## Workload and Assessment in Taught Courses

Ian Stark 2015-10-27

## Summary: Less Assessment, More Learning

I propose that the School set a standard profile for the workload and assessment expected in 10-credit and 20-credit courses; with the aim of reducing the time and effort expended by students and staff in assessment, while increasing the time available for students to learn and to take control of their own studies.

This paper arises from a discussion at Strategy Committee regarding feedback and the NSS, with a series of follow-up meetings chaired by the Director of Teaching and Head of School. It is likely there will be further proposals to a later Board of Studies regarding the overall structure of third-year and above; this proposal addresses only the workload profile within individual courses.

The following sections outline the motivation for change, some comments on choices made, possible implementation plans, and some alternatives. The proposed profile itself is in the table "Summary of Course Workload and Assessment" below, with details expanded in the pages after that.

## Motivation

We are under considerable pressure from College and the University to spend less of students' time and our own on assessment, and more on teaching and learning. This is routinely summarized as "Informatics overassess". Some of our courses at Honours and MSc level do nothing but assess: students spend essentially all hours outside lectures on assessed work. This disables our students as independent learners, and further conditions them that nothing outside graded work matters.

We also have considerable feedback from the NSS, ESES, course surveys, and individuals that the Informatics places a highly stressing workload on students. This is not just long hours but specifically tasks where students have little or no control over their use of time: large quantities of compulsory for-credit coursework and a high number of deadlines. While this originates in individual courses, it is then amplified by our wide use of 10 -credit courses rather than the 20 -credit ones seen elsewhere in the University.

I think we should aim to reform courses to reduce the time students spend on compulsory summatively-assessed work, where they have little control over their learning, and increase the opportunity for them to direct their own studies.

The Director of Teaching and others are already preparing proposals for whole-programme reform of our Honours years, and in particular the use of more 20-credit courses. I think this is helpful; however, I also think we can do more within all courses to improve the student experience by reducing assessment load and giving students more ownership of their own learning.

## Proposal

My proposed mechanism is uniform limits on course workload, summative assessment and compulsory assignments; together with clear expected levels of feedback, contact hours and teaching support. In the table below and the text accompanying it I set out a candidate workload and assessment profile for Informatics courses.

Although motivated by a desire to improve our teaching and the student experience, these guidelines also address our need to make more of limited resources in support of an increasing student cohort. The September meeting of Strategy Committee identified resource constraints as a key challenge in any teaching
improvement; and the latest surge in MSc numbers only reinforces this. High staff workload is a significant barrier to improving our feedback: reducing the quantity of credit-bearing assessed coursework we use across the school will help ensure the feedback we do give to students is prompt, useful and of high quality.

## Comments

## Exams

I have not included any proposal on moving end-of-course exams, or replacing exams with assessed coursework, as these fail to deliver on "less assessment, more learning". Moving exams gives no change in assessment quantity nor additional teaching time, and moving assessment from exams into coursework during teaching weeks means the same amount of assessment and less time for learning. Switching from 10-credit to 20-credit courses, though, does at least reduce assessment load if it leads to fewer exam papers.

## Weekly Hours

The calculations of working hours are based on a standard of 40 study hours per week. The University has no clear policy on this, but I do have a statement from Assistant Principal lan Pirie confirming that "the hours of engagement you expect from your students" must be "within a 40 hour max per week". The full text is at the end of this paper and includes a summary of SCQF standards from Prof. Pirie.

The University does have a guideline that students should spend no more than 15 hours per week on outside paid work during semester. Together these give a 55 -hour working week.

All this, of course, assumes a student with perfect planning and organisation. In practice, many students will have weeks when they spend hours well beyond this. Having per-course limits is cannot prevent that, but it does put this under students' control rather than us effectively dictating specific weeks of overload.

## The Elusive 10 Hours per Credit Point

We commonly assume that if a 120-credit year of study occupies 30 weeks of 40 study hours, then a student has 10 hours for each credit point on a course. Like any constrained scheduling problem, it simply doesn't work like that, and the proposed workload profile reflects this. Realistically, it is just about possible to schedule with only a 10\% overhead for many courses; except for coursework-only courses in Semester 2, where even that's not within reach.

The current course descriptors do include hours for "programme level" activities, but fixed at a poor 2\%. I think 10\% is more plausible - note that a third of this is immediately taken up with Innovative Learning Week.

An even more finely-sliced version is the assumption that each hour of work counts for a $1 \%$ mark on a 10 credit point course. Unrealistic calculations aside, I think that's a bad message to present to students.

## Relaxation of Constraints

Two of the proposed profile limits are relaxations on current practice.

- Allowing Honours courses assessed wholly by coursework to use the Semester 1 project block.
- Pushing the latest hand-in date for coursework to Week 11, from the current Week 10 limit.

Both of these give students more flexibility in study time.

## Impact on Current Courses

Some of our courses already fit the proposed profile. Others go well outside it: several have more than this number of pieces of summatively-assessed coursework, often many more; indeed, the resulting proliferation of deadlines is one of the motivations for changes like this.

Courses might adapt by reducing the number of pieces of coursework, their scale, and limiting which ones are required for course grades. This can also help with staff workload, as non-credit coursework is more open to staggered submission dates, peer evaluation, automated online feedback, or self-marking.

In some cases coursework is already so substantial, and argued as essential to practical learning, that it would be much better to upgrade a 10-credit course to 20 credits in recognition of this.

## Implementation

The question of how to implement any profile of workload and assessment in taught courses is separate from deciding the content of that profile. The following is a graded series of possible approaches.

1. As-and-When: All proposals for new courses or revisions of existing courses must satisfy the workload and assessment profile.
2. Progressive: All courses reviewed in batches to meet the profile over the next $N$ Board of Studies meetings. (If we had a functioning review cycle for all courses, this would be the same as (1).)
3. Recalibration: Board of Studies reclassify existing courses as 10 -credit or 20 -credit by matching them against the profile. No action by course lecturers is required.
4. Immediate: Current course lecturers submit proposals to match the profile in time for 2016/2017; either by noting that it is already satisfied, reclassifying from 10-credit to 20 -credit, or revising to fit.

Options (3) and (4) aim for implementation by next academic session; (1) and (2) over the longer term.
It has been suggested that as part of a phased adoption we might "kitemark" courses meeting the workload profile in the documentation provided to students when they select courses. (Naturally, we can't actually use the kitemark, or even that trademarked word. Alternatives welcome.)

## Variations

There are some elements of the profile that one might add, adjust, or remove. These two strengthen the workload profile:

- Limit coursework load per week to no more than half of the hours available per course. This doesn't necessarily mean reducing the total hours on a piece of coursework, but giving students more weeks in which to complete it and enabling them to schedule their work through those weeks.
- Require elective courses assessed only by coursework to run during Semester 1, where students can use the project block following teaching weeks to complete their coursework.

These two weaken the workload profile:

- Remove the specification of per-week course workload.
- Apply the profile only to Honours courses and above, which is where we believe we have problems to solve.


## Coursework

Assigned coursework may be summative or formative in its assessment.

- Every course must have at least one piece of formative assessment with feedback (TAR 14).
- A 20-credit course may have in addition up to three pieces of summatively-assessed coursework.
- A 10-credit course may have at most one piece of summatively-assessed coursework.
- Courses without a final exam may have one additional piece of summatively-assessed coursework. For each summative assessment the following must be fixed in advance: a scheme for allocation of marks to different components; the criteria for awarding those marks; and the weighting of the whole assignment towards the final course grade.


## Feedback Timing

For all in-course assignments, marks and feedback must be returned promptly.

- The return date and the form of feedback must be stated in advance on the course web page, and on any exercise sheet describing the coursework.
- The return date must be no later than two weeks after the work is submitted by students.
- The return date must be in time for students to use the feedback in their next assignment: ideally before that assignment starts, and in all cases before that assignment is submitted.


## Course Workload

Courses must not assign work that enforces an unreasonable load on students.

- A 20-credit course should not require more than 13 hours of work in any given week.
- A 10-credit course should not require more than 6-7 hours of work in any given week.

These include all contact hours - lectures, tutorials, labs - as well as directed reading, individual study, tutorial exercises and coursework.

Courses assessed entirely by coursework timetabled during Semester 1 may use the full 14 weeks of semester for coursework. All other courses must complete within the 11 teaching weeks of semester.

## Contact Hours

Timetabled hours must not exceed $50 \%$ of course time each week.

- A 20-credit course would normally plan 3 or perhaps 4 hours of lectures each week; those with labs or extensive hands-on work might have only 1 or 2 hours weekly.
- 10 -credit courses would normally plan 1 or 2 hours of lectures each week.


## Teaching Support

Resource limits are in the School's Teaching Support Staff Policy. For a 20-credit course highlights include:

- Teaching Assistant: up to 60 hours; potentially a further 40 hours if summative assessment contributes $40 \%$ or more of the final grade, or if the course is new or being significantly redesigned.
- Marker: up to 4 hours plus 1 hour per student
- Tutors/Demonstrator: according to student numbers

For a 10-credit course all these are halved.

## Course Workload and Assessment Profile

## Assessment Methods

Assessment at degree-level in Edinburgh is about capability not competition: the aim is to establish the level of achievement in a specific area, not a student's rank in the class. It's also generally the work which is assessed, not the student. This is standard across the UK and elsewhere in Europe, but differs from "normreferenced" practice common in North America where personal performance against peers is a key measure.

Part of this "criterion-based" assessment is that the University does not publish class rankings or percentile positions; and in many cases we don't even calculate them.

Strictly, each piece of assessment should evaluate the extent to which a student demonstrates achievement in one or more of the listed learning outcomes for the course. In practice, this means exams and their marking criteria are set separately from the learning and teaching on a course; and the students may take them independently from the course itself — as with resits, or retaking courses "assessment-only".

## Coursework

Assigned coursework may be "summative" or "formative" in its assessment.

- Formative assignments are "assessment for learning"; they don't count towards any final grade, but students learn through doing them and getting feedback on their work. This can include self-marking; peer evaluation by other students; or audio, written or in-person feedback from tutors or the lecturer.
- Summative assignments are "assessment of learning"; they evaluate whether the students can demonstrate things described in the course learning outcomes. Summative assignments contribute to course grades, the lecturer is responsible for the marks awarded, and marking cannot be done by other taught students.

For each summative assessment the following must be fixed in advance: a scheme for allocation of marks to different components; the criteria for awarding those marks; and the weighting of the whole assignment towards the final course grade.

Every course must have at least one piece of formative assessment with feedback (University Taught Assessment Regulation 14). Examples include: submission of essay plans for feedback; written exercises brought along to tutorials; in-class tests with peer marking; as well as standard pieces of coursework marked and with feedback as usual but not contributing to the final grade.

A 20-credit course may have in addition up to three pieces of summatively-assessed coursework; or four if assessed wholly through coursework.

A 10-credit course may have at most one piece of summatively-assessed coursework; or two if assessed wholly through coursework.

## Feedback Timing

For all in-course assignments, marks and feedback must be returned promptly.

- The return date and the form of feedback must be stated in advance on the course web page, and on any exercise sheet describing the coursework.
- The return date must be no later than two weeks after the work is submitted by students.
- The return date must be in time for students to use the feedback in their next assignment: ideally before that assignment starts, and in all cases before that assignment is submitted.


## Course Workload

Courses must not assign work that enforces an unreasonable load on students. This relates to the absolute number of hours expected, and also the opportunity students have to balance this across weeks - a piece of coursework over five weeks gives students more flexibility to plan their work than one due after a single week.

Naturally, some students will spend longer on particular work than others; and some may allocate their time poorly - but courses should not assign so much that even the most competent and well-organized student cannot arrange a working timetable.

No course should rely on some other parallel course having a low workload in any given week; unless that course is a specific co-requisite.

A 20-credit course is one-third of a student's weekly timetable; a 10-credit course is one-sixth.

- A 20-credit course should not require more than 13 hours of work in any given week.
- A 10-credit course should not require more than 6-7 hours of work in any given week.

These include all contact hours - lectures, tutorials, labs - as well as directed reading, individual study, tutorial exercises and coursework.

Courses assessed entirely by coursework timetabled during Semester 1 may use the full 14 weeks of semester for coursework; although any lectures and tutorials must be within the 11 designated teaching weeks.

All other courses must have all lectures, tutorials, and coursework completed within the 11 teaching weeks of semester.

For an example 20-credit course with an end-of-year exam, the notional 200 hours assigned by SCQF would be allocated as follows:

11 teaching weeks $\times 13$ hours +4 days exam preparation $+1 / 2$ day sitting exam +20 hours "programme level activities" - the $10 \%$ of student time taken up with Innovative Learning Week, Personal Tutor meetings, welcome week, and everything else not specific to an individual course

## Contact Hours

For any course, only part of students' time is spent in timetabled activities: lectures, labs, tutorials. In general this should not be more than $50 \%$ of course time each week, and for certain kinds of course it may be much less.

A 20-credit course would normally plan 3 or perhaps 4 hours of lectures each week. This might be supplemented with tutorials or labs, and courses with extensive hands-on or lab work might have only 1 or 2 lectures hours each week.

10-credit courses would normally plan 1 or 2 hours of lectures each week; possibly supplemented by 1 tutorial hour where appropriate.

## Teaching Support

Resource limits set an upper bound on the teaching support that the School can provide for any course. These bounds are set per student and scale with the credit weighting of the course.

The tariff is set out in detail in the School's Teaching Support Staff Policy. For a 20-credit course highlights include:

- Teaching Assistant: up to 60 hours; potentially a further 40 hours if summative assessment contributes $40 \%$ or more of the final grade, or if the course is new or being significantly redesigned.
- Marker: up to 4 hours plus 1 hour per student
- Tutors/Demonstrator: according to student numbers

For a 10 -credit course all these are halved.

Date: Thu, 6 Aug 2015 08:59:53 +0000
From: PIRIE Ian [ian.pirie@ed.ac.uk](mailto:ian.pirie@ed.ac.uk)
To: STARK Ian [Ian.Stark@ed.ac.uk](mailto:Ian.Stark@ed.ac.uk)
Subject: Re: Student working week
Dear Ian,
Thank for your email.
I suspect that you are correct in that we do not have the expected student engagement time clearly stated in University policy or guidance; I will look into this. I am afraid therefore that there would be no point in quoting me directly since this could be challenged/contested by our students.

However see attached the expectations as laid out by the Scottish Credit and Qualification Framework (SCQF). You should be able to construct a robust narrative for guidance to your students around these principles which the University has already signed up too.

I will ask my colleagues in Academic Services to look into this and bring a paper to CSPC should we need to be more explicit about out expectations of students.

Meanwhile Schools are perfectly entitled to stipulate the hours of engagement you expect from your students for each course and programme of study and in general within the culture of the discipline provided that these are not unreasonable and within a 40 hour max per week - e.g. many early morning or late classes.

I am in Bristol at the moment but be will be back in Edinburgh next week.
Best wishes,
Ian.

## Scottish Credit and Qualifications Framework

## Undergraduate Degrees

Each level of study comprises 120 credits, indicating a minimum of 1200 hours on notional student learning hours.

It is our job to ensure that in designing our courses and programmes that the total workload for students is realistic and manageable and enables the student to achieve and evidence the learning outcomes intended within the allocated time.
The minimum time in which this can be achieved (and is broadly adopted by all Scottish Universities) is 30 weeks, normally comprising two $\times 15$ week semesters and represents $30 \times 40$ hour weeks $=1200$ hours.

Benchmarking indicates that the majority of Scottish Universities teach over a 22 week period with the remainder of the time being devoted to independent study, revision weeks, assessment and scheduled feedback tutorial time.

At Edinburgh in Session 15/16 (excluding vacation time) we have 13 weeks in semester one and 17 weeks in semester two bringing us to the same 30 weeks for the total learning envelope for students.

As previously, this equates to a minimum student effort / learning time of 40 hours per week and therefore students need to expect that they should be engaged in their studies for approximately this amount of time each week.

Students (to an extent) can of course choose to engage in their independent study at anytime during a calendar week - i.e. early mornings, evenings and weekends.

In course design however the directed learning components such as labs, experiments, tasks, group-work, projects, etc. may require the student to be on the premises to access particular equipment, facilities and/or resources and therefore can be legitimately expected to be in the University Monday to Friday depending upon the requirements and nature of teaching and learning in the subject/discipline - e.g. in the Art College the students have no option but to be in every day all day for the vast majority of their time. In fact they complain when the buildings are not open long enough.

So regardless of where the learning takes place, there is no escaping that students should be routinely engaging in their studies for approximately 40 hours per week. Anecdotally a 1 hour tutorial at Oxford/Cambridge will generate 12-15 hours of directed study for each student.

Also for context, UK University degrees have the shortest amount of student time spent per level of study and our European counterparts are routinely $>1500$ hours per academic year.

