10 Tips for Science Courses

This sheet is a compilation of advice/tips from faculty members in the science departments as well as advice from students who have been successful in the sciences.

1. Make sure that you’re attending ALL lectures. Be on time. While in lecture listen, then write. It’s important to paraphrase, it will help to retain information more effectively.

2. “Don’t be afraid to ask questions in lecture/discussion because many other students are probably wondering the same question as you. If you don’t ask, the professor/TA will assume that you know the material and move on.”

3. “Study as you go along: This is the hardest thing for students to do because you have to be motivated to study the material as you go along in the course. Take 15-20 minutes to read over your notes or re-write your notes in a meaningful way so that you can prevent last minute cramming before an upcoming exam.”

4. Work the practice problems in the book, often those problems will be similar to the exam questions. Start with the problems that you already understand and then work up to the more difficult problems.

5. If the class requires quite a bit of memorization try utilizing flashcards and writing out the information. “Learn, practice, and understand the terminology. The sciences build on the previous knowledge. If you understand material from the previous class, the new information will make more sense.”

6. “Form study groups: Get together with people you know in class or people in your discussion sections to study. The best way to utilize a study group is to study on your own first, and then bring your knowledge to the group.”

7. “Figures matter! Don’t just glance over figures that are in the text or ones that professors put in their slides—they are there for a reason. Make sure you understand the figure and the text associated with it.”

8. “Compare notes from lecture and textbook. This is a great way to double check yourself if you have written things down correctly from class and to repeat the amount of times that you read/see what you have learned from class and the book. It will build your muscle memory and help you do well in the class.”

9. Seek guidance from professors and TAs. “This is YOUR education so make the most of it! If you don’t feel like asking questions in a large group setting, go to their office hours. They are not scary people, they want to help you, but you have to take initiative to ask for help.” Once there, ask your professors/TAs targeted questions. Questions such as, “how does this apply” or “help me understand why” are two questions that are GREAT to ask. Asking them how these scientific concepts apply in the real world will help you gain a better understanding of the content as well as help you remember it because the concept has a specific meaning. This will help you answer the, “why do I need to learn this?” question.

10. “Don’t just rely on one source, but utilize every academic resource on campus to make your college experience successful!”

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