

## Assessment

A rubric is a guide to assist the marker to make consistent and reliable judgments about the quality of student work.

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## 1. What is a rubric?

**Assessment rubrics are guides to assist markers to make consistent and reliable judgements about the quality of student work. They are also used to provide feedback to students about the quality of their work and how they might improve.**

Rubrics are commonly presented in the form of a matrix that includes:

- **marking criteria** – the elements that the marker will consider when judging a piece of work (such as quality of argument, research, technical aspects, etc.)
- **grading standards** – descriptive statements about the level of each criterion; in the SCU Assessment Procedures (Clause 13) [SCU’s Generic Grade Descriptors](#), which are general guides to the standard of work required at each grade level, apply to all assessment tasks.

Rubrics may vary in complexity from simple tables to very detailed matrices that provide descriptions of each dimension of quality and characterise each level of accomplishment.

Rubrics can be adapted to grade many different types of assignments including essays, reports,, oral presentations, group work and research papers

Rubrics should be simple and clear so that students can readily understand and engage with them.

## 2. Why use rubrics?

Rubrics bring transparency to assessment and marking for both staff and students. Clear criteria and standards:

- enable markers to form a shared understanding about how grades should be awarded
- explicitly communicate to students what is valued in the completion of a task
- help to clarify and articulate industry or discipline standards
- provide students with more detailed understanding of how to improve
- increase efficiency and consistency of marking and moderation processes.

Rubrics can be used in the three stages of the assessment process as shown in Table 1 below:

Table 1: Assessment stage matched to the rubric purpose

Assessment stage	Rubric purpose
Before assessment occurs	For students the rubric explains what is required in the assessment task. It provides important cues about the expected elements and approaches. For the marking team, the rubric provides an opportunity to explain and moderate understandings about criteria and standards before marking commences.
During the assessment process	Rubrics support markers in two major ways: <ul style="list-style-type: none"> <li>• They provide a detailed framework for consistently judging individual student submissions.</li> <li>• They provide prompts for the provision of systematic feedback on student performance against each criterion.</li> </ul>
After assessment occurs	Rubrics: <ul style="list-style-type: none"> <li>• provide important information to students about the quality of their performance against the specified criteria</li> <li>• allow students to diagnose their strengths and weaknesses and where they can improve</li> <li>• provide transparency to students about academic standards, and how grades are derived.</li> </ul>

### 3. When should rubrics be used?

The Assessment Procedures of the SCU Assessment Policy require that a rubric for each assessment task is made available and communicated to students prior to the first week of teaching of a unit (Clause 12). The Procedures require full assessment details which includes assessment rubrics to be available to students in their unit learning sites (Clause 16).

All assessment types can be marked using rubrics. However, caution should be taken when deciding the form the rubric should take. Detailed atomised rubrics may trivialise the components of the assessment task and can skew the final assignment grade. A staff member explains:

“  
*I thought I had allowed for all possibilities when I set up the marking criteria. However, when I collated the result from each criteria I was surprised the student had achieved a credit, when in fact they could not even solve the problem presented.*

To overcome the difficulties associated with overly detailed rubrics and to help in the construction of grading standards, researchers have proposed frameworks to assist in the design of effective rubrics. These frameworks help us to see the range of potential student responses to a task – from very basic responses to highly sophisticated ones.

- [Bloom’s Taxonomy](#) is a framework that proposes a hierarchy of assessment tasks.
- [Biggs’ and Tang’s SOLO Taxonomy](#) framework focuses on criteria and standards.

**Further information about writing criteria and standards for rubrics using these frameworks is available from the Assessment@Southern Cross University website, [Principle 5](#).**

### 4. Types of rubrics

There are two types of rubrics in common usage – holistic and analytic:

**Holistic rubrics** are used when making an overall or holistic judgement about the quality of the response.



**Analytic rubrics** are used when making judgements about each criteria separately and then combining each judgement to make a decision on the quality of the response.



## Holistic rubrics

Holistic rubrics are used when it is more difficult or not desirable to partition a task into separate criteria. For example, in some tasks, the criteria are intertwined and overlap too much. This often occurs in complex, extended abstract or creative tasks where there are a variety of ways to go about the task and the task cannot easily be partitioned into components. In such cases we make **holistic** judgments about the work, rather than analytical judgments based on individual criteria.

In holistic rubrics, the standards are articulated by a detailed descriptive statement. Tables 2, 3 and 4 below show examples of holistic rubrics for a multi-media project, an essay and online participation.

Table 2: Holistic rubric for multi-media project

Grade	Description of Grade
<b>High Distinction</b>	The project is realised to a very high professional standard. Technically it is fully functional and meets all specifications. It demonstrates high levels of creativity and innovation both in terms of its function and usability. It has a high level of aesthetic appeal. It has been carefully quality controlled to ensure full functionality and that no errors are evident. This product has real 'wow' factor.
<b>Distinction</b>	The project is realised to a high professional standard, with a good level of function and meets most specifications. It demonstrates occasional levels of creativity and innovation and is attractive and aesthetically engaging. While there may be a few errors, these are of a minor nature. Generally the product would be well-regarded by industry standards.
<b>Credit</b>	The project is realised to an acceptable professional standard with generally adequate levels of function and generally meets specifications, although there are a number of problems evident. There is some evidence of creativity and innovation although these are not sustained or notable. Further experimentation and testing could have improved this product considerably. Generally it would not be well regarded by industry and would need more work before release, but still shows good developing competence.
<b>Pass</b>	The project was completed, but to a less than acceptable industry standard. Functionality was problematic and often did not meet required specifications. There is little evidence of creativity or innovation in the project. Numerous errors crept into the work. Significant further work would be required to bring this up to industry standards, but overall it demonstrates sufficient competence to merit a passing grade.
<b>Fail</b>	The project is incomplete and/or work well below industry standards. Functionality is poor or absent. Failure to meet project specifications. Numerous errors. Little or no innovation or aesthetic appeal. A large volume of work required to bring the project up to industry standards. Insufficient effort or competence demonstrated to achieve a passing grade.

Table 3: Holistic rubric for an essay

Grade	Description of Grade
<b>High Distinction</b>	This essay commands attention because of its insightful development and mature style. The response to the text is convincing and elaborated upon with well-chosen and correctly referenced examples. It is written with aptly chosen words, effectively constructed sentences and a keen observation of the conventions of written English.
<b>Distinction</b>	This essay provides a thoughtful and well reasoned response to the text with appropriate and correctly referenced examples. The sentences are constructed and words chosen to communicate clearly to the reader. The conventions of written English have been well observed.
<b>Credit</b>	This essay provides a competently reasoned response to the text with some appropriate and mostly correctly referenced examples. The sentence structure and choice of words have sufficient precision to communicate the message to the reader. The conventions of written English have been observed.
<b>Pass</b>	This essay is satisfactory. It provides an adequate response to the text with sufficient examples and adequate reasoning. The examples are mostly adequately referenced. The sentence structure and choice of words communicates adequately to the reader. The conventions of written English need to be observed more closely.
<b>Fail</b>	This essay fails to respond appropriately to the text. The responses are simplistic or incoherent and suggest some significant misunderstanding of the text. The writing lacks appropriate structure and has a pattern of errors in word choice with poor grammatical expression. Correctly referenced examples are absent or poorly presented. More attention needs to be paid to the conventions of written English.

Table 4: Holistic rubric for online participation

Grade	Descriptor of Grade
<b>High Distinction</b>	In addition to qualities of a distinction grade, contributions at this level demonstrate a sophisticated synthesis of theoretical understanding and reflection on practice, as well as a high level collegiality in engaging with others.
<b>Distinction</b>	<ul style="list-style-type: none"> <li>• Contribution to the discussion is relevant, succinct and timely.</li> <li>• Contributions demonstrate deep engagement with issues and recognition and evaluation of differing perspectives.</li> <li>• Contributions are informed by significant reading and critical reflection on own professional practice.</li> <li>• Contributions advance and extend the debate and demonstrate high level of online communication skills.</li> </ul>
<b>Credit</b>	<ul style="list-style-type: none"> <li>• Contribution to the discussion is relevant, succinct and timely.</li> <li>• Contributions demonstrate a good understanding of basic issues and own professional practice.</li> <li>• Contributions are informed by reading and reflection and not only personal opinion.</li> <li>• Clear efforts are evident to engage with others' views and to advance the debate in constructive ways.</li> </ul>
<b>Pass</b>	<ul style="list-style-type: none"> <li>• Some contribution to discussion is evident but may also be untimely.</li> <li>• Contributions make some points that demonstrate basic understanding but do not generally advance the debate.</li> <li>• Contributions suggest only minimal engagement with literature and tend to reflect only personal opinion.</li> </ul>
<b>Fail</b>	Fails to make necessary contributions and/or contributions are very late. Comments are generally not scholarly and do not contribute to the debate.

## Analytic rubrics

Analytic rubrics are the most common kind of rubric. They are used when the judgment of the assessment task can be partitioned into discrete elements or criteria each of which are assessed individually. The results for each criterion are then aggregated to provide an overall grade for the task. In some instances criteria are weighted relative to their importance to achieving the learning outcomes for the assessment task.

Table 5 below is a complex analytic rubric which contains both criteria and grading standards (adapted from Lombardi, 2008). A description is provided for each standard relative to each criterion along with the percentage weighting.

This rubric provides more guidance to students about the expected standard for each element of the task. From this type of rubric students gain insight into how they might, in practical terms, improve their performance.

Table 5: Analytic rubric for an argumentative essay

Criteria	Level of Student Performance				
	High Distinction	Distinction	Credit	Pass	Fail
<b>Critical thinking and argument</b> 45%	A clear, concise argument, that effectively addresses alternative viewpoints. Applies perspicacious and perceptive critical thinking skills to build the argument. Succinctly and discerningly defines and applies concepts relevant to the argument.	Well-supported argument. Applies well-developed critical thinking skills to build a cohesive argument. Thoughtfully defines and applies concepts relevant to the argument.	Legitimate and factually correct argument. Applies developed critical thinking skills to build a coherent argument. Clearly defines and applies all concepts relevant to the argument.	Argument stated is not based on all relevant facts, or has not been stated clearly. Basic critical thinking skills illustrate limited insight. Defines and applies concepts relevant to the argument.	No argument stated, or argument relies on logical fallacies. Demonstrates a lack of critical thinking skills. Does not apply concepts relevant to the argument.
<b>Research and evidence</b> 40%	Clear immersion with the question or topic. Outstanding selection and use of relevant evidence. A wide range of key sources adroitly integrated into essay.	Prolific engagement with the question or topic. Comprehensive selection and use of relevant evidence. A range of key sources skilfully integrated into essay.	Productive engagement with the question or topic. Competent selection and use of relevant evidence. A range of appropriate sources integrated into essay.	Engages with the question or topic. Adequate selection and use of relevant evidence. Several relevant sources integrated into essay.	Basic or poor engagement with the question or topic. Little selection or use of relevant evidence. Few or no sources provided.
<b>Presentation structure</b> 15%	Clear, concise and logically structured essay with a succinct, clear introduction and cogent conclusion. Demonstrates professional use of writing mechanics to engage the intended audience.	Well-structured essay with clear introduction, logical paragraph structure and persuasive conclusion. Well-developed writing mechanics highly appropriate to audience.	Essay includes a clear introduction and reasonable conclusion. Paragraphs in a logical sequence. Successful use of writing mechanics, suited to a general audience.	Essay includes an introduction and conclusion, however lacks clarity. Paragraph sequence could be more logical. Adequate use of writing mechanics.	Essay lacks structure with an unclear introduction and weak conclusion. Major issues with writing mechanics.

Table 6 below shows an analytic rubric for mathematical problem solving and reporting. It also provides guidance to students on what is expected and is used in the pre-marking process with a large group of tutors.

Table 6: Analytic rubric for mathematical problem solving and reporting

Criteria	High Distinction	Distinction	Credit	Pass	Fail
<b>Definition of the explicitness in problem description</b> 5%	Aim outlines the purpose of the investigation specifically, explicitly, and relevantly.	Aim outlines the purpose of the investigation with minor lapse in explicitness, specificity or relevance.	Aim outlines the purpose of the investigation with some lapse in explicitness, specificity or relevance.	Aim outlines the purpose of the investigation with substantial lapse in explicitness, specificity or relevance.	Aim not given or does not satisfactorily outline the purpose of the investigation.
<b>Clarity and correctness of method</b> 35%	Innovative and correct method of solution to problem.	Above average and substantially correct method of solution to the problem.	Average and mostly correct and complete method of solution to the problem.	Sound but partially incomplete or incorrect method of solution to problem.	Solution to problem not described, or not correct.
<b>Correctness of mathematics</b> 40%	All calculations/ algebra/graphs complete and correct.	Only minor errors or omissions in calculations/ algebra/ graphs.	Calculations/ algebra/graphs partially correct or complete.	Calculations/ algebra/graphs half correct or complete.	Calculations/ algebra/graphs incorrect or not present.
<b>Logical and connected conclusion</b> 10%	Conclusion is explicit, logically and mathematically correct and consistent with the aim, method and results.	Conclusion has minor lapse in explicitness, logical and mathematical correctness or consistency with the aim, method and results.	Conclusion has some lapse in explicitness, logical and mathematical correctness or consistency with the aim, method and results.	Conclusion has substantial lapse in explicitness, logical and mathematical correctness or consistency with the aim, method and results.	Conclusion is not present or not explicit, not logically and mathematically correct, or not consistent with the aim, method and results.
<b>Written mathematical communication</b> 10%	Written expression of high level of achievement using sophisticated mathematical language.	Written expression of high level of achievement with some use of appropriate mathematical language.	Written expression of average level with some use of appropriate mathematical language.	Written expression sound with little use of appropriate mathematical language.	Written expression not included or very poor.

## Potential issues with the use of analytic rubrics

Two respected researchers of assessment in higher education – Royce Sadler and Chris Rust – have expressed concerns around the use of analytic rubrics.

Royce Sadler (2010) asks us to be cautious about using criteria in rubrics that do not contribute to achievement of learning outcomes. He claims that these lead to a mistrust in the integrity of the grade. Typically, such criteria include technical requirements that are aimed to change student behaviours or improve learning. He lists the following practices that can **undermine achievement and misrepresent a grade**:

- Marks awarded for attendance at, or participation in, lectures, a minimum proportion of classes, group discussions, laboratory sessions or elearning chat rooms
- Marks awarded for completion of specified activities, including practice exercises, log books, reflective journals, posts to online forums and discussion boards without reference to learning outcomes
- Marks awarded for inclusion of a specified component in a work submitted (e.g. 'at least 20 references')
- Marks awarded for completion of interim drafts or project stages
- Marks deducted for late submission of a response to an assessment task
- Marks deducted for non-conformity with regulative specifications, such as maximum word length for an essay
- Marks deducted for plagiarism.

Further details on this issue are available at from an UQ Assessment Brief on [Fidelity as a precondition for integrity in grading academic achievement](#) (2011).

Chris Rust's (2011) concern lies with the automatic use of numbers or marks to determine achievement. He proposes that because of the way numbers are presented for very different assessment types and then calculated and recalculated to produce a final grade, a biased result may be obtained. This result may obscure the actual student's performance. He presents seven arguments against traditional practices in the use of numbers as the basis of making assessment judgements.

Further details on this issue are available from a UQ Assessment Brief on [The unscholarly use of numbers in our assessment practices: What will make us change?](#) (2011).

Caution should be used in developing rubrics – complex mathematical formulas or fine grained analytic rubrics can bias a grade, resulting in a final judgment which runs counter to expectations.

## 5. Holistic vs analytic rubrics

Both holistic and analytic rubrics have advantages and disadvantages, depending on the context in which they are used, and how they are used. Table 7 below explains these issues.

Table 7: Analytic and holistic rubrics: advantages and disadvantages

	Holistic	Analytic
<b>Advantages</b>	<ul style="list-style-type: none"> <li>• Useful for tasks that contain inter-related skills and knowledge</li> <li>• Useful for tasks that are holistic in nature e.g. works of art, creative writing, engineering design, essays, projects</li> <li>• Can focus on higher order, inter-related knowledge and skills</li> <li>• May be more authentic in nature</li> <li>• Can be quicker to develop</li> </ul>	<ul style="list-style-type: none"> <li>• Useful when task is composed of discrete skills or knowledge</li> <li>• Provides direct advice on set criteria</li> <li>• Shows students specific strengths and weaknesses</li> <li>• Easier to moderate marking in large classes with large number of markers</li> <li>• Can take more time to develop</li> </ul>
<b>Disadvantages</b>	<ul style="list-style-type: none"> <li>• Can be more difficult to moderate in large classes with large number of markers</li> <li>• May not provide the detailed feedback students expect</li> <li>• Can produce a biased result if markers are not clear on what is required</li> </ul>	<ul style="list-style-type: none"> <li>• Can over-partition a task so that the result is biased towards small skills rather than the overall achievement</li> <li>• Can produce a biased results if criteria are not carefully selected</li> <li>• Can focus on detailed, lower level skills rather than deeper understanding and knowledge</li> </ul>

## 6. Moderation of rubrics

Moderation of rubrics is one aspect of the assessment moderation process which is a focus of [Principle 6](#) in the Assessment@SCU website.

Rubrics can be moderated at three different stages of the assessment process: the design stage, the moderation stage, and in the final awarding of grades stage.

- The assessment moderation phase. The onus is on the Unit Assessor to ensure that all markers have shared understanding of rubric criteria and standards before marking commences. See [Principle 5](#) in the Assessment@SCU website for a focus on Criteria and Standards based Assessment.
- The awarding of grades phase. Awarding of grades confirm that the grades are correct, fair and consistent before release to students.

Table 8: Moderation of rubrics: assessment stages

Assessment stages	Using rubrics to moderate
<b>Design</b>	<p>Rubrics should be moderated after they are designed but before they are released to students.</p> <p>In this phase, the designer and moderator (the academic colleague/s designated to review the unit assessment) will:</p> <ul style="list-style-type: none"> <li>• ensure the rubric fits with unit learning outcomes, focuses on higher-order learning, uses appropriate marking criteria and standards</li> <li>• ensure that the rubric fits with other rubrics to determine the appropriateness in relation to progressive learning during the course.</li> </ul>
<b>Marking</b>	<p>In this phase, the onus is on the Unit Assessor to ensure that all markers have a shared understanding of the rubric criteria and standards before marking commences.</p> <p>The Unit Assessor will implement a moderation process which in this phase includes (Clause 37 Assessment Procedures):</p> <ul style="list-style-type: none"> <li>• provision to markers of sample responses for short-answer questions</li> <li>• discussion within the marking team about a sample of submitted papers prior to the commencement of marking</li> <li>• sampling by Unit Assessor of marked scripts across each band (i.e. HD, D, etc.) to ensure consistency with adjustment as necessary.</li> </ul> <p>Additional moderation processes can include the following (Clause 38 Assessment Procedures):</p> <ul style="list-style-type: none"> <li>• sampling by Unit Assessor of marked scripts that are on the border between grades with adjustment as necessary</li> <li>• members of marking team are paired – each member marking a sample of the other's papers</li> <li>• double blind marking of all submitted papers followed by a discussion where both markers reach agreement on grade to be awarded (appropriate for honours or higher degree marking).</li> </ul>
<b>Awarding of grades</b>	<p>In this phase, the Unit Assessor:</p> <ul style="list-style-type: none"> <li>• confirms that the grades are correct, fair and consistent before submission to Committee of Examiners (Clause 43 Assessment Procedures)</li> <li>• reports all results through Gradebook in the Learning Management System (Clause 46 Assessment Procedures).</li> </ul>

Further discussion about rubrics, moderation, calibration and benchmarking processes associated with assessment are found in the [Assessment@Southern Cross University](#) website, Principles 5 and 6.

## 7. Rubric design checklist

This rubric design checklist has been adapted from the one provided by Stevens and Levi (2005, p. 94) to assist with refining and polishing the details of your rubric. Use this as a self-checking tool or ask a colleague to review your rubric using this checklist.

Rubric part	Questions to consider	Yes	No
<b>The marking criteria</b>	Does each criterion cover important parts of the final student performance? Do the criteria capture some key themes in your teaching? Are the criteria clear? Are the criteria distinctly different from each other?		
<b>Descriptions of levels of performance (standards)</b>	Do the descriptions match the criteria? Are the descriptions clear and different from each other? If you used points, is there a clear basis for assigning points for each criteria? If using a three-to-five level rubric, are the descriptions appropriately and equally weighted across the three-to-five levels?		
<b>The levels</b>	Do the descriptors under each level truly represent that level of performance? If not using traditional grade labels (HD, D, C, P), are the scale labels encouraging and still quite informative? Does the rubric have a reasonable number of levels for the stage of the student and the complexity of the assignment?		
<b>The overall rubric</b>	Does the rubric clearly connect to the learning outcomes that it is designed to measure? Can the rubric be understood by external audiences (avoids jargon and technical language)? Does the rubric reflect teachable skills? Does the rubric reward or penalise students based on skills unrelated to the outcome being measured?		
<b>Fairness and sensibility</b>	Is the rubric fair to all students and free of bias? Will the rubric be useful for students as performance feedback? Does the rubric make sense to the reader?		

## 8. References

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