

University of Manchester School of Mathematics

Graduate Teaching Assistant teaching and other work in the School

1. Introduction

The School of Mathematics employs research students to assist the work of the School in the following ways:

- a) assisting an academic member of staff in an examples class;
- b) taking responsibility for running a class, either a first year supervision class for Mathematics students or a tutorial class for students in other schools;
- c) working in the Faculty Mathematics Resource Centre;
- d) acting as a demonstrator in a computing class
- e) the marking of students' work including assessed coursework;
- f) assisting in the marking of level 1 examinations
- g) assisting at certain other activities such as visiting days for applicants or events for local schools.

Students on taught postgraduate programmes are not normally employed to undertake these tasks.

This document sets out what is expected by the School of students who undertake this work. It also sets out what support students can expect in undertaking the work. The School believes that involvement in the undergraduate teaching is an important part of the education of research students and expects research students to participate.

2. Assisting at examples classes

2.1. Course material. It is the responsibility of the course lecturer to provide research students with copies of the relevant problems sheets and solutions sheets in advance of each class and any other information research students need in order to provide appropriate advice to students. If the lecturer fails to do this then research students should contact the lecturer to obtain the material.

2.2. Preparation. It is expected that research students will undertake appropriate preparation for examples classes so that they are in a position to assist students. This will include reading through the problems and solutions in advance of the class seeking to identify areas where students may have difficulty. The requirements of classes at different levels, although different, are considered to be equally demanding: while the difficulty of the material may be greater for higher level classes, the number of students is usually lower and the students are more experienced in studying University level mathematics; for lower level classes it is necessary to spend more time considering how material should be presented. Research students may find it helpful to discuss the course material with the member of staff responsible for the class at the beginning of the class so that any particular important points or difficulties can be brought to their attention.

2.3. Work during the class. The staff member responsible for the class has overall responsibility for the conduct of the class (and may decide, for example, to spend some of the class time working with the class collectively addressing common problems). Research students are accountable to the staff member for their work.

During the examples class, research students should respond to queries from students and/or groups of students but also be proactive in approaching students to ask how they are getting on with the course unit and in particular with the problems sheets. They should encourage the students and not be dismissive of their efforts even if they are finding the material difficult or are a long way behind in their work. It is usually most helpful when a student is having difficulty with a problem to suggest an approach or give a hint. It can be useful to ask to look at a student's notes in order to help the student find material in the lectures which is relevant to the problem or even for a similar example. Having given the hint it can be useful to leave the student and return a bit later to see how the student is progressing and if necessary to provide further help.

2.4. Liaising with the member of staff. Research students should inform the staff member responsible for the class of common difficulties which they encounter or of students who appear to be in particular difficulties. If they are unable to deal with a student query they should ask the member of staff for assistance.

2.5. Administration. The research student may be asked to assist with the keeping of records of students' attendance.

3. Taking responsibility for a class

3.1. Course material. It is the responsibility of the course lecturer to provide research students with copies of the relevant problems sheets and solutions sheets in advance of each class and any other information research students need in order to provide appropriate advice to students. If the lecturer fails to do this then research students should contact the lecturer to obtain the material.

3.2. Preparation. Research students will undertake appropriate preparation for the class. This will include reading through any course material provided in advance of the class seeking to identify areas where students may have difficulty. If students hand in work for marking as part of their preparation for the class then this work should be marked so that it can be returned to the students at the class. Common errors can be discussed in the class. It will be necessary to have an idea of which material is to be covered in the class but it will be necessary to be flexible in the running of the class depending on the needs of the students. In case of uncertainty the research student should contact the course lecturer for advice and the lecturer should be ready to provide such advice.

3.3. Work during the class. During the class, it is important to try and involve each of the students in the class and to encourage the students. The time will usually be spent on problems or course material which most of the students are finding difficult and ideally the class tutor will provide just enough help to enable students to work through the problem as a group. There may be some students in the class who are finding the material more difficult than others and their needs should not be forgotten. It can be useful to get students who have a better understanding to explain material to others.

3.4. Liaising with the course lecturer. Research students should provide feedback as required to the course lecturer on how the students are coping with the course

material. If students are having any particular problems with the material the lecturer should be alerted to this.

3.5. Administration. The research student should keep attendance records as required.

4. Working in the Faculty Mathematics Resource Centre

There is a new facility set up to support students in other schools with their mathematics. Research students will be employed to work in the centre dealing with queries from students who call in. Questions might be on a variety of mathematical topics but it is expected that most will be on elementary material.

5. Demonstrating in a Computing Class

5.1 Course material. It is the responsibility of the course leader to provide research students with copies of any course material for the class in advance of each class. If the lecturer fails to do this then research students should contact the lecturer to obtain the material.

5.2. Preparation. It is expected that research students will undertake appropriate preparation for the class so that they are in a position to assist students. This will include reading through any course material. They might find it useful to discuss the course material with the member of staff responsible for the class at the beginning of the class so that any particular important points or difficulties can be brought to their attention.

5.3. Work during the class. The staff member responsible for the class has overall responsibility for the conduct of the class (and may decide, for example, to spend some of the class time working with the class collectively addressing problems). Research students are accountable to the staff member for their work. During the class, research students should respond to queries from students and/or groups of students to ask how they are getting on with the class activity. It may be helpful to show the student how they could have found the answer to a query rather than simply giving the answer. Giving a hint, leaving the student and returning a bit later to see how the student is progressing may be a good approach.

5.4. Liaising with the member of staff. Research students should inform the staff member responsible for the class of common difficulties which they encounter or of students who appear to be in particular difficulties. If they are unable to deal with a student query they should ask the member of staff for assistance. The staff member responsible for the class has overall responsibility for the conduct of the class and may decide to spend some of the class time working with the class collectively.

5.5 Administration. The research student may be asked to assist with the keeping of records of students' attendance.

6. Marking of work including assessed coursework

6.1. Course material. It is the responsibility of the course lecturer to provide research students with copies of the problems and solutions, together with a marking scheme if the work is to be marked for assessment. If the lecturer fails to do this then research students should contact the lecturer to obtain the material.

6.2. Marking the work. When the work is marked there should be clear indications to the student why any marks have been deducted. Where errors are made students should be given an indication of the nature of the error. References to the solution sheet which the student will receive in due course can be useful.

6.3. Liaising with the member of staff. If the work is for assessment, the final responsibility for the marks awarded to the students and the quality of the feedback lies with the course lecturer. The lecturer should monitor the quality of the marking and, unless there is a very clear marking scheme, will probably find it helpful to check a small number of marked scripts at an early stage to check the standard of the marking. Research students should inform the staff member responsible for the class of common difficulties which they encounter or of students who appear to be in particular difficulties. If the research student is unsure about the mark to award for a particular piece of work, this should be set aside and brought to the attention of the course lecturer.

6.4. Administration. The research student keep records of the marked work as required.

7. Marking of examinations

7.1. Course material. It is the responsibility of the course lecturer to provide research students with copies of the examination and solutions, together with the marking scheme. The lecturer should make sure that the research student is aware of the School requirements in handling the scripts and indicating the marks.

7.2. Course material. When the work is marked there should be clear indications why any marks have been awarded or deducted.

7.3. Liaising with the member of staff. The final responsibility for the marks awarded lies with the course examiner. The examiner should monitor the quality of the marking and will probably find it helpful to check a small number of marked scripts at an early stage to check the quality and standard of the marking. If the research student is unsure about the mark to award a particular piece of work, this should be set aside and brought to the attention of the examiner.

7.4. Administration. The research student should prepare mark lists as required.

8. Assisting with School Activities

Research students provide assistance in the hosting of Visiting Days for applicants and events arranged for local schools and colleges. The research student will need to ensure that they know from the person running the activity what is expected of them.

They should normally be expected to be proactive in engaging with the participants in the event.

9. Training

Research students undertaking teaching duties are expected to undertake the Graduate Teaching Assistant Training course at the first opportunity. Details of the training can be found at

<http://www.graduatededucation.eps.manchester.ac.uk/graddev/devworkshop/rs/demonstrator/index.html>

10. Assigning work

At the beginning of each semester Research Students will be asked to return to the School Administration a form indicating which duties in §1 they are interested in undertaking. Work will then be assigned by the administrative staff. Certain activities ((b) and (f) in §1) will normally only be assigned to more experienced research students and in some cases research students will be approached to undertake one of these tasks.

During the semester the need for research student support will be re-assessed from time to time and research students will only be employed to teach in a particular class so long as the number of students attending and the organization of the class warrant it.

11. Monitoring and claiming for work carried out.

Research students claim for work carried out at the end of each month on a standard form. It is necessary for the member of staff responsible for the activity to sign the form confirming that the work has been done.

Payment will not be made until any required attendance lists have been returned to the Teaching and Learning Office.

12. Payment

The University has a standard rate (at present £13.02 per hour) for payment of research students who act as “demonstrator” or undertake marking duties. However the School recognises that our expectations of the contribution of research students in some of the tasks listed in §1 is somewhat greater than the University normally expects of students who act as demonstrators in laboratory classes. In view of this students are paid above the standard rate for these tasks.

The tasks which lead to this additional payment are as follows:

- for (a) and (c) students are paid at 25% more than the standard rate;
- for (b) students are paid at 50% more than the standard rate.

If classes have marking of work associated with them then this will be paid for separately at the standard rate. All other tasks will be paid at the standard rate.

Peter J. Eccles, revised draft 14 September 2007