The aim of Annual Monitoring is to maintain quality and improve provision through identifying action that can be taken to improve future student experience. In the context of the COVID-19 pandemic annual monitoring will proceed with a significantly reduced area of focus in terms of reporting requirements.

For session 2019-20 this abridged form should be used to record Annual Monitoring Activity. Its purpose is to capture a focused and concise evaluation (or a reflective summary). In undertaking annual monitoring, online meetings should take place to support reflection, reporting and development planning towards enhancement and the maintenance of academic standards.

| College | Science and Engineering | | |
|---|---|---|---|
| School/Subject/Discipline *(as* appropriate*)* | | | |
| Provision covered | Unit of Learning<br><br>**UG and PGT degrees in the following schools** | Represented by<br>**School Quality Officers** | Input received<br>[at meeting (M)/via form (F)] |
| | Engineering (Eng)<br>Computing Science (CS)<br>Psychology (Psy)<br>Geographical & Earth Sciences (GES)<br>Mathematics & Statistics (M&S)<br>Physics & Astronomy (P&A)<br>Chemistry (C) | Dr Kelum  Gamage<br>Dr Paul Siebert<br>Dr Ashley Robertson<br>Dr Iain Neill<br><br>Dr Chris Athorne<br><br>Dr Peter Sneddon<br><br>Dr Linnea Soler | via form (AM1) |
| Collaborative Provision covered | | | |

**In the context of the extraordinary circumstances of this academic year, please reflect on Student Experience and Student Performance.** (Please take particular account of course evaluations, data on student performance and the reports of external examiners).

What is working well?

**September 2019 - August 2020**

All schools report positive responses from students to improvements in curricula, operations, delivery or assessment. For example, successful new degrees and curricula (GES, CS, Eng), diverse assessment methods (incl. peer assessment (GES), graded homework (P&A), group work (GES), YACRS (M&S)), improved project allocation and marking processes (Psy, P&A), improved lab and course organisation and management (Psy, C, P&A), and changes in assignment frequency (P&A).

Two schools in particular are making concerted efforts in building a community between and with their students (Psy,M&S).

Two schools particularly wished to commend positive actions taken by the university: the 'Technicians commitment' (C), and the provision of a School-based student support officer (CS).


**March-August 2020**

All schools reported that their staff (academic and administrative) responded remarkably well to the challenges of delivering online examinations in a very short period, and worked well beyond expectations in order to support students and bring the year to a successful conclusion. This was despite the fact that they themselves endured difficult circumstances, and that the additional workload (both in revising and marking exams, and in setting up the online exam environment in Moodle) was significant, unfamiliar and unexpected. In some schools, the effort was mostly confined to a small very hard-working group of people who supported each other through this harrowing period; in other schools, some tasks were distributed to members of staff no longer involved in the marking of L1&L2 exams.

While some schools indicated that, for their own subjects, open-book 24hr exams we particularly difficult to create (Eng, CS), all schools reported that the overall online exam processes were all conducted very smoothly and successfully, including the management and calculation of grades under the NDP. The commitment and dedication of all staff and the amount of effort expended to ensure these successful outcomes should not be underestimated.

Although there was limited educational delivery in the final two weeks of March (since many courses had finished, or almost finished), those that continued were concluded successfully through remote lectures, with appropriate online assessment.

From the student point of view, schools reported that students typically adapted well to the new circumstances (P&A), and gave positive feedback on the online exam process (CS); few significant issues were reported by students (Eng) . Some schools held timed exams (M&S, P&A), and reported that they went smoothly, with no significant problems.

The effect of the online exams on undergraduate students' exam grades was typically that they were higher than might have be expected (Eng, P&A, CS, M&S), in particular for content-heavy courses (P&A). Only one school (GES) reported that the grade profile was similar to previous years. PGT students' exam marks in CS were not higher than normal, but the application of the NDP meant that the progression rate to the MSc project stage was much higher than usual.

PGT students particularly appreciated the NDP (GES), and especially the flexible extension policy for project submission (Psy).

There is recognition that our new circumstances bring some advantages: Zoom meetings mean higher attendance by staff at, for example, Exam boards and recruitment events (GES), assessing problem-solving rather than bookwork is

a positive step (CS), implementing new online resources which can be used flexibly will benefit delivery for future cohorts (C), and moving group work exercises online will allow students to manage their time better (M&S).

There is appreciation of the wide range of technologies procured by the university to support remote delivery (CS).

What needs work?

**September 2019 - August 2020**

Schools report a wide range of suggested improvements that are independent of the need for remote delivery: revising the balance between content and skills (GES); introducing continuous assessment and formative feedback and considering the suitability of end of year exams (P&A); improved feedback quantity (Psy), timeliness (Eng, GES), consistency (Eng, GES P&A); reviewing the amount and nature of assessment (M&S), revisiting group work assessments and individual contributions (Psy), as well as proposed changes to the way specific content is delivered (P&A, CS).

There is a clear desire to improve students' engagement and increase attendance, through community-building (Psy) or quizzes, groupwork, YCARS etc. (M&S). Increased numbers of PGT students means that themed projects conducted by a group of students (while still ensuring the delivery of an independent project) will be considered (Eng).

**March - August 2020**

Only a few problems were reported regarding the online delivery at the end of March: confusion over what would (and would not) be assessed at L1 (C), international students travelling home and needing extensions for missed assessments (GES) and the difficulty of cancelling and refunding the costs of field trips (GES).

While only one school explicitly reported an increase in student mental health problems from March onwards (Psy), it is likely that this phenomena was widespread throughout the college.

All schools reported frustration at the management of university communications during a very difficult period, while acknowledging the challenges experienced by those charged with devising and communicating policy. The frustration was particularly extreme when poorly-managed communications resulted in additional unnecessary work for already stretched staff, particularly as they were required to address student queries without knowing the answers (C, CS, GES). For example, communications sent to students without the knowledge of staff (P&A, CS, C), a one-size-fits-all approach resulting in confusion amongst students (especially PGT students) (GES, CS), long delays in decisions made about teaching formats or session dates (GES), changing and contradictory information (P&A), delayed communication about PGT regulations (CS, GES).

There was initial confusion over the responsibilities for managing the online exam process, with the set up, delivery and administration of exams (tasks usually done outwith Schools) ultimately being passed to School staff (CS,C). The extent of Schools' autonomy in the exam process was also ambiguous (C); it was not clear what decisions could be made at School level and which ones had to comply with university-level regulations.

**Beyond August 2020**

Most schools recognise the importance of reassessing their approach to delivery and assessment, especially if exams are to continue to be offered online (and therefore open-book) (C, Eng, P&A, CS), and in particular in addressing the balance between assessing content and problem-solving (C,P&A). Many schools are clear that 24hr exams are unsuited for their subject, and request the option to hold timed exams (CS, Eng, C). [*Postscript: since the submission of the School Annual Monitoring forms - it has now been determined that timed exams may take place*].

Struggling L1 students who were allowed to automatically progress to L2 will need to monitored carefully (CS).

**In the context of the extraordinary circumstances of this academic year, and any anticipated requirements and challenges in 2020-21, please reflect on any themes or issues that you wish to report to the responsible level of the University.**
(Check with your School or College Quality Officer if advice is needed on which is the most appropriate level)

**Since many of these themes apply variously to different School/ College/ University levels, these are interspersed in the text in blue bold font.**

**An asterisk\* denotes an issue raised in previous AMR reporting cycles.**

**Staff workloads**

All schools express concern about vastly increased workloads, and support is requested at School, College and University levels to enable staff to fulfil their duties successfully:

- remote delivery: provision of basic equipment, eg. webcams (P&A, Psy) **[School]**; support for developing online materials (Eng, M&S) **[University];** monitoring student engagement **[University]** and determining the effect of remote learning **[School]** (C)
- recruitment: additional staff resources for remote communication with applicants (GES) **[School]**
- provision of online exams: additional administrative **[College]** and IT **[University]** staff resources (M&S)
- teaching and assessing vastly increased numbers (esp PGT): additional staff resources (CS, GES) **[College]**
- building a sense of community and engaging students; managing and co-ordinating remote delivery for cohorts of students: additional staff resources (C, Psy, P&A) **[College]**

School-specific additional workload demands include significant revision of labs to allow for remote delivery  (P&A) **[School]**, the challenge of providing field-trips (GES) **[School]**, a need for additional Maths support for Engineering students (Eng) **[School]**, late-submitting PGT projects requiting supervision well into the 2020/21 academic session (Psy, CS) **[School]**, new Linux server to support remote delivery (P&A) **[College** (probably)]**.

Five of the seven schools (GES, M, P&A, C,  CS)  explicitly request that School workload models be clearly adapted to reflect these additional demands  **[School] .** One school commented that increased university requirements for conducting, monitoring, managing and reporting on teaching activities significantly increases workload for course heads/ programme directors/ year heads etc., with a request that their necessity be reassessed (C) **[University].**

In discussion with the Directors of Learning and Teaching in the seven schools, it was clear that additional targeted administrative and academic staff resources will be needed if the Schools' currently excellent provision is to be sustained and improved.

**Mental Health**

There is a strong concern expressed about staff well-being under such pressure (expressed by two schools (C,GES), but widely shared by all others) **[University].**

The university's student mental health provision is still considered inadequate (GES, Psy, CS) - especially in these changed circumstances. Having a named mental health practitioner associated with each School is suggested (GES) **[University].**

**Communications**

Improved (timely, consistent, unambiguous) communication of regulations and future plans (all schools), acknowledging opportunities for local decision making (e.g exam format and processes (C, GES)), and clarity on Disability provisions. Clarity over what information is sent to whom (and when) (P&A). In particular, information on what we can and can't offer students on-campus is essential for recruitment activities (GES, CS). Improved communication to PGT students regarding admissions matters (deferrals, deposits etc.), so that they are not sent directly to academic staff (Psy, CS) **[University].**

Reassurance is sought that there will be adequate technology support for remote delivery (M,P&A). 24/7 central IT support would be welcomed - not just for remote delivery (esp. international off-campus students), but also for ODL

(Psy). Moodle is clumsy for online assessment; an improved online assessment tool would make the marking process more efficient for staff (Eng) **[University].**

Quality of teaching spaces* (P&A), in particular: Gregory Building* (GES), East Quad (GES), functional lapel microphones* (C). Need for out-of-hours lab access and flexible spaces [GES]. Renovation of Boyd Orr was so disruptive that several classes had to be cancelled. **[University].**

Consideration of room bookings so that students are not in a different place for the same course each day*, and don't have to traverse long distances between classes* (P&A). Request that the large L&TH lecture theatre be used to prevent duplication of lectures (Psy). The consequences of timetable clashes being overridden due to remote learning will need to be considered when returning to on-campus delivery (GES). **[University].**

Specific issues previously raised **[University]:**
- Please can MyC automatically send an email notification when a student enrols/unenrols for a class after start of semester*
- Please can MyC be adapted so that multiple windows are supported, allowing multi-tasking (C)*
- Field trips costs are passed directly to students; this puts UofG at a disadvantage w.r.t. competitors (GES)*
- The University travel insurance is unsuitable for field trips (GES)*

# Additional matters

Please highlight any additional matters that you wish to raise from this year's Annual Monitoring cycle

Particular QA achievements include:

**Engineering:** IET/IED/RaeS/IPEM reaccreditation for all degree programmes; SRC Teaching Award (Alistair McCay)
**Computing Science:** SRC Teaching Award (John Williamson)
**Psychology**: SRC Teaching Awards (Emily Nordmann, Heather Cleland Woods); significantly improved NSS scores
**Geographical & Earth Sciences:** NSS Overall Satisfaction of 100% for Geology and 98% for Human Geography
**Mathematics & Statistics:** NSS Overall Satisfaction of 100% for Statistics
**Chemistry:** University Teaching Excellence Award (Linnea Soler), SRC Teaching Award (Beth Paschke), RSC reaccreditation of UG and Msci programmes