Your questions answered by current undergraduates

What should we do to prepare to start our physics degree? Should we just review A level notes, or should we also read ahead / read other things to prepare?

At my university the first module of 1st year was a lot of A Level physics and maths so I would suggest that you go over your previous notes. Read ahead if you would like, but you may not remember a lot of it especially with everything else going on in the 1st module.

Did any of you do Further Maths at A level? If so, did this help you in the first couple of years in university? Is it a significant disadvantage not to take Further Maths?

It was not a disadvantage for me, my university seemed to reteach the vast majority of Further Maths in 1st year so everybody was on the same page (but check the syllabus on your university website to see if this is the same at the uni you intend to go to).

Also, if possible, read up on Matrices and Complex Numbers :)

Visit this website for some good preparation:
https://isaacphysics.org/pages/university_preparation

How important is coding in Physics and did you struggle with learning the language?

At my university we did one module of Python coding and, after that, coding was not used too often for most modules. I do Theoretical Physics where coding is used a lot more (especially in labs), but they teach the coding to you slowly and in enough detail that it was easy enough to learn (there is a learning curve that could take longer for some to overcome, but at the end you will definitely be more confident in coding).

How many hours a week should an undergraduate study in order to be successful in exams?

There is no set time. Not only do people naturally need more or less time to understand topics, this time will vary from topic to topic. For example, I probably spent twice as long working on Quantum work rather than Maths modules even though it's the same amount of 'stuff'. Take as much time as you ned to understand a topic, but importantly make sure you're balancing work time with other social commitments.

What revision and notetaking techniques have you found useful and effective?

In 1st year you will always be evolving how you take notes. You will be tempted to write down every single word the lecturer says however, as you go through, you will start to summarise and write it in a way that suits you more. This happens in revision too, as other undergraduates have said, as you revise, you will begin to write less and less until they become flashcards. Use the revision techniques you used at A Level to start with, and over time you will change it to make it work better.

When you come across a physics concept that you don't understand, what do you do apart from asking a lecturer or friend?

Personally, I found YouTube videos really helpful. They will teach the same things as in the lecture but will explain it in a way that is different and could just make it 'click'. After that then you can research further into the topic once you understand it.

This site is also helpful: http://hyperphysics.phy-astr.gsu.edu/hbase/hframe.html

How useful did you find the library? How often did you use it?

I found myself using the library a lot more in 2nd year than 1st. It can be a really good place to be focused and study without distraction, but you have to make the effort to avoid distractions (phone away etc.).

Did anyone do work placement/work experience during your degree? How was it? Any advice?

In 1st year my only work experience was the job I did before uni (which is still good experience to have even without it being directly tied to physics). I applied for summer placements in 2nd year, and I eventually got one (but it was cancelled due to lockdown). My advice would be to build up your CV a bit by doing other stuff in 1st and 2nd year (volunteering, Rep roles) and then apply for a select few placements. Work hard and with your careers team / supervisor on a handful of placements you are really interested in, and that will give you a good chance of getting work experience.