



UNIVERSITY OF LEEDS

SCHOOL OF MATHEMATICS

Code of Practice on Assessment

2009/10

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1. Introduction.

1.1. Purpose. This document lays out the rules for assessment procedure of modules in the School of Mathematics for the academic year 2009/10. It is to be used as a reference for students, staff, and external examiners.

1.2. Overall School Policy. Assessment procedures are considered by the Teaching and Learning Committee who also respond to External Examiners' comments. Recommendations for changes to any current procedures are placed before the Teaching and Learning Committee.

1.3. Additional Information. Relevant information can also be found in the Student Handbook of the School of Mathematics 2009/10. The handbook contains information on the examination and assessment procedures, including arrangements for resit examinations together with the regulations for progression from one year to the next. The procedure by which the final degree class is determined from individual module grades is also included. Students are also given clear instructions as to when and how medical evidence and special pleading should be submitted for consideration by examiners.

Summaries of these regulations can also be found online in the Student Resources section of <http://www.maths.leeds.ac.uk/> which includes a document with detailed information about "How your degree is classified".

2. Management of the Assessment Process.

2.1. Responsibilities. Subject to the overall responsibility of the Chairman of the School, the Examinations Officer is responsible for co-ordinating all examination and assessment procedures including production of examination papers, dates of examiners meetings and submission of marks.

2.2. Examination Boards. There are three Examination Boards for undergraduate students and taught postgraduate students:

- In January/February after the January exams,
- In June after the May exams
- In September after the August resit exams for undergraduate students and in November for taught postgraduate students.

The Examination Boards include all academic staff and Teaching Fellows.

Its responsibility is

- to approve final module marks on all modules taught in the School of Mathematics,
- to reach decisions on requests for mitigating circumstances, based on the recommendation of the Special Cases Committee,
- to determine, on behalf of the Senate of the University of Leeds, the degree classification of all finalist students parented in the School of Mathematics.

2.3. External Examiners. The Examination Boards for undergraduate finalists in June and for postgraduate finalists in November also includes External Examiners.

Prior to the January and June Examination Boards there are meetings of the:

2.4. Examinations Monitoring Group consisting of the Head of School, Heads of Departments, Director and Deputy Director of Learning and Teaching, Examinations Officer, the Programme coordinators, and a Statistical Analyst.

2.5. Special Cases Committee consisting of the Examinations Officer, the Undergraduate Officer, the Director and Deputy Director of Learning and Teaching meets before the Examination Board.

2.6. Erasmus Committee. This committee is responsible for the assessment of Year abroad students as described in Section 3.13.

The responsibilities of all these committees and the role of the External Examiners are explained in Section 3.

3. Module Assessment and Examination

3.1. Management of Modules. Module leaders together with the internal assessor (see 3.9.) are responsible for the assessment of any particular module.

3.2. Type of Assessments. The majority of modules in the School of Mathematics are assessed through a combination of coursework and examinations. Some modules are assessed by reports, essays, or presentations, or a combination of these.

3.3. Moderation of examination marking. Examiners submit exam papers and model solutions and agree mark schemes with the internal assessor when papers are set, and for examinations at Level 2, 3 and M these mark schemes are submitted to the External Examiners for their comments. As part of the process of agreeing numerical grades, Internal Assessors check a sample of scripts against the agreed marking scheme. The External Examiners have access to all the examination scripts, model solutions and mark schemes. All mark sheets are returned to the Examinations Officer or the Administrative Officer, and are signed and dated by both examiner and assessor.

3.4. Assessed coursework. In those modules in which assessed coursework constitutes at least 50% of the marks, the grading of the coursework is moderated by an internal assessor. In such modules at Levels 2, 3 and M the coursework is made available to the external examiners. Depending on the module, coursework is handed in directly to the lecturer, to tutors marking the work, or to the Undergraduate Office. In some modules, students are required to submit coursework or project reports electronically, and substantial project reports will be screened for plagiarism using the University's plagiarism software. Coursework is assessed by academic or academic-related staff or by postgraduate markers. Markers are provided with marking schemes and their first batch of marking is discussed with the lecturer who is consulted subsequently in cases of difficulty.

3.5. Late submission of coursework. Individual lecturers notify students about the penalty system for late submission of coursework. Unexcused late submission of coursework normally results in a deduction of 5% for each calendar day past the submission deadline. Exemptions may be granted in cases of difficulties experienced by students provided that these are negotiated in advance of the submission date. No marks will be given for coursework submitted after model solutions have been distributed or published to students. If late submission of coursework is justified with medical evidence, then normally this piece of work is discounted in the determination of the component of the module obtained from continuous assessment.

If a student did not submit any coursework due to illness or other good reason attested in writing, then

- for modules with up to 30% assessed coursework, the student will be credited the average mark on the coursework submitted, if the student submitted at least half of the total coursework. Otherwise the coursework will not be included in the assessment, and the final mark will be based on the exam alone.
- for modules with over 30% assessed coursework, the student will be credited the average mark on the coursework submitted, if the student submitted at least two thirds of the total coursework. Otherwise the student will be required to submit further coursework, failing which they will count as absent.

3.6. Anonymous Marking. The School of Mathematics uses the University's anonymous marking system for examinations. Coursework is usually not marked anonymously. In many cases the marker of the coursework is also the student's tutor and anonymity would prevent speedy and effective feedback during tutorials.

3.7. Assessment Criteria. The lecturers are advised to use the following guidelines:

For level 0, 1, 2, and 3 modules, returned marks

- between 70 and 100 are considered of class 1,
- between 60 and 69 are considered of class 2.1,
- between 50 and 59 are considered of class 2.2,
- between 40 and 49 are considered of class 3,

- between 1 and 39 are considered as failed.

For level M modules the following intervals are used for scaling purposes

- 70 to 100
- 60 to 69
- 50 to 59
- below 50 is considered as failed

3.8. Assessment Procedures, Annotation of Exam Scripts, Scaling of Marks. Lecturers will mark the scripts in accordance with the marking scheme drawn up during the paper setting. Lecturers will indicate on the exam scripts the marks given for each subsection of the exam. When less than full marks are given, an annotation should be included where mistakes have been made, or where answers are missing. In consultation with the assessor, the marks are then converted according to the guidelines above. This conversion is done by careful consideration of grade boundaries, with a linear interpolation between the grade boundaries, taking into account the difficulty and length of the exam paper, the comments by the external examiner on the exam paper, the performance of the students in the exam, and the objectives and learning outcomes of the module.

3.9. The Role of the Internal Assessor. Each module has associated with it an Internal Assessor. At the stage at which examination papers are set the Internal Assessors should satisfy themselves that

- The proposed questions are mathematically correct.
- The content of the questions is appropriately related to the syllabus of the Module.
- The level of difficulty of the questions is appropriate bearing in mind both the need to differentiate candidates at the top of the scale and need to provide opportunities for weaker candidates to gain marks.
- The mark scheme is appropriate. In the event that the Examiner and the Internal Assessor are not able to reach agreement on the form of an examination paper, the matter should be referred to the relevant Head of Department who will either determine the matter or nominate another member of the Department to do so.
- There are no misprints in the final version of the paper.

At the stage at which examination papers are marked the duties of the Internal Assessor are

- to check a sample of scripts to ensure they have been marked in accordance with the mark scheme.
- to double-check the adding up of the marks on the exam scripts and the transcription of the correct mark onto the list of module marks.
- to agree with the Examiner the translation of raw marks into numerical grades.

3.10. Publishing Module Grades for Students. Preliminary results are made available to students when possible, with the caveat that these may be moderated by the External Examiners in the summer.

3.11. Policy on Resit Examinations. For the majority of modules taught in the School of Mathematics, August resit examinations are offered to students as outlined below. However, for some modules (including project modules) no August resit examination is available. Resit examinations are subject to a maximum mark of 40, unless the student has explicitly been granted first-attempt resit due to some special circumstances.

(a) Non-Finalists (students in Year 1 and Year 2 of BSc or MMath, and Year 3 of MMath) who fail a module normally have two more attempts to resit the examination of the module:

1. Resit taking place during the Resit Period in August of the same academic year.
2. Resit taking place during the next academic year when the module is examined. In this case, students normally resit the exam as External Candidates, which means that they do not attend teaching for the module concerned, that they will be provided with an exam paper based on the module as it was taught when they took the module with teaching, and that the coursework mark will be carried forward. Upon special request, students can be granted to resit failed modules as Internal Candidates, in which case the student will have to pay a higher fee, the student will attend teaching again for the module concerned, the old coursework mark is NOT carried forward, and the student is expected to hand in coursework, if applicable, and the student will sit the exam for the module as it is taught during the semester in which he/she is resitting internally.

(b) Finalists are entitled to take one resit for failed modules if they are on an Honours degree programme and do not qualify for an Honours degree, or do not qualify for a degree. These resits will normally take place during the following academic year during the regular time the module is next examined.

3.12. Feedback to Students on Assessed Work. Assessed coursework is usually expected to be returned to students within 7 days of submission together with comments, indication of mistakes, and model solutions. Students have access to their marked written examinations upon request.

3.13. Grading of Year Abroad and Year in Industry

(a) Year Abroad.

(i) MMath students on the Year abroad will be given an overall grade based on their performance during their year abroad. Upon their return from the Year abroad, students on the MMath scheme are required to submit a written report of at least 15 pages. The assessment of the report consists of

- 25% written description of the experience abroad, with some parts of the report written in the language of the country,
- 50% written summary of a module with comments identifying important results and some exercises with the student's own solutions from a recommended textbook by the host institution ,
- 25% aural presentation to a small subgroup of the Erasmus Committee upon return to Leeds.

The Erasmus Coordinator will give feedback to the student on their written report and aural presentation. The overall mark for the Year abroad on the MMath, BSc scheme is to be determined as the better of

- the weighted mean with the student's report contributing 40% and with the translated marks from abroad contributing 60%,
- the translated marks from abroad alone.

(ii) BSc students on the Year Abroad are just given a Pass or Fail for their Year Abroad. Upon their return from the Year abroad, students on the BSc scheme are required to submit a written report of at least 15 pages. The assessment of the written report consists of

- 50% written description of the experience abroad, with some parts of the report written in the language of the country,
- 50% written summary of a module with comments identifying important results and some exercises with the student's own solutions from a recommended textbook by the host institution.

The Erasmus Coordinator will give feedback to the student on their written report.

In order to obtain a 'pass' for the Year abroad, the weighted mean, with the student's report contributing 40% and the translated marks from abroad contributing 60%, must be at least 4.0 (on the 2.0 to 9.0 scale).

(b) Year in Industry.

The Year in Industry (on the BSc scheme) is assessed as a 120-credit module on a pass/fail basis with four components outlined below. The performance on the Year in Industry does not contribute towards the student's final degree classification average. The assessment consists of four components:

1. completion of the Work Placement Profile with the assessment being made by the Academic Supervisor and Work Placement Coordinator,
2. satisfactory completion of the work placement contract (assessed by Industrial Supervisor/employer),
3. satisfactory completion of a report (15 pages) on an aspect of the work completed during the placement (assessed by Academic Supervisor),
4. satisfactory presentation of an aspect of the work to the School upon return to University.

All assessed components must be completed by the first few weeks of the first semester of the final year.

3.14. Credit Rules for Undergraduate Honours Degrees. For the award of a BSc degree in Mathematics, Mathematical Studies, Mathematics with Finance or Statistics a student must pass at least 280 credits, of which at least 180 must be at levels 2 and 3 and at least 80 must be at level 3.

For the award of an MMath or MMath,BSc degree in Mathematics or Statistics a students must pass at least 400 credits, of which at least 300 must be at levels 2 and 3 and M, at least 200 must be at levels 3 and 4, and

- at least 80 at level M for students who entered University before 2007
- at least 100 at level M for students who entered University in 2007 or after.

In addition, for students who have been admitted on the MMath, BSc degree programme in 2009/10 or after, the average on 120 credits of level M modules has to be at least 50%.

3.15. Credit Rules for Taught Postgraduate Degrees. For the award of an MSc degree in Statistics, an MSc in Statistics with Applications to Finance, or an MSc in Mathematics a student must pass at least 150 credits, including at least 135 credits at level M.

3.16. Classification of Undergraduate Degrees. Numerical grades on the 0-100 scale are first converted to a 0-9 scale according to the following method. A grade of zero remains as zero. Grades in the range 1 to 29 are scaled to the range 2.0 to 2.9. Grades in the range 30-80 are divided by 10. Grades on the range 81 to 100 are scaled to the range 8.1 to 9.0. An absence without good reason receives a grade of zero.

The grades are weighted according to the number of credits involved. In addition, in each degree programme, two averages are calculated weighting the grades of modules taken in different years in different ways. The higher of these averages is used to work out the degree class.

- For students on a three-year degree scheme the first average weights the grades for the modules taken in year 2 and those taken in year 3 equally. In the second average they are weighted in the ratio 1:2. The degree class is then based on the higher of these two averages.
- For the four year MMath/ MMath,BSc, for the first average the grades for modules taken in years 2, 3 and 4 are given equal weighting. In the second average they are weighted in the ratio 1:2:2. The degree class is based on the better of these two averages.
- For BSc with Year Abroad and Year in Industry, the first average gives equal weighting to years 2 and 4. The second average uses a 1:2 weighting of the results for years 2 and 4.
- For MMath with Year abroad, the first average gives equal weighting to years 2, 3 and 4. The second average uses a 1:1:2 weighting of the results for years 2, 3 and 4.

In all cases it is the year of the degree scheme in which a module is taken which is relevant, not its level. Normally, level 1 modules may not be taken in year 3 (and year 4) of degree programmes. However, level 1 modules designated as "Special Skills" electives may then be taken in year 3 or year 4, but will carry a weight of 1 in the averaging formula.

3.17. Degree class thresholds for Undergraduate Degrees. Grades on the 2.0 to 9.0 scale, calculated as described above, are converted into degree classes as shown in the following table:

Grade	Degree class
6.85 - 9.00	I
5.90 - 6.84	II i
4.95 - 5.89	II ii
4.00 - 4.94	III
0 - 3.99	Fail

Notwithstanding the student's entitlement to a particular class of Honours under these requirements, the Examination Board may, at its discretion, award a higher class of degree when the average falls just below a class threshold, or if there is marked improvement in the final year, or if the candidate is deemed eligible for special consideration for strong medical or other reasons.

3.18. Classification of Taught Postgraduate Degrees. Numerical grades on the 0-100 scale are first converted to a 0-9 scale as for undergraduate degrees. Then the average over all 180 credits of modules is computed weighted according to the number of credits involved, and converted to degree classes as follows:

Grade	Degree class
7.00 - 9.00	With Distinction
6.00 - 6.99	With Merit
5.00 - 5.99	Pass
0 - 4.99	Fail

3.19. Consideration of Results. The results for modules assessed by written examination, and including assessed coursework, are collated by the lecturers concerned and submitted to the Examinations Officer. The Examination Board meets to consider and approve these results together with any requests for special consideration and submissions of medical evidence. Grades from Semester 1 are subject to amendment after Semester 2.

After the semester 2 exams have been collected, a statistical analysis is carried out prior to the meeting of the Examination Monitoring Group in order to

- identify any inconsistencies, particularly in comparison with historical results,
- look at comparability between modules,
- recommend (where appropriate) to an examiner and assessor, that the results of a particular module are out of line with the School norm and to request that an adjustment be made. If the examiner and/or assessor does not accept the recommendation they will be asked to submit reasons in writing. This will be drawn to the attention of the External Examiner.

After the Examination Monitoring Group meeting and prior to the Examinations Board, the Mitigating Circumstances Committee screens all submissions for Special Circumstances and selects cases which should be considered more carefully by the External Examiners.

3.20. Consideration of Degree Classes

The Examinations Board, to which all examiners are invited, is held in the presence of the External Examiners. The Examinations Officer ensures that information is available at this meeting detailing the marks for each module and the marks attained by each student for modules counting towards the final degree classification. Degree classifications for all final year students are agreed at this meeting, following receipt of the recommendations of the External Examiners. As soon as possible after the end of this meeting the School will release the degree classifications and module grades for all final year students and transmit them to the Examinations Section of Central Student Administration.

3.21. Use of Examiners' Discretion in Medical and Other Circumstances

Students are advised that they should notify the Director of Learning and Teaching if they experience a problem such as illness which might affect their academic work, in line with general University policy.

On receipt of this information the relevant lecturers and tutors are informed. Allowance is made for students who fail to submit coursework for good reason attested in writing, in line with the agreed policy for the relevant module. This policy is made explicit to the student.

Cases for special consideration by Examination Boards are normally considered if, and only if, this is explicitly requested by the student concerned in writing by a specified date. Students are notified of this policy in the Student Handbook and on the web, and are reminded by notices and e-mail messages at relevant times. A standard form is supplied on which they can make requests for special circumstances to be considered. In exceptional cases tutors may write letters, to be submitted by the day before the relevant Examinations Board. The Mitigating Circumstances Committee will screen all submissions of special circumstances and decide which cases should be considered by the External Examiners and the Examiners Meeting. No new evidence can be brought to the Examinations Board after this. At Examination Boards these claims for special consideration are reported by the Chairman, or the person to whom he delegates this task.

A decision to alter grades on particular modules or to recommend a degree class "notwithstanding the result implied by the agreed formula" because of personal circumstances will be minuted together with the reason for the decision.

The policy on how Examiners' discretion is used is explained in the School of Mathematics Student Handbook.

3.22. Release of marks to other departments

The assessment procedures for Joint Honours (Science) students are identical to those already described above. All marks on service teaching modules are passed to the Examinations Officer. The Examinations Officer will submit marks attained by students taking MATH modules as soon as possible.

3.23. External Examiners' Report

Following receipt of the External Examiners' report, the Chairman of the Teaching and Learning Committee will convene the Teaching and Learning Committee to draft a formal response outlining any actions to be taken in subsequent years or explaining why suggestions are not being implemented.

3.24. The Role of the External Examiners

External Examiners are nominated by the three Departments and approved by the TLC for formal approval by the Faculty Teaching and Learning Committee for one year in the first instance, normally followed by a further two-year period. A timetable will be drawn up by the Examinations Officer which will include dates of examinations periods, examiners meetings and deadlines for examination paper preparation. This will be sent to the External Examiners at the beginning of the session. The main duties of the External Examiners are:

- To approve all departmental draft examination papers contributing to degree classification, making suggestions for changes as required.
- To attend the principal examiners' meeting at the end of semester 2 at which degrees are classified.
- To consider medical evidence and any points arising from the meeting of the Examinations Monitoring Group.
- To verify and approve all aspects of the assessment procedure for each module contributing towards final degree classification.

External Examiners are also encouraged to comment on the assessment process and the schemes for marking and classification. This can include comments on:

- the objectives of the programmes of study
- the appropriateness of the structure and content of the programmes
- the assessment methods and arrangements for the marking of modules and classification of degrees
- the academic standards of the programmes
- the standard of candidates' work
- teaching methods
- comparability of the programmes with similar programmes at other institutions
- the External Examiner's participation in the assessment process.

At the end of each academic year, each External Examiner draws up a report which is subsequently considered by the Teaching and Learning Committee.

3.25. Prizes and Scholarships. Upon the recommendation of the Head of the School the School of Mathematics awards a number of prizes and scholarships on a yearly basis. Details can be found on the following web page: http://www.maths.leeds.ac.uk/school/students/Prizes_and_Scholarships.html

4. Conduct of Students in Assessment.

The policy on the late submission of coursework is laid out in Section 3.5.

4.1. Attendance

As stated in the Student Handbook, attendance of all scheduled lectures, classes, tutorials, workshops, and examinations is compulsory. Students' attendance is monitored throughout the academic year. Details are published on the School's Student Resources page. If a student fails to attend compulsory teaching events repeatedly, the School will initiate the Unsatisfactory Student Procedure in accordance to the procedure laid out in the Taught Student Handbook. Students are reminded to inform the Director of Learning and Teaching as soon as possible, if they miss an examination.

4.2 Mitigating/Special Circumstances

The Guidelines to Students accompanying the Special Circumstances Form, available on the Student Resources webpage and from the Undergraduate Office, gives detailed information to students about the mitigating/special circumstances procedures as explained in Section 3.21. Students' cases based on medical circumstances need to be supported by a medical note. Other cases should be supported by written evidence whenever possible.

4.3. Plagiarism and Cheating. The Student Handbook explains the University policy on plagiarism and cheating, and students are made aware of the possible consequences.

4.4. Transcripts. For an official University transcript students are referred to the Student Services web page through which students can request a University transcript. When necessary, upon request the Undergraduate Student Office will provide students with an unofficial departmental transcript.

4.5. References. Students are referred to their personal tutors for reference letters for application for employment or further studies. If necessary and appropriate, it is also suggested that students contact project supervisors for such letters of reference.

5. Appeals

The procedure for appealing against examination results is set out in the Taught Students Guide, see <http://www.leeds.ac.uk/qmeu/tsg/10appeals.htm>

In addition students are advised in the Student Handbook as follows:

- The student must notify the Office of Academic Appeals and Regulations if the student wishes to appeal against any of the examination results or the degree class within the published deadline.
- The student is advised to consult the Director of Learning and Teaching in the School of Mathematics informally before deciding whether to pursue an appeal.
- The student should also speak to the staff of the Leeds University Union Student Advice Centre. They can advise the student on whether the appeal is likely to succeed and what to write in a full statement of appeal.

6. Course-Specific Details

6.1. Students Admitted with Advanced Standing

Students who have been admitted into year 3 with Advanced Standing should be classified

- on year 3 only for BSc degrees
- on year 3 and 4 for the MMath degree using the higher of the 1:1 average giving equal weight to year 3 and 4, and the 1:2 average giving double weight to year 4.

6.2. Assessment information for students in Year abroad or Industrial Year programmes are described in Section 3.13.