# Honours Assessment Department of Biological Sciences

Overview Processes Issues Responses Associate Professor Ted Steele has made a number of assertions about assessment processes for Honours students in this Department, in 1997 and 2000.

Find out more about it in these pages.

For more information, please contact Professor Rob Whelan rob\_whelan@uow.edu.au

# **Assessing Honours**

# The issue of Honours assessment is challenging but very important.

The mark and grade of Honours affect the ranking of a graduate in the competition for PhD scholarships and for jobs. This Department has been criticised by Associate Professor Ted Steele, in widely-circulated assertions about inappropriate actions in assessing Honours students - specifically a Bachelor of Biotechnology Honours student in 1997 and a BSc Honours student in 2000.

# The purposes of this web site are:

- (i) to present the <u>issues</u> facing us, and any Department, in the assessment of Honours,
- (ii) to explain the <u>process</u> we have developed over recent years to address these issues, and
- (iii) to respond to the <u>specific criticisms</u> of Ted Steele.

# **Our Honours Programs**

There are two sorts of Honours degrees in courses run in the Department of Biological Sciences.

The BSc (Honours) is a 1-year, add-on research year - assessed mostly by thesis (70%) with some coursework.

The B. Biotechnology degree is a 4-year professional degree qualification, with a research project (assessed mostly by thesis), worth 40%, integrated with two coursework subjects (BIOL420 & BIOL421) in the final year.

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# Honours Assessment **Processes**

#### BSc assessment

- \* Thesis (70%)
- \* Literature review paper (10%)
- \* Scientific paper (7%)
- \* Conference Poster (5%)
- \* Thesis Seminar (8%)

#### B. Biotech, assessment

- \* Research Project (40%) fcomprising: poster (10%), seminar (10%) and thesis (80%)]
- \* BIOL420 subject (20%)
- \* BIOL421 subject (20%)
- \* 3rd year performance (20%)

# In the specific cases...

In the cases identified by Ted Steele to the press and media, there was considerable debate. Nevertheless, in both cases the external examiner's thesis mark was included in the averaging process.

Clearly, a low thesis mark can be somewhat compensated for by a strong performance in the coursework, especially in the B. Biotech, honours year.

#### Honours assessment

We have developed a set of objectives for each of our two Honours programs. These cover achievement of generic skills (such as scientific writing, seminar presentation, conception of research questions, experimental design and analysis, laboratory and/or field skills) and mastery of the knowledge and concepts of a research field, at the forefront of a particular field. These objectives recognise that Honours needs to prepare graduates for a wide range of potential careers.

Assessment in each of the Honours programs is designed to test. Honours Examination the level of achievement against these objectives.

In the BSc program, the supervisor nominates the two internal markers of student work (including the thesis) and these academics operate as the student's committee. The supervisor also nominates the external examiner, but is not an

In the B. Biotech, program, again, the supervisor nominates the external examiner and does not mark the thesis.

Exclusion of the supervisor from thesis marking is designed to protect against bias (either for or against a student) and to leave the supervisor free to have input to the student's thesis drafts.

All other items of assessment have multiple markers. Seminar and poster presentations are marked by all available academic staff (including supervisors).

The responsibility of the Department Examination Committee (comprising all available academic staff) is to review the marks and the written reports of the three examiners.

The agreed procedure is to determine the thesis mark as a straight average of the three examiners, but with discretion to ignore a mark, seek further input from an examiner, seek a fourth examiner or seek another opinion on the examiners' reports. In practice, this discretion is usually exercised only when an examiner's comments are at variance with the mark allocated and/or the mark of one examiner is an extreme outlier.

Particularly detailed discussion is held on those students whose overall marks fall close (within one mark) of a borderline. The supervisor and other markers of the student's work have an opportunity to make a case for increasing the mark (by 1%) to the next grade. Marks may be deducted, according to policy, for work submitted late.

## NSW Ombudsman's Conument

Contained in an email sent out by Ted Steele on 2/2/01:

"You seem to be further arguing that the other academic members of your department who were members of the Committee should, as a matter of course, have preferred the assessment of the external examiner (supported by you) over that of the two internal examiners. It appears to me that if such an approach was standard practice, there would be little purpose in appointing any thesis examiners other than the external expert selected by the supervisor,"

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SMH 12/1/01



Australian 24/1/01



Ombudsman's statement

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# Honours Assessment Issues

# Some Challenges...

Designing a set of objectives for Honours that prepare for multiple career paths.

Designing an assessment system that tests both generic research skills and research ability in a field.

Encouraging supervisor input to the student's training while avoiding bias in assessment.

Creating some comparability among institutions, and among Departments within an institution, in the standards of Honours marks and grades.

Where external examiners are used, ensuring their independence from the supervisor and project, and their understanding of the assessment procedure.

#### **Issues for Honours Assessment**

## Importance of Honours marks

The issue of Honours assessment is challenging but very important. The mark and grade of Honours affect the ranking of a graduate in the competition a PhD scholarship or for a jobs.

In either of these arenas, students are competing with graduates of a number of institutions, each of which will have a unique Honours program and different forms of assessment. Nevertheless, students from different Departments and Universities will be compared with each other on the basis of their Honours marks.

One contribution to benchmarking Honours marks is the use of an external examiner - preferably a researcher who knows the field, is independent of the student and the supervisor, who has supervised Honours students themselves, and who has the time to do a thorough job.

## Multiple career pathways after Honours

The Honours year is a 'training ground' for research.

"Research" is a big term representing an amalgamation of so-called generic skills (scientific writing, seminar presentation, conception of research questions, experimental design and analysis), laboratory and/or field skills specific to a particular discipline area, and mastery of the knowledge and concepts at the forefront of a specific field.

For those Honours graduates planning to proceed to further research, the mastery of the knowledge and concepts at the forefront of a specific field is of fundamental importance. Judgements of them might weight 'imagination' and 'lateral thinking' more heavily than scientific writing, presentation or statistical analysis skills.

For other graduates, planning a different career, the more generic research skills will be the basis on which they are judged. For them, the particular research field of the Honours project may simply be the 'stage' on which they develop and display their abilities.

Beginning honours students are not streamed according to 'intended careers', and so neither their training ground nor the assessment of their skills and other abilities can be tailored.

## The 'apprenticeship' aspect of Honours

There are many ways to provide a good training in research, but the most common at Honours level includes (but is not solely) a form of 'apprenticeship'... that is, by working alongside an experienced academic researcher in a project designed for the student but within one of the supervisor's research fields.

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#### Potential for conflict and bias

A supervisor who takes seriously the job of developing a young person's research skills must have an investment in both the outcome of the research and also the performance of the student - with the attendant potential for at least subconscious bias.

Given the nature of human interactions, there is also the potential for personality conflicts, which can be difficult to keep out of the process of research training and assessment, where there is a 1:1 relationship between student and supervisor.

As a consequence, it is important that there be processes in place to protect a student where there is such a conflict. Having assessment tasks marked by several markers and excluding the supervisor from thesis assessment may contribute to a solution,

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# **Honours Assessment** Criticisms and Responses

Associate Professor Ted Steele has made many assertions in the press, the media and in widely circulated emails. Some of them are quoted below - along with Department's responses.

# Dr Steele's statements

This prompted Dr Ted Steele, of Wollongong University, to allege he had been instructed to increase the grades of Honours students." [SMH 12/1/01]

"Wollongong University Department of Biological Sciences associate professor Ted In line with our process of Honours Steele has signed a statutory declaration stating that at least two of his honours students had their marks boosted from a fail to a high grade." [Illawarra Mercury 12/1/01]

"I was thoroughly disgusted by the way the Department upgraded those marks." [SMH 12/1/01]

"Dr Steele claimed he had been coerced into agreeing to the boosting of marks of some of his students, including one full fee-paying student. He cited two examples where student (O)marks were upgraded." [Illawarra Mercury 1/2/01].

# Department's response

Dr Steele was not instructed to increase any grades. No grades or marks were boosted, increased or upgraded. All other members of the Department, who were at these meetings, agree that there was no coercion and that there was no atmosphere of coercion.

examination, as a supervisor, Dr Steele was not a marker of the thesis of either of the students in question.

The determination of the mark for the thesis, in each case, was based on a straight averaging of the marks provided by the three examiners.

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"Indeed the then Head of Department Professor Rob Whelan actively guided the Honours assessment committees. If any one individual is responsible therefore for "instructing" the way the marks should be upgraded then it was Professor Rob Whelan." [Widely circulated email of 1/2/01]

He did not. In fact, no marks were altered.

"In the case of Student B this [i.e. the allocation of a low grade] was to ensure that automatic entrance to a PhD program was not granted."

[Widely circulated email of 31/1/01]

There is no such thing as Qautomatic entrance to a PhD programŎ.

This appears to be an accusation that Professor

Whelan instructed marks to be increased.

Further, as a matter of principle, the basis for the marks awarded to an assessment item should surely be the quality of the specific piece of work and not an ulterior motive of preventing the student proceeding to a PhD.

"What else was I expected to do, complain to VC Sutton?" [Widely circulated email of 31/1/01]

If there had been any concern about (i) the process of honours examination, or (ii) the application of the agreed process, the route for complaints is Head of Department, Dean, PVC(A), DVC, VC Dr Steele made no complaint to anyone in this line.

Further, Dr Steele was involved in the 1999-2000 review of the BSc Honours year and made no comment or criticism at the time.

"Furthermore, I have not taken steps to no need, in my informed view, for this to be done."

Dr Steele has repeatedly stated that he stands correct the public record because there was by the impressions given by the newspaper articles that there was upgrading of marks and an instruction to increase marks.

[Widely circulated email of 31/1/01]

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