

## **The Department of Computing Guideline on Ensuring Quality in Teaching**

(Developed from School of Computing Guidelines for Ensuring Quality in Teaching)

### **Distribution:**

- All staff members of the Department of Computing.
- All Postgraduate students who are contracted to lecture.
- All student tutors.
- In addition all students are advised to read.

### **Introduction**

In recent years there has been a growing concern within the international academic community to objectively define and assess the quality of teaching, administration and research activities. This is largely motivated by governments' concern about the justification and accountability of public funds although it does provide us with an opportunity to overview our department's position on these issues. Maintaining a high degree of quality with regards to teaching is essential in order to preserve the quality of our graduates and hence the reputation of the department.

It is vital that lecturers ensure that all assessment critically assesses the unit learning outcomes for the unit.

The need for assessment guidelines can be put in terms of the following:

- To be, and be seen to be, consistent and fair in our assessment of students' work.
- To show students how their work has been assessed.
- To give consistent and valuable advice to new or inexperienced staff.
- To ensure that the lecturer does not appear to be guilty of bias, incompetence, inconsistency and to protect from accusations of such behaviour.

Given an adequate assessment guideline, then the assessment process becomes part of good teaching practice, guarantees students are at an appropriate standard and helps students learn by appropriate feedback.

It is our belief that if the guideline is constructed carefully, they will simplify and speed up the assessment process, as well as providing us (and the students) with better information. This guideline is important because:

- We have a professional, moral and legal duty to assess our students to the best of our ability in a fair and just way.
- We need to ensure that our clerical and administrative procedures minimise the chance of mis-recording or mis-processing of marks.
- We need to ensure that staff time is used effectively.
- Without such procedures we would fail Academic Audit.
- It is our duty to investigate and resolve plagiarism issues in a manner consistent with University policy.

The assessment type and weighting must have a solid mapping to the stated unit learning outcomes for the unit. Changes to assessment must be approved by the dept. Teaching and Learning Committee.

Each lecturer has a moral responsibility to their students, their tutors and the Department.

It is not possible for any policy to cover every single aspect of Lecturer responsibilities. Lecturers should regard this guideline as a minimum standard and they should strive to exceed it every semester. The courses offered by our department are held in high regard. The Department (and hence all lecturers within the department) has a moral responsibility to past and present students to ensure that the good reputation of the department and its courses is upheld.

**Lecturers should be aware that failure to comply with this guideline could result in disciplinary action being taken against the lecturer concerned.**

### **Head of Department Responsibilities**

The Head of Department has ultimate responsibility for administering all Quality Processes within the Department. The Head of Department will be responsible for the following:

- Approving all final examinations and examination marking guides following prior approval of the co-examiner and before submission to the ARO;
- Chairing all Quality Panels;
- Approving all Quality Panel outcomes;
- Soliciting input from students for consideration in the quality process at the conclusion of each semester.
- Communicating quality process outcomes to relevant staff members, or other areas of the University engaged in delivering service units, units that are taught by other Departments that are part of CS double degrees, or other services.

Student input will be sought for the following reasons:

- To determine if students feel that individual units deliver on stated unit learning outcomes.
- To determine if students feel that the individual units contributed to graduate outcomes as stated in the unit outline, eg contributed to life long learning, the ability to work in teams, etc.
- To assess if workload levels are reasonable.
- To assess if students were provided with adequate feedback on progress throughout the semester;
- To provide an independent appraisal of lecturer responsiveness, effectiveness, and professionalism.
- To review the quality of units taught by other departments in conjunction with service units or double degrees.

Input from students can take any of the following forms:

- The Head of Department may convene a meeting with student representatives from each year of the course. So that students are free to comment openly and objectively, lecturers should not be included in this meeting.
- Written feedback from students may be requested in lieu of a formal meeting.
- eVALUate as per university policy.

Co-lecturers are appointed by the Head of Department to oversee quality for individual units in conjunction with the principal lecturer/examiner. See Co-Lecturer Responsibilities for more information.

The Head of Department must approve all requests for moderation of assessment marks, following consultation with the lecturer and co-lecturer, in accordance with the

Departmental Guideline on Moderation of Assessment Results (see later).

### **Department Teaching and Learning Committee Responsibilities.**

The Department Teaching and Learning Committee(DTLC) consists of the course controllers for the courses controlled by the department and the Head of Department. The main role of the committee is to ensure that the required body of knowledge for each degree is covered as well as ensuring the integrity of the mapping between graduate attributes and unit learning outcomes. For this reason lecturers are not permitted to make any changes to unit content, syllabus or assessment without first obtaining permission from the DTLC. If a lecturer wishes to change any aspect of a unit they must:

- Approach the DTLC and request a meeting.
- Present their case before the DTLC at a minuted meeting.
- Obtain the approval of the DTLC.

No lecture may make any changes without DTLC approval. The DTLC may also approach a lecturer with a request for a change to the one of his/her units. The lecturer is required to make the requested change which should take effect the next time the unit is taught.

### **Co\_Lecturer Responsibilities**

It is required that in addition to the lecturer-in-charge, another member of the academic staff is informed, in some detail, as to the content of the course and related issues. This staff member, called the co-lecturer, would also be the co-examiner and can be involved in issues related to the unit design. The Head of department is responsible for the selection of co-lecturer.

At all times, should the need arise, the co-lecturer should be prepared to take over some or all of the teaching responsibilities in the given unit.

The co-lecturers will work closely with the lecturer to complete the Quality Panel Audit Form at the end of the relevant semester.

The co-lecturer/co-examiner will review and approve all examinations and examination marking guides before being sent to the Head of Department for final approval.

The co-lecturer/co-examiner will review all final results before they are submitted to the Head of Department for final approval. In some cases, this will mean reviewing exam scripts from papers receiving high and low marks.

When necessary, the Head of Department will adjudicate disagreements between the lecturer and the co-lecturer in all aspects of the process.

### **Tutor Responsibilities**

Tutors should ensure that they have all of the following information and understand all requirements for tutoring in a given unit. This information is supplied by the Lecturer:

A class list for each practical/tutorial for which the tutor is responsible.

A set of practical/tutorial sheets and a set of tutor's notes.

A set of sample solutions (if appropriate).

Other requirements (e.g. the tutor may be expected to attend weekly tutor meetings).

The tutor should

- Prepare for Tutorial and Practical Sessions.
- Discuss all potential issues with the lecturer.
- Represent the Lecturers views to the students.
- Abide by University Regulations with respect to maintaining student confidentiality.
- Abide by University Regulations with respect to incidents relating to cheating, collusion, and plagiarism.

It is recognised that tutoring is partially a learning process for the tutor. Any problems the tutor has with the format of the tutorials etc. should be discussed with the lecturer-in-charge. Any unresolvable differences or problems the tutor has with the lecturer-in-charge should be referred to the Head of Department.

### **Lecturer Responsibilities**

Lecturers are normally the examiner for the unit, unless otherwise stated. Lecturers are responsible for the production and quality of the following items, and for archiving this information on the teaching server for all units for which they are responsible:

- Unit outlines.
- Lecture notes.
- Practical/tutorial worksheets sheets and tutor guides.
- Copies of all assessment used including marking guides.
- Representative samples of work submitted by students for all assessments (examples should cover a spectrum of poor to good students).
- Results for the semester to facilitate appeals, supplementary examinations, deferred assessment and potential remarking.

This information will be archived on the Department teaching server Compliance will be audited internally by the Department Quality Panel twice yearly. Electronic copies should not be held on unsecure office computers or on media devices. Paper copies must be kept in a secure location.

Unit outlines must be made available to students in printed form in the first two weeks of semester (as per university policy). All unit outlines should conform to University, divisional, Department and departmental policies.

All lecturers should be familiar with all University policies, particularly those with respect to the production, and content of unit outlines, assessment, and final examinations as well as cheating, plagiarism, and collusion.

The lecturer will ensure that:

- A high standard of feedback is provided to students on all assessed work returned to students;
- Response to student e-mail enquiries will occur within one working day;
- Examinations and examination marking guides will be sent to the co-examiner and Head of Department for approval by the due date set by the Department and in accordance with the Department Guideline on Writing and Submitting Exams.
- Technical support staff are informed of unit requirements well before the start of a new semester.
- Marked assessment is returned to students within ten working days of the test or assignment submission date.

Lecturers will supply tutors with the following:

- A set of practical/tutorial sheets and a set of tutor's notes. Note the tutor should not be asked to produce this material.
- A set of sample solutions (if appropriate).

Lecturers should meet with their tutors on a regular basis (preferably on a weekly basis) to ensure that the tutor knows what they have to do and to assist the tutor with any problems that might arise.

The lecturer will work closely with the co-lecturer to complete the Quality Panel Audit Form each semester the unit is taught.

Lecturers should encourage their students participate in eVALUate at the end of each semester.

Each lecturer also has a duty of care to the tutors employed to assist in teaching and should supply all materials required for them to do their job correctly. It is important to realise that the tutors are learning the educational process and will require guidance. The lecturer-in-charge should monitor the performance of the tutors by attending practicals/tutorials and give guidance where necessary.

### **Pre and Co-Requisites**

Lecturers have a duty of care to ensure that they are familiar with the content of pre-requisite or co-requisite units. Any changes to pre-requisite or co-requisite units must be approved by the department Teaching and Learning Committee.

### **Unit Web Area**

The lecturer is required to maintain an up to date copy of the following material:

- Unit Outline
- Practical/tutorial worksheet exercises.
- Lecture notes.

Note that the material listed above must be exactly the same as that used for teaching in the current semester.

The look and feel of the web area must conform to University and Departmental specifications. Lecturers may include other material but must ensure that their unit web area(s) are easy to navigate and not cluttered with unnecessary information.

### **Changes to Units**

Computing is a ever changing discipline and the need to change unit learning outcomes and hence assessment and teaching material is a normal part of the teaching and maintenance of Computing degrees. However it is critical that changes are not made arbitrarily and that any changes ensure that the required body of knowledge is still covered and that the mapping to graduate outcomes for each degree is preserved. For this reason, any changes to a unit that a lecturer wishes to make, need to be approved by the Department Teaching and Learning Committee. See the *Department Teaching and*

*Learning Committee Responsibilities* section for more information.

### **Quality Panels**

Quality Panels will be convened and chaired by the Head of Department twice yearly. See Head of Department Responsibilities for more information.

The purpose of the Quality Panels is to:

- Review if stated unit objectives with respect to subject material and content are being met.
- Review if stated unit learning outcomes and graduate outcomes are being met.
- Review the efficacy of all assessments and teaching material.
- Review pre-requisites and co-requisites.
- Ensure that the syllabus as stated in the Curtin Handbook remains relevant and correct.
- Recommend significant changes to unit structure, syllabus, prerequisites, or assessment pattern to the Department Teaching and Learning Committee.
- Ensure that the mapping of assessment and teaching materials to the stated unit learning outcomes is being preserved.

The lecturer is responsible for completing the Quality Panel Audit form prior to the Quality Panel meeting. The lecturer must provide the co-lecturer the completed form at least one week prior to the panel so that the co-lecturer has a reasonable amount of time to audit the information on the form and ensure it is both complete and accurate.

Prior to the Quality Panel meeting, the lecturer is required to ensure that unit records are complete and archived on the department teaching server.

During the meeting the HoD and the Quality Audit Panel may make recommendations for changes to the unit. These proposed changes should be entered in the relevant section of the Quality Audit Form during the meeting. The lecturer must then follow the process outlined in the *Department Teaching and Learning Committee Responsibilities* section with regard to making changes to a unit.

### **Assessment**

The final exam should assess all unit learning outcomes. All other assessment should cover as many unit learning outcomes as possible. No assessment should be used more than once. Lecturers are required to produce new assessment each time a unit is taught.

For assessment other than the final exam, test based assessment is preferred. It is recognised that some units require the use of assignments but the use of assignments for a particular unit must be approved by the Department Teaching and Learning Committee.

### **Communicating Assessment and Assessment Marking Guides to Off Campus Lecturers**

The department has a offshore campus assessment server at:

<https://offshore.computing.edu.au/>

Assessment for all units taught off campus should be uploaded onto this server. This is the only allowable means of communicating assessment and assessment marking guides

to off campus lecturers. Emailing assessment and assessment marking guides is not permitted. Lecturers should ensure that the uploaded material is deleted once it is no longer required.

### **Marking Guides**

Lecturers must provide a marking guide for each item of assessment. This marking guide should be written at the same time as the assessment item.

Marking guides are essential in order to:

- Assist the lecturer. Devising a marking scheme helps to ensure that the person setting the piece of work is clear on its academic purpose. Moreover, drafting the marking scheme at the same time as setting the piece of work will highlight any problems with the assessment which might otherwise go un-noticed until too late. Since a marking scheme must contain a specimen solution or, at least, a clear indication of what is required, the lecturer is able to check that the knowledge or skills have been covered.
- Ensure that the assessment objectives are achieved. Devising a clear marking scheme helps ensure the marks are allocated in a fair and consistent manner.
- Assist the marker. Use of an explicit and unambiguous marking scheme helps to ensure that work is marked in a fair and consistent manner. In marking a large number of items there can be a tendency for standards to differ amongst markers.
- Allow the use of marking assistants. If one person sets a question and another marks it, then, unless the first provides the second with a clear marking instructions, it is unlikely that the emphasis in assessment will reflect the emphasis that the lecturer had in mind: marking schemes communicate intentions to those marking. This is essential considering our offshore arrangements.
- Allow the co-lecturer to judge the standard of the question. The co-lecturer may be unaware of the finer points of the syllabus of a module. Seeing a marking scheme and specimen solution allows them to judge the standard and make appropriate constructive comments.
- Act as a reference standard. Referring back to a previous year's assessment documentation and schemes can assist in maintaining the same standard from year to year.
- Assist an audit. For external reviewers and evaluations of the programme we can provide a clear exposition of the courses and an indication of what is necessary to achieve the standards which we apply in classifying students.

Every lecturer should ensure that the mapping between unit learning outcomes and assessment items for their units have been entered into the Department Unit Learning Outcomes Database (<http://outcomes.cs.curtin.edu.au/>). Lecturers must ensure that both the assessment and the marking guides preserve this mapping.

### **Marking of Assessment**

As indicated above, all marking should be supported by the use of a clear, well designed marking scheme. There is more, however, to good marking than simply following a marking scheme. Marking should be undertaken in a timely manner, using comments to provide feedback to students, in the case of work that is to be returned, and to leave an audit trail so that consistency and accuracy can be considered subsequently.

All assessment other than the final exam should be returned to students within ten working

days of the submission date or test date. Lecturers are also required to follow the department guideline on late or missed assessment (<http://www.computing.edu.au/documents/latesubmissionpolicy.pdf>).

When marking assessment which is to be handed back to students, the following points should be observed:

- Use a different colour ink to the work you are marking. The traditional red pen is a good choice. Note that a pencil should never be used.
- There should be a clear indication of where the student gained or lost marks. Techniques include the use of error guides/code sheets for the evaluation of answers and errors, the use of ticks or marks to provide feedback.
- Marks for the assignment/test are private information between the student and the lecturer/tutor. There must be a mechanism by which the student knows what the total mark is, e.g. written inside the assignment/test. You can publicly display the total marks along with the student ID - but not their name.
- Indicate each error by a cross or by crossing through the sentence, paragraph or whatever. If the work is to be returned to students, ensure that they can discover what the mistake is by writing a short comment.
- If work is to be returned to the students, students have a right to expect quality feedback. Lecturers should ensure that there are positive as well as negative comments, as appropriate. Sarcasm or derogatory comments should never be used. Constructive criticism is required.
- You should keep a record of the marks awarded (and a copy of the error/code guide/marking guide) for future reference (e.g. student appeals, job references, etc.).
- When tutors are used to assess coursework e.g. tests, assignments, the lecturer-in-charge should verify that the marking has been done correctly and consistently across tutors. A suggested method is to sample marked coursework from each tutor.
- Finally an example of poor, medium and good quality student work is required for each assessment item.

When marking final exams:

- Lecturers should mark question by question not paper by paper.
- If marking is to be done by more than one marker then marking should be allocated by question not by paper. i.e. marker A marks question one for all exam scripts, marker B marks question two for all exam scripts etc.
- Markers should clearly indicate the marks awarded for each answer in the margins of the exam script. The marker should not write comments or make notes anywhere but in the margins of the exam script. This is so that, should a student request a re-mark, the markers comments and mark allocation can be easily removed from photocopies of the exam script.
- Marker should use a pen, preferably a different colour to that used by the student (e.g. red is preferred).
- The marks awarded for each question should be written on the front cover of the exam script in the space provided.
- The total marks for the paper should be written on the front cover of the exam script. This should be written as a ratio of marks awarded against total marks possible (e.g. 83/120).

## **Moderation of Assessment Results.**

The scaling of results is not permitted under any circumstances. In situations where something has gone wrong with an assessment item (e.g. error in an exam question), the Head of Department, the lecturer and co-lecturer will meet and decide upon a course of action which might involve some form of mark moderation. If required this moderation must be designed to directly address the problem (for example not including the marks for a flawed question in the final exam).

The procedures for moderating marks are as follows:

1. All requests for moderation of any assessment must be communicated to the Co-lecturer and the Head of Department.
2. The decision as to whether moderation will take place and how it will be achieved will be determined by the Head of Department after consulting with the lecturer and co-lecturer.
3. The details of what occurred with regard to moderation will be reported to the Board of Examiners at the end of the semester.
4. The moderation used and the reasons why it was required must be recorded by the Examiner and Co-examiner on the Quality Panel Audit Form so that the Quality Panel can make recommendations for future semesters, if necessary.

### **Returning Assessment to Students**

Assessment items are the property of the students who created them and lecturers must ensure that each assessment is safely returned to its owner. Specifically assessment cannot be left unattended in boxes for students to collect. It is suggested that the lecturer arrange for the marked tests or assignments to be returned to the students in a lecture/practical/tutorial. Students are not permitted to collect marked assessment on behalf of other students. Each assignment item must be handed back to the student by the lecturer or tutor.

### **Writing and Submitting Exams**

All examination papers must conform to university policy. The lecturer must ensure that the exam and exam marking guide are provided to the co-lecturer and Head of Department in a time frame that ensures that:

- The co-lecturer and Head of Department have a reasonable amount of time to look over the exam and marking guide.
- The lecturer has adequate time to make any required corrections to the paper.

Examination papers must never be used more than once. Exam papers for offshore campuses **MUST** be different to the onshore examination paper. The only exception to this is where the offshore exam is held at the same time as the onshore exam (e.g. Miri).

The questions on any examination paper cannot overlap any questions used on previous examination papers by more than 10%. In other words 90% of the questions in an examination paper must be new questions which have never appeared on a previous examination paper. The practice of generating a new exam by selecting questions from past papers is forbidden. All examination papers must be made available to students via the Library once the examination period is over.

The supplementary examination paper may be the same paper as the deferred examination paper. However the 10% rule applies and for this purpose, the normal examination paper for the current semester is considered as a past paper. i.e. the

supplementary/deferred examination paper must be different to the examination paper used for that semester.

The one instance where an exam paper may be used is that a supplementary/deferred examination paper may be re-used as an offshore examination paper provided that:

- The supplementary/deferred exam paper is an original exam that conforms the requirements specified above.
- It is only re-used exactly once.

### **Boards of Examiners**

The lecturer must ensure that the mark breakdown and recommendation for each failing student is provided to the relevant board of examiners. Mark break downs should clearly indicate the percentage score for each assessment item.

Lecturers should check all printouts prior to the Board of Examiners meeting to anticipate any problems that might occur. All documentary evidence of problem cases (e.g. medical certificates, student letters) should be handed to the Department Administration Officer well before the board meets.

Lecturers are not permitted to grant deferred examinations or supplementary examinations. That is the role of the examiner's board. Lectures must be clear when communicating with students that it is the examiner's board that will make the final decision.

Lecturers are not permitted to tell students their final marks. Students should be referred to the online mechanisms provided by the university for this purpose.

### **Unit Boxes**

At the conclusion of each semester, the lecturer must provide copies of the following material to be stored in a unit box which is clearly labelled with the name of the unit and the semester and year:

- A copy of the unit outline
- A copy of the completed and signed Quality Panel Audit Form.
- For each item of assessment:
  - A copy of the assessment
  - A copy of the marking guide.
  - Three copies of student work (poor, medium and good).

There have been incidents of material going missing from quality boxes in the past so lecturers are advised to provide the above material in electronic form on a CD or DVD and to keep a backup of this information on the secure teaching server.

Lecturers should note that incomplete unit boxes could result in one or all of our degrees failing to keep accreditation.