- Study your notes from classes, and reread relevant sections in your textbook. Pay attention to what your instructor expects you to know for an exam.
- Study individually *before* joining a study group with friends. Study groups are effective only if every individual comes prepared to contribute.
- Don't stay up too late before an exam. Don't eat a big meal within an hour of the exam (thinking is more difficult when blood is being diverted to the digestive system).
- Try to relax before and during the exam. If you have studied effectively, you are capable of doing well. Staying relaxed will help you think clearly.

Presenting Homework and Writing Assignments

All work that you turn in should be of *collegiate quality*: neat and easy to read, well organized, and demonstrating mastery of the subject matter. Future employers and teachers will expect this quality of work. Moreover, although submitting homework of collegiate quality requires “extra” effort, it serves two important purposes directly related to learning:

1. The effort you expend in organizing and clearly explaining your work solidifies your learning. In particular, research has shown that writing and speaking trigger different areas of your brain. By writing something down—even when you think you already understand it—you will reinforce your learning by involving other areas of your brain.
2. By making your work clear and self-contained (that is, making it a document that you can read without referring to the questions in the text), you will have a much more useful study guide when you review for a quiz or exam.

The following guidelines will help ensure that your assignments meet the standards of collegiate quality:

- Always use proper grammar, proper sentence and paragraph structure, and proper spelling. Do not use texting shorthand. And don't become over-reliant on spell checkers, which may miss “too two three mistakes, to.”
- All answers and other writing should be fully self-contained; that is, the question itself should be somehow “contained” in the answer. A good test is to imagine that a friend is reading your work and to ask yourself whether the friend would understand exactly what you are trying to say and why. It is also helpful to read your work out loud to yourself, making sure that it sounds clear and coherent.
- In problems that require calculation:
 - Be sure to *show your work* clearly. By doing so, both you and your instructor can follow the process you used to obtain an answer. Also, please use standard mathematical symbols, rather than “calculator-ese.” For example, show multiplication with the \times symbol (not with an asterisk), and write 10^5 , not $10^{\wedge}5$ or $10E5$.
 - *Word problems should have word answers.* That is, after you have completed any necessary calculations, any problem stated in words should be answered with one or more *complete sentences* that describe the point of the problem and the meaning of your solution.
 - *Units are crucial.* If your answer has units, be sure they are stated clearly. For example, if you are asked to calculate a distance, be sure you state whether your answer is in miles, kilometers, or some other distance unit.
 - Express your word answers in a way that would be *meaningful* to most people. For example, most people would find it more meaningful if you express a result of 720 hours as 1 month. Similarly, if a precise calculation yields an answer of 9,745,600 years, it may be more meaningful in words as “nearly 10 million years.”
- Include illustrations whenever they help explain your answer, and make sure your illustrations are neat clear, and labeled if necessary. For example, if you graph by hand, use a ruler to make straight lines. If you use software to make illustrations, be careful not to make them overly cluttered with unnecessary features.
- If you study with friends, be sure that you turn in your own work stated in your own words — you should avoid anything that might give even the *appearance* of possible academic dishonesty.