

“What advice would you give to students starting your course?”

Advice for Aspiring Biological Scientists

There are many reasons to study a subject: perhaps you wish to get a particular job which requires it, perhaps you are unnaturally gifted in a particular field and wish to reach your full potential, perhaps you just enjoy learning.

This last reason is perhaps the most important, especially for those studying science. Our culture abounds with stereotypes of “mad” scientists: people who become obsessed with a particularly bizarre subject (like the effect of music on earthworms), people who devote their lives to building impossible machines, people who when faced with a terrifying monster or horrific diseases say “How fascinating” instead of running away. While often being humorous exaggerations, there is some truth in this depiction, in that the people who become scientists are passionate. We have to be, otherwise we wouldn’t be able to cope with the level of detail and mind-boggling concepts the sciences frequently involve. Hopefully, if you are planning to take a degree in biological sciences, then you have such passion. If you don’t then you will be bored and confused, and you will learn little.

Having placed emphasis on the importance of having this passion for science, this thirst for knowledge, my first piece of advice is to protect that passion. You need it to learn well, you need it to enjoy what you learn. If in a lecture, the lecturer mentions something not written in the slides, and your first thought is “I wonder if that will be on the exam” then clearly you have forgotten why you chose your degree in the first place.

So how do we prevent this? Well one thing to remember is that the lectures are not the entirety of your subject, they provide a basic skeleton of knowledge, an introduction to concepts. Try taking a look at some of the recommended textbooks sometime, you may be surprised at how easy they are to read. They have nice pictures and usually have far more real-world examples than can be covered in a single lecture. For example: If in a lecture you learn that insect cells independently decide gender as opposed to the hormonal system used by mammals, then that’s all well and good. But how much better is it to open a book and actually see a butterfly that is exactly half male and half female. The image stays long after the words have faded.

Similarly, if you have any questions after a lecture, catch the lecturer before they leave and ask them. Don’t let them escape! Will this annoy them? Actually, in my experience most lecturers enjoy these questions! Which makes sense, if you spend a large part of your life involved with a particular subject, it feels good to know that the people you are talking to share some of your interest. Also, don’t underestimate the benefit that this kind of one-to-one interaction has: You will concentrate better and remember more easily things which have been said in an actual conversation with someone, rather than if you’re just lazing around in the back of the lecture theatre, wondering what kind of pasta you’re going to have for tea (as a student you WILL eat a lot of pasta).

Coursework. It has to be done. But it doesn’t have to be painful. First thing to realise is that people are creatures of habit. I ate breakfast this morning. Why? Because I eat breakfast every morning. Habits are incredibly powerful tools, learn to use them. If you force yourself to work hard a few times, you get used to it and it becomes effortless. You may even learn to enjoy it, perverse as that may be.

Another important thing to remember if struggling with work is that the university exists to help you. For most of my life I assumed that either I could do something, or that I couldn’t and should give up. I failed to consider asking for help. Your teachers didn’t work everything out for themselves, and nor can you. So ask for lots of help, you really have nothing to lose by doing so,

and although sometimes you won't be given the answer directly, you will at least be guided very close to it.

Finally, a word about making the most of your social life while at university. One thing that I cannot stress enough is how good societies at university are. You make friends, learn skills, discover new interests, and it helps break up the week into bite-sized chunks. If you don't have at least one society every weekday evening then in my opinion you really aren't trying hard enough.

Also, it is probably a good idea to take part in at least one sport. Exercise will help you to deal with stress, which you will inevitably feel as deadlines close in. You don't have to play football or tennis or any of the other boring things, most universities have a wide range on offer. For those of us who are less keen on team sports there are things like martial arts, climbing, swimming, being a Viking. Besides, when else are you ever going to get the chance to play "Extreme Frisbee!" competitively?

So, in conclusion: Enjoy your subject, sneak extra knowledge from lecturers whenever you get the chance, make your habits work for you and not against you, ask for as much help as is humanly possible (seriously, there's no shame in it), and join a ridiculous number of societies including at least one sport. I hope you enjoy university and the study of biology as much as I have.