

Marking and Classing:

Department of Chemistry within the Natural Sciences Tripos.

This description must be read alongside the *Course Guide* relevant for that part of the Tripos. These guides are distributed in paper form at the start of the academic year, and are available on line at <http://www-teach.ch.cam.ac.uk/introcourses/guides.html>

Examiners

1. There is a separate body of examiners for each of Part IA Chemistry, Part IB Chemistry A, Part IB Chemistry B, Part II Chemistry and Part III Chemistry. Half-subject Chemistry within Part II Physical Sciences is covered by the same examiners as for Part II Chemistry.
2. In addition, there are External Examiners for Part II and Part III. These examiners are drawn from major chemistry departments in other UK universities.
3. At Part IA and IB it is usually the case that the examiners themselves will set and mark the questions on the paper. However, in setting the questions they may well seek the assistance and advice of relevant colleagues.
4. At Part II and Part III the questions are set by the lecturer(s) who gave each course; in most cases the lecturer(s) also mark the questions. The role of the Examiners is to check the questions, to ensure comparability across all of the courses and to moderate the marking process.

Marking of individual questions from Tripos examinations

1. All questions are given a numerical mark out of pre-determined maximum. The full mark range mark is used.
2. Unless specifically indicated otherwise on the front of the paper, each question on a paper carries the same weight.
3. Answers are marked by a single Examiner or Assessor.
4. Where a question has been answered by a significant number of candidates the expectation is that the average mark for the question will be about 65%. Significant deviations from this expectation are permitted, but only in cases where they can be justified by the Examiner/Assessor in consultation with the Senior Examiner.
5. The marks awarded for a given answer can be interpreted in the light of the classing criteria given at the end of this document.

Marking of continuously assessed work

1. Accounts of practical work are marked on the assumption that the majority of the marks will be awarded for the satisfactory completion of the experiment and the production of a satisfactory write-up. As a result of the marking session, additional marks are available for those who show a deeper or fuller understanding of the experiment and/or its background. The expectation is that the average mark for practical work will be around 70%.

2. The Senior Examiner may find it necessary to scale different components which make up the overall practical mark in order to ensure equity between these components.
3. Accounts of practical work which are submitted later than the advertised deadlines may attract mark penalties, as specified in the relevant *Course Guide*.
4. Part III projects are marked according to the procedures set out in the relevant *Course Guide*. The written project is marked by the project supervisor and one of the Examiners (or an Assessor), and these two agree a mark. In the case of dispute, the Senior Examiner acts as an arbitrator, and he or she may refer the dissertation to another Examiner or Assessor for a third opinion. All of the marks awarded for projects are subject to review and moderation by the Examiners, and further scrutiny by the External Examiners.

Classing conventions: Parts IA and IB

1. The weighting of each paper and any continuously assessed component of the course is specified in the relevant *Course Guide*. In exceptional circumstances the Examiners may vary the weights away from the advertised values.
2. Marks are combined at a precision of one decimal place.
3. Where absolutely necessary the marks on individual questions and/or papers may be scaled.
4. The marks from the written papers and the continuously assessed component are combined according to the advertised weightings. The resulting total mark is then scaled according to the instructions of the Chairman of Examiners for the relevant part of the NST. The classing process then follows that advertised for the NST as a whole, see <http://www.cam.ac.uk/about/natscitripos/exams/index.html>

Classing conventions: Parts II and III

1. For Parts II and III the marks from the written papers and the continuously assessed component are combined according to the advertised weightings to give an overall mark. A preliminary class is then assigned based on this numerical mark using the standard class boundaries given under classing criteria.
2. Marks are combined at a precision of one decimal place, and for the purposes of classing the final mark is rounded up to the nearest integer.
3. It is not the practice to scale the marks on individual questions, nor to scale the marks for individual papers. However, the Examiners reserve the right to apply such scaling if they see fit.
4. The Examiners may ask for questions to be remarked if they are not content with the mark distribution presented.
5. The final class is arrived at by careful consideration of those candidates who fall close to borderlines. This procedure is largely undertaken by the External Examiners, who will be acting on advice given by the internal Examiners. The following factors may be taken into account when arriving at a final class

- a. The historic distribution of candidates into classes.
- b. Cohort tracking data.
- c. The profile of marks across all of the papers e.g. where the final class is affected by one component which is out of line with the others.
- d. Reconsideration of the marks awarded for particular questions or for continuously assessed work, especially for the Part III project.
- e. The outcome of oral examinations which are conducted by the External Examiners.

Generally these considerations are applied to the benefit of the candidate i.e. it is not the practice to lower the class of a candidate whose raw mark places him or her above a borderline.

6. In order to be classed (i.e. to pass the examination) candidates need to pass each component separately. In Part II this means achieving a pass mark in both the continuously assessed work and in the theory papers (taken as an aggregate). In Part III this means achieving a pass mark for both the project and in the theory papers (taken as an aggregate).

Teaching Committee
Department of Chemistry
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Classing criteria

First Class (mark range 70% – 100%)

A candidate placed in the first class consistently produced answers which fulfilled the examiner's expectations and which in many cases went beyond simply answering the question by, for example, introducing extra relevant material, using particularly elegant methods of solution or by showing exceptional command of the subject matter. A first class candidate consistently produced precise, well argued and compact answers.

A performance in this class is indicative that the candidate has complete command of the subject material and is also able to apply his or her knowledge in an imaginative way.

Upper Second Class (mark range 60% – 69%)

A candidate placed in the upper second class consistently showed a good command of the subject and was able to answer well all the straightforward parts of the questions and in addition made significant progress with the more challenging parts of some questions.

A performance in this class is indicative that the candidate has a good command of the subject material and in some areas demonstrates a deeper level of understanding.

Lower Second Class (mark range 50% – 59%)

A candidate placed in the lower second class was able to make good attempts at the straightforward parts of questions, but showed limited ability to tackle any of the more challenging parts of questions.

A performance in this class is indicative that the candidate has a reasonable command of the subject material but is not able to extend or apply this in a more sophisticated way.

Third Class (mark range 40% – 49%)

A candidate in the third class was unable to answer in an entirely satisfactory way even the most straightforward parts of the questions. There is no evidence of understanding at the deeper level.

A performance in this class is indicative that the candidate has significant defects in their basic knowledge.

Ordinary/Fail (mark range 0% – 39%)

A candidate who was classed as a fail was unable to answer even the straightforward parts of the questions.

A performance at this level is indicative that the candidate has little understanding of even the basic concepts.