

Weekly Problems – Instructions for Students 2019/20

You are required to do homework problems set on the content of the lecture courses you are taking. Whilst this work is not formally assessed, it is nevertheless compulsory. The schedule for the individual lecture course components within the modules is detailed overleaf. The weekly problems will normally relate to the content of the recent lectures but may sometimes rely on material not explicitly covered in lectures.

The problems will be made available week-by-week electronically in pdf via the Weekly Problems area of the Physics Student Portal at <https://teaching.physics.dur.ac.uk/> – this system can also be reached via the “Assignments” section of the individual courses in duo. It is your own responsibility to download the questions – they will not routinely be issued on paper and you should not assume that individual lecturers will remind you during their lectures. **You are not required to submit your work for formal assessment**, via the weekly problems post box or otherwise, and should not attempt to do so.

Problems are published on Fridays and you have ten days in which to complete each problem and to submit your self-assessment online, prior to the relevant workshop. The model solutions will become available on Fridays at 2.00 p.m., one week after the questions, via the same Physics Student Portal. **You are required to self-assess your work and to enter your self-assessment via the Physics Student Portal.** The self-assessment facility will become available at the same time as the model solutions (Friday at 2.00 p.m.). In order to gain maximum benefit, you are expected to submit your self-assessment in advance of your workshop in the week following the publication of the model solution, and preferably by 2.00 p.m. on the Monday (ten days after the question was released), hence the ‘completion deadline’ indicated on the schedule overleaf. The absolute deadline for submission of your self-assessment is 2.00 p.m. on the Friday (two weeks after the question was released). If there is a good reason, such as illness, why you will not be able to complete the work in a particular week then you must arrange for a ‘self-certification’ form to be forwarded to the Department by your College.

When you submit your self-assessment, you will enter ‘Successful’, ‘Partially successful’ or ‘Unsuccessful’, depending on how completely and correctly you answered the question. There are no strict rules about this; use your judgement, with the model solution to guide you. In particular, there is no rule saying that you must get every part of the problem perfectly correct in order to regard yourself as being ‘successful’. (You may wish to ask another student to peer-assess your work instead; some students find this approach educationally useful, but it is entirely up to you.) Please try to be honest. (Whilst the Department will take this information into consideration when monitoring your academic progress, if you enter dishonest self-assessments then the only person you will be cheating is yourself. Entering honest information will also enable your academic adviser to provide useful academic advice and, if appropriate, to direct you to sources of further support.) You will also be invited to enter some text comments; these comments (anonymised) will be read by the lecturer and workshop supervisors each week and will help them to gauge how well students are coping with the course and to give suitable and useful feedback in the workshops. We hope that entering comments will also help you to think about how well you understood the subject matter, and will act as a useful aide-memoire for you later.

You should use the published model solutions to resolve points of misunderstanding. In addition, the workshops provide the opportunity to seek additional, verbal, feedback on your work from the workshop supervisors and demonstrators, and you are strongly encouraged to take advantage of this. For example, you may have obtained the ‘right’ (or ‘wrong’) answer but be unsure *why*, or you may wish to ask about alternative approaches to the problem, or to clarify conceptual points.

Weekly Problems Schedule 2019-20
Level 2

Publication date	Students' completion deadline ¹	Module					Problem set number
(Friday 14:00)	(Monday 14:00)	PHYS2581 Foundations 2A	PHYS2591 Foundations 2B†	PHYS2611 Maths Methods	PHYS2621 Stars & Galaxies	PHYS2631 Theoretical Physics 2	
11-Oct	21-Oct	QM2.1	Th.1	MM1.1	OT.1	CM.1	1
18-Oct	28-Oct	QM2.2	Th.2	MM1.2	OT.2	CM.2	2
25-Oct	04-Nov	QM2.3	Th.3	MM1.3	OT.3	CM.3	3
01-Nov	11-Nov	QM2.4	Th.4	MM1.4	OT.4	CM.4	4
08-Nov	18-Nov	**	**	**	**	**	
15-Nov	25-Nov	QM2.5	Th.5	MM1.5	S.1	CM.5	5
22-Nov	02-Dec	QM2.6	CMP.1	MM1.6	S.2	CM.6	6
29-Nov	09-Dec	QM2.7	CMP.2	MM1.7	S.3	CM.7	7
06-Dec	16-Dec	QM2.8		MM1.8		CM.8	8a
10-Jan	20-Jan		CMP.3		S.4		8b
17-Jan	27-Jan	EM.1	CMP.4	MM2.1	S.5	QT2.1	9
24-Jan	03-Feb	EM.2	CMP.5	MM2.2	S.6	QT2.2	10
31-Jan	10-Feb	EM.3	Op.1	MM2.3	S.7	QT2.3	11
07-Feb	17-Feb	EM.4	Op.2	MM2.4	GA.1	QT2.4	12
14-Feb	24-Feb	**	**	**	**	**	
21-Feb	02-Mar	EM.5	Op.3	MM2.5	GA.2	QT2.5	13
28-Feb	09-Mar	EM.6	Op.4	MM2.6	GA.3	QT2.6	14
06-Mar	16-Mar	EM.7	Op.5	MM2.7	GA.4	QT2.7	15
		¹ You should take your solutions to your workshop which falls in the same calendar week as the 'deadline' indicated. Please submit your self-assessment prior to the relevant workshop.					
		† Also applies to PHYS3671 Foundations of Physics 3C					
		** Progress tests in weeks 6 and 16 – fewer problems set.					
	Key:	Course		Lecturer			
	CM	Classical Mechanics		Eke			
	CMP	Condensed Matter Physics		Hatton			
	EM	Electromagnetism		Hampshire			
	GA	Galactic Astronomy		Theuns			
	MM1	Maths Methods part 1		Zambon			
	MM2	Maths Methods part 2		Testrow			
	Op	Optics		Jones			
	OT	Observational Techniques		Swinbank			
	QM2	Quantum Mechanics 2		Cole			
	QT2	Quantum Theory 2		Potvliege			
	S	Stars		Alexander			
	Th	Thermodynamics		Swift			
	Note:	The Department reserves the right to make changes to the above schedule at short notice, as circumstances dictate.					