

About this course

The purpose of this course is to cover – rapidly and lightly – material from A-level (or the equivalent) which is needed for other courses in the Tripos, in particular for the Lent term Dynamics and Relativity course. The lectures will be fairly informal and fairly short (about half an hour).

If you have taken M1, M2 and M3 (or the equivalent), you need not to come to the course: the material should all be familiar to you, but you are welcome to attend if you would like to refresh your memory.

If you have taken M1 and M2 but not M3, nearly all the material will be familiar: probably the only topics that you have not covered (probably because it depends on the your examination board) will be simple harmonic motion and motion in a circle – both pretty important. You might like to come along for the lectures that cover those topics.

Even if you have seen none of the material before, the course should not take a huge amount of your time.

Resources

The course consists of 14 lectures, each lasting roughly 1/2 an hour. In each lecture, I will cover a single topic according to the timetable circulated. I am taking the course over from the previous lecturer, Dr Siklos. His website for previous years is

www.damtp.cam.ac.uk/user/stcs/mechanics.html

I do not plan to deviate very much from what he did. In the event that the timing ends up being a little different, I will update the timetable on my website (I have already made minor changes)

www.damtp.cam.ac.uk/user/wingate/Mechanics

Dr Siklos has provided short examples sheets for the lectures. The examples are all relatively straightforward; they will test fundamental understanding and will not require you to do a great deal of manipulation or perform STEP-like acrobatics. If you have already covered the topic at school, you should have no difficulty with the examples; if you do find difficulty with them, you should attend the relevant lecture. The sheets and solutions also appear on his website.