

MTH4100  
Preparing for your Calculus 1 exam

Calculus 1  
year 2008/2009

- Your Calculus 1 exam takes place on

**11 May 2009 from 10-12am**

in both the Great Hall Queen's Building and in the Octagon. *Please check out your personal exam timetable for the room to which you are assigned to!*

- Work yourself through the four sample exams from the previous two years 2007 and 2008, which are all available on the course webpage. The *structure* of the 2009 exam paper will be exactly the same. Although, of course, the *individual problems* will be different, you will thus get a very good idea about what kind of questions you can expect.
- Model solutions for these exam papers are available as follows:

exam	model solution
First sit exam 2008	Almost all solutions to these exam questions are contained in the coursework model solutions and in the lecture notes, which are all available on the course webpage. This should encourage you to study coursework questions and lecture notes!
Late summer resit exam 2008	The solution to this exam will be discussed in a revision class, please see below for details.
First sit exam 2007	The full model solution is available on the course webpage.
Late summer resit exam 2007	Some solutions to these exam questions are contained in the coursework model solutions and in the lecture notes, which are all available on the course webpage. This sample exam is for students who want to test the 'real thing' without being pampered by model solutions.

- If you have any specific question on previous exam problems, please come to see me during my office hours. However, I then expect to see a written attempt from you of how you have tried to solve the respective sample exam.
- Note that Calculus 1 exams earlier than 2007 (denoted by MAS101), which are available on the College's exam papers home page, are different from the ones of 2007/2008 (denoted by MAS115), because the format of this module has changed in 2005/2006. That is, for the 2009 exam only the 2007/2008 exams mentioned above are representative, and it will fully suffice to study these.
- Section 1 of the exam paper is pretty much like a shortened version of the in-term test that you have sat, except that now you have to do it on paper. You should be able to work through this section in at most 45 minutes, leaving you with plenty of time for the rest of the paper.

- The remaining questions test skills as they have been practiced in the exercise classes. You will have to do things like
  - apply calculus, for instance to do curve sketching, to compute areas, find tangents to curves, and so on
  - state definitions and apply them meaningfully
  - state theorems and be able to work with them
- Show that you understand what you are doing! For example, if you are computing an area and your answer is negative, make it clear that you realise that your result must be wrong (this may earn you partial marks).
- If you are aiming at a *bare pass* (40 marks), practice at least on the four sample exams. You will be *ideally prepared* for the exam (perhaps aiming at at least 70 marks for an A) if in addition you review
  1. all your Calculus 1 online coursework and the midterm test, including the voluntary exercise 11
  2. all the problems covered in the exercise classes
  3. all material covered by the lecture notes, including reading assignments.

The exam will only be on material covered by the above three items. If you want to know which sections of the textbook have been taught in this course, please see the frontpage of all the lecture notes as they are available on the course webpage, where this is stated for each week.

- Calculators will not be allowed for the exam. No tables of integrals will be available or allowed, nor will they be necessary for solving the exam questions.
- About 20% of the Calculus 1 students haven't done any homework. These students will be in big trouble for the exam, which counts 80% towards your final mark for this course. If you belong to this fraction of students, it is high time to do your job **NOW!** Students failing more than 3 modules will not progress into the second year.
- In order to prepare for the Calculus 1 exam, a **revision class** will take place on **Friday, March 27 from 4-6pm in Skeel Lecture Theatre**, People's Palace. In this lecture we will solve the late summer resit exam 2008 as an example. Please note: Model solutions for this exam will not be made available by me - come to the revision lecture if you are interested in the solution!
- **My office hours:** I will be out of office from March 30 until April 13. In *urgent* cases (and *only* in urgent cases!) I can be reached via e-mail during that time: r.klages@qmul.ac.uk. From April 14 until May 10 I will have office hours on **Tuesdays and Thursdays from 2.30-4pm** unless stated otherwise. Please check out my homepage for any latest update about my office hours.
- **Please note:** More information on this exam than provided in these notes and on the course webpage *will not be given out to students!* Particularly, I will not give specific exam hints to single students via e-mail or otherwise. This would not be fair towards all the other students.

Good luck!

26th March 2009

*Rainer Klages*