

School of Biosciences

Addendum to Guidelines for Final Year BSc Project:

The Biosciences Undergraduate Ambassadors Scheme (UAS)

For action:

Final-year students 2008/2009

For information:

Second-year students 2008/2009

April 2008

1. GENERIC KEY DATES (FROM BSc PROJECT GUIDELINES)

***The following notes are for students considering Biosciences UAS projects. These notes supplement the "General Guidelines for BSc Research Project in the School of Biosciences".

For students commencing their second year in 2008/2009:

Semester 3 (2008)

April/December 2008 Module Registration. Register for D224E2 Communicating Biosciences. This module is a pre-requisite for the Biosciences UAS project but **does not guarantee** that you will be able to conduct a UAS project in your final year. Therefore, you must have an alternative plan for a final year project, based on the requirements of your course. You must check with your Course Manager that you are fulfilling your course requirements and whether you need to begin project work in Semester 4. It is compulsory for students reading Agriculture, Animal Science, Food Microbiology, Crop Science, Nutrition and Nutritional Biochemistry to undertake a Semester 4 project module. In other disciplines, this is an option which you should discuss with your Course Manager at the meeting. Students reading Applied Biology, Environmental Biology and Biotechnology may select a project in any Division provided they have taken the appropriate prerequisites and any compulsory project or techniques module(s), and sufficient projects are available.

Semester 4 (2009)

January 2009Begin D224E2 Communicating Biosciences.April 20091Module Registration session. Students not required to begin work in
Semester 4 must confirm an alternative Part 2 project, even if their
preferred project is to participate in the Biosciences UAS.June 2009Confirm intention to participate in Biosciences UAS.

For students commencing their final year in 2008/2009:

Semester 5 (2007)

September 2008 Begin Biosciences UAS project.

Semester 6 (2008)

| May 2008 ² | Submit abstract and PowerPoint files for Final Year Project Symposium. |
|-----------------------|--|
| May 2008 ³ | Submit Dissertation. |
| May 2008 | Final Year Project Symposium. |

¹ Date to be confirmed.

² Date to be confirmed. Late submission will be penalised at the standard rate of 5% per working day. Problems associated with computing, printing and binding are not acceptable as extenuating circumstances for late submission.

³ Date to be confirmed. Late submission will be penalised at the standard rate of 5% per working day. Problems associated with computing, printing and binding are not acceptable as extenuating circumstances for late submission.

2. UAS TIMETABLE FOR STUDENTS COMMENCING THEIR FINAL YEAR IN 2007/2008

Semester 5 (2008)

| 22-24 Sept | Meet with Biosciences UAS Co-ordinator to discuss project. Collect Criminal Records Bureau (CRB) forms. |
|------------|--|
| Early-Oct | Meet with David Woolley (Widening Participation Officer) who will review and submit your CRB forms. Contact David to confirm a suitable time for meeting (david.woolley@nottingham.ac.uk). |
| Early-Oct | Attend WPU training (Pope Building, University Park). |
| Mid-Oct | Attend PGCE training (Dearing Building, Jubilee Campus). |
| Late-Oct | Commence school placement. |
| Dec | Arrange meeting with Biosciences UAS Co-ordinator to discuss progress with Literature Review and School Placement. |

Semester 6 (2009)

| Feb | Meet with Biosciences UAS Co-ordinator to discuss progress with Literature Review and School Placement. |
|-----------------------|---|
| End-Mar | Complete school placement. |
| End-Mar | Submit draft dissertation to Biosciences UAS Co-ordinator for initial feedback. |
| May 2009 ⁴ | Submit abstract and PowerPoint files for Final Year Project Symposium. |
| May 2009⁵ | Submit Dissertation. |
| May 2009 | Final Year Project Symposium. |

⁴ Date to be confirmed. Late submission will be penalised at the standard rate of 5% per working day. Problems associated with computing, printing and binding are not acceptable as extenuating circumstances for late submission.

⁵ Date to be confirmed. Late submission will be penalised at the standard rate of 5% per working day. Problems associated with computing, printing and binding are not acceptable as extenuating circumstances for late submission.

3. Background

The University of Nottingham's School of Biosciences joined the Undergraduate Ambassadors Scheme (UAS) in 2006. This national scheme provides a framework for awarding academic credits to undergraduates from science, technology, engineering and maths (STEM) subject areas and includes work with teachers in local schools. Its primary aims (see www.uas.ac.uk) are to:

- Provide key transferable skills to undergraduates, including communication and reflective learning skills
- Provide classroom-based experience and encourage undergraduates to consider teaching careers
- Provide role models for school pupils
- Encourage a new generation of scientists, engineers and mathematicians
- Support teachers
- Increase widening participation activities of universities in their local areas.

The School of Biosciences UAS is a two-stage process. The first stage is participation in the Level 2 D224E2 Communicating Biosciences module, while the second involves a year-long final-year project module, worth 40 credits, **which includes a school placement**. Unless there is very good reason, the D224E2 Communicating Biosciences module is a prerequisite for participation in a final-year Biosciences UAS project.

The final-year 40-credit Biosciences UAS project runs as an existing School of Biosciences BSc honours project module using the following project codes and titles:

- D233MP Microbiology Project
- D23BAP Research Project in Agriculture 2
- D23BCP Research Project Crop Science
- D23BEP Research Project in Environmental Biology 2
- D23BFP Research Project in Food Science 2
- D23BMP Research Project in Food Microbiology
- D23BNF Nutrition and Food Science Research Project
- D23BNP Research Project in Nutrition and Biochemistry
- D23BPP Research Project in Plant Science 2
- D23BZP Research Project in Animal Science 2

Module-code allocation for UAS projects is made by the Biosciences UAS Co-ordinator, in consultation with the relevant Course Manager. Module-code allocation is based primarily on the degree course of the participating Biosciences UAS student.

4. Aims and Objectives

The aim of ALL 40-credit final year BSc honours projects in the School of Biosciences is to provide students with the opportunity to undertake a programme of original research in an aspect of biological science. The results are presented in a project talk and dissertation. In experimental or review-based projects, students will gain experience of independent research activity and should become competent in:

- Problem identification and analysis
- Principles of good experimental design
- Literature searching, analysis and interpretation
- Principles and practice of statistical analysis appropriate guidance may be sought from supervisors, statistical advisors and relevant Semester 4 techniques modules
- Data preparation and presentation
- Oral presentation skills
- Writing detailed scientific reports
- Research skills appropriate to their area of specialisation

The Biosciences UAS Project is academically equivalent to a laboratory or literature-based final-year project. However, the research skills developed within the Biosciences UAS Project relate to communication and pedagogy and not necessarily to the technical skills required to solve a specific scientific problem *per se*. Pedagogy refers to the science of being a teacher and/or the study of strategies of instruction. In the context of the Biosciences UAS Project, the research focus falls within the discipline of "Communicating Biosciences", and includes consideration of learning and teaching strategies from the perspective of different participants (school pupils, university students, school teachers), participation in school-based activities, critical reflection, and quantitative analysis of the effectiveness of the project.

5. Assessment

The mark allocation framework, and qualitative assessment criteria are similar to other Biosciences final year project modules. The mark allocation framework is:

- 30% Quality of UAS-based research activity
- 30% Dissertation (first marker)
- 30% Dissertation (second marker)
- 10% Oral presentation

5.1 Quality of Biosciences UAS-based research activity

The quality of Biosciences UAS-based research activity, which includes the School Placement (Section 6.3), will be judged by the Biosciences UAS Co-ordinator according to the following generic criteria:

- 20% Independence/initiative
- 20% Organisation
- 20% Technical competence (i.e. communication skills, lesson plans etc.)
- 20% Perseverance
- 20% Critical ability

The qualitative assessment criteria for Biosciences UAS-based research activity are provided at the end of the document.

5.2 Dissertation

Biosciences UAS students will submit a dissertation of approximately 10,000 words, excluding references and appendices. The dissertation will be marked by two academics, the UAS Co-ordinator, and a "home" Divisional academic. Suggestions for the content and structure of the dissertation are provided in Section 6. The mark allocation for the dissertation is:

- 5% Abstract
- 25% Literature Review
- 25% Retrospective
- 25% School Placement Report (i.e. a description of teaching activities/lesson plans, quantitative analyses etc.)
- 10% Written Expression
- 10% References

Qualitative assessment criteria are provided at the end of the document.

5.3 Oral presentation

Students will make an oral presentation to their "home" Division Undergraduate Symposium in May. This is worth 10% of the overall project mark. To ensure parity, all Biosciences UAS students will submit abstracts and PowerPoint presentations on the same date, irrespective of "home" Divisional symposium requirements. The qualitative assessment criteria for oral presentations are provided at the end of this document.

6. The Dissertation

The dissertation will comprise (I) a Literature Review, (II) a *Retrospective* and (III) a School Placement Report (i.e. a description of teaching activities/lesson plans etc.). The School Placement Report will ideally contain quantitative analysis of, for example, pupil/teacher feedback, effectiveness of teaching etc.

6.1 The Literature Review

The Literature Review will comprise approximately 4,000 words excluding references and should provide a comprehensive introduction to the Biosciences UAS Project Dissertation. Students are expected to identify appropriate literature from library (papers and books) and web-based sources and bring together related aspects of the work into a cohesive overview. The Literature Review must include a description of the specific aims and objectives of the Biosciences UAS project. Students should critically appraise the papers and books they read rather than simply describing other people's findings. The Literature Review should be divided into subsections, organised according to the main elements of the subject matter. If material is not immediately available in the James Cameron Gifford Library, you must arrange access to materials elsewhere (e.g. the School of Education Library). Discuss with your subject librarian (in the first instance) and Biosciences UAS Co-ordinator as required.

The Biosciences UAS Project is a rigorous academic exercise. As such, the Literature Review should be as methodical and rigorous as laboratory or literature-based dissertations. It should be planned well in advance of submission date, and the proposed structure and content discussed with the Biosciences UAS Co-ordinator and/or Divisional supervisor at the earliest opportunity and throughout the project. Whilst most Biosciences UAS students will benefit from several meetings with their supervisor to discuss the structure and content of their Literature Review, individual students must ultimately determine the structure and content of the Literature Review themselves.

Qualitative assessment criteria Literature Reviews are provided at the end of this document. Briefly, these should provide an overall introduction to the Biosciences UAS project dissertation and review the aims and objectives of the UAS generally and the Biosciences UAS specifically. Biosciences UAS students should also consider how the aims and objectives of UAS relate to learning and teaching theories in the pedagogical literature. Therefore, students will need to conduct a detailed literature search and explain a selection of (preferably contrasting) learning and teaching theories which are relevant to the context of both university and school education. Furthermore, students should be able to assess critically the evidence that UAS, and/or "student ambassadors schemes" generally, are effective in enhancing the learning and teaching experience of university students and/or school pupils and/or school-teachers. Students may also wish to explore whether "student ambassador schemes" are effective in developing transferable skills amongst different learning groups. In conducting the Literature Review, it is likely that students will focus on Biosciences teaching, although reference to non-Biosciences disciplines should be made as required.

6.2 The Learning Journal and Retrospective

6.2.1 General

The *Retrospective* will consist of approximately 3,000 words excluding references and be based on a *Learning Journal* which you must maintain throughout the UAS project. The *Learning Journal* is not to be submitted as part of the Dissertation.

The Learning Journal and Retrospective provide the framework to:

- enable regular reflective writing
- improve the written expression of thoughts and ideas
- encourage reflection on progress through the project
- identify one's strengths and weaknesses
- set priorities and plan learning

Training in the maintenance of the *Learning Journal* and *Retrospective* is provided in D224E2 Communicating Biosciences. Briefly, the *Learning Journal* and *Retrospective* are reflective documents in which students describe their experiences as they study. The *Learning Journal* should include thoughts

about activities on the module and progress being made. It can be used to describe events, lectures, discussions, study tasks, thoughts, ideas or feelings. Entries can be substantial or small, significant or trivial. Entries can be written immediately (i.e. written at the time or shortly after the event) or over the longer-term (written after looking back over a period of time). They should relate specifically to participation in the Biosciences UAS and the perceived progress of the student. A *Learning Journal* is more than just a diary (which is a list of events, kept as a reminder or a record) and more than just a log-book (a detailed record of events, facts or data), although it may contain elements of both of these. A *Learning Journal* is more like a web-log ("blog") because it lets one express feelings, views and opinions.

6.2.2 Prompt-questions

The most effective way to complete the *Retrospective* is to maintain a weekly *Learning Journal* throughout the project (see D224E2 Communicating Biosciences handout). Some prompt questions for a weekly *Learning Journal* are:

- which aspects of the project have I worked on this week? What have I written? What have I heard or read?
- how effective was the school session for me, the pupils, the teacher?
- did the week go as I expected? Did I get as much done as I hoped? Did I make unexpected progress?
- what really made me think this week?
- which aspects of the week's work did I find difficult? What did I do about it?
- is there anything I feel more confident about now than before?
- which skills do I need to work on? Do I just need practice or should I seek advice?
- what am I most looking forward to next week?

6.2.3 Assessment

The *Retrospective* must be submitted as Part II of the Biosciences UAS Project Dissertation and include a synthesis of *Learning Journal* entries, which should be used to prompt new ideas and allow the student to identify how their knowledge, skills and understanding have developed and how their views have changed. The *Retrospective* should also include critical reflections on how the learning and teaching strategies discussed in the Literature Review related to participation in the school placement.

6.3 The School Placement

6.3.1 General

All Biosciences UAS students will spend time engaged in teaching activities in an educational establishment. For most students, this establishment will be a secondary or primary school. However, it may be possible for UAS students to complete their placement in another educational establishment, such as a Further Education College or in Adult Education. Choice of educational environment is subject to the approval of the Biosciences UAS Co-ordinator and approval may also be required from the National UAS Co-ordinator. Students should discuss educational environments with the Biosciences UAS Co-ordinator at the earliest opportunity. In most instances, the Biosciences UAS Co-ordinator will identify the host educational establishment.

The format for the School Placement is not prescriptive and it is essential that Biosciences UAS students take ownership of their relationship with their host school at the earliest opportunity. The format of the School Placement will thus be determined through negotiation between the school and Biosciences UAS students. This negotiation forms a key component of the project and should be recorded in the *Retrospective*.

Prior to their School Placement, Biosciences UAS students will be given an induction by the Biosciences UAS Co-ordinator. This will include a briefing on the school into which they will be placed and information required by students to make contact with their designated school. Within one week of this induction, Biosciences UAS students will submit their CRB forms to The University of Nottingham's Widening Participation Unit (WPU). Biosciences UAS students must make contact with their designated school within one week of CRB clearance. It is expected that Biosciences UAS students will visit their designated school prior to the half-term school holiday in October. This visit will ideally include an

observational session. During the school half-term holiday in October, Biosciences UAS students will attend further induction/training sessions organised by the WPU and the Biosciences UAS Co-ordinator.

Following negotiation between Biosciences UAS students and the school, a School Placement Plan will be developed. Placements will normally consist of a minimum of 10 sessions (each of 3-4 h duration) in the school. These should ideally be arranged into two discrete blocks before and after Christmas. Biosciences UAS students should discuss their School Placement Plan with the Biosciences UAS Co-ordinator.

A typical School Placement might include the following: (1) Observation, (2) Classroom Assistance, (3) Lesson Hotspots, (4) Lesson Plan and (5) Lesson Delivery. School Placements may also involve extracurricular activities (e.g. involvement in a "science club"). Biosciences UAS students and their host school might also wish to arrange a school visit to the University. The Biosciences UAS Co-ordinator and others within the School of Biosciences and The University of Nottingham will be available to provide support.

6.2.3 Assessment

The School Placement Report will be submitted as Part III of the Biosciences UAS Project Dissertation and will be approximately 3,000 words, excluding references and appendices. It should include a factual diary of activities and evidence of development of lesson plans or their equivalent. Lesson plans should be submitted as appendices and are not included in the word-count. Training in the development of lesson plans is provided in D224E2 Communicating Biosciences. Reference should be made to the sections of the National Curriculum that are relevant to the placement. It is also expected that the School Placement Report will contain quantitative analysis of school-pupil engagement with Biosciences UAS students. This could be achieved using a questionnaire or direct observational techniques. Biosciences UAS students are encouraged to discuss methods to quantify school-pupil engagement with the Biosciences UAS Co-ordinator and their host school.

Appendices: School of Biosciences UAS Qualitative Marking Schemes

The School's qualitative marking schemes provide general guidance for assessment of various types of work. However, in applying these schemes to individual assessments, account must be taken of the level at which students are working. The criteria outlined below provide general guidance, and not all criteria will be applicable to all forms of assessment.

Academic Levels

- Level 2 Diploma level, generally taken by year 2 students
- Level 3 Degree level, generally taken by year 3 students
- Level 4 Masters level, generally taken by post-graduate or year 4 undergraduate students

Major considerations

Mark Class A

| Level 1: Level 2: Level 3: Level 4: | Draws on available evidence to make sound conclusions supported from a range of sources. There is evidence of further reading and careful analysis offering alternative views. There is critical analysis offering alternative views. There is clear expression of own views, which are supported by appropriate literature. Draws on available evidence to make persuasive conclusions. Detailed, orderly and critical work with clearly specified focus/foci exhibiting rigorous analysis, synthesis and evaluation. There must be evidence that the student has developed their own arguments. |
|--|--|
| Mark Class B Level 1: Level 2: Level 3: Level 4: | Content is accurate and relevant with appropriate use of supporting material. There is sound analysis with good expression and argument with evidence of independent thinking supported by appropriate material. There is sound critical analysis. Alternative views are expressed using supporting evidence from a variety of sources. Evidence of originality and significant critical analysis. There is evidence of integration of material from a variety of sources. |
| Mark Class C Level 1: Level 2: Level 3: Level 4: | Content is largely accurate and relevant with some evidence of understanding. There is adequate analysis with limited evidence of wider study. There is reasonable understanding, with some attempt at analysis and limited use of supporting material. There is reasonable understanding and analysis supported by a range of relevant evidence. |
| Mark Class D Level 1: Level 2: Level 3: Level 4: | Some relevant content but with evidence of only very limited understanding. Some relevant content with limited understanding but little evidence of wider study. Basic understanding with limited evidence of wider study. Basic understanding with limited evidence of understanding and some attempt at analysis. |

Mark Classes E/F

All levels: Work does not demonstrate above criteria and reference should be made the qualitative criteria in deciding final mark.

Modules offered at levels A-C are considered intermediate between Levels 1-2, 2-3 and 3-4 respectively.

School of Biosciences - Assessment of Quality of UAS-based activities:

Name of Student.....

Name of Assessor.....

| | A1 | A2 | A3 | A4 | B1 | B2 | B3 | C1 | C2 | C3 | D1 | D2 | D3 | E | F1 | F2 | F3 |
|---|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|
| Independence/initiative (20%) | | | | | | | | | | | | | | | | | |
| Organisation (20%) | | | | | | | | | | | | | | | | | |
| Technical competence (i.e. communication skills, lesson plans etc.) (20%) | | | | | | | | | | | | | | | | | |
| Perseverance (20%) | | | | | | | | | | | | | | | | | |
| Critical ability (20%) | | | | | | | | | | | | | | | | | |

Overall Mark (%).....

(Refer to attached qualitative assessment guidelines for essays and reports to assist categorisation of the different dissertation components)

Comments:

| CLASS | % | QUALITATIVE ASSESSMENT CRITERIA – UAS-BASED ACTIVITIES |
|--------------|-----|--|
| First | | a. Extremely independent and able to work with minimal direct supervision. Shows a great deal of initiative and perseverance when things go wrong. |
| A1 | 100 | b. Very well organised; able to plan time in classroom with minimal assistance. |
| A2 | 90 | c. Extremely competent in terms of communication techniques; learns new communication skills quickly with minimal training. |
| A3 | 80 | d. Excellent critical ability and able to appreciate limitations of communication techniques used. |
| A4 | 73 | |
| Upper Second | | a. Able to work independently with little direct supervision. Shows some initiative and perseverance. |
| B1 | 68 | b. Well organised; able to plan time in classroom with little assistance. |
| B2 | 65 | c. Competent in terms of communication techniques; learns new communication skills quite quickly when given training. |
| B3 | 62 | d. Some critical ability and appreciation of limitations of communication techniques used. |
| Lower Second | | a. Needs close supervision and shows little initiative. Tendency to give up too quickly when things go wrong. |
| C1 | 58 | Quite well organised but needs help to plan time in classroom. |
| C2 | 55 | c. Quite competent in terms of communication techniques, but liable to make mistakes if not supervised closely. Slow at learning new communication |
| C3 | 52 | techniques. |
| | | d. Limited critical ability and appreciation of limitations of communication techniques used. |
| Third | | a. Little or no ability to work independently. Shows very little initiative. Liable to give up when things go wrong. |
| D1 | 48 | b. Poorly organised; unable to plan time in classroom without direct instruction. |
| D2 | 45 | c. Limited competency in terms of communication techniques. Liable to make mistakes even when supervised closely. Very slow at learning new |
| D3 | 42 | communication techniques. |
| | | d. Virtually no critical ability or appreciation of limitations of communication techniques used. |
| Soft Fail | | a. No ability to work independently. Minimal effort put into work. |
| E | 35 | b. Poorly organised and liable to miss planned classroom sessions. |
| | | c. Very incompetent in terms of communication techniques. Often makes mistakes, even when closely supervised. Extremely slow at learning new |
| | | communication techniques. |
| | | d. No critical ability or appreciation of limitations of communication techniques used. |
| Fail | | a. No ability to work independently. Minimal effort put into work. |
| F1 | 25 | b. Very poorly organised and likely to miss classroom sessions. |
| | | c. No critical ability or appreciation of limitations of communication techniques used. |
| Fail | | |
| F2 | 10 | Minimal classroom work attempted. |
| Fail | | |
| F3 | 0 | No classroom work attempted |

1. Only broad classes (A,B,C,D,E,F1) have qualitative criteria attached; the division into (e.g.) C1, C2, C3 etc. is at the discretion of the examiner.

The qualitative criteria include consideration of : 2.

- a. Independence and initiative. Perseverance when work does not go according to plan.b. Organisational ability; can the student plan their use if time effectively and efficiently?
- c. Technical ability; can the student carry out work competently and learn new techniques quickly
- d. Critical ability and appreciation of the limitations of the work.

UAS project guidelines

School of Biosciences - Assessment of UAS-Dissertation (First Marker, UAS Co-ordinator):

Name of Student.....

Name of Assessor.....

| | Max. Ma (%) | ark | A1 | A2 | A3 | A4 | B1 | B2 | B3 | C1 | C2 | C3 | D1 | D2 | D3 | E | F1 | F2 | F3 |
|--------------------------------------|----------------|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|
| Abstract | 5 | | | | | | | | | | | | | | | | | | |
| Literature Review ⁶ | 25 | | | | | | | | | | | | | | | | | | |
| Retrospective ⁷ | 25 | | | | | | | | | | | | | | | | | | |
| School Placement Report ⁸ | 25 | | | | | | | | | | | | | | | | | | |
| Written expression | 10 | | | | | | | | | | | | | | | | | | |
| References | 10 | | | | | | | | | | | | | | | | | | |

Overall Mark (%).....

(Refer to attached qualitative assessment guidelines for essays and reports to assist categorisation of the different dissertation components)

Comments:

⁶ The **Literature Review** should contain an introduction to UAS, a review of learning and teaching theories, a critical evaluation of effectiveness of UAS/student ambassador schemes" for students, pupils and teachers, clearly-stated aims and objectives of project, and evidence that original and high-quality references have been sourced ⁷ The **Retrospective** should include evidence of reflective learning and links to reflective learning to learning and teaching theories

⁸ The **School Placement Report** will be judged according to the quality of teaching materials/lesson plans, quantitative analysis of effectiveness of School Placement, Originality and quality of source material/references used in developing teaching materials (e.g. links to National Curriculum)

School of Biosciences - Assessment of UAS-Dissertation (Second Marker, "Home" Divisional Supervisor):

Name of Student.....

Name of Assessor.....

| | Max. M (%) | lark | A1 | A2 | A3 | A4 | B1 | B2 | B3 | C1 | C2 | C3 | D1 | D2 | D3 | E | F1 | F2 | F3 |
|---------------------------------------|---------------|------|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|
| Abstract | 5 | | | | | | | | | | | | | | | | | | |
| Literature Review ⁹ | 25 | | | | | | | | | | | | | | | | | | |
| Retrospective ¹⁰ | 25 | | | | | | | | | | | | | | | | | | |
| School Placement Report ¹¹ | 25 | | | | | | | | | | | | | | | | | | |
| Written expression | 10 | | | | | | | | | | | | | | | | | | |
| References | 10 | | | | | | | | | | | | | | | | | | |

Overall Mark (%).....

(Refer to attached qualitative assessment guidelines for essays and reports to assist categorisation of the different dissertation components)

Comments:

⁹ The **Literature Review** should contain an introduction to UAS, a review of learning and teaching theories, a critical evaluation of effectiveness of UAS/student ambassador schemes" for students, pupils and teachers, clearly-stated aims and objectives of project, and evidence that original and high-quality references have been sourced ¹⁰ The **Patrospective** should include evidence of reflective learning and links to reflective learning and teaching theories.

¹⁰ The **Retrospective** should include evidence of reflective learning and links to reflective learning to learning and teaching theories

¹¹ The **School Placement Report** will be judged according to the quality of teaching materials/lesson plans, quantitative analysis of effectiveness of School Placement, Originality and quality of source material/references used in developing teaching materials (e.g. links to National Curriculum)

| CLASS | % | QUALITATIVE ASSESSMENT CRITERIA - GENERAL GUIDELINES FOR UAS DISSERTATION |
|--------------|-----|---|
| First | | |
| A1 | 100 | a. Excellent report structure demonstrating professional presentation of illustrative figures, tables, diagrams, references etc; considerable evidence of originality/novelty. |
| A2 | 90 | b. Comprehensive understanding of subject; all arguments carefully developed, critically evaluated and clearly expounded. |
| A3 | 80 | c. Extensive and effective use of relevant literature within the context of the broader field of knowledge. |
| A4 | 73 | d. Extensive evidence of critical thinking and analysis, excellent written expression with detailed and accurate citation of source material. |
| Upper Second | | |
| B1 | 68 | a. Well organised report showing sound understanding, logical presentation of figures, tables, diagrams, references etc; some evidence of originality/novelty in |
| B2 | 65 | presentation. |
| B3 | 62 | b. Sound understanding of subject; major arguments carefully developed, evaluated and expounded. |
| | | c. Effective use of literature information beyond that recommended by supervisor within the context of the general subject area. |
| | | d. Evidence of critical thinking and analysis, sound written expression with largely accurate citation of source material. |
| Lower Second | | |
| C1 | 58 | a. Generally clear report conforming with accepted format but with some stylistic errors and/or omissions in understanding, arguments and presentation of figures, tables, |
| C2 | 55 | diagrams, references etc. |
| C3 | 52 | b. Reasonable understanding of subject; some arguments evaluated and expounded. |
| | | c. Literature information largely limited to that recommended by supervisor; no substantial attempt to place this within the wider context of the subject. |
| | | d. Review largely limited to a summary of identified literature, with no synthesis and with errors in the citation of source material. |
| Third | | |
| D1 | 48 | a. Little attention to report structure; frequent stylistic errors and/or omissions in understanding, limited use of illustrative figures, tables etc; serious flaws in presentation. |
| D2 | 45 | b. Limited understanding of subject; no evaluation of material. |
| D3 | 42 | c. Limited literature cited, indicating generally poor information retrieval within the subject area. |
| | | d. Review limited to summaries of some relevant literature, indicating no independent thought or application; numerous inaccurate citations. |
| Soft Fail | | |
| E | 35 | a. Very poorly structured and disorganised, missing sections and minimal presentation of summaries from literature. |
| | | b. Minimal understanding of subject; numerous seminal and/or major literature sources missing. |
| | | c. Major omissions from summaries of literature, indicating a lack of understanding and/or incorrect interpretation and citation. |
| | | d. No evidence of independent thinking, originality or application; citations largely inaccurate, misleading or missing. |
| Fail | | |
| F1 | 25 | a. Very poor coverage of material with little relevant information. |
| | | b. Virtually no evidence of understanding the subject literature; review includes only a limited number of relevant literature sources or largely inappropriate material. |
| Fail | | |
| F2 | 10 | A few lines of relevant material. |
| Fail | | |
| F3 | 0 | No relevant material presented. |

1. Only broad classes (A,B,C,D,E,F1) have qualitative criteria attached; the division into (e.g.) C1, C2, C3 etc. is at the discretion of the examiner.

2. The qualitative criteria include consideration of:

a. Structure, organisation and readability of the article.

- b. Level of engagement felt by the reader.
- c. Accuracy and completeness of the content.
- d. Where appropriate, inclusion of students' own experimental data.

School of Biosciences - Assessment of UAS-Oral Presentation:

Name of Student.....

Name of Supervisor.....

Name of Assessor.....

| | A1 | A2 | A3 | A4 | B1 | B2 | B3 | C1 | C2 | C3 | D1 | D2 | D3 | E | F1 | F2 | F3 |
|---|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|
| Presentation ¹ (25%) | | | | | | | | | | | | | | | | | |
| Organisation ² (25%) | | | | | | 1 | | | | | | | | | | | |
| Content ³ (25%) | | | | | | | | | | | | | | | | | |
| Response to questioning ⁴ (25%) | | | | | | | | | | | | | | | | | |

¹Audibility, speed use of notes, addressed to the audience, eye contact, use of visual aids.

²Organisation of talk with Introduction, Methods. Results & Discussion. Succinct with logical structure, good time keeping, summary given.

³Clear presentation of research results, justification of conclusions drawn, analysis of data and its significance.

⁴Wider understanding of results, able to think on the spot, evidence of knowledge of relevant literature.

Overall Mark (%).....

(Refer to attached qualitative assessment criteria for oral presentations to assist categorisation of the different components)

Comments: (please provide notes which can be used when students are briefed on their presentation skills)

| CLASS | % | QUALITATIVE ASSESSMENT CRITERIA - GENERAL GUIDELINES FOR UAS ORAL PRESENTATIONS |
|--------------|-----|---|
| First | | a. Clearly audible, well-paced presentation delivered without obviously reading from notes in the time allocated. Addressed to the audience. |
| A1 | 100 | b. Very well-planned with a clear logical structure focused on the topic being presented. Excellent introduction and summary. |
| A2 | 90 | c. Excellent use of visual aids which are easy to read and understand. Main points of slides clearly explained. |
| A3 | 80 | d. Content of presentation very well-researched with relevant data where appropriate. Response to questions asked indicates thorough understanding. |
| A4 | 73 | |
| Upper Second | | a. Clearly audible, well-paced presentation delivered with some reading from notes in the time allocated. Mainly addressed to the audience. |
| B1 | 68 | b. Quite well-planned with logical structure focused on topic being presented. Good introduction and summary. |
| B2 | 65 | c. Good use of visual aids which are quite clear to read and understand. Good attempt to explain main points of slides. |
| B3 | 62 | d. Content of presentation quite well-researched with relevant data where appropriate. Response to questions asked indicates good understanding. |
| Lower Second | | a. Audible presentation which may be too fast or too slow. Tendency to read from notes and to address floor or ceiling. May be outside time allocated |
| C1 | 58 | b. Some flaws in structure and not always focused on the topic being presented. Weak introduction and summary. |
| C2 | 55 | c. Adequate use of visual aids which are not always easy to read and understand. Little attempt to explain main points of slides. |
| C3 | 52 | d. Some omissions in literature research and little relevant data presented. Response to questions asked indicates incomplete understanding. |
| Third | | a. Difficult to hear. Too fast or too slow. Read from notes and little attempt to address the audience. Outside allocated time. |
| D1 | 48 | b. Poorly-structured, rambling presentation which strays from topic being presented. Very weak introduction or summary. |
| D2 | 45 | c. Poor visual aids which are difficult to read and understand. Poor explanation of main points of slides. |
| D3 | 42 | d. Little evidence of literature research and no data presented. Response to questions indicates poor understanding. |
| Soft Fail | | a. Mumbled, halting presentation. Much too fast or too slow. No attempt to address audience and well outside allocated time. |
| E | 35 | b. No discernible structure to presentation with some relevant material. No introduction or summary. |
| | | c. Very poor visual aids. No explanation of main points of slides. |
| | | d. Poor literature research and no data presented. Response to questions shows serious weakness in understanding. |
| Fail | | a. Extremely difficult to hear presentation and well outside allocated time. |
| F1 | 25 | b. No discernible structure and very little relevant material. No introduction or summary. |
| | | c. No visual aids used. |
| | | d. Little evidence of research. Response to questions shows minimal understanding. |
| Fail | | |
| F2 | 10 | Very minimal attempt to give a presentation. |
| Fail | | |
| F3 | 0 | Failed to give a presentation. |

1. Only broad classes (A,B,C,D,E,F1) have qualitative criteria attached; the division into (e.g.) C1, C2, C3 etc. is at the discretion of the examiner.

2. The qualitative criteria include consideration of:

a. Presentation of talk; audibility, speed, use of notes, addressed to audience, time keeping.

b. Organisation of talk; logical coherent progression with introduction and summary.

c. Use of visual aids; clarity and explanation of salient points.

d. Research and response to questioning; evidence of extensive reading, presentation of own data (where relevant), evidence of wider understanding.