SMSTC: summary of student feedback (2015–16)

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This document is a summary of student feedback gathered through the online survey. My comments are italicised; all other opinions expressed are attempts to summarise the students' responses as accurately as possible.

Respondents

The overwhelming majority of the 61 respondents were research students. On average they spent about 12 hours per week on SMSTC activities (including classes) and 23 hours per week on research; a majority (60%) would have preferred to spend less time on SMSTC, and none would have preferred to spend more time on it. We received responses from students taking every SMSTC module (between 8 and 17 responses) and advanced course (between 2 and 7 responses).

Individual modules

The numerical responses to most questions on delivery for most modules fell in the range 3–4 (on a scale of 1–5); I have interpreted this as "generally fine", noting the reported workload and on the assumption that a PG module ought to err slightly on the challenging side. In many cases the written feedback was either very terse or contradictory, so it is hard to identify a clear consensus. The law of small numbers should be borne in mind throughout.

A conspicuous feature is that some modules have much less homogeneous cohorts of students than others. For each module, I've recorded the mean μ and standard deviation σ of the responses to "Most of the material was new to me" as a rough indicator of this. The modules with a particularly wide range of responses were Algebra 1, G&T 1 and 2, Models 1, Probability 1, and Pure Analysis 1 and 2. The average level of unfamiliarity was particularly low in Algebra 1 and particularly high in Applied Analysis 2 and Models 2.

Algebra 1. [$\mu \approx 2.7$; $\sigma \approx 1.6$.] Generally fine, though much of the material was already familiar to some students.

Algebra 2. [$\mu \approx 4.0$; $\sigma \approx 0.7$.] Generally fine, especially the quality of the notes and the interest value. Delivery fractionally on the slow/easy side.

Applied Analysis & PDEs 1. [$\mu \approx 4.1$; $\sigma \approx 0.9$.] Generally fine.

Applied Analysis & PDEs 2. [$\mu \approx 4.3$; $\sigma \approx 0.7$.] Generally fine; delivery perhaps slightly slow. One complaint about the setting of a single assignment rather than two shorter ones.

Applied Mathematics Methods 1. [$\mu \approx 3.9$; $\sigma \approx 0.6$.] Mostly fine, though with a wide spread of opinion especially about the notes; lectures 6–8 were identified as particularly problematic.

Applied Mathematics Methods 2. [$\mu \approx 4.0$; $\sigma \approx 0.9$.] Mostly fine, with some reservations about the delivery of material on SDEs and PDEs.

Geometry & Topology 1. [$\mu \approx 3.5$; $\sigma \approx 1.5$.] Mostly fine, with some strongly dissenting opinions; some students found the module too challenging and/or found the lectures disorganised and hard to follow.

Geometry & Topology 2. [$\mu \approx 3.7$; $\sigma \approx 1.5$.] A wide spread of opinion. No strong consensus on which parts worked well or badly, though assessments were generally seen as being on the heavy side.

Mathematical Models 1. [$\mu \approx 3.7$; $\sigma \approx 1.3$.] Generally fine.

Mathematical Models 2. [$\mu \approx 4.3$; $\sigma \approx 0.5$.] Mostly positive feedback on delivery, but the assignment workload was too high and the assignment format was disorganised.

Probability 1. [$\mu \approx 3.5$; $\sigma \approx 1.5$.] Generally fine; perceived as rather on the easy side. Some lecturers were criticised for just reading through the notes.

Probability 2. [$\mu \approx 4.2$; $\sigma \approx 1.0$.] Generally fine, with a few minor comments.

Pure Analysis 1. [$\mu \approx 3.2$; $\sigma \approx 1.6$.] Very positive comments on the delivery.

Pure Analysis 2. [$\mu \approx 3.7$; $\sigma \approx 1.4$.] Generally fine, though the second half was less accessible than the first half.

Statistics 1. [$\mu \approx 3.5$; $\sigma \approx 1.1$.] Generally fine.

Statistics 2. [$\mu \approx 3.9$; $\sigma \approx 1.1$.] Generally fine, with some dissenting opinions on the notes and on the first half.

Advanced courses. The numbers of respondents were rather small and there were very few comments, although these were generally positive and the scores were typically a little better than those for the core modules.

As in previous years, the provision of tutorial support was reported as differing substantially between modules and (presumably) institutions; it has not been broken down further here.

SMSTC generally

Symposium. Most respondents had attended the symposium. All had enjoyed it; a majority found the stream talks had helped them choose their modules; a slightly larger majority had found the other talks useful. Two suggestions for improvement were (i) that the advanced courses could also be introduced at the symposium; (ii) that students be encouraged to set up an SMSTC Facebook group to continue the social contact that started in Perth.

Technical. There seem to have been some problems seeing the class in Edinburgh, and with connections from NUI Galway.

Overall. Students did not find the level of the modules consistent; there were complaints both that some were too advanced and that some were too basic. There were some requests for a greater range of advanced courses. The lecture format was criticised, with requests for more interactive activities, e.g. reading groups, projects and working seminars.

Summary and interpretation. *Leaving aside the specific points which are for Stream Leaders to address, the feedback in general reflects the competing expectations that students have of the core SMSTC modules: as an opportunity for "broadening", in which case more advanced material is seen as disconcerting and inappropriate; or as support for their research, in which case more basic material is seen as unnecessary and inappropriate. With a very wide range of academic backgrounds to cater for, some dissatisfaction is inevitable, but the feedback suggests to me that we could do more to explain to students (and perhaps supervisors) what the role of SMSTC training is and how to get the most out of it. Efforts to encourage interactive use of the VC system, and perhaps also efforts to encourage more provision of local tutorial support, would also be welcomed by students.*