

ANNUAL QUALITY IMPROVEMENT REPORT 2019/20

Appendix 3: External Examiners' report

UG Biosciences

This appendix contains Year Leader's responses to 2019/20 External Examiners' comments and updates to actions from previous External Examiners' reports (if applicable).

As Year Leader/Course Director please ensure you reflect on External Examiners' comments in the Course Review section. Please ensure that any actions to be taken in response to these comments have been recorded in your Annual Quality Improvement Report.

For support or advice please contact Ana Filipovic, Academic Quality Officer 'Standards', afilipovic@rvc.ac.uk.

Appendix 3 consists of:

a.	Updates to actions from previous years' reports
b.	2019/20 Collaborative Annual Report with responses from Course Director/Year Leader

Updates on actions from 2017/18				
Question	External Examiners comment	CD's response & Action	Update in 2018/19	Update 2019/20
<p>1.2 Learning objectives, and the extent to which they were met</p>	<p>For the most part, learning objectives addressed by individual examination questions were indicated but this was not always done consistently and some omissions were noted. As a general observation, the complete range of learning objectives in each module required access to module handbooks; navigation of these online at speed and in high volume is cumbersome and practically impossible for the external examiners. Where it has been possible to review the learning objectives, these appear to have been met. However, the external examiners would value having ready access to printed materials containing this information (handbooks containing module descriptors, learning objectives, lecture lists etc). These should certainly be available during the examiners' visits – and ideally mailed (or e-links provided) much earlier in the academic session.</p>	<p>Since going paper free a number of years ago the college has not provided students or staff with printed module handbooks or other materials. However, it seems entirely appropriate to make hard copies of module handbooks available for External Examiners during their visit and to ensure that they have access to PDF or weblinks to the most up to date versions of these materials to aid their valuable work.</p> <p>Action Required:</p> <p>CD to request course coordinator to arrange printing of module handbooks for external examiners during their visit</p> <p>Action Deadline:</p> <p>20-Jun-2019</p> <p>Action assigned to:</p> <p>course director course support team</p>	<p>Ongoing discussions as to the best way to provide this information for External Examiners</p>	<p>COMPLETED</p> <p>The BSc1 EEs were provided with module outcomes and previous years' median marks in a dashboard style</p> <p>This was welcomed so will roll out for 2020-21</p>
<p>1.4 Resources (in so far as they affected the assessment)</p>	<p>... no specific information has been provided in relation to resources for assessment. We would observe that the single largest and most valuable resource relevant to assessment, academic staff time, is at risk of being over-stretched given the volume of assessment and the rapidly increasing number of students. The College will need to evaluate the sustainability of current approaches to assessment within the context of student numbers and academic staffing levels. This relates to comments below on the nature and volume of assessments.</p>	<p>This is very timely. The Deputy Principal has commissioned a Work Load Allocation Model Study to define the hours related to all aspects of course delivery and assessment. This information will be used to inform our design of future assessment instruments</p> <p>Action Required:</p> <p>Course director to discuss the findings from the Work Load Allocation Model with the BSc/MSci leadership and course support team to ensure that delivery of course and</p>	<p>Ongoing – Work Allocation Model findings not published</p>	<p>COMPLETED</p> <p>Work Allocation model findings still not published. Modules moving away from essays in exams apart from some 3rd year modules where appropriate and ICA size being harmonized in line with credit awarded</p>

		<p>assessments remain robust but also sustainable</p> <p>Action Deadline:</p> <p>01-Jun-2019</p> <p>Action assigned to:</p> <p>Course Director</p>		
<p>2.2 Quality of candidates' knowledge and skills, with particular reference to those at the top, middle or bottom of the range</p>	<p>.... in BSc year 2 Applied Pharmacology, Section A marks were noticeably better than Section B. In all programmes, mean marks may be noticeably lower for some modules. There will be a number of possible reasons for these variations in quality of performance, so long-term analysis of patterns across several examination diets and student cohorts is recommended to identify causes, consequences and potential remedies for these variations. The Gateway Programme examiners noted that the spread of marks was right or left skewed in some questions. For example, IGE and AH1 were left skewed, indicating that there were quite a few students who struggled with these modules. The problem may be attributable to the simple arithmetic requirements in these questions. On the other hand, TMA was right skewed, with average mark for TMA1 of 66%; this question was not dependent on arithmetical ability. Our interpretation is that the arithmetical issue is a problem that needs to be solved as it evidently disadvantages some students. One simple solution may be to change the order of questions on the exam paper, and not placing all the arithmetical questions together as a panic-inducing block. In discussion with the Gateway examiners it was apparent that this problem was not specific to the Gateway students and the same trends could be seen in BSc1 answers. On the whole, there was no statistical difference between the Gateway and BSc1 marks.</p>	<p>We are aware of some students finding arithmetic more challenging and our Learning Technology team are developing online tutorial material using authentic and relevant (laboratory/field) problems to work through different types of calculations. It is hoped that this will be offered to all students entering the programme in 2020 with a pilot version for 2019 entry. Great emphasis is put on the importance of calculations and several directed learning sessions (small group problem solving) are focused around the sorts of problems students may encounter when conducting laboratory or field experiments. Additionally there is a workshop dedicated to calculations in first year and there is a recap session in second year, as well as one to one (or small group) support available for all students via our Education Development team. For 2018-19 we have moved to two examination periods and will encourage students to reflect on their first exams in January and seek help and advice from ED before undertaking their term two module exams and research projects in term three</p> <p>Action Required:</p> <p>Course Director to liaise with Learning Technology team, Education Development team and</p>	<p>Ongoing</p> <p>There continue to be timetabled opportunities to develop numeracy and Learning Support team are aware of the short fall. Unfortunately the "Learning Sciences" software was not purchased in the last budget will be applied for 2020-21</p>	<p>Complete Learning Sciences subscription for 2020-21 Gateway students will have additional support 2020-21 Learning sciences software subscription purchased for 2020-21 IGE module questions were reviewed for 2019-20 to ensure no ambiguity and there were higher median marks for both BSc1 and Gateway cohorts</p>

		<p>tutorial leads to ensure that students have opportunity to discuss and develop their numeracy skills. Gateway, first, second, third year leaders to encourage students to reflect on exam performance and seek help from ED before the start of the second examination period</p> <p>Action Deadline: 01-Jun-2019</p> <p>Action assigned to: Course Director, year leaders, tutorial leads</p>		
<p>2.3 Please provide any additional comments and recommendations regarding the students' performance</p>	<p>In a number of instances, the poor handwriting of students in exam scripts was noted but it is unclear to us if there is a formal strategy for handling illegible scripts. This should be considered since illegibility of student responses can add considerable work to the assessment process. For example, if more than 1 in 5 words are illegible then a student could be called in to transcribe their answer prior to marking.</p>	<p>We thank the External Examiners for this observation and agree that over the past few years handwriting skills have declined, probably due to relatively less handwritten work now we have gone paper free. Course Director will discuss the possibility of asking students to transcribe their work. This may be challenging due to the short turnaround time for papers to be marked</p> <p>Action Required: Course director and Exam Board Chair to discuss with Examination Officers</p> <p>Action Deadline: 01-Mar-2019</p> <p>Action assigned to: course director; exam board chair; examination officers</p>		<p>COMPLETED</p> <p>Remote proctoring and electronic submission of exams is being used for 2020-21 – this will be evaluated and may persist post-COVID</p>
<p>3.2 Extent to which assessment procedures are rigorous</p>	<p>We note the sampling approach for moderation that is in place for all programme assessments. Part of this moderation is that no further action is taken on discrepancies between the first and moderator markers unless the moderator</p>	<p>. This is an issue that has recently been highlighted on other programmes within the college. Course Director will bring this up with the Chair of Learning Teaching and Assessment</p>	<p>Not complete. College wide issue</p>	<p>COMPLETED</p> <p>Review of common grading scheme has been discussed at academic committees</p> <p>2019-20 examiners were</p>

	<p>has selected “yes” on the form. It may be worth considering additional actions such as moderating an expanded sample of scripts if more than two discrepancies are noted. This would provide additional assurances for individual students to whom a difference of a few % could make a very significant difference.</p> <p>The objectivity of the marking scheme for essays is not always evident and including more MCQs and FIBs to increase the validity and robustness of the assessment may be a future alternative to the majority of long answer / essay questions. We observed in several instances that the words used by the examiner to summarise the essay standard (“very sound answer”, “quite good answer”, “excellent account” etc) and the grade awarded did not line up with the common grading scheme descriptions (for example, an “excellent account” attracted a mark of 65%). While this may not be a systemic issue (most markers’ comments were in line with the marks awarded), it is a concern because of the heavy reliance on essays in every module assessment and the potential for subjective interpretation of the common grading scheme. We are aware that markers may feel that the common grading scheme is not well tailored to each programme of study; it may be the case that the College will wish to review the common grading scheme and its application.</p>	<p>committee to determine whether the CGS should be tailored for each programme, or indeed whether a rubric should be developed for each individual question so that written feedback can be exactly tailored to the question</p> <p>Within the bounds of the current CGS, examiners will be reminded to use words in their feedback that are consistent within the descriptors of the CGS for the mark they have awarded for a particular question</p> <p>Action Required:</p> <p>CD to discuss review of the common grading scheme and descriptors either for biosciences or for the college as a whole</p> <p>Exams officer to remind examiners to use words from the descriptors in the CGS that reflect the mark they are awarding</p> <p>Action Deadline:</p> <p>01-May-2019</p> <p>Action assigned to:</p> <p>course director exams officer</p>		<p>reminded by exams office to use words that align to the CGS</p>
<p>3.4 Standard of marking</p>	<p>A general comment is that the quantity and quality of annotation on the scripts was variable, although there has been a clearly improving trend during the last few years. In some instances the handwriting of markers was illegible (pharmacology has a particularly notable culprit whose pencilled commentaries were almost entirely illegible), and there were many instances where a summary statement (useful for feedback to students and a guide to other</p>	<p>We will ask exams officer to remind examiners of the need to include this important information when preparing questions and that it should form part of the scrutiny during exam paper setting meetings.</p> <p>The instructions for examiners includes the need to provide written comments on the scripts they mark. CD will ask the exams</p>	<p>Ongoing.</p> <p>Examiners were reminded to try to be legible on scripts and assignments.</p> <p>As an example of good practice some examiners now print stickers with their comments to attach to scripts</p>	<p>COMPLETED</p> <p>April Exams were electronic. Review of these practices post covid may mean we can continue and thus remove legibility issues both from student answers and staff feedback</p>

	<p>examiners) was completely absent at the end of a long answer / essay script. These deficiencies must be corrected to facilitate the quality assurance of the assessment process and to aid feedback to students.</p> <p>A particular issue was noted in the Principles of Pathology paper 2: the absence of scale bars on pathology images, when students were required to comment about organ/lesion size for defined marks within the marking scheme, clearly disadvantaged all candidates. This necessitated adjustment of the marking scheme – but only after intervention of the external examiner at a very late stage; we were surprised that the issue had not been addressed earlier.</p>	<p>officer to also include instructions to ensure that these comments are legible! It is noted that some examiners provide their written comments on a sticker. Although this may be time consuming to set up it may be helpful where handwriting is a known issue</p> <p>Action Required:</p> <p>course director will highlight the need for legible comments from examiners on scripts and will ask colleagues for their ideas on how to achieve this during our course management committee meeting exams office will add the need for comments to be legible to the instructions for examiners chair of exam board and exams officer to ensure that all figures and tables used in papers are suitably annotated at the paper setting meeting stage</p> <p>Action Deadline:</p> <p>01-May-2019</p> <p>Action assigned to:</p> <p>Course director; exams officers; chair of exam board</p>		
<p>3.5 In your view, are the procedures for assessment and the determination of awards sound and fairly conducted? (e.g. Briefing, Exam administration, marking arrangements, Board of Examiners, participation by External Examiners)</p>	<p>....We have a strong impression a high assessment load which may not be appropriate or academically justified; an increasing staff burden of assessment; and increased risks of marker and administrator error.....(complete comment online)</p>	<p>The programme will be undergoing Periodic Review in 2020 and the suitability/sustainability of the assessment load should be one of the areas under scrutiny. A document was drawn up some years ago (Assessment Tariff) by the Academic Registrar and Associate Dean of Undergraduate Learning and Teaching to try to ensure equal assessment load across different modules and programmes. Some of the BSc3 modules predate this but have been changing to ensure that their</p>	<p>Ongoing (Periodic Review in 2020)</p>	<p>COMPLETED</p> <p>Assessment load is now harmonized for BSc1 and BSc2</p> <p>BSc3 leader will carry out a full review of BSc3 module assignments (2021) to ensure there is parity between modules</p>

		<p>in course assignments and exams are within the guidelines. It is hoped that this ensures parity between different forms of assessment at the same level. The work load allocation model also takes assessment time into account and so also offers valuable insight into the marking load for individual modules and courses. Module leaders and year leaders will be reminded to use the Assessment Tariff when designing new assessments</p> <p>Regarding release of titles for ICA to External Examiners, the exams officers will be asked to provide this information to enable more effective scrutiny</p> <p>Action Required:</p> <p>Exams office to remind module leaders to utilise the Assessment Tariff when designing different types of assessment. Where their assessment doesn't fit with those described in the document they should seek advice from the Academic Registrar.</p> <p>Course Support team and Exams officers will be asked to provide the titles of summative in course assessments and provide them on the spreadsheet alongside marks and student information</p> <p>Action Deadline:</p> <p>01-May-2019</p> <p>Action assigned to:</p> <p>exams officers; course support</p>		
<p>4.4 I was able to scrutinise an adequate sample of students' work and marks to enable me to carry out</p>	<p>We would ask you to note that the volume of written work that needs to be sampled has increased markedly in the last three years and that a more stream-lined approach would aid the examiners working</p>	<p>We appreciate the huge volume of documents that need to be sampled by the External Examiners in a short space of time, and are very grateful for your</p>	<p>Ongoing discussion for best way to present scripts and assignments for EEs to scrutinize in 2019-2020 cycle</p>	<p>COMPLETED</p> <p>This was all done electronically for 2019-20 and the EEs received all</p>

<p>my duties</p>	<p>in the short time-frame of their visit. For example, bundles of scripts could be pre-prepared with samples from high- medium- and low-performing candidates already selected and identified. IT access continued to be a major limiting factor for us this year. We request that dedicated, secure computers, with log-in done in advance, are available for us to review all on-line materials. For the BSc programmes, exam scripts and projects were available but the full-range of in-course assessments was not available.</p>	<p>tireless work. We will endeavor to ensure that high - medium - low scripts and ICA are made readily available either in paper or electronic format and that there are enough computers available and accessible for you to carry out the sampling. In general, the Exams Office does not give External Examiners a batch/sample of scripts, instead they are provided with a range of scripts</p> <p>Action Required:</p> <p>Exams office to work with course support and IT to ensure access for External Examiners during the visit. To make available online course work and projects as well as low - medium and highly marked scripts from each question / module exam</p> <p>Action Deadline:</p> <p>01-Jun-2019</p> <p>Action assigned to:</p> <p>exams officer; course support team; IT</p>		<p>that they required. Will need to be reviewed post-COVID if we return to paper scripts</p>
<p><u>Update to actions from 2018/19</u></p>				
<p>Question</p>	<p>External Examiners comment</p>	<p>CD's response & Action</p>	<p>Update in 2019/20</p>	
<p>1.2 Learning objectives, and the extent to which they were met</p>	<p>Gateway / BSc1 / BSc2 - The learning objectives addressed by a particular examination question were not always stated in guide answers. This was also noted in 2017.18 and it would be an enhancement if this could be achieved for all questions.</p> <p>BSc 3 - We do note that some of the exam papers, at least those prepared for staff in year 3, identify what lectures and learning objectives are being tested. This will aid in the provision of feedback for students.</p>	<p>College response: We do ask question authors to include the learning objectives when submitting questions and it is unfortunate this is not always adhered to. Year and Modules Leaders will be reminded when submitting questions in the future. ACTION: Course Director, Year Leaders, Exams Office</p>	<p>Complete</p> <p>We note that this is improved for 2019-20 based on EE comments</p>	

<p>1.2 Learning objectives, and the extent to which they were met</p>	<p>Overall - We note that there is access to course handbooks online and that the college has gone paper-free. However as noted in 2017.18, navigating this system at speed during the days when on site is cumbersome. It would substantially enhance the external examiner experience if there were a printed copy of module descriptors, learning objectives, summary of course assessment (in course and examination) and lecture list for each module. These should certainly be available in printed format during the examiners' visits, but ideally also sent to the examiners at the time of examination script scrutiny.</p>	<p>All material is located on RVC LEARN, which the Externals have access too. In addition Exams Office sends link together with the papers to help Externals navigate through LEARN pages. What might be useful is for the Course Team (Course Support and Year Leaders) to make contact with the specific EEs with this detail early in the academic year. ACTION; Course Director, Year Leaders, Course Support</p>	<p>Complete</p> <p>EE report noted the module handbooks with past median grades being given to BSc1 / Gateway EE this will be extended to other years of the course for 202-21</p>	
<p>1.4 Resources (in so far as they affected the assessment)</p>	<p>No specific information has been provided to examiners in relation to resources for assessment.... No information was provided to examiners as to the impact of more short-answer style exam questions on staff assessment time or on the speed of feedback to students on in-course assessments.</p>	<p>College response: Departmental Teaching Co-ordinators will be approached to determine whether they have conducted any analysis on the impact of more short answer style questions on staff assessment time. In regards to student feedback, this was released to students as published on the Exams Timetable. These dates meet with our Feedback policy to ensure timely feedback. There was one instance when, due to a family emergency, results were delayed but this was communicated to students appropriately. (CD, Departmental Teaching Co-ordinators)</p>	<p>This is part of the work allocation module publication of which has been delayed</p>	<p>COMPLETED See 1.4 above.</p>
<p>1.4 Resources (in so far as they affected the assessment)</p>	<p>Linked to this are examiner observations on variable feedback style (see later) and potential time/resource savings that might be made by a more uniform approach.</p>	<p>c. Variable feedback style and quality is a College wide issue. Some Module Leaders are in the process of developing online rubrics which it is hoped will unify the approach, eg Dev (Bsc1/ Gateway) This has been brought up in teaching committee. LTAC have</p>	<p>This has been brought up in teaching committee. LTAC have agreed an updated feedback policy which will need to be implemented in 2020-21. The BSc team have tried to implement rubrics but this was not approved in 2019-20</p>	

		agreed an updated feedback policy which will need to be implemented in 2020-21. The BSc team have tried to implement rubrics but this was not approved in 2019-20		
1.5 Please provide any additional comments and recommendations regarding the Programme	Following discussion with the programme lead for MSci WAB it might be prudent to re-think the description or title given to this program	College response: Thank you for this comment with regards the branding of the MSci Wild Animal Biology course. This process has already begun and is under active consideration at the moment with plans to develop a 3 year BSc Wildlife and conservation course and an optional 4th year research option (MSci). (WAB Pathway Leader)	Completed BSc/MSci Biological Sciences (Wildlife Health Sciences) has been validated and the WAB pathway will be discontinued after the current year one cohort, All students currently on the WAB programme are also able to change to the new WHS programme	
2.1 Students' performance in relation to those at a similar stage on comparable courses in other institutions, where this is known to you	For BSc 1 / Gateway it was noted that there was a high degree of fails and Qualified fails in IGE and BoC modules.	College response: a. BoC and IGE are the first modules and may take students time to adjust to new learning styles. Exams were held in January (for the first time) but essay style questions were removed from the papers. Students were given a mock exam after Reading Week, which included all styles of exam questions included on the Summative January papers (MCQ, SAQ, PSQ). Course Director will discuss whether additional support can be offered by Education Development either F2F or online. It has been noted that there was a lower average of entry qualifications for Gateway for 2018-19, which may be one contributing factor, although direct analysis has not been carried out. BSc1 entry qualifications were similar to previous cohorts • For BSc 2 it was observed that there was a higher number of	Completed The IGE module leader has made sure the questions in the exam paper are not ambiguous. No additional workshops were added 2019-20. Gateway students now have additional Science Development and Communication sessions 2020-21. Performance in exams will be one of the metrics used to evaluate the success of the initiative BOD and AAD appear to have similar median scores to the single 30 credit EW1 module. Students who failed did not have the opportunity to resit due to the policy during the pandemic to allow the progression of all students who engaged with module assessments regardless of failure.	

		<p>students resitting TEW module.</p> <p>College response: b. EWI has now been split into two 15 credit modules. Although the LOs, content and in course assessments will remain similar this means that there will be two separate papers. It is hoped that this will reduce the numbers of students needing to resit the papers (students are only allowed 15 credit qualified fail in BSc year 2, so EWI was not eligible as a qualified fail)</p> <ul style="list-style-type: none"> • For these cohorts it would be of value to formally record possible reasons for this. 		
<p>2.2 Quality of candidates' knowledge and skills, with particular reference to those at the top, middle or bottom of the range</p>	<p>For BSc 1 and especially Gateway, the arithmetic component of questions continues to be a struggle for some students.</p>	<p>College response: a. Numeracy continues to be a concern and staff will continue to engage with Education Development to ensure that appropriate support is available and flagged to students who require additional help. There are module specific directed learning sessions as well as a calculation based skills tutorial in first year. These will be reviewed by Module Leaders and tutorial conveners.</p> <p>Action Required: 1. Inheritance, Genetics and Evolution Module Lead to review module content and assessments with the view to supporting students with numeracy issues, in the light of the 2018-19 examination results. (Deadline: April 2020). Completed</p> <p>2. Educational Development Dept. (o develop and deliver numeracy workshops to support students struggling with mathematical concepts/data interpretation in the Inheritance, Genetics and Evolution</p>	<p>Completed</p>	

		<p>Module and the Animal Husbandry Module. Also, to run a series of drop-in sessions to address the problems of specific students. (Deadline: April 2020)</p> <p>Module Leaders and Year Leaders to ensure that all examination questions are mapped to specific learning objectives. (Deadline: April 2020).</p>		
<p>2.2 Quality of candidates' knowledge and skills, with particular reference to those at the top, middle or bottom of the range</p>	<p>The examiners noted that, overall, the exam marks achieved by the Gateway students were very similar to those taking the BSc 1 exams. However, that there was a noticeable discrepancy in performance between Gateway students and BSc 1 students in terms of the IGE marks (Gateway median was 26.6% compared with 37.5% for BSc 1) and that there were 14 fails among the Gateway cohort. The reasons for this difference were possibly caused by the numeracy issues mentioned above.</p>	<p>College response: b. Discrepancy of IGE marks between Gateway and BSc1 students is of some concern. Students will be reminded of additional support available through Education Development (Gateway Leader, IGE Module Leader)</p>	<p>Completed</p> <p>Please see comments above regarding Science Development and Communication initiative with Gateway students to provide extra support</p> <p>Additionally the RVC has now subscribed to Learning Sciences for 2020-21 which includes simple laboratory calculation quizzes to encourage students to develop their numeracy</p>	
<p>2.2 Quality of candidates' knowledge and skills, with particular reference to those at the top, middle or bottom of the range</p>	<p>For BSc 1, some aspects of in-course assessment resulted in very high grades this was particularly apparent for IGE and TMA. The assessments therefore may not have been effective in discerning depth of knowledge, may have simply indicated compliance by students to a task, and also are in danger of giving false comfort to students' over underperformance in the exam. In some contrast, for the BoC module (in which there were a number of qualified fails) the course assessment grades were mostly in the 2ii – 3rd class bracket.</p> <p>For BSc2, all but one student achieving a 1st class classification did so on the basis of an overall year mark in the low 70%. It is</p>	<p>College response: c. We would like to thank the External Examiners for this observation. Brief analysis has been carried out on year marks for each graduating cohort for several years and confirms this finding that most Firsts are in the low to mid 70% range in each year of the course. This may be due to the breadth of modules covered, large range of different styles of in course and examination assessments and the weightings that are given to each component of each module within the programme. Increasing the weighting of ICA would likely increase the overall module scores</p>	<p>Completed</p>	

	probably linked to the noticeably lower grades for some modules (as described above). Examiners were not able to see how this compares to previous years, and this long-term analysis would be helpful. Additional long-term analysis of patterns across several examinations and student cohorts is recommended to identify causes, consequences and potential remedies for these variations.	and therefore year and final degree classifications. (Course Director, Chair of Course Management Committee – for discussion at CMC)		
2.2 Quality of candidates' knowledge and skills, with particular reference to those at the top, middle or bottom of the range	For BSc2 TEW, it appeared that students were avoiding certain problem-solving questions and those that did tackle them were scoring low. For question 8, it was observed that the three highest scores were for students who were achieving an overall year 2ii or 2i classification. This may reflect engagement of students with tutorials on problem-solving skills – this would be consistent with national data linking attendance to performance, and it is something that could be analysed further and brought to the attention of students.	College response: d. Thank you for this observation regarding EWI PSQ. Engagement for some activities continues to be of concern for BSc cohorts. The benefits of attendance will be stressed to all students as in previous years during year leader and module leader intro sessions (BSc Year Leaders, Module Leaders) completed	Completed	
2.2 Quality of candidates' knowledge and skills, with particular reference to those at the top, middle or bottom of the range	For BSc 3 - There were some very good examples of question construction in D&D Yr3. Additionally the problem solving questions are clearly short but efficient in terms of highlighting students with a deep or superficial knowledge of the area. There are some modules where the true value of these are displayed and PSQs which tend to focus only on knowledge recall are easily identified as consistently giving higher marks in comparison to true PSQs . It may be worth the module leads reviewing these internally and review those PSQs which consistently result in higher scores, identify potential elements focusing on knowledge recall only and replace these.	College response: f. Thank you for highlighting best practice with regard to D&D questions. [Development of guidance for exam questions and during paper setting meetings] Individuals involved in exam scrutiny will be asked to identify questions which rely more heavily on factual recall so that question setters can be asked to replace with those that require reasoning, a deeper knowledge of the subject area (Course Director / Year & Module Leaders; Exam Office to assist where needed) completed	Completed	

<p>2.3 Please provide any additional comments and recommendations regarding the students' performance</p>	<p>For BSc 3/MSci, Bsc Comp Path, AoP for example, poor handwriting of students was noted with markers' comments being not much more legible. An online system would improve this and the overall fairness of the assessment. One candidate could type and print their answers so it must be feasible?</p>	<p>College response: a. We thank the External Examiners for this and agree that online examinations would help with legibility of scripts. The College has investigated use of online systems for all candidates but currently lacks resources to enable this for the whole cohort. Unfortunately, only students with special exam arrangements are able to be accommodated at the present time</p>	<p>Due to COVID all examinations were carried out electronically in April 2020. This will be reviewed but may persist</p>	<p>COMPLETED</p>
<p>3.1 Assessment methods (relevance to learning objectives and curriculum)</p>	<p>For Gateway/ BSc1 /BSc 2 - The removal of essay style questions for gateway/ BSc1 /BSc 2 now brings the programmes in line with other Russell Group courses. Testing for integration and synthesis of knowledge plus demonstration of extensive study beyond the syllabus of lectures is now fulfilled only by in course assessment, e.g. report writing. As already noted, the examiners feel that this must have been of benefit to staff assessment time, and we would imagine that students will find the short answer / MCQ styles to be a more rigorous test of their knowledge. It would be good if the impact of these changes were to be assessed in some way. Certainly from the examiners' perspective, review of examination papers was much more straightforward.</p>	<p>College response: a. We would like to thank the External Examiners for positive comments about the recent changes made to the assessment diet for Gateway/BSc1/2 and will endeavour to provide some analysis from the Departmental Teaching Coordinators regarding staff time (as above) and academic achievement between modules/years of study (as above)</p>	<p>Please see comments above regarding delay to work allocation model publication due to covid</p>	
<p>3.1 Assessment methods (relevance to learning objectives and curriculum)</p>	<p>In BSci 3 EMS - As mentioned before, including assessed teaching material and LOs in model answers is excellent practice and even though not found for all exam questions, they seem to be used more this academic year.</p>	<p>College response: We would like to thank the External Examiners for highlighting best practice from the BSc3 EMS module and will continue to request LOs in model answers (Course Director / Year Leaders) completed</p>	<p>Completed</p>	

<p>3.2 Extent to which assessment procedures are rigorous</p>	<p>For Gateway/ BSc1 /BSc 2 - Examiners observed modules in which the median was lower (IoD) or higher (OH) relative to other modules in that cohort (also noted by 2nd marker on one of these). These observations suggest that it would be of great value to the overall rigour of the assessment process to set up simple macros within marking spreadsheets and analyse grades according to the marker. We appreciate that there is a solid moderation process in place, but this knowledge would help shed light on the instances where a module grades are observed to be high or lower than others.</p>	<p>College response: We thank the External Examiners for the suggestion to analyse grades from individual markers within the marking spreadsheets and will consult with Exams team to set this up (Course Director, Exams Office)</p>	<p>Not complete – will try to carry out analysis 2020-21</p>	
<p>3.2 Extent to which assessment procedures are rigorous</p>	<p>For all years - As already noted, we would suggest that a review of the common grading scheme is undertaken, across the years, to ensure that it fits the purpose of the current curriculum and handbook expectations and guidelines, including mention of appropriate referencing style. We also suggest that a review of consistency, across the years, in marking style is undertaken for exam and in course assessments.</p>	<p>College response: b. The common grading scheme is used College wide and is not specific for individual courses. Course Director will consult with Director of Assessment to the best way to move this forward (Course Director, Director of Assessment) c. Thank you for highlighting that there are several different formats for marking style and feedback between different pieces of work. Highlighted elsewhere in this report for some pieces of work there is now a prompt for markers to give clear written feedback i.e. “you could improve your mark by” as well as prompts for individual parts of a given piece of work. This has not been adopted across the board but could be investigated further (Module Leaders, Year eaders)</p>	<p>Completed (discussed with Director of Assessment) this is an RVC wide issue</p>	
<p>3.2 Extent to which assessment procedures are rigorous</p>	<p>The YR3 project dissertation double marking is to be commended, as this is a serious time commitment, however it was troubling that such large discrepancies could exist between the two markers. There</p>	<p>College response: d. The policy for double marking of major pieces of work, such as the Research Project, is set at a College wide level. In 2018-19 we</p>	<p>Completed (brought to the attention of Director of LWB as an area of staff training need)</p>	

	<p>was ~9-10 projects that had a 20%+ difference in marker one vs marker two. A simple agreement in this case is not fair on the student as it likely leads to a middle point being picked. It might be worth considering a sliding scale, where by up to a 10% difference can be rectified between examiners. However, 10%+ difference would benefit from a third marker as there would a clear difference in the fundamental scientific opinion of the two examiners at this gap. I understand there is a moderation procedure in place, however it may not be fair on the staff involved or the student in cases where the gap between examiners is so large</p>	<p>introduced the use of a 'facilitator' to ensure that, where the two markers differed across a grade boundary and their marks were not adjacent, an experienced academic was ask to ensure appropriate justification of the agreed mark was documented. The use of a third marker is not something the College uses as this could potentially lead to three disparate marks. Ensuring parity between markers will be discussed with Learning and Wellbeing as part of ongoing staff and examiner training</p>		
<p>3.4 Standard of marking</p>	<p>One area for concern is in the consistency of feedback style and quality. This is summarized as follows: For short answer questions / problem-solving questions: Some markers used pen which was the same colour as the candidate's and one marker is using pencil (not legible). Some markers consistently assign one tick per mark, while others pepper the page with ticks and then assign a score which doesn't link up with it. Some markers used crosses for incorrect answers and one marker struck through the actual text. Aside from this wide variety of marking style there is also a variable level of annotation of scripts with comments to help explain marks. A consensus should be reached on style to maximize value to the students.</p>	<p>College response: ai) Thank you for highlighting these inconsistencies in annotation. Will consult with Exams Office to see ensure that appropriate guidance is given within marking packs. The Directorate of Learning and Wellbeing will also ask to consider including appropriate training in the College's Inset Day. (Course Director, Directorate of Learning and Wellbeing, Exams Office)</p>	<p>Completed</p> <p>Guidance is given to examiners on suitable annotations that are consistent with marking scheme</p>	
<p>3.4 Standard of marking</p>	<p>A further observation concerned the allocation of marks within short answer questions – sometimes this had not been decided at the time of question setting and notes had been made by markers at the time of marking on guide answers concerning the allocation of marks. As an</p>	<p>aii) Thank you for highlighting these discrepancies, the allocation of marks for parts of questions within the question itself and how they are allocated alongside the model answer is required at the question setting stage but this can be re-</p>	<p>Completed</p> <p>Guidance is given to examiners on ensuring marks are suitably allocated and this was highlighted for scrutiny at exam paper setting meetings</p>	

	<p>additional thought, examiners felt it would be of merit for question setters to consider always indicating to students within the body of the question (if more than one part to it) as to how the marks would be awarded – naturally some questions already do this when broken down into parts a, b....etc.</p>	<p>iterated in guidance to question setters. Questions that are lacking in allocations of marks or are insistent should be highlighted at the paper setting meetings and returned to the author for rewriting. (Year & Module Leader, with assistance from the Exams Office)</p>		
<p>3.4 Standard of marking</p>	<p>For coursework: There was some really very good / excellent feedback offered on coursework. A particularly good feature of some markers' feedback was a section on 'Things you could do to improve this work'. However overall, examiners observed a wide range in the style with which feedback is delivered (tracked comments in word/pdf files; excel tabulated, listed within the online system, listed+categorized in some way within the online system etc.). This variability may affect the use that the student can make of the feedback and may also lead to confusion in the student body as a whole. It may be that students get greater benefit from tracked comments but that the online system makes more difficult for some assessors to implement. In some instances examiners awarded a first-class mark and did not give any real justification – for example, 'excellent abstract' as the only feedback does not allow a student to know why they did well and allow them to repeat it with confidence next time. In other instances the feedback language was vague, for example comments like 'sound answer' or 'Brush up on bits' do very little to aid students in evaluating their performance. We also observed many instances in which the feedback descriptors used by a marker did not align with the grade assigned according to the common marking scheme (the value words like 'good' or 'excellent' should align with the grade awarded). This issue was flagged up last year and suggests that it should be reviewed alongside the common grading</p>	<p>College response: bi) Thank you for highlighting discrepancies in wording used in feedback and the marks awarded for some pieces of work. Course Director will ask Year Leaders to remind marks regarding the use of words in the descriptors matching with the marks awarded. As this is also a College wide issue, will ask for it to be included in training for new examiners. We would ask that External Examiners (CD, Directorate of Learning and Wellbeing)</p>	<p>Completed Guidance is given to ensure that all wording is in line with the marking scheme descriptors at the grade awarded</p>	

	scheme itself.			
3.4 Standard of marking	For the BSc 2 project, it was noted that several assessors arranged their feedback comments according to the sections of the report. On the face of it this seems logical, but it may not serve the students as well as if it arranged according to 'features' or 'qualities' – for example categories like 'context', 'analysis', 'critical evaluation', 'presentation' (each with a different weighting) and some of which will cut-across project write up sections. The nature and uniformity of feedback should be reviewed.	bii) Thank you for these comments regarding the feedback of BSc2 projects and suggestions to ask for written comments under different qualities rather than sections of the report. Course Director will raise this at the next CMC. Development of a straightforward feedback rubric for research projects may aid consistency which can then be carried over into BSc3 and MSci research projects (Course Director, BSc2 project co-ordinator?)	Not complete BSc2 year leader and project co-ordinator devised a rubric but this could not be used for marking as has not been approved at all academic committee level (although would have been used formatively for 2020)	
3.4 Standard of marking	There seemed to be a big emphasis on referencing by many markers, and it was not always clear (largely due to the variable style in which feedback is delivered) what part this played in the mark awarded. As far as the examiners could see, the stance on referencing was not always mentioned in online course work guidance and certainly does not seem to be mentioned in the common marking scheme.	College response: Thank you for this observation that there is a lack of explicit mention of referencing in the Common Grading Scheme. At the 2.1 classification the CGS states "Appropriate reference to published work from authoritative sources", whilst at 1st class "Published work from authoritative sources used extensively and appropriately". This has generally been interpreted to include both the use of references as well as appropriate citation and listing in the college-endorsed format (Harvard) and students are given guidance in the appropriate sources of information to use and how to present them within their written work, with additional guidance from online resources, skills tutorials, tutor input etc.	Completed	
3.4 Standard of marking	There appeared to be some evidence of discrepancies in the marks awarded to Gateway students for their "Lambing reports" (narratives that summarise and analyse their experiences during an on-	College response: c) This year a new Module Leader took over for Animal Husbandry and the marking of the lambing report	Complete for 2020 new module leader in post with amended assignment due to COVID and students not being allowed on placements	

	<p>farm placement. The discrepancies appeared to relate to the expectations of the difference markers, some of whom appeared to award low marks (i.e. 35 – 40%) while others awarded marks in the 80% range. Although these marks had been moderated, it was often very difficult for the external examiner to understand why such a wide discrepancy existed. It would be worth trying to analyse these results in more detail to see whether this impression was correct.</p>	<p>was shared over a wider range of staff than in previous years. Gateway leader is planning to flag this with the module leader to gather her comments and suggestions in advance of the 2020 laming period. (Gateway Leader)</p>		
<p>3.4 Standard of marking</p>	<p>For essay-based questions (year 3 and 4): The biggest area for concern was across the modules for yr3/4 was the lack of a common system for denoting when a mark(s) are awarded. For students reviewing their scripts should they need to following failure of an exam, this is problematic. Likewise there were a number of examples where marks had initially been summed incorrectly. However, this would not be an issue if a consistent approach was used.</p> <p>Within modules the extent of feedback was still variable – often the feedback did not directly relate to the points expected within the model answer provided with exam questions. Finally, there were some instances where the written comments did not tally with the marks provided, e.g. an examiner commenting ‘excellent and exceeding answer’ but only awarding 82%.</p>	<p>College response:</p> <p>Thank you for highlighting that some marks had initially been incorrectly summed. If the questions are being marked on either the 0-10 or Common Grading Scheme then the allocation of marks is not who the schemes works. The schemes are a holistic overview of how a student has performed and not a summing up of marks (as is with a PSQ) The need to be accurate with addition of marks will be included in marker instructions and as above clear guidance on ensuring that written feedback conforms to the descriptors in the common grading scheme and where there are parts to a question how the marks have been awarded (Course Director / Year Leaders).</p>	<p>Complete</p> <p>Guidance to markers to ensure that marks were added correctly and written feedback conforms to CGS grade descriptors</p>	
<p>3.5 In your view, are the procedures for assessment and the determination of awards sound and fairly conducted?</p>	<p>We felt that a briefing of examiners by module leads at the start of the visit would have been of merit (this could complement the summary document of courses / assessments) and would give them the opportunity to outline what went well or not so well that year.</p>	<p>College response:</p> <p>a. Thank you for this valuable suggestion. We will endeavor to prove module packs and ensure that each Year leaders is on hand to brief External Examiners of how modules have run at the start of their visit. (Course Director, Year Leaders, Exams Office)</p>	<p>Completed</p>	

		Complete: module handbooks were sent. Module leaders were available (via Teams) if EEs needed to contact them		
3.5 In your view, are the procedures for assessment and the determination of awards sound and fairly conducted?	In response to the 2017.18 examiner report the course director commented that the programme will be undergoing Periodic Review in 2020 and the suitability/sustainability of the assessment load should be one of the areas under scrutiny. The review should reveal whether the multiple component in-course assessments coupled with multiple examination papers for multiple modules across an entire degree programme (e.g. several dozen discrete components contribute to a 3-year Biological Sciences programme) pose risks for the College (i.e. sustainability in relation to the academic and administrative staff workload, and recognising the increasing number of students).	College response: b. Thank you for this suggestion. Suitability and sustainability of assessments will be included as one of the items under scrutiny in the next Periodic Review (Course Director)	Completed	
3.5 In your view, are the procedures for assessment and the determination of awards sound and fairly conducted?	Evaluation of in-course assessments and projects has to be undertaken using an online system that is rather cumbersome for external examiners. There are a large number of in-course assessments, and the examiners would ideally like to have a reasonably objective method of comparing the grades awarded, it may be useful to develop a sampling strategy.	College response: c. The Course Director and Exams Office will discuss the possibility of development of a strategy to make this more straightforward and investigate whether by sampling from top, middle bottom after marking (Course Director, Exams Office)	Completed A sample of work was sent to EE	
3.5 In your view, are the procedures for assessment and the determination of awards sound and fairly conducted?	Some module leaders were not present at the board meeting which, while probably inevitable, did partially disabled a full immediate discussion around specific issues. External examiners were given ample opportunity within the agenda to voice feedback.	College response: d. Module Leaders will be reminded of the dates of Exam Boards and asked to be present or, if unable to attend, to send a deputy (Year Lead, Heads of Departments)	Completed although a limited number were invited for June 2020 Exam Boards for security reasons	

<p>4.4 I was able to scrutinise an adequate sample of students' work and marks to enable me to carry out my duties</p>	<p>Over all years - We note a comment from the 2017.18 examiner report - "For example, bundles of scripts could be pre-prepared with samples from high- medium- and low-performing candidates already selected and identified.". This didn't happen for 2018.19 and would expedite the examiner process. For all years, an additional graphical display of mark distribution for examiners would be appreciated in future years.</p> <p>For Gateway/ BSc1 /BSc 2 - exam scripts and projects were available but the full-range of in-course assessments was not available.</p>	<p>College response:</p> <p>a. A mentioned previously, we will work on the development of a strategy to make sampling more straightforward (Course Director, Exams Office)</p> <p>b. Course Director will investigate producing graphical displays of mark distribution in time for the arrival of External Examiners (CD, Exams Office)</p>	<p>Completed samples of papers at each grade level were sent to EE</p>	
<p>4.9 I have received enough support to carry out my role</p>	<p>We are complimentary of the exams office team for all their support and clear communication. But there has been no real additional clarity given to the external examiner's role following comments made in previous years. Naturally the existing examiners have developed a strategy for the examiner days, informed by prior experience of some examiners during similar roles at other Universities. However, it would be helpful to external examiners if the College sets out clearly its expectations of the external examiner role, and any specific objectives for external examiner action in advance of the visit. This could be set out in a policy document which articulates our role e.g. in relation to scrutinising or validating the marks of individual students, particularly those who have had individual circumstances or who sit at a critical mark boundary. The induction day(s) for new external examiners should complement this by setting out if/how it wishes them to contribute at all stages of the assessment process.</p> <p>As noted earlier, we would value printed module descriptors, learning objectives,</p>	<p>College response:</p> <p>We welcomed the External Examiners' comments from last year, relating to improving the information given to them. We have since revised the procedure for External Examiners to specify their duties. We have consequently updated the RVC webpages dedicated to External Examiners.</p> <p>We have not received similar comments from other External Examiners appointed on other Exam Boards.'</p> <p>Instead of the face to face annual training, which was historically delivered at the inset day on assessment each January, we have created a bespoke RVC online training for the new External Examiners available to them as soon as they are appointed. We will be conducting a review of RVC practice against the revised UK Quality Code specifically to external expertise during 2019/20 academic year.</p>	<p>Completed External Examiners website has been approved. This hasn't come up as an issue in the latest report.</p>	

	<p>lecture lists and assessment list being available during our visit (and ideally mailed or link emailed earlier in the academic session / at time of question setting / review) and perhaps an indication from module leads on how the year went (at start of examiner day).</p>	<p>We will endeavor to provide printed module handbooks with class by class and overall learning objectives, Award maps including assessment lists and relevant Grading Schemes during the External Examiner visit as well as a zip file containing this information when questions are sent for review. (Course Director, Year & Module Leaders, Course Support, Exams Office)</p>	<p>Handbooks were sent for all modules</p>	
<p>5.2 External Examiner comments: For College information only</p>	<p>We recommend that procedures should be clarified for instances where exam board vote not to adopt the penalty proposed.</p>	<p>College response:</p> <p>The College does who appropriate policy document detailing the Academic Misconduct procedure and this defines how an Exam Board should receive and act once the outcome of an investigation has been completed. The Academic Registrar will be asked to review the role of the Exam Board in procedures where an academic penalty has been applied arising from plagiarism or other academic misconduct. (Course Director, Academic Registrar)</p>	<p>Completed</p> <p>Academic registrar asked to review this document</p>	

Collaborative Report

Exam board meeting: 27-Jun-2020

BSc in Bioveterinary Sciences, 2019/20

Lead examiner: Dr Kerstin Baiker

Collaborating examiner(s): Professor William Holt, Dr Lucy Green, Dr Robin Flynn, Dr Dan Lambert, Dr Nick Wheelhouse

This report relates to the following pathways of the UG Biosciences suite:

- BSc(hons) Biological Sciences
- BSc(hons) Bioveterinary Sciences
- BSc(hons) Animal Biology, Behaviour, Welfare and Ethics
- BSc(hons) Biological Sciences with Certificate in Work Based Learning
- BSc(hons) Bioveterinary Sciences with Certificate in Work Based Learning
- BSc Comparative Pathology
- MSci Biological Sciences
- MSci Bioveterinary Sciences
- MSci Applied Biological Research
- MSci Applied Bioveterinary Research
- MSci Wild Animal Biology

The Programme

Please comment, as appropriate, on the following aspects of the programme:

1.1 Course content

As a general observation, course content is appropriate in all the programmes examined. There is considerable variety and choice available to students and the range of topics provides highly contemporary coverage of the veterinary and biomedical sciences.

BSc Comp Path covers the comparative aspect of the module and is of good academic standard.

1.2 Learning objectives, and the extent to which they were met

The learning objectives for each course were clearly stated or found on RVC LEARN and readily accessible to us and the students. Exam questions appear to cover the teaching blueprint and learning outcomes. Learning objectives were stated in most draft examination papers for Gateway, BSc 1 and 2. This has improved from previous years. Learning objectives and specific lectures are highlighted as they relate to teaching material for BSc 3.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

This is still somewhat a work in progress but pleased to see that most examiners are now providing this valuable information

1.3 Teaching methods

Teaching methods which include didactic lectures, small group teaching, practicals, guided self-directed learning and research projects appear appropriate.

The examiners note that the COVID-19 outbreak will have impacted substantially on teaching and assessment processes in Semester / term 2. We also note that the College adapted its methods quickly and attempted to mitigate negative impact on students.

It should be noted that this approach is in line with other external examiners' institutes.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

We thank the external examiners for their reassurance that we have acted in accordance with other institutions

1.4 Resources (in so far as they affected the assessment)

There were no resource issues identified during the review of the examinations.

1.5 Please provide any additional comments and recommendations regarding the Programme

It was noted that one candidate had not received marks for work undertaken as part of a placement in Singapore. It was reported that efforts had been made to obtain the missing marks but these had been unsuccessful at the time of the exam board. It wasn't clear why this delay had occurred. A 'no detriment' approach had been taken to resolving this, which is acceptable in the circumstances, but we recommend that the viability of this arrangement is considered carefully if this situation is likely to occur in future, or contingencies put in place to avoid this arising in future years.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

We will review the collaborative agreement to ensure that clear steps are laid out for NTU Exams Office to send results to RVC Exams Office electronically rather than by mail, thus RVC will be able to process the results in a more timely manner

Student performance

Please comment, as appropriate, on:

2.1 Students' performance in relation to those at a similar stage on comparable courses in other institutions, where this is known to you

The performance of students in all programmes is comparable to what we have observed in Russell Group universities offering similar or related programmes of study (Birmingham, Nottingham, Southampton, Sheffield, Liverpool).

2.2 Quality of candidates' knowledge and skills, with particular reference to those at the top, middle or bottom of the range

Gateway –

A notable outcome of this year's examination results was that they were consistently higher than last year's; in some cases to a remarkable extent. Interestingly, there was a marked improvement in student performance in the "Inheritance, Genes and Evolution" (IGE) module which, despite producing lower marks than the other modules (median was 45%, while all other modules produced medians above 50%) was much higher than last year's equivalent IGE score (26.63%). While some of the overall improvement may have been linked with the different circumstances under which these exams were taken, the IGE exams were undertaken in the normal way and did not involve open books. As IGE has been a problem module for several years in terms of low exam marks, it seems that the lecturing staff have managed to adapt their style of teaching or exam formats in ways that are

more suitable for these students. It is also possible that the cohort of students has a generally higher level of ability than those of previous years.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

The IGE module leader has worked hard with other question setters on the module to ensure that the framing of the questions within the exam paper are not ambiguous in any way, without reducing the academic quality of the questions.

It is also worth noting the increased marks for the “Integrated Physiology 1” module, which rose from a median score of 52.5% in 2019 to 68.34% in 2020. The reason for this is not immediately obvious, but it may be worth focusing on this outcome to see whether there are any clues that could be exploited in future courses

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

Integrated Physiology 1 paper was sat under Extraordinary Regulations which may account for some of the increase in median score

It was clear from the coursework and library projects that many of the students tackled their essays enthusiastically, and some produced work of an exceptionally high standard. I (WVH) was especially impressed with one essay that described non-genomic impacts of sperm components, such as microRNAs and phospholipases, that induce post-fertilisation effects on embryonic development. This was a highly topical essay with references to recent publications and was almost of a publishable standard.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

We thank the EE for this observation and agree that we have some very dedicated and talented students

As in previous years the students did well in the animal husbandry module (median 75.01%), possibly reflecting their level of interest and existing knowledge of the subject.

As part of their course, the Gateway students have to spend some time on a farm during the lambing season and then write a broadly based analytical account of their experience. Although their reports are of generally good quality, the writing exercise highlights differences in the students' abilities as final marks ranged between about 45% and >80%. The markers provided consistently good and helpful feedback and explained where marks were lost or gained.

BSC1 –

There were more 1st class marks awarded this year than last.

It is noted that overall performance in the IGE module continues to be poor relative to other modules (13 qualified fails and 4 fails). It could be that this performance is due to the students settling in to University, although it could also reflect the way in which they are engaging with this module's specific content / style of teaching. Having said this, the median exam mark of 40% is a slight improvement on last year BSC1 median (37.5%).

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

(as for Gateway) the IGE module leader has worked hard with other question setters on the module to ensure that the framing of the questions within the exam paper are not ambiguous in any way, without reducing the academic quality of the questions.

The in-course assessment results for IGE and TMA modules continue to be high. A concern here is that the tasks are too simple and not effective in discerning breadth and depth of knowledge. Are they simply assessing compliance in doing a task?

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

The in course assessments for these modules will be reviewed by Director of Assessment, IGE Module Leader, TMA module leader, BSc1 Year Leader, Gateway Year Leader

BSc 2 –

There were more 1st class marks award this year than last.

Overall performance in the PID Jan exam was lower (53%) than both the other two modules. These are modules that may (with no detriment) go on to be used in final classification. This was due to both lower results in both the exam (mean 49%) and ICA (61%) components. Marks for the PID exam were particularly low for Questions 1, 4 and 5. Questions 1 and 4 relate to components of the immune system as does much of the ICA and some reflection on the question / teaching may be warranted.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

We thank the EE for this observation and will pass on to the PID module leader and teaching team for reflection on the immunology teaching on this module

For AAD Jan exam, Questions 5 and 6 (and to a lesser extent Questions 2 and 8) had mean marks on the low-side. These questions all relate to immune function (as above for PID) and reflection on this seems warranted. It may be that additional support to student learning is required.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

We thank the EE for this observation and will pass on to the AAD module leader and teaching team for reflection on the immunology teaching on this module

For BoD, 8 students achieved 100% of their ICA. This was a write up of a lab practical that was in the form of guided short answers. It will have boosted the overall module performance. By comparison, the performance for a guided short answer in-course assessment for PID didn't yield such high max marks and will have impacted on the overall performance for this module, as noted above.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

We thank the EE for this observation and will pass on to the PID module leader and teaching team for reflection of the composition of the ICA

BSc 3 -

As in the previous year there was a wide range of marks for some of the modules but given this occurred in both terms it would be independent of COVID19 disruption.

The subject matter being testing in each exam/module is relevant and up to date, thus the college should have confidence in the delivery of their stated outcomes. There is a clear path to distinguishing those students who excel (not always across the board) and those that do not. The marking and assessment criteria are fair and robust. There was some concern about the % of students obtaining either 1st class or 2.i class degrees this year compared with the previous year. The proportion is not vastly different 54% vs 64% last year; a more thorough examination of previous years would be warranted before conclusions are stated. The overall outcome of this year's examinations show that students were doing generally well or very well.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

We thank the EE for these observation, and will pass on to the BSc3 year leader and module leaders for reflection on the slight overall drop in good degree classifications this year and whether this is a COVID related issue – although applying our no detriment policy impacted only a few students over all (those who had achieved a higher degree classification in 2nd vs 2nd and 3rd year marks combined were awarded their 2nd year degree classification). A number of students improved their overall degree classification as would be expected in a normal year.

MSci -

The MSci project reports were generally of a good standard, with no obvious differences in standard from previous years. The range of marks was perhaps narrower than last year but that is more likely to be the result of inter-cohort variation rather than any consequence of COVID disruption.

2.3 Please provide any additional comments and recommendations regarding the students' performance

No further comments.

Please comment, as appropriate, on:

3.1 Assessment methods (relevance to learning objectives and curriculum)

Due to COVID-19, BSc1 and Gateway assessments are formative only and all students progress to year 2. In all programmes, there is a good range of assessment methods; this variety provides students with several ways to demonstrate their knowledge and there is no reliance on a single method of assessment. This is in line with the sector.

The heavy reliance on the essays seen in previous years appears to become less which we welcome.

BSc Comp Path and other courses: A continuing move towards full online assessments would eradicate a few remaining issues with poor handwriting (students as well as markers occasionally) in short answers questions and project write-ups.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

We thank the EE for these positive comments

We are using remote proctoring software for MCQ/SAQ/PSQ and OCM dropbox for essay style papers (BSc3 only) this year. If successful then this assessment style could persist beyond COVID- related changes to the examinations

3.2 Extent to which assessment procedures are rigorous

For BSc 1 and 2, we note previous examiner steer to analyse marking according to marker. This was being investigated but the outcome of these analyses is not known to the examiners. We note that for pre-COVID exams the moderation / sample marking was working effectively.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

Analysis of individual markers was not carried out in 2019-20, with electronic marking now in place this may be more straightforward in the future

The procedure for exam script scrutiny was effective.

Due to COVID-19, some assessments were only 1st-marked (except summative Jan exams for BSc2).

COVID-19 will have substantially impacted on Gateway, BSc 1 and 2 student learning, and it seems likely that it will continue to be felt in the subsequent years by some students. This will need to be monitored and mitigated where possible.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

This is definitely something that the BSc leadership team are aware of and are mindful of “gaps” that may need to be plugged. Because of the timing of the Pandemic at the end of the term 2 these are largely analytical and practical research skills rather than knowledge gaps.

BSc 3. There is a clear and robust process in place to distinguish those top tier students from the rest of the cohort. There is a mechanism to reconcile differing marks and this is fair to the student in its outcomes. The quality of feedback on both project reports and module exams is good and staff should be pleased with this.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

This practice is to be highly commended and it enabled the external examiners to easily identify where and why marks were assigned for an individual answer. Where there was disagreement between the first and second marker, the disagreements were discussed and a consensus mark awarded.

We thank the EE for this observation and will pass on to Comp Path teaching staff and examiners

MSci

The assessment process was impressively rigorous, with independent second marking. The examiners should be

commended on the detailed feedback provided; this was helpful as an external examiner to understand why there were discrepancies in marks between the markers, and the constructive nature of the feedback will be of benefit to the students.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

We thank the EE for this observation and will pass on to MSci examiners

3.3 Consistency of the level of assessment with the Framework for Higher Education Qualifications (FHEQ)

The level of assessment in all programmes is entirely consistent with the FHEQ.

3.4 Standard of marking

Gateway, BSc 1 and 2 –

There was evidence of good practice in many places. Notably, the quality of feedback for Gateway and BSc 1 library projects was high. Overall the standard has improved over the last few years. It is noted, however, that for some assessments there is still inconsistency between markers in style and quality of feedback. We understand from the exams office that steer was given to staff to avoid annotation of work so that feedback to students could be automated. This is an understandable practical approach but has disadvantages in the precision of feedback that can be offered to the students. As previously noted, a consensus between markers on style will maximize the value to the students. It is almost as if this needs a structured audit, to bring home the point to markers. Also, prior to marking it may be worth asking the module leads to provide an example of the marking style expected.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

We thank the EE for this observation. We are working towards introduction of consistent rubrics for certain pieces of work including the BSc2 projects, which will somewhat allay this.

We will disseminate the comments to the Biosciences examining teams

Types of issues noted are as follows: 1) the number of ticks for SAQ / PSQ should match the marks awarded; 2) state the marks awarded per section in SAQ / PSQ; always mark in a pen colour distinct from the student's; 3) Inconsistency in whether work was annotated or not; 4) not all markers indicate where / why a mark has been lost by adding comments; 4) some feedback comments are very vague / gestural; 5) some markers inserted the generic marking guide into the feedback as way for students to self-assess against the grade award; 6) In some instances the common grading scheme was mentioned but no breakdown of marks shown; 7) For BSc1 library projects the marking had been standardised and addressed common marking scheme categories, plus room for improvement. Undoubtedly annotation of the work with comments would have enhanced this feedback further. By contrast the marking of BSc2 projects was much more variable in style. Often the marking tended to be grouped by project section (aims, methods etc.) rather than features from the common marking scheme (like understanding, critical thinking, etc.). The style of marking and feedback appeared to be very much dependent upon the individual marker. A point to consider is whether the current feedback style would be enhanced by formal comments around features of the common marking scheme. There were instances where the descriptor words like 'good' or 'very good' didn't link up with the mark awarded.

BSc 3 –

Marking was maintained at high standard for all modules and for the project elements. There was use of dual marking and moderation at appropriate points and clear justification for an increase or decrease in grade after this moderation has taken place. It was reassuring to see that dual marking for the project reports often yielded identical or near identical results; this level of consistency offers assurance to examiners that the rubric used is robust. There was conversation related to the supervisor grade and the range of marks awarded here, ie. 8% up to 98%. It should be made clear to both staff and students that this grade reflects a different set of examinable

outcomes when compared to the report

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

We thank the EE for this comment and will aim to provide guidance to staff and students on how this component of the marks should be awarded

MSci -

A high standard of marking was noted, with detailed feedback provided. There was substantial discrepancy in marks in at least one case between markers; interrogation of the feedback gave an indication of why these differences existed and I was satisfied the final mark awarded was fair in these cases.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

We thank the EE for this observation and for interrogating the feedback given to be able to reassure us that a fair mark was agreed upon in this case

3.5 In your view, are the procedures for assessment and the determination of awards sound and fairly conducted? (e.g. Briefing, Exam administration, marking arrangements, Board of Examiners, participation by External Examiners)

The procedures employed by the College were fair and all carried out with great efficiency by the Examinations Office. External examiners were given ample opportunity to ask questions or express their opinion despite the necessary move to online scrutiny of papers and online meetings due to the coronavirus (COVID-19) outbreak. We are grateful to the exams office for their clear communication around the time of exam paper scrutiny, preparation for external examining, and clear links / access to the online systems. For BSc 1, data on performance in previous years (by module) was included in module handbooks. This was helpful in certain instances (e.g. IGE) and would be of use in BSc2 as well.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

We thank the EE for this. We will ask course support and exams office to provide this information in a similar format for BSc2, BSc3 in future

3.6 Opinion on changes to the assessment procedures from previous years in which you have examined

It is quite difficult to comment on this in light of the COVID circumstances. The assessment procedures had to be adjusted to the coronavirus (COVID-19) outbreak in 2020. As noted, it will be important for the College to keep an eye on the pathway of individual students to mitigate impact of the pandemic on their learning and ability to perform effectively in assessments in subsequent years.

Most examinations were already sat by the time national lockdown implementations were introduced; however, this had an impact on some research project work which could not be completed. The RVC agreed and published a 'No detriment' policy for graduating students for summative assessments which was clearly communicated and adhered to in the following assessment procedures.

The college should consider if the no detriment approach they have adopted will need to be adapted to a changing style of deliver for the coming academic year and when these changes should be made such that they are transparent for the students.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

We thank the EE for this observation and assure them that no detriment policies have been agreed for current BSc3 and MSci students and that these are published on the RVC website

3.7 Please provide any additional comments and recommendations regarding the procedures

No further comments.

4.1 Comments I have made in previous years have been addressed to my satisfaction

Yes

Additional comments, particularly if your answer was no:

We feel that our previous comments have been taken into consideration by the College, thank you.

4.2 An acceptable response has been made

Yes

Additional comments, particularly if your answer was no:

4.3 I approved the papers for the Examination

Yes

Additional comments, particularly if your answer was no:

4.4 I was able to scrutinise an adequate sample of students' work and marks to enable me to carry out my duties

Yes

Additional comments, particularly if your answer was no:

4.5 I attended the meeting of the Board of Examiners held to approve the results of the Examination

Yes

Additional comments, particularly if your answer was no:

4.6 Candidates were considered impartially and fairly

Yes

Additional comments, particularly if your answer was no:

4.7 The standards set for the awards are appropriate for qualifications at this level, in this subject

Yes

Additional comments, particularly if your answer was no:

4.8 The standards of student performance are comparable with similar programmes or subjects in other UK institutions with which I am familiar

Yes

Additional comments, particularly if your answer was no:

4.9 I have received enough support to carry out my role

Yes

Additional comments, particularly if your answer was no:

4.10 I have received sufficient information to carry out my role (where information was insufficient, please give details)

Yes

Additional comments, particularly if your answer was no:

4.11 Appropriate procedures and processes have been followed

Yes

Additional comments, particularly if your answer was no:

4.12 The processes for assessment and the determination of awards are sound

Yes

Additional comments, particularly if your answer was no:

Completion

If you have identified any areas of good practice, please comment more fully here. We may use information provided in our annual external examining report:

5.1 Do you have any suggestions for improvements based on experience at other institutes? We may use information provided in our annual external examining report:

The clarity and detail of feedback for students for their project work in BSc Comp Path is commendable. Consistency of feedback and alignment to the common marking scheme is very good for BSc 1 library projects. Further value would be derived from annotations on work.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

We thank the EE for these observations and positive comments and will pass these on to the Bioscience examiners. The team will continue to look at the opportunities for providing annotations on electronically submitted written work whilst maintaining anonymity of marking

Projects, both 30 and 60 credits for the students undertaking a BSc 3. The opportunity afforded to students to gain a very in-depth understanding of the topic is to be commended. Immersive learning experiences like this are essential to producing high quality graduates.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

We thank the EE for these very positive comments

5.2 External Examiner comments: For College information only (Responses to External Examiners are published on the College's website. Please only use this box to add any comments that you wish to remain confidential, if any)

Using a full online assessment system would make the assessment procedure less prone to mistakes like wrong counting of marks/points, resolve the handwriting issue and facilitate reporting and analysis of results.

COURSE DIRECTOR: Dr Charlotte Lawson

Course Director Response:

We thank the EE for these comments and will evaluate the success and benefits of our changes made in light of COVID, including use of remote proctoring and more use of open book exam styles to enable online examinations in the future

