

Sessional Teachers in Mathematics

A. Supervision Groups (for First and Second Year Undergraduate Students)

- Supervisions are groups of 4 or 5 undergraduates which focus on written assignments for core and other specific modules and are led by PhD students or fourth year MMath students (called supervisors).
- Separate groups exist for external students taking first year maths modules (on joint degrees with Statistics, Physics and Computer Science).
- The assignments are prepared by academic staff who also provide the mark scheme. Assignments are usually returned within a week and marked by the supervisors for a subsequent supervision group meeting where they will be discussed within the group. Preparation (and admin) is small and counted in the marking hours as the lessons learnt by marking will dictate the areas to cover in the meetings.
- Supervisors (allocated by DUGS to volunteers) should have the necessary pre-requisite knowledge and be ready to deal with difficulties raised by the undergraduates themselves; they can also ask their undergraduates to make short presentations at the blackboard, or stimulate discussion by asking questions in the supervisions.
- In Term 3, besides going over written homework, supervisors will often encourage their undergraduates to attempt past exam questions, and will go over their solutions with them.

Proposed Payment Schemes:

Contact (or other) hours are provisional and may be refined before the new academic year.

Role	FA Grade	Base Hourly Rate	Holiday Pay	Total per hour
Contact hours, marking, admin, prep	FA4 SP18	11.72	1.41	13.13

A1. Supervision Groups for First Year Maths Students (5 students per group)

Contact Hours FA4 SP18 £13.13 hour
[18 hours T1 + 18 hours T2 + 5 hours T3 = 41 hours]

Marking Hours (including preparation/admin) FA4 SP18 £13.13 hour
[= 1.5 x contact hours = approx. 62 hours]

TOTAL = 102.5 hours @ £13.13 = £1,345.83

A2. Supervision Groups for First Year Math/Physics, Statistics and Discrete Maths Students (*4* students per group)

Contact Hours FA4 SP18 £13.13 hour
[9 hours T1 + 9 hours T2 + 0 hours T3 = 18 hours]

Marking Hours (includes small element for admin/preparation)

[= 1.5 x contact hours = 27 hours] FA4 SP18 £13.13 hour
[Whilst the groups are smaller, there is proportionately more marking per student per contact hour].

TOTAL = 45 hours @ £13.13 = £590.85

A3. Supervision Groups for Second Year Maths Students (5 students per group)

Contact Hours FA4 SP18 £13.13 hour
[8 hours T1 + 6 hours T2 + 0 hours T3 = 14 hours]

Marking Hours (includes small element for admin/preparation)

[= 2 x contact hours = 28 hours] FA4 SP18 £13.13 hour

TOTAL = 42 hours @ £13.13 = £551.46

B. Teaching Assistants (for Support Classes)

- Many lectures have support classes associated with them, especially core second year modules, and many third and fourth year modules (around 70). Support classes are led by PhD students (called Teaching Assistants or TAs) and are typically for group sizes of 15 - 90.
- Support classes vary in style depending on the material, and in what way they support the lectures. Some will spend most of the time going over the assignments sheets (assessed or otherwise), and if these sheets are assessed it is usually the TA of the support class that marks them. Other classes will go over particularly difficult parts of the module, or additional examples that give a better insight. Many will be a mixture of the two.
 - TAs are expected to be well prepared, competent and prepared to answer relevant questions. In particular, most of the TAs will not be experts on the course they are covering (especially higher level courses) so cannot be expected to answer questions outside of the material covered in lectures (although many will be able and willing to do so).
 - The TA will mark any assessed work and return marks to the lecturer promptly.
 - Students are encouraged to email the TA with suggestions for topics that they are particularly having problems with so that they have sufficient time to prepare. It is however not the TAs role to email individual solutions to students as this is what the support classes are for.
 - The TAs are funded at a higher level than supervisors for the contact hour given the higher level of expertise and skills required.
 - Marking rates are however consistent with that for supervisors given the similarities between marking for the two types of activity.
 - Volume of marking is dependent on module registrations. Initial contracts are therefore likely to need amendment after week 3 of Terms 1 and 2.

Role	FA Grade	Base Hourly Rate	Holiday Pay	Total per hour
Contact hours	FA5 SP24	13.98	1.69	15.67
Preparation, Marking, Admin	FA4 SP18	11.72	1.41	13.13

Proposed Payment Schemes:

B1. Teaching Assistant with no marking [T_0]

Contact Hours FA5 SP24 £15.67 hour
[9 hours for a 1 term module]

Preparation/Admin Hours FA4 SP18 £13.13 hour
[9 hours per term]

TOTAL per term = 9 x £15.67 + 9 x £13.13 = £259.20

B2. Teaching Assistant with marking for up to 15 students [T_15]

Contact Hours FA5 SP24 £15.67 hour
[9 hours for a 1 term module]

Marking Hours (includes small element for admin/preparation)
[= 1 hour marking/15 students/week = 9 hours/term] FA4 SP18 £13.13 hour

Preparation/Admin Hours FA4 SP18 £13.13 hour
[9 hours per term]

TOTAL per term/TA = 9 x £15.67 + 18 x £13.13 = £377.37

B3. Teaching Assistant with marking for between 15 and 30 students [T_30]

Contact Hours FA5 SP24 £15.67 hour
[9 hours for a 1 term module]

Marking Hours (includes small element for admin/preparation)
[= 1 hour marking/15 students/week = 18 hours/term] FA4 SP18 £13.13 hour

Preparation/Admin Hours FA4 SP18 £13.13 hour
[9 hours per term]

TOTAL per term/TA = 9 x £15.67 + 27 x £13.13 = £495.54

B4. Teaching Assistant rates (summary including larger volumes of marking)

Summary of Proposed TA rates (including holiday pay):

Rate	Number of Module Registrations at Term 1 /2 snapshot for modules with marking	Contact Hours (per term) @ £15.67 rate [FA5/24]	Prep/Admin Hours (per term) @ £13.13 rate [FA4/18]	Marking Hours (per term) @ £13.13 rate [FA4/18]	Termly Cost/TA
T_0	Zero marking	9	9	0	£259
T_15	1-15	9	9	9	£377
T_30	16-30	9	9	18	£496
T_45	31-45	9	9	27	£614
T_60	46-60	9	9	33	£692
T_75	61-75	9	9	39	£771
T_90...	76-90	9	9	45	£850

- Marking hours for T_60 and above rise incrementally by 6 as marking larger volumes of mathematical assignments will naturally bring efficiencies.
- It may occasionally be necessary on large modules to pay a few students the marking rate to undertake the marking activity only.

C. Small Group Teaching (for module Analysis 1)

- Collaborative teaching by PhD students in group sizes of 30 (typically around 10 groups).
- PhD students must have a good track record of undertaking supervisions and/or TA work and an excellent understanding of the subject area.
- Must be able to prepare the lessons with guidance from lecturer.
- Some administration required (e.g. Moodle).
- No marking involved.

Role	FA Grade	Base Hourly Rate	Holiday Pay	Total per hour
Contact hours, Preparation, Admin	FA5 SP26	14.83	1.79	16.62

Proposed Payment Scheme:

Contact Hours FA5 SP26 £16.62 hour
[9 weeks in Term 1 x 4 hours/week = 36 hours]

Preparation/Admin Hours FA5 SP26 £16.62 hour
[= 1 x contact hours, plus 2 hours in total for organisational meetings = 38 hours]

TOTAL per teacher = 74 hours x 16.62 = £1229.88

D. Teaching Assistants for module Maths by Computer

- 2 hour lab sessions led by PhD students (TAs).
- The TAs make use of their knowledge to provide guidance and advice.
- PhD students must have a good track record of undertaking supervisions and/or general TA work and an excellent understanding of the subject area.
- Marking and some preparation/ administration required.

Role	FA Grade	Base Hourly Rate	Holiday Pay	Total per hour
Contact hours	FA5 SP24	13.98	1.69	15.67
Preparation, Marking, Admin	FA4 SP18	11.72	1.41	13.13

Proposed Payment Scheme:

Contact Hours FA5 SP24 £15.67 hour
[8 weeks in Term 2 x 2 hours/week]

Marking/Preparation/Admin Hours FA4 SP18 £13.13 hour
[= 5 hours x contact hours = 40 hours in Term 2]

TOTAL per teacher = 16 x £15.67 + 40 x £13.13 = £775.92

E. Teaching Assistants for module Experimental Maths

- Lab sessions in group sizes of 20 led by PhD students (TAs).
- The TAs make use of their knowledge to provide guidance and advice.
- PhD students must have a good track record of undertaking supervisions and/or general TA work and an excellent understanding of the subject area.
- Some preparation/ administration and marking required.

Role	FA Grade	Base Hourly Rate	Holiday Pay	Total per hour
Contact hours, Preparation, Admin	FA5 SP24	13.98	1.69	15.67

Proposed Payment Scheme:

Contact Hours FA5 SP24 £15.67 hour
[4 weeks in Term 3 x 3 hours/week]

Preparation/Admin/Marking Hours FA5 SP24 £15.67 hour
[= 2/3rds x contact hours = 8 hours in Term 3]

TOTAL per teacher = 12 x £15.67 + 8 x £15.67 = £313.40

F. One on One Support (e.g. for SEN students)

- Similar to supervisions but for individuals.
- Suitably qualified students/employees (e.g. from Disability Services) who must be excellent, empathetic teachers with a good understanding of the subject area.
- Some preparation and marking required.

Role	FA Grade	Base Hourly Rate	Holiday Pay	Total per hour
Contact hours, marking, preparation	FA4 SP18	11.72	1.41	13.13

Proposed Payment Scheme:

Contact Hours FA4 SP18 £13.13 hour
 [Dependent on individual's needs]

Preparation/Marking Hours FA4 SP18 £13.13 hour
 [= 1 x contact hours]

TOTAL per week = 2 x £13.13/student

G. Peer Tutors (for module Analysis 1)

- Second or third year maths undergraduate students who support the TAs for Analysis 1.
- No preparation and marking required.

Role	FA Grade	Base Hourly Rate	Holiday Pay	Total per hour
Contact hours	FA1 SP6	8.44	1.02	9.46

Proposed Payment Scheme:

Contact Hours FA1 SP6 £9.46 hour
 [9 weeks in Term 1 x 2 hours/week]

H. Exam Script Marking

- Requires PhD students who have appropriate level of subject knowledge and are accurate whilst marking quickly.

Role	FA Grade	Base Hourly Rate	Holiday Pay	Total per hour
Marking	FA4 SP18	11.72	1.41	13.13

Proposed Payment Scheme:

Marking Hours FA4 SP18 £13.13 hour
 Based on £1 per standard question per script or, £2 per compulsory (40%) question per script