

## MATH549 MAPLE AND L<sup>A</sup>T<sub>E</sub>X PRACTICAL ARRANGEMENTS

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### OUTLINE ARRANGEMENTS

The arrangements for this module are complicated by the fact that there are three different groups of students taking it, each with its own assessment arrangements: Ph.D. students, M.Sc. students, and M.Math students. There are therefore separate sections at the end of this handout describing the arrangements for each group.

The taught part of this module consists of computer workshops, which take place in room 302, each Wednesday afternoon in the first six weeks of term (so the first will be on 1<sup>st</sup> October and the last on 5<sup>th</sup> November). The first three of these will be devoted to the (mathematical) typesetting system L<sup>A</sup>T<sub>E</sub>X, and the other three to the computer algebra package Maple. There will be an exercise sheet to work through in each workshop: both I and my assistant, Freddie Exall, will be on hand to help you with any difficulties you may have. You are also welcome to contact me for additional help at other times.

The exercise sheets will be available in advance on the website for this module, which is <http://www.liv.ac.uk/~tobyhall/latex/>. I encourage you to start work on them before the relevant workshops if you are able to. The website also contains a variety of other information and links which may be useful to you, and I recommend that you bookmark it and visit it from time to time.

As you go through each exercise sheet, you will create one or more files: these should be emailed to me by the deadline for the sheet, which will be the Monday following the workshop (precise submission instructions will be given at the end of each sheet). If you submit your work by 5pm that day, then I will be able to return it to you and comment on it at the following workshop; if you submit later, then I will probably eventually mark your work, but make no promises as to when...

### ROOM 302 ETIQUETTE

The computers in room 302 are a common resource for everyone in the department. Please keep to the following simple rules so that they remain in a good state:

- Please don't install any software on any of the machines except what is available on the **Install** menu. If there's some software that you need for your work, please ask Steve Downing ([steved@liv.ac.uk](mailto:steved@liv.ac.uk)) to install it for you.
- Please don't delete any of the desktop shortcuts.
- Please read and follow the instructions in the various notices in the room. In particular, please note that the facilities in room 302 are for Staff and Postgraduate Students in the Department of Mathematical Sciences only. **Please don't give anyone else "permission" to use the room. If you do, you can be barred from using all departmental computer resources, with no second chances. Please don't give the door code to *anyone* outside the department.** There have been real problems in this regard in

the past, and if they recur then access to the room will have to be made more restrictive for everybody.

## SOFTWARE

**L<sup>A</sup>T<sub>E</sub>X.** L<sup>A</sup>T<sub>E</sub>X is free software, as are other associated programs that you will be using (T<sub>E</sub>XShell, Ghostview, etc.). To make it easier for you to install it on your own PCs, I have prepared an installation CD and installation instructions - please ask me if you'd like to borrow these.

**Maple.** Maple, on the other hand, is a commercial product: unless you're prepared to pay a substantial amount of money, you will therefore be limited to using it on the computers in the Departmental and University computer centres.

## ARRANGEMENTS FOR PARTICULAR GROUPS OF STUDENTS

**Ph.D. students.** You are doing the taught part of this module as part of the "Key Skills" requirement of your Ph.D. In order to get credit for having done the module, you must:

- Attend all of the workshops, unless there is a good reason (e.g. sickness) why you're unable to do so. If you can't attend a workshop, please let me know in advance if at all possible.
- Submit reasonable attempts to all of the exercise sheets.

**M.Sc. students.** The taught part of this module is designed to prepare you for your Maple-L<sup>A</sup>T<sub>E</sub>X project, which you will do in the final six weeks of the semester. This project must involve a substantial amount of Maple programming, and must be written in L<sup>A</sup>T<sub>E</sub>X. I will circulate further details of the project requirements, together with a list of supervisors and the topics they offer, as soon as I can – hopefully by the end of week 3.

Your mark in this module will be based entirely on your project (40% is for the Maple programs, 30% for the quality of L<sup>A</sup>T<sub>E</sub>X typesetting, and 30% for the mathematical content). Thus there is no formal requirement for you to attend the workshops or submit the exercise sheets, although it will of course be beneficial for you to do so. (The only circumstance in which attendance and submission may affect your final mark is if the "raw" mark for your project is just below a borderline, and your case is discussed at the examiners' meeting. If this happens, the case for you to be raised above the borderline is unlikely to be considered sympathetically if you've clearly made no effort in the taught part of the module.)

**M.Math students.** The L<sup>A</sup>T<sub>E</sub>X component of the taught part of this module is offered as a service to you, to help you when you come to write your M.Math project (which must be in L<sup>A</sup>T<sub>E</sub>X). I will keep no record of your attendance or your performance in submitted work, and hence this will have no direct effect on your mark for your project.

If too many M.Math students wish to attend the workshops, there may not be enough space in room 302. In this case special arrangements will have to be made.

You are, of course, welcome to do the Maple part of the module as well provided that there is space to accommodate you in room 302.