



Continuous Assessments: Standards Setting Document

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1. Aim of this Document

This document aims to provide guidance and support for those who are using continuous assessments as part of the overall assessment strategy. This document also aims to ensure that all staff are aware of the quality assurance mechanisms related to preparation, conduct, marking and feedback of continuous assessments at Glasgow College UESTC.

2. Important Guidelines for Assessments

According to the UK Quality Code for Higher Education, assessments need to adhere to the following guiding principles [1]:

- Assessment methods and criteria** are aligned to the learning outcomes and teaching activities of a module.
- Assessments are **reliable**, **consistent**, **fair**, **transparent** and **valid**.
- Assessment is **purposeful** and supports the learning process.
- Assessment is **timely**.
- Assessment is **efficient** and **manageable**.
- Students are supported and prepared for the assessment. Ideally, students should be able to take **formative assessments** before they take a summative assessment.

3. Quality Assurance of Continuous Assessments

3.1 Align Assessments to Learning Outcomes

Effective assessments are properly aligned to a course's learning outcomes. Make sure you assess how well your ILOs have been met using your assessment strategy. Ideally, this process should take place before course delivery, as shown in figure 1[2]. Moreover, students should know what forms of assessment will be used and how their performance in those assessments will be judged (i.e. the rubrics and mark schemes that will be applied).

3.2 Continuous Assessment Weighting

All continuous assessments for third and fourth year modules (except for IP, ECS and TDPS) must not constitute more than 25% of the module's overall weight. Furthermore, there should be no more than 2 continuous assessment tasks. See section 3.5 if your continuous assessments exceed 25% of your module's weight.

3.3 Prepare Appropriate Marking Criteria

Mark schemes need to be **transparent** and **reliable**. Transparency in assessment means that students know how and when their learning will be judged. Reliable assessments mean that different markers can use the mark schemes to grade students in a similar way. It is therefore extremely important to design clear assessment criteria that guide markers

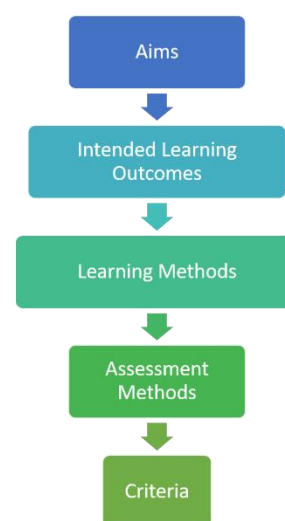


Figure 1 Aligning assessments to the learning outcomes

to judge the same things to the same standard. These mark schemes should also be easily understood by a non-expert in the field.

3.4 Ensure that Assessments are Internally Moderated

Course coordinators must ensure that continuous assessments have been internally moderated before delivering them to students. If necessary, staff members are expected to provide evidence of the internal moderation process. For quality assurance purposes, this evidence might be requested by the external examiner or the IET.

3.5 External Moderation of Continuous Assessments

Courses with continuous assessments exceeding 25% need external moderation. In that case, continuous assessments need to be uploaded to Exam DB for external moderation (<https://webapps.eng.gla.ac.uk/external/>). In the “Comments” section, staff need to indicate that a **Continuous Assessment** was uploaded.

3.6 Continuous Assessments and IET Accreditation

All continuous assessment tasks must be uploaded to the appropriate IET accreditation page on Moodle (<https://moodle.gla.ac.uk/mod/assign/view.php?id=1129478>). In case continuous assessments exceed 25%, course convenors must provide 3 samples of student work achieving high, median and low grades. Full instructions for uploading these materials are provided in the Moodle page.

3.7 Continuous Assessments Exceeding 25% of Module Grade

In addition to the instructions provided in sections 3.5 and 3.6, course convenors must ensure that their course specifications include the following note: “To receive the threshold grade in this course, students must achieve at least a grade E in every component of assessment listed in §20. The result will be capped at E1 otherwise.” This statement is required for accreditation purposes.

3.8 Use of Moodle Grading Sheet

Make sure that all grades are available for each student’s continuous assessment exercise or task on Moodle. Instructions for how to use grading sheets in Moodle are provided by the university:

<https://www.gla.ac.uk/myglasgow/moodle/guides/assignmentusingagradingworksheet/>

4. Types of Assessments

Assessments can be used for a number of different educational purposes. According to the literature, there are **six** different types of assessments [3-5]. The first three are the most common methods used in Glasgow.

- a. **Summative assessment** counts towards a student's final grade. It usually takes place at the end of a particular learning objective to judge how well a student has grasped the material.
- b. **Formative assessment** takes place during a student's learning process. Any marks given to the student are indicative and do not contribute to their final grade. Formative assessments provide feedback to students, so that they have an opportunity to improve their grades.
- c. **Interim assessments** evaluate student performance at particular intervals (e.g. every six weeks) within the learning process. They can be summative assessments that track student learning.
- d. **Diagnostic assessments** are used to test a student's specific weaknesses, strengths and knowledge to judge what level of support they will require.
- e. **Norm-referenced assessments** are used to compare a student's performance against nationalised or "normalised" groups.
- f. **Criterion referenced assessments** measure a student's performance against specific objectives or standards.

5. Assessment Criteria and Mark Schemes

- Assessment criteria explain to a student what they need to do to achieve a particular grade. They clarify what is expected in terms of student performance [6]. .
- It is your responsibility as course convenor to prepare the appropriate **level of difficulty** of your continuous assessments. You must also engage with the internal moderator, the Assessment Coordinator and the Programme Directors in case of doubts. Their contact details are provided in section 7.
- Please bear in mind that our students are non-native English speakers.
- Make sure that there are **formative elements throughout the course** to help students test their level of understanding and provide you with an opportunity to provide feedback. These can be tutorials, exam-style exercises, and online quizzes in Moodle.

6. Assessment Methods

There are more than 20 different types of assessment methods that course convenors can use. A full list of these methods can be found here [2]. Common assessment methods include multiple choice questions, group projects, oral presentations, demos, essays, computer based assessments and laboratory notebooks.

7. Summary

- All staff are reminded on the need for transparent marking criteria. Please make sure to prepare a **legible** mark scheme that includes the **distribution** of marks for each item.
- **Allow your mark scheme to be understood by a non-expert in the subject.** This can help your marking scheme to be a useful resource for students, as well as external examiners. Make sure that anyone can mark your questions relatively easily.
- For continuous assessments, **you are reminded to develop appropriate mark schemes**. For example, lab report mark schemes and oral presentations can be derived from the UoG final year project report marking or oral presentations marking matrix. Examples of mark schemes are shown in the Appendix.
- Continuous assessments must be **moderated** internally before they are given to students. Staff members are expected to provide evidence of the internal moderation process of their continuous assessments. For example, staff members **A** and **B** share the delivery UESTC course **X**. Both **A** and **B** can demonstrate moderating each other's continuous assessment exercises before offering them to students.

8. Contact People

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Appendix

Examples of mark schemes used for the assessment of some TDPS course components, as shown in figures A.1 to A.2 [7-9].

Category	Proficient (4-5)	Developing (2-3)	Basic (0-1)	Score
Organisation	<ul style="list-style-type: none"> All pages are numbered and dated. Each experiment or key argument contains title, purpose and brief procedure. The key arguments are expressed fluently. Observations, recorded data and calculations are present. All information recorded in pen not pencil. Complete table of contents. 	<ul style="list-style-type: none"> Most pages are numbered and dated. Some of the key arguments are missing one or two of the following: title, purpose, brief procedure or reference to lab manual. Recorded data and observations are incomplete in some areas. Some of the information is recorded in pencil. Table of contents missing some experiments or key arguments. 	<ul style="list-style-type: none"> Most pages are not numbered and dated. Most of the experiments are missing several of the following: title, purpose, brief procedure or reference to lab manual. Recorded data and observations are incomplete in most areas or not present. All information is recorded in pencil. Most experiments are not recorded in table of contents. 	
Content	<ul style="list-style-type: none"> All data and workings are recorded completely. All data is recorded and neatly presented with units to the correct number of significant figures. All calculations and observations are included and neatly presented with details including units and significant figures. 	<ul style="list-style-type: none"> Workings and observations are not complete and missing important details. Data is recorded, but is not presented neatly or some are missing units or the correct number of significant figures. Findings and observations are included, but are not presented neatly or missing details. 	<ul style="list-style-type: none"> Workings and observations are mostly missing. All data is not recorded and not neatly presented with missing units and have incorrect number of significant figures. Calculations and observations are not included or are very sparse with no units and are incorrect. 	
Analysis	<ul style="list-style-type: none"> Data is explicitly analysed, methods of analysis are described with appropriate detail. Calculations are presented neatly. Graphs and images are properly labelled, scaled and annotated. Sources of error are explored and considered when evaluating data. 	<ul style="list-style-type: none"> Data analysis is implied and methods of analysis are not described or properly used. Calculations are sometimes not complete. Graphs and images are included, but are not properly labelled, scaled and annotated. Sources of error are explored, but they are inadequate or incomplete. 	<ul style="list-style-type: none"> Data analysis is not included. Calculations are missing. Graphs and images are missing or grossly incorrect. Sources of error are not explored. 	
Commentary and Conclusions	<ul style="list-style-type: none"> Results are explicitly interpreted and compared with literature data. Conclusion is written in coherent manner. Discussion of any limitations and any problems encountered, explaining how they could be overcome and how they contributed to the results. 	<ul style="list-style-type: none"> Results are interpreted but interpretation is sometimes missing. The key arguments are expressed well. Some understanding shown and key arguments agree with the presented data. 	<ul style="list-style-type: none"> Conclusions are not logical and/or do not agree with data presented. Conclusions are written in non-coherent manner with many spelling and grammatical errors. 	


University of Glasgow

Team:

Total: /20

Assessor:

Figure A.1 Mark scheme for the Laboratory Notebook.

Assessment Matrix for Team Design Projects

Final Individual Report (To be completed by staff only.) (worth 25%)

Grade Range (Highest to Lowest)	A1, A2, A3, A4, A5	B1, B2, B3	C1, C2, C3	D1, D2, D3	E1, E2, E3	F1, F2, F3	G1, G2, H	Grade Awarded
Descriptor	Excellent	Very Good	Good	Satisfactory	Weak	Poor	G: Very Poor H: No Attainment	
Writing (Weighting = 1)	Exceptionally clear, precise and concise English. Excellent spelling & grammar, few typos.	Clear and well written, easy to understand, and mostly free of errors.	Most of the text is clear and easily understood. There are some issues with grammar and spelling.	The text can be understood, but some elements are not entirely clear. A sizeable volume of errors is noticeable.	Hard to understand much of the text. Significant spelling errors and grammatical flaws.	The volume and nature of the grammatical errors, combined with poor writing makes this report difficult to read.	Unintelligible. Impossible to read due to exceptionally poor use of English.	
Literature Survey (Weighting = 1)	Exemplary range of references used and discussed in great depth, indicating comprehensive background reading.	An appropriate range of relevant references used and discussed suggesting substantial background reading.	Sufficient references used and discussed to indicate a good level of background reading.	Perhaps just enough references used and discussed to suggest some background reading was undertaken. Too many "www" references.	Too few relevant references used and discussed and possibly an over reliance on www sources indicating insufficient background work.	Only a few references used and discussed and majority are irrelevant. Little evidence of background reading.	Very few (or no) references used or discussed. No evidence of any background reading.	
Technical Content & Quality of Analysis (Weighting = 3)	Well informed and authoritative discussion and a comprehensive analysis of a significantly complex technical problem.	Clear and reasoned arguments backed up with a significant analysis indicating a very good grasp of a difficult technical problem.	Arguments presented are of a reasonable technical level, supported by a good quality analysis, and have been well considered and clearly stated.	The arguments presented are of reasonable technical depth, supported by some analysis and show a satisfactory understanding.	Only limited critical discussion of the technical problem studied. Little analysis or a low level of analysis. Suggests limited understanding of problem.	Very little evidence of critical discussion of technical work or results. Superficial understanding of problem. Minimal analysis included.	The lack of quality of the technical argument suggests that the student has very little understanding of the problem. No analysis.	
Presentation & Figures (Weighting = 1)	Professional standard of presentation. All illustrations are well formatted and presented.	A clear and consistent presentation style making it easy to read. Most of the figures are clear and well presented.	There are some minor flaws in the presentation and the clarity of the figures, but overall a well presented report.	A number of basic errors present – inconsistent use of styles, margins etc. Figures are satisfactory.	Significant flaws in the presentation detracting from the overall impression of the report. Flawed figures, e.g. badly drawn and untidy.	Unacceptable presentation: untidy and inconsistent use of styles. Figures are messy and unclear.	A messy report, e.g. no evidence of any effective effort on the quality of the presentation. Report is hard to follow due to unclear figures.	
Organisation & Structure (Weighting = 1)	Structure is entirely correct and in accordance with instructions. All contributions can be clearly identified.	A well organised report with all sections logically placed enhancing understanding of work. All contributions can be clearly identified.	A report which is sufficiently well organised to make reading the report easy. All contributions can be clearly identified.	There may be some issues with the structure, but these do not detract from overall quality. Contributions cannot be identified.	There are flaws in the way the report is structured which damages the overall quality of the report. Contributions cannot be identified.	Serious flaws in structure which makes it difficult to read and understand the report. Contributions cannot be identified.	No discernable structure. Illogical placement of sections. Impossible to follow argument.	

Student Name: _____ Student GUID: _____ Team Number: _____ Examiner Name: _____

Figure A.2 Mark scheme for marking the final individual report of the Team Design Project.

Assessment Matrix for Oral Presentation (worth 25%)

Grade Range (Highest to Lowest)	A1, A2, A3, A4, A5	B1, B2, B3	C1, C2, C3	D1, D2, D3	E1, E2, E3	F1, F2, F3	G1, G2, H	Grade Awarded
Descriptor	Excellent	Very Good	Good	Satisfactory	Weak	Poor	G: Very Poor H: No Attainment	
Delivery (Weighting = 1)	Confident, clear and unhesitating delivery. Held attention of audience. Easy to follow arguments.	Was confident but perhaps a few minor flaws (such as hesitation, talking too fast etc).	Perhaps slightly lacking in confidence or possibly not speaking quite clearly enough.	Overall a reasonable delivery, but there were issues regarding clarity or fluency.	A hesitant or unclear delivery made understanding the presentation difficult.	Hesitant, unclear, monotonous, hard to maintain attention. Difficult to follow argument.	No fluency or clarity. Too many basic errors, e.g. mumbling or talking to screen.	
Response to Questions (I) (Weighting = 2)	Answered all questions clearly and confidently. Gave the impression of having an excellent grasp of the subject.	Answered all questions competently. Has clearly developed a very good understanding of the subject.	Answered most questions well enough to conclude that the student has a developed a good understanding of the subject.	Gave some good answers but also some poor ones. Evidence of reasonable understanding of the subject.	Answered the majority of the questions poorly suggesting a lack of knowledge in the subject.	Gave some superficial answers, but appears to have very little understanding of the subject.	Unable to give any sort of competent answer to any question.	
Structure (Weighting = 1)	Structure of the presentation makes understanding the technical arguments exceptionally clear.	A very well structured presentation with everything where it should be to provide clarity.	Overall a well structured presentation but perhaps one or two slides are misplaced.	Some elements of the presentation are not clear as the structure is slightly confused.	A badly structured presentation giving a confused picture of the project making it difficult to follow arguments.	Although there is some structure to the presentation it is very confused and it is almost impossible to follow.	No discernable attempt at a logical structure.	
Slides (Weighting = 1)	Exceptionally clear slides. Simple design, large enough font, not too much material on slides. A professional quality presentation.	Clear slides but perhaps the occasional flaw (font size, colour scheme etc), but overall impressive presentation.	There may be a number of errors, on the slides but overall still clear and flaws do not detract significantly from content.	Consistent errors on many slides but not of a significant nature. A reasonable effort but flaws have detracted from presentation.	Significantly flawed slides. Basic errors such as small font size, too much content on slides, over-elaborate design.	Not only are slides poor, but they make it difficult to follow argument.	Very poor slides, basic errors on every slide. Impossible to follow technical argument.	
Technical Content (Weighting = 2)	There is a good quantity of high level technical content in the presentation.	Overall, the content is sufficient to give the audience a clear account of a challenging technical task.	The presentation has a good level of technical content with only a small amount of superfluous information.	There is some irrelevant non-pertinent material, but overall the technical content is satisfactory.	The presentation has only limited technical content with too much general background information.	The technical content is relatively low in terms of level and quantity.	Superfluous or possibly no relevant technical content evident.	

Team Number: _____ Team Name: _____ Marker Name: _____

Figure A.3 Mark scheme for oral presentations.

References

- [1] Q. A. A. f. H. Education, "UK quality code for higher education," ed: QAA Gloucester, 2011.
- [2] G. Brown, "Assessment: a guide for lecturers. Learning and Teaching Support Network (LTSN) Generic Centre," *Assessment series*, vol. 3, pp. 1-28, 2001.
- [3] M. Lejk, M. Wyvill, and S. Farrow, "A survey of methods of deriving individual grades from group assessments," *Assessment & Evaluation in Higher Education*, vol. 21, no. 3, pp. 267-280, 1996.
- [4] W. Harlen and M. James, "Assessment and learning: differences and relationships between formative and summative assessment," *Assessment in Education: Principles, Policy & Practice*, vol. 4, no. 3, pp. 365-379, 1997.
- [5] J. Leighton and M. Gierl, *Cognitive diagnostic assessment for education: Theory and applications*. Cambridge University Press, 2007.
- [6] C. Rust, M. Price, and B. O'DONOVAN, "Improving students' learning by developing their understanding of assessment criteria and processes," *Assessment & Evaluation in Higher Education*, vol. 28, no. 2, pp. 147-164, 2003.
- [7] W. Ahmad, R. Ghannam, and M. Imran, "Course design for achieving the graduate attributes of the 21st Century UK Engineer," Birmingham, 2019: Advance HE STEM Teaching and Learning Conference 2019.
- [8] R. Ghannam and W. Ahmad, "New Team Based Learning Course for Chinese Students in Engineering and Technology," *Compass*, Forthcoming 2020.
- [9] R. Ghannam, "Team Design and Project Skills Course Handbook "