



MAS348 From Classical Dynamics to Quantum Theory
Course Information (Sept. 2007) Fall 2007

Lecturer: Dr. Rainer Klages **Office:** B12 **Email:** r.klages@qmul.ac.uk

Office Hours: Monday 13.30-14.30, Thursday 16.30-17.30

Lectures: Monday 16.00-17.00 Maths G2
Thursday 15.00-16.00 *Queen's bldg. FB1 (basement)*
Friday 16.00-17.00 *Physics PLG1*

Exercise Class: Monday 15.00-16.00 Maths G2

Note the change of rooms for Thu/Fri!

Further Course Information: Please check out the course webpage on

www.maths.qmul.ac.uk/~klages/MAS348

This is a new 3rd year course, which replaces the old MAS217 Quantum Theory. Students who have already taken MAS217 are *not* allowed to take MAS348!

Literature: There will be no lecture notes on the web, so please take course notes yourself. They should be sufficient for your studies. However, for further details you may wish to look into the following books, which are available in the library's short loan collection:

1. Alastair I. M. Rae, *Quantum mechanics* (The Institute of Physics, 2002), Chapters 1 - 5 (short account of quantum theory)
2. Brian H. Bransden, Charles Jean Joachain, *Quantum mechanics* (Prentice Hall, 2000), Chapters 1 - 7 (more details)
3. Michael A. Morrison, *Understanding Quantum Physics: A User's Manual* (Prentice Hall, 1990) (recommended if you have trouble with the material presented in the lectures and need a very detailed presentation)

Preknowledge in physics is helpful but not necessary. All the physics you need to know will be explained in this course.

Coursework regulations: Coursework will be handed out in the Friday lecture. You can also find it on the course webpage.

The corresponding exercise classes will take place on the ensuing Mondays *except* on 24/09, 8/10 and in the midterm week on 5/11. Your solutions must be handed in *at the beginning of the lectures shown in the table below*. Late work will not receive a mark. Copied work will be penalized.

Marked coursework will be given back to you in the exercise classes. Model solutions will be made available on the course webpage.

Not all of your coursework will be marked. Instead, I will mark a representative subset of questions. Usually I will mark around 30-50% of all questions and then scale the total mark of your coursework solutions according to the maximum of 100 marks. The questions I chose will be indicated on the model solutions by circled **m**'s.

Important: For your final mark, all 5 coursework sheets will count. Students failing to hand at least 3 coursework solutions will be de-registered from this course. A mark of below 10 points constitutes a non-serious coursework submission.

If you miss handing in a coursework, you should fill in a copy of the Missed In-Term Assessment Report Form (available from the web at www.maths.qmw.ac.uk/undergraduate/handbook/, or from the Undergraduate Studies Handbook) and give it to the Pastoral Tutor (Prof. Rosemary Bailey, Room 317).

Dates for Assignments:	Assignment	hand out	hand in
	1	5/10	19/10
	2	19/10	2/11
	3	2/11	16/11
	4	16/11	30/11
	5	30/11	13/12 (Thu!)

Assessment and Examination:

Total credit for this course will be based on the following components:

- (1) Exercise sheets (10%)
- (2) Final written exam, probably in May (90%)

There is no midterm test for this course.