

School of Mathematical Sciences Workload Allocation Model v. 1.0 (11 June 2012)

Proposer: HoS (BK)
Scrutineer: SM
Approved: HoSAG (11 June 2012)

The main purpose of the workload allocation model is to guide the Head of School towards a fairer distribution of workload across academic staff. The model calculates the notional individual workload, NWL, which is the sum of teaching load (TL), administrative load (AL), externally funded research time allowance (ESTR) and self-funded research time allowance (SFR),

$$NWL = TL + AL + ESTR + SFR,$$

and, for the purpose of workload comparison, the difference $DWL = NCH - NWL$ between the notional contract hours, NCH, and the notional workload. Typically, NCH is 1650 h for staff in full time roles as used by research councils for FEC calculations and is adjusted correspondingly to take into account part-time contracts and periods of leave other than sabbaticals, e.g., maternity, paternity, sick or unpaid.

The key comparative indicator in the model, RA, is the rolling average over three years of the deviation of the individual DWL from its school average. The Head of School may moderate the DWL used in the rolling average if there is an exceptional reasons to do so.

The externally funded research time allowance, ESTR, is 50% of FEC staff time on research grants. For staff in teaching and research roles, the self-funded research time allowance, SFR, is 35% of the notional contract hours, and is adjusted for sabbatical leaves according to the formula

$$SFR = (NCH) * [(LAF) + 0.35 * (1 - LAF)] = NCH * [0.35 + 0.65 * LAF],$$

where LAF is sabbatical leave adjustment factor (fraction of year spent on leave, e.g. 1/3 for leaves of four months). For staff in teaching and scholarship roles, SFR is 20% of the notional contract hours.

The teaching loadings used in the model were derived from staff responses obtained in the staff teaching time survey conducted by BK in April-May 2012. The admin loadings were derived on the basis of staff survey conducted by SM in October 2011.

(A) Teaching loadings

Exceptional Modules

Essential Mathematical Skills – 130 h in total over two semesters
(prep time 60 h, delivery time 20 h, marking time 30 h, admin time 20 h)

Essential Foundational Mathematics – 60 h over one semester
(prep time 30 h, delivery time 10 h, marking time 10 h, admin time 10 h)

Essential Psychology Skills for g1C8 students – 30 h in total over two semesters

Communicating and Teaching Mathematics – in total 186 h over two semesters c 20 students;
(to be revised if student numbers increase), 206 h if
taught for the first time

Mathematical Problem Solving - 90 h + 5 h x (no of students)

Third year and MSci Projects – 50 h in total

MSc/MSci project training – 30 h in total (prep time 24 h, delivery time 6 h)

Applied Statistics – 25 h

Scientific Computing – 354 h in total (to be revised if student numbers increase)
(prep time 250 h, delivery time 44 h, marking 60 h)

LTCC modules – prep time: lectures 10 h (80 h is new module), CA 20 h, exam 15 h; delivery time
20 h including travel, marking 30 min per script

For the remaining modules the nominal hours are as below

Preparation time(*)

3 h per lecture

4 h per coursework assignment (CA), 10 CA per module as standard

40 h per unique exam paper

15 h per test paper, exceptions Essential Mathematical Skills and Foundational EM

1 h per tutorial/lab if helping in someone else module

(*) Preparation time

- is to be scaled by a factor of 1.5 if module is new for the lecturer;

- is to be scaled by a factor of 2 plus 100 hours additional if the module is completely new

- can be increased if contents or lecture notes need to be updated (requires approval of
DoTP/HoS)

Delivery time

1 h per lecture, 36 lectures per UG module incl revision lectures, and 24 lectures per
unique MSc/MSci module [exception Engineering Maths 48 lectures]

1 h per tutorial, 10 tutorials per module as standard

Lab time as allocated [Introduction to Statistics, Statistical Modeling I and II, DoE]

Marking time

4 mins per coursework and test script

30 mins per exam script, team marking split: 60% lecturer, 40% helper marker(s)

Course administration time, office hours, answering student queries and all that

50 h + 1 h per 10 students for all first year modules and Linear Algebra I

20 h + 1 h per 10 students for level 5 and 6 modules (except Linear Algebra 1)

(B) Supervision and mentoring loadings

15 h per unique 3rd year project

30 h per unique MSci or MSc project

88 h per PhD student per yr (100% 1st supervisor unless agreed otherwise)

44 h per RA or RF, plus 60 h prep where not covered under (C)

1.5 h per advisee

(C) Research time allowance

Fixed freely allocated time: 35% of NCH (adjusted for sabbatical leaves as explained above)
Add onto this any fec from grants (50% recovery of PI/CI time)

(D) Admin duties loadings

1280 h	HoS [40 h Deputy]
660 h	DoTP, DUGS
445 h	Senior Tutor
330 h	Subject Directors, DoR, DPGR, UG Admission Tutor (*), UG SEB Chair
100 h	MSc EB Chair, SEFP Coordinator (to be reviewed), International Office Coordinator/Marketing, CDM Director, Impact Champion (to be reviewed)
60 h	MSc Programme Director, MSc Programme Tutor, MSc Programme Admissions, UG SEB Deputy Chair, Study Abroad/Erasmus/Associate Students Advisor, G100/G110/G102 Programme Director, G1N1/G1N4/GN13 Programme Director, UG Admission Selector, Seminar Organiser (Pure seminar, CSG, DSSP, Statistics), ATHENA SWAN Champion
40 h	School Outreach team member, Clearing, PGR selector/tutor, LTCC Joint Head, LSR exams coordinator, seminar organiser (Stat Mech Study Group, Geometry and Analysis, Quantum Algebras)
30 h	Webmaster, UG SSLC Chair, ½ London Algebra Colloquium, ½ Relativity and Gravitation Seminar
20 h	UG Deputy Senior Tutor, Confirmation of UG applicants, UCAS Visit Days (admin), University Open Days, SEFP Advisor, CDM Advisory Group member, GL11, GG31/G1G3 and GG14 Programme Directors, Subject Group Web editor

(*) Does not include time for Confirmation, Clearing and UG Selector work

PGCAP 50 h per module

QMPAS/CDR appraiser/reviewer 30 h

MSc Mathematical Finance startup 100 h or 60 h depending on involvement

BMC committee tbd

Admin jobs with 15 or fewer hours are not accounted in WAM. The model does not account for second marking and for general activities like attending school meetings etc.