

Collaborative Report

Bachelor of Veterinary Medicine, Year 2, 2013/14

Dr Sionagh Smith

The Programme

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

1.1 Course content

This is a wide-ranging and quite demanding course which encompasses a diverse array of disciplines through which the aim is to encourage integrative learning. The main disciplines include the core subjects of anatomy, physiology, pharmacology, microbiology, pathology, animal husbandry and communication skills; these key disciplines, or “strands”, are used in combination to explore many of the major body systems and causes of disease. The integrative approach introduces the students to clinical aspects of veterinary medicine earlier than more traditional methods have done in the past.

Response from college requested: **NO**

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

This year the external examiners were given passwords to allow access to the on-line course material, including the learning objectives. In one or two areas, learning objectives were difficult to find but, for the most part, clear and detailed learning objectives were available, either on the web pages or embedded within the lectures and/or notes. The objectives that have been examined do seem to have been largely met by the students who successfully completed the programme. As part of the assessment process each component of the examination should be clearly mapped to one or more of the course ILOs and these in turn mapped to specific lectures or practical ILOs. At present it is not immediately apparent how each component of the course maps to either the course level ILOs or, indeed, how the assessment is blue-printed to ensure that specific ILOs are not being over- or under-examined. As good practice this is something you may wish to consider in the future.

Response from college requested: **YES**

All strands have overall LOs as do each individual teaching session. Each component of the write up is blue printed to ensure that the distribution of material being examined is in line with timetabled material. The group that is responsible for the compilation of the papers (Year leader, strand leader/deputy leader) ensure that the assessment is blue-printed to ensure that specific ILOs are not being over- or under-examined. On LEARN for each strand of BVetMed 2 there are global learning objectives.

1.3 Teaching methods

As far as we are able to assess, the teaching methods employed by the staff who deliver this course are appropriately diverse and more than adequate, as in previous years. They consist of traditional didactic lectures, practicals (including dissections), directed learning, computer-assisted learning and drop-in sessions. The locomotor strand challenge to “build a leg” was considered an innovative and hopefully engaging addition to this part of the course. It would have been interesting (and entertaining?) to see the end results. The quality of the EMS-based project remains high, with the in-built opportunity for students to receive specific tailored feedback from their tutors.

Response from college requested: **NO**

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

These are satisfactory. We are not aware of any specific deficiencies in resources that might impact on student learning.

Response from college requested: **NO**

1.5 Please provide any additional comments and recommendations regarding the Programme

The effort to integrate clinical material into the first two years of the course is commendable; a similar initiative to incorporate basic principles of science into the later years of the course would be of great value to the students, while enhancing the importance of foundational subjects.

This is an explicit objective of the curriculum which has yet to be realized in practice and it will be revisited in the review of the curriculum.

Response from college requested: **NO**

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 integrative and diverse approach of this course is still fairly unique, though other schools are moving in a similar direction. This makes comparison of student overall performance difficult to gauge. One examiner felt that the BVetMed2 students had obvious gaps in their understanding and knowledge of pathology. This topic is traditionally taught in other institutions as a standalone subject and/or at a different stage of the course, so it's possible that direct comparison is a little misleading. These gaps in knowledge will presumably be addressed as the students' progress through the program.

Pathology in year 2 is an introduction which is revisited in later years. Performance in later years indicates coverage is sufficient.

Response from college requested: **NO**

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

The overall distribution of the marks did not appear to be skewed, i.e. the number of merits and distinctions were not excessive given the large cohort. Equally, the fail rate was approximately 10%, which is considered to be in the expected range for a robust and discriminatory course in the earlier stages of a veterinary degree programme. The distinction and merit students tended to perform proportionately well across the different parts of the examination, with some distinction students submitting excellent essays that demonstrated deep understanding and additional peripheral reading. We did notice that a small number of students had problems with English language. This was either immediately apparent in their written answers or clear from their dearth of basic knowledge. One or two internal examiners mentioned poor English in their notes, with one student seemingly affected more than once. This particular student failed to score at all on a paper 3 question and it was clear they had very limited understanding of the topic – an important one in feline medicine. We wonder if advanced English classes or classes in scientific terminology may be possible, while realising that this would represent additional burden of study. It would be of immense benefit to the affected students to undertake such a course, as it would lead to much improved exam performance. One student, failing on 48%, would have easily passed the exams at this sitting if he became more skilled at scientific expression.

Response from college requested: **YES**

As this clearly is a matter that affects all courses at the RVC, it will be considered by the Learning, Teaching and Assessment Committee to ensure a commensurate and consistent response that will be applicable across all courses at the RVC. Will forward to Associate Dean responsible for student experience.. The College have minimum standards of English required however this needs further investigation.

2.3 Please provide any additional comments

The students performed well in many areas, similar to previous years. The consistency of the marks was good across the board, with merit and distinction students performing well in most areas and no single paper or section bringing down failing students. Interestingly, a very small number of distinction students performed less well in their projects (RP1), which may be for any number of reasons (e.g. focusing on main course work to the detriment of the project; better rote learning versus critical thinking skills in those particular students; or slightly harsher marking of those projects). Notably strong areas included cardiovascular, respiratory and renal physiology, as well as locomotion.

There were still gaps in knowledge, as in previous years. This year, students performed less well in pathology and microbiology/pharmacology. For example, the pathology question in paper 2 was chosen by approximately 25% of the cohort and more than 40% achieved less than 5 out of 10. This was a well-structured question that was fairly marked (some students achieved high or even full marks) and which covered a common and important pathological process. However, it did highlight gaps in knowledge and some major misconceptions (the latter albeit in a small number of students). It is likely this particular topic will be revisited in later years but the foundations do seem shaky at this stage, at least in some students. In paper 3, the antimicrobial question shed light on a number of students who had limited scientific knowledge or understanding of antimicrobial resistance and the mechanisms that underpin it. Several times, the examiner expressed surprise that they had chosen this question and disappointment in their performance. This examiner provided excellent individual feedback and recognised very good/excellent answers. However, overall, this particular question was one of the two lowest scoring questions in terms of mean mark.

Response from college requested: **YES**

It is always disappointing when a significant proportion of the student body underperform in particular aspects of the course. The topics in question will be revisited on two further occasions during the course (years 3 and 4). This will allow those students that have underperformed to master these topics as they progress through the course. Student performance in microbiology/pharmacology in examinations in later years has not been the subject of adverse comment. This would suggest that the current approach to the teaching of these topics over the curriculum as a whole is more than adequate.

Please comment, as appropriate, on:

3.1 Assessment methods (relevance to learning objectives and curriculum)

The spread of assessment methods is fairly comprehensive and mirrors the diversity of teaching methods. In most exams, the type of assessment used has been appropriate. The individual feedback provided to students for the RP1 part of the course is excellent. Each student receives timely, individually tailored feedback in writing which is quite a feat, though the support is probably necessary, given that the students are research novices. Nonetheless, we recognise the tutors' continued commitment to their students' progress. Please see comment related to learning objectives in 1.2.

Response from college requested: **NO**

3.2 Extent to which assessment processes are rigorous

The assessment process is suitably rigorous, encompassing three written papers (all different), a spot test and an oral examination generally comprising four widely varying topics. In addition, there is an in-course assessment which is further subdivided into MCQs, a research project and group presentations. Assessment takes place at different stages of the academic year and covers all the disciplines taught.

In the MCQs, there were many suitably discriminatory questions but some questions were less so, i.e. answered correctly by a large percentage of the year. Many of these could be regarded as core knowledge so are still appropriate for inclusion. There were a few questions which did not discriminate and which few students failed to answer correctly, one of which was a picture question in which the picture was, in retrospect, rather unclear. Review of MCQs based on the Speedwell data is recommended. We are uncertain if this is already common practice, though we have had a positive response to previous similar comments.

Review of individual MCQs based on the Speedwell data is something that we carry out routinely. Poor-performing questions are either deleted or modified. For the forthcoming session, we will be trialing the compilation of the MCQ paper (Paper 1) using a database (the questions contained within the database are those that have been shown to perform satisfactorily in the Speedwell analysis).

Response from college requested: **YES**

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

As far as we are able to assess, this appears adequate. This examination assesses a broad range of subjects to a fairly deep level, specifically evaluating students' understanding and rewarding detailed knowledge and peripheral reading. The problem-solving paper addresses students' abilities in critical thinking and data analysis, while the research project requires the students not just to learn how to use statistical tools but also to be creative in terms of hypothesis-driven research and study design. While much of the course requires that students are self-reliant, the in-course assessment includes a presentation which focuses on team work.

Response from college requested: **NO**

3.4 Standard of marking

Marking is broadly of a good and consistent standard, with significant attempts to ensure fairness (sample marking, improved use of well-defined common grading schemes). One of us reviewed the entire exam scripts of the students who achieved 49% and felt their mark fairly reflected their knowledge. We noted with interest that some staff members were using marking matrices which list the individual criteria required for the award of marks. One matrix was used for marking each individual essay, bringing another dimension to ensuring transparency. The substantial amount of work required to reach this standard is recognised.

As we alluded to above, most examiners are now using the extremes of the CGS much more comfortably, indicating a growing willingness to reward excellence and penalise poor answers. The sample marking scheme was also used much more consistently compared to last year, when some examiners seemed not to follow protocol. This year, the sample marking process led to a few discrepancies between the original and sample marker, which is probably inevitable. This was brought to our attention by the exam board chair and the administration team. Two of the external examiners reviewed these and tended to agree with the sample marker, suggesting in these cases that the original marker may have been a little harsh. We also noticed margin annotations indicating that the original marker was seeking material in the answer that was not specifically requested in the question. This did not happen often but is worth noting as it may explain some discrepancies. We did not think the few discrepancies warranted remarking but a written protocol may help and we believe one is nearly prepared. One difficulty is that remarking of an entire question would be virtually impossible given the time constraints, so some other means of handling this may have to be considered, such as remarking only the borderline papers in questions that may be adversely affected.

Half points were awarded in individual questions and then rounded up or down but each individual examiner decided the direction of rounding, leading to some inconsistency. As discussed at the Board of Examiners' meeting, rounding up should be left until the very end for final grading. We understand half marks are now allowed, which should make this a more consistent policy to follow in future.

Several internal examiners are commended on the quality of their script annotations and feedback to students. This might be something worth standardising. In a few questions, it was not obvious exactly how or where marks were being awarded and no feedback was given in the paper. We understand this probably reflects previous policies on marking. Some additional marks were present on the front page of a few scripts from one question (Paper 3, Q1). We were uncertain as to their significance. Since they were clearly not related to sample marking they were ignored but additional annotations can confuse review of papers.

Response from college requested: YES

3.5 Opinion on changes to the assessment process

We are grateful to the examiners for their comments regarding the willingness of the internal examiners to use the CGS in its entirety. The College is finalizing a transparent policy for both annotation and marking of scripts; the latter will require a re-mark of the entire question if the sample marking demonstrates statistically significant discrepancies. As the sample marking is conducted 1 week before the exam board is scheduled, it will be possible to have the relevant question re-marked. The exams office continues to encourage internal examiners to annotate the scripts. This topic will also be the subject of a session at the forthcoming INSET day (Dec 2014) to which all internal examiners are invited. Going forward, we hope that internal examiners will adopt a greater degree of consistency to annotation of scripts

There have been no substantial changes to the assessment process. The only change was the reduction in the pass mark for the research project (RP1) from 50 to 40%. This is in line with the pass mark for the combined components (essential and interpretative), so it does seem a logical step. There was an issue in previous years whereby one student, who was otherwise performing quite well, failed on their project, resulting in a "qualified fail" which seemed rather harsh at the time, given this was the first time many students had undertaken any type of research or statistical analysis. The change in the pass mark will hopefully minimise the chances of this happening, while still demanding a certain standard. This year, there were one or two poor projects that scraped through as a result of this drop in pass mark. Despite this, the overall quality of the projects was very good, with many students researching quite stimulating topics with enthusiasm. As in previous years, the feedback and level of support given to the students by their tutors were excellent.

Response from college requested: NO

3.6 Please provide any additional comments and recommendations regarding the assessment process

One point of concern that has been raised in previous years is the inclusion of choice. Papers 2 and 3 require that students answer 6 of 9 questions and 4 of 6 essays, respectively. This essentially means that the students are sitting different exams, albeit (theoretically) playing to their strengths, if students choose wisely, though this did not seem to be the case with the pathology and antimicrobial questions (see 2.3 above). Removing choice would increase exam consistency and make it more difficult to mask gaps in knowledge and would allow student performance to be directly compared across all topics.

The ISF Orals: As in previous years the orals are extremely well organised and professional objectivity was exercised throughout the examination process. The three tier marking scheme was helpful in objective assessment of each student's ability, allowing discrimination between poor, average and distinction students. Topics covered were varied and extended over the full spectrum of the curriculum. Sampling in this way, however, has limitations. Students were asked questions on prepared anatomical specimens, live animals or were shown pictures. Both examiners felt that much greater effort must be made to provide fresh (normal and pathological) specimens. Each student was asked questions by 2 sets of 2 examiners. It is not immediately evident how the examiners ensured that the level of overlap between each station was minimised. The subjectivity of oral exams in other institutions has resulted in many dispensing with this form of assessment on the basis of inconsistency of student experience. Both examiners who attended the orals noted that there was wide variability of questioning experienced by students, arising from a narrow sampling of their knowledge and examination of just 4 topics per student. This again raises the issue of fairness being applied across the assessment process.

The approach to standard setting at present has focused mainly on the MCQ paper. The team would be advised to explore how best to apply standard setting across the entire assessment process. This would ensure that the final pass grade is set against a standard which will depend on the level of difficulty of each component of the assessment rather than arbitrarily chosen as 50%.

Response from college requested: YES

The subject of choice in exam papers has been much debated and the current approach of 6 from 9 and 4 from 6 was adopted relatively recently. We acknowledge the point being raised by the externals and will undertake further internal debate in order to arrive at a consensus to be applied across the BVM curriculum. However, it is pertinent to point out that informal sampling of opinion among internal examiners does not seem to suggest an appetite for change at the present juncture. As regard topics of questions the student is subjected to during the ISF orals, the internal examiners are allocated topics which ensure minimal overlap. Any examination is only ever a "sampling" of the student's knowledge. Given that this is only ONE component of the examination which contributes only 10% of the overall marks, we are confident that advantages of assessing a student's ability to apply their theoretical knowledge in a practical setting outweigh any issues of variability of questioning experienced by students, arising from a narrow sampling of their knowledge and examination of just 4 topics per student. Analysis of marks awarded by pairs of examiners reveal a consistency of marking that is on par with that seen in marking of written papers. As such, we disagree with the examiners' view that this component of the examination is "unfair". While we agree that attempting to standard set the examination across all components may be desirable, the complexity of this does not justify the potential benefit. We would be very pleased to receive suggestions about how this might be achieved in practice.

Please comment, as appropriate, on:

4.1 In your view, are the processes for assessment and the determination of awards sound and fairly conducted?

The processes for assessment and determination of awards are, for the most part, sound and there is evidence that the system is fair. As in previous years, external examiners have been involved at all stages of the process. All four of us were able to comment on the exam papers prior to the exams. For the second year running, two external examiners acted as observers in the orals, rather than as examiners, allowing them to observe a wider range of internal examiners and question stations. All papers and provisional marks were available for external scrutiny for the entire day before the Board of Examiners' meeting. The administrative team quickly responded to any specific requests that we had (e.g. Speedwell data for MCQs and hard copies of exam regulations). Academic and administrative management of the exams has been excellent, with close teamwork and strong leadership apparent. As in previous years, the Board of Examiners' meeting was very well attended. It was professionally run with a clear agenda and administrative support. All present were able to raise any concerns they had. The marks were presented and all candidates with fail marks were thoroughly reviewed, with their tutors frequently contributing to the discussions. Please see specific comments related to fairness of marking in 3.4 above (particularly sample marking and half marks).

One student was allowed to take the orals one week after the main student body. We are aware that some questions were raised as to the appropriateness of this. However, we are also aware that this student had suffered a close family bereavement and we acknowledge the efforts of the staff to accommodate this student. We also have one query relating to the requirement for an overall similarity index (OSI). One external noticed a project in which the OSI was pending on the hard copy and we were unable to clarify whether this had been obtained after handing in and prior to marking. Several weeks had elapsed since the projects were marked; there does not seem to be a system in place to ensure that outstanding issues of this nature are being followed up.

We will review our systems to ensure that such issues are followed up.

Response from college requested: NO

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

Generally speaking, the process is improved and seemed smoother this year compared to previous years. The team is quite established and this manifests in the overall management of the exam, with newer administrative staff continuing in the same vein as predecessors. Specific areas that are improved on previous years are a) more consistent use of the sample marking scheme b) better use of the CGS [see 3.4 above] c) good examples of feedback and script annotation [this is probably still a work in progress, see 3.4 above] d) inclusion of topics such as pharmacology/microbiology and pathology in the written papers, e) as last year, increased time allowance for marking by the internal examiners prior to the examination board. This increased time hopefully reduces pressure on internal examiners and maximises the time for external scrutiny of scripts.

Response from college requested: NO

4.3 Please provide any additional comments and recommendations regarding the procedures

It would be good practice to provide external examiners with the current Assessment and Award Regulations in advance since this provides the basic information of the examination format and assessment criteria to help in the evaluation of the examination questions. There was indication in an email prior to the examination that these are available under LEARN but they are not easy to find, even when searching specifically for them. We were given a hard copy on the day prior to the Exam Board meeting and this was very valuable during review of the papers.

External examiners should also have sight of all examination and assignment questions in advance. For example, this year, while most papers were seen ahead of time, they did not include the spot exam (we were given access to this on request, but only well after the main papers had been reviewed for approval). In a similar vein, where there is standard setting, the details should be provided to the external examiners during the approval process of the questions, rather than retrospectively.

Finally, prior to and during the Board of Examiners' meeting, there was some discussion about whether it is necessary to have external examiners attend every round of oral exams. The general feeling seems to be that, where applicable, one new examiner each year could observe the orals in parallel with a longer standing examiner and that this may only need to take place once each year, though preferably during the first diet. We agree that this approach would be sensible.

Hospitality and accommodation for the external examiners have, once again, been very good and we are grateful for the organisational help in making sure we are comfortable during our time with you.

Response from college requested: YES

We are taking steps to ensure the Externals have easy electronic access to the regulations. Where logistics permit, external examiners are provided sight of all examination questions. This is certainly the case with respect to written papers. We will endeavor to provide examiners with early sight of topics to be covered in the practical examinations such as ISF orals and SPOT test. Standard setting is only carried out on the finalised exam paper which of necessity (e.g. extended dialogue between the external examiners and RVC exams office) will be undertaken in close proximity to the examination. We will therefore undertake to provide the outcome of the standard setting exercise to the examiners BEFORE their arrival at the RVC.

Whilst accepting it would be satisfactory for only two examiners to observe each diet of oral examinations we would still expect externals to be present at each diet for QA purposes.

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

Yes

Additional comments, particularly if your answer was no:

Many previous comments have been addressed. Some are still a work in progress (e.g. clear written sample marking guidelines that ensure fairness in the face of time constraints).

Response from college requested: NO

5.2 An acceptable response has been made

Yes

Additional comments, particularly if your answer was no:

Response from college requested: NO

5.3 I approved the papers for the Examination

Yes

Additional comments, particularly if your answer was no:

Please see point 4.3.

Response from college requested: NO

5.4 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:

Response from college requested: NO

5.5 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:

Three of four external examiners were able to attend the Board of Examiners meeting, which was considered sufficient coverage.

Response from college requested: NO

5.6 Candidates were considered impartially and fairly

Yes

Additional comments, particularly if your answer was no:

Response from college requested: NO

5.7 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:

As alluded to above, this is a wide-ranging integrated course that marries together many different individual subjects but the standard set, even across such an array of subjects, does seem to be appropriate. Some suggestions for improvement which will increase the defensibility of the assessment process have been proposed in the commentary.

Response from college requested: NO

5.8 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:

Mostly. Please see 2.1 above.

Response from college requested: NO

5.9 I have received enough support to carry out my role

Yes

Additional comments, particularly if your answer was no:

Response from college requested: NO

5.10 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:

Response from college requested: NO

5.11 Appropriate procedures and processes have been followed

Yes

Additional comments, particularly if your answer was no:

Response from college requested: NO

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

Yes

Additional comments, particularly if your answer was no:

Response from college requested: 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:

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 use of marking matrices by one or two examiners was interesting and potentially improves marking transparency. Some of the examiners provided detailed feedback on the scripts. This is to be commended as it provides valuable feedback for the students.

Response from college requested: NO