

Extended Common Marking Scheme – School of Informatics

Information for staff and students

The University of Edinburgh uses a Common Marking Scheme (CMS) for taught student assessment, as laid out in the Taught Assessment Regulations (see regulation 35). Schools may provide their own marking scheme which clarifies the interpretation of the general scheme in the context of the School, without changing the basic principles.

The University CMS is set out below with brief descriptors clarifying the interpretation within the School of Informatics. The remainder of this document provides guidance on implementation, and further interpretation with respect to subjectively assessed work.

| Grade | Mark | Degree award (Honours or Postgraduate) | Description |
|-------|--------|---|---|
| A1 | 90-100 | 1 st class or MSc with distinction | Excellent Outstanding in every respect, the work is well beyond the level expected of a competent student at their level of study. The work should meet the criteria for an A2 grade and should also evidence a clear understanding of the limits of the state of knowledge, and their consequences, for the topic at hand. |
| A2 | 80-89 | 1 st class or MSc with distinction | Excellent Outstanding in some respects, the work is often beyond what is expected of a competent student at their level of study. Demonstrates that the student is actively extending their knowledge and capacity well beyond required materials and making new connections independently: for example, by showing a strong grasp of a range of related materials that are optional or not directly provided, or by demonstrating unusual creativity, depth of analysis, or synthesis with other areas of study. |
| A3 | 70-79 | 1 st class or MSc with distinction | Excellent Very good or excellent in most respects, the work is what might be expected of a very competent student. It indicates that the student has an excellent grasp of the required materials for the course, and may have demonstrated some limited knowledge of or fluency with additional optional materials, if provided. |
| B | 60-69 | 2(i) or MSc with merit | Very Good Good or very good in most respects, the work displays thorough mastery of the relevant learning outcomes. |
| C | 50-59 | 2(ii) or MSc | Good The work clearly meets requirements for demonstrating the relevant learning outcomes. |
| D | 40-49 | 3 rd class or PG Diploma/Cert | Pass (undergraduate or Diploma level) The work meets minimum requirements for demonstrating the relevant learning outcomes. A satisfactory performance for undergraduate |

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| | | | degrees and postgraduate diploma and certificate, but inadequate for a Master's degree. |
| E | 30-39 | Fail | Marginal fail The work fails to meet minimum requirements for demonstrating the relevant learning outcomes. |
| F | 20-29 | Fail | Clear fail The work is very weak and/or incomplete in important respects. |
| G | 10-19 | Fail | Bad fail The work is extremely weak or mostly incomplete/absent. |
| H | 0-9 | Fail | Bad fail The work is absent or of very little, if any, consequence to the area in question |

Implementation

Within Informatics we use a range of different types of assessment. For some types of assessment (notably, auto-marked assignments where the mark depends only on passing certain tests), it may be difficult to achieve alignment with the above scale. Deviation from the scheme is permitted for individual items of assessment, provided that:

- the assessment in question constitutes a relatively small proportion of the course mark;
- students are advised in advance of the deviation from the CMS, and how marks on this assignment should be interpreted; and
- overall course marks reflect the CMS. That is, as a whole the course assessment appropriately differentiates between students at each level and provides students with the opportunity to demonstrate achievement at the top two levels. At the course level, the 'work' referred to in the CMS above indicates the student's work for the course as a whole, including examinations.

Note that achieving the higher levels of the marking scheme requires work of standard *beyond* that normally expected for the course. This will usually require the student to demonstrate more advanced attributes, rather than simply an increased volume of work. The assessment must have scope for students to demonstrate such advanced attributes. This may require a component of the assessment to have a different style, such as more open-ended questions.

Guidance for subjectively assessed work

In addition to the general descriptors above, we include the following more detailed descriptors, which should be used to maintain consistency of marking for subjectively assessed work such as lab and project reports, essays, open-ended questions on assignments and exams, and some larger practical assignments. These are adapted from earlier College guidance (in particular, by adding further guidance regarding software projects) and are indicative of the level of performance expected from students. They are not, however, a checklist of qualities that each student must demonstrate, and not all assessments will cover or consider all of the aspects listed below. The way performance is demonstrated will vary from course to course, and from one mode of assessment to another.

Grade / Mark / Descriptor

A1 / 90-100 / Excellent (Outstanding)

Often faultless. The work is well beyond that expected at the appropriate level of study. See also the guidance above.

A2 / 80-89 / Excellent (High)

A truly scholarly and/or professional piece of work, often with an absence of errors. As 'A3' but shows (depending upon the item of assessment): significant personal insight/creativity/originality and/or extra depth and academic maturity in the elements of assessment.

A3 / 70-79 / Excellent

- Knowledge: Comprehensive range of up-to-date material handled in a scholarly and/or professional way.
- Understanding and handling of key concepts: Shows a good command of the subject and current theory.
- Focus on the subject or task: Clear and analytical; fully explores the subject or task.
- Critical analysis and discussion: Shows evidence of deep thinking and/or an appropriately logical and rigorous approach in critically evaluating and integrating the evidence and ideas. Deals confidently with the complexities and subtleties of issues. Shows elements of personal insight/creativity/ originality.
- Literature synthesised, analysed and referenced: Comprehensive grasp of the up-to-date literature which is used in a scholarly way.
- Structure: Clear and coherent showing logical, ordered thought. Additionally for code: likely to support re-use. No unused variables or dead code.
- Presentation: Clear and well presented with few, relatively minor flaws. For writing: Accurate referencing; using the correct referencing system. Figures and tables well-constructed and accurate. Good standard of spelling and grammar. Alternatively for code: well-documented, readable code.
- Design of software or experiments: sensible, with appropriate justification.
- Correctness and robustness: Compiles and executes without errors or warnings. Strong evidence of testing and (if appropriate) optimisation. Correct functionality and robust to unexpected input.

B / 60-69 / Very Good

- Knowledge: Very good range of up-to-date material, perhaps with some gaps, handled in a competent way.
- Understanding and handling of key concepts: Shows a firm grasp of the subject and current theory but there may be gaps.
- Focus on the subject: Clear focus on the subject with no or only trivial deviation.
- Critical analysis and discussion: Shows initiative, the ability to think clearly, critically evaluate ideas, to bring different ideas together, and to draw sound conclusions.
- Literature synthesised, analysed and referenced: Evidence of further reading. Shows a firm grasp of the literature, using good, up-to-date references to support the arguments.
- Structure: Clear and coherent showing logical, ordered thought. Additionally for code: re-usability may be somewhat limited. No unused variables or dead code.

- Presentation: Clear and well presented with few, relatively minor flaws. For writing: Accurate referencing; using the correct referencing system. Figures and tables well-constructed and accurate. Good standard of spelling and grammar. Alternatively for code: well-documented, readable code.
- Design of software or experiments: sensible and usually well-justified, though may have some minor weaknesses or omissions in the justification.
- Correctness and robustness: Compiles and executes without errors or warnings. Some evidence of testing and (if appropriate) optimisation. Robust to unexpected input and largely correct behaviour, perhaps with a few minor bugs.

C / 50-59 / Good

- Knowledge: Sound but limited. Inaccuracies, if any, are minor.
- Understanding and handling of key concepts: Understands the subject but does not have a firm grasp and depth of understanding of all the key concepts.
- Focus on the subject: Addresses the subject with relatively little irrelevant material.
- Critical analysis and discussion: Limited critical analysis and evaluation of sources of evidence.
- Literature synthesised, analysed and referenced: References are used appropriately to support the argument but they may be limited in number or reflect restricted independent reading.
- Structure: Reasonably clear and coherent, generally structuring ideas and information or code in a logical way. Additionally for code: Few or no unused variables or dead code.
- Presentation: Generally well presented but there may be some flaws, for example in figures, tables, referencing technique and standard of English. Alternatively for code: generally well-documented, readable code, but with some weaknesses.
- Design of software or experiments: sensible for the most part but justification may be weak or absent in places.
- Correctness and robustness: Compiles and executes without errors or warnings. Code is somewhat robust to unexpected input and generally shows correct behaviour, but may have a few bugs or be inefficient.

D / 40-49 / Pass (for UG or Diploma)

- Knowledge: Basic; may have factual inaccuracies and omissions.
- Understanding and handling of key concepts: Superficial; there may be some gaps in understanding. Lacks detail, elaboration or explanation of the key concepts and ideas; some may have been omitted.
- Focus on the subject: Addresses the subject but may deviate from the core issues.
- Critical analysis and discussion: Limited or lacking. The arguments and conclusions may be weak or lack clarity with unsubstantiated statements. The emphasis is likely to be more on description than analysis.
- Literature synthesised, analysed and referenced: Basic and limited. May lack appropriate citations and evidence of independent reading.
- Structure: Lacks clarity of structure. Shows poor logical development of arguments or structure of code.

- Presentation: Inadequate; may show flaws in the overall standard of presentation or in specific areas such as figures, referencing technique and standard of English. Alternatively for code: documentation is limited or unclear. Code difficult to read in places.
- Design of software or experiments: shows weaknesses in the design. Justification may be weak or largely absent.
- Correctness and robustness: Compiles and executes without errors or warnings. Code is not robust to unexpected input and generally shows correct behaviour, but may have a few bugs or missing components, or be very inefficient.

E / 30-39 / Marginal Fail

- Knowledge: Poor and inadequate. Content too limited, there may be inaccuracies.
- Understanding and handling of key concepts: Poor and inadequate; does not show sufficient understanding. Concepts omitted or poorly expressed.
- Focus on the subject: Does not adequately address the subject.
- Critical analysis and discussion: Poor and inadequate. May be no real attempt to critically evaluate the work.
- Literature synthesised, analysed and referenced: Poor and inadequate; appropriate literature citations lacking or trivial.
- Structure: A lack of coherence or poor structure.
- Presentation: Overall standard of presentation may be poor. May be problems in specific areas such as writing style and expression (making it hard to follow the content), errors in referencing technique, and poor standard of English (spelling, punctuation and grammar). Alternatively for code: documentation is very limited, code difficult to read.
- Design of software or experiments: flawed design, with little or no justification provided.
- Correctness and robustness: Compiles and executes without errors or warnings, but supports only a limited subset of the functionality required.

F / 20-29 / Clear Fail

- Knowledge: Very poor. Irrelevant or erroneous material may be included. May be very limited in scope consisting, for example, of just a few good lines.
- Understanding and handling of key concepts: Very poor, may be confused.
- Focus on the subject: Does not address the subject.
- Critical analysis and discussion: Extremely limited or omitted. May be confused.
- Literature synthesised, analysed and referenced: Extremely limited or omitted.
- Structure: Confusing or no attempt to order the material in a systematic way.
- Presentation: Writing style and presentation may be unacceptable. Alternatively for code: documentation is very limited or absent, code difficult to read.
- Design of software or experiments: flawed design, with little or no justification provided.
- Correctness and robustness: Compiles and executes without errors or warnings, but supports little, if any, meaningful functionality.

G / 10-19 / Bad Fail

- Knowledge: Serious lack of knowledge. Irrelevant or erroneous material may be included.

- Understanding and handling of key concepts: None or trivial evidence of understanding.
- Focus on the subject: Does not address the subject.
- Critical analysis and discussion: May be no coherent discussion.
- Literature synthesised, analysed and referenced: May be omitted.
- Structure: Confusing or no attempt to order the material in a systematic way.
- Presentation: Writing style and presentation may be unacceptable. Alternatively for code: documentation is very limited or absent, code difficult to read.
- Design of software or experiments: flawed design, with little or no justification provided.
- Correctness and robustness: The submitted code is of limited size and cannot be executed.

H / 0-9 / Very Bad Fail

The presented work is of very little relevance, if any, to the subject in question. It is incomplete or inadequate in every respect. A blank answer must be awarded zero.