

REPORT ON EXAMINATIONS

M.Sc. in Mathematical and Computational Finance

Part I

A. STATISTICS

(1) Numbers and percentages in each class/category

(a) Classified examinations

Class	Number			Percentage (%)		
	2013/14	2012/13	2011/12	2013/14	2012/13	2011/12
Distinction	7	7	2	23	25	7
Pass	22	20	25	73	71	89
Fail	1	1	1	3	4	4

(2) If vivas are used:

No candidates were examined viva voce.

(3) Marking of scripts

The four written examinations were set and marked by lecturers on examined courses, and checked by a D.Phil. student who graduated from our programme last year.

Special Topics projects were double marked by two Assessors independently and discrepancies were reconciled by Assessors/Examiners.

The two C++ practical exams were marked by a lecturer and checked by secretaries.

All dissertations were read and marked independently by one Examiner and one Assessor with discrepancies resolved by the Examiners. Each presentation of a dissertation was assessed by the Examiner who marked the dissertation.

B. NEW EXAMINING METHODS AND PROCEDURES

This year, we also finalised the written exam marking in 2 weeks after exams to help students for their applications for jobs and further study.

This year, the Chair Examiner checked the originality of all mini-projects and dissertations via Turnitin. All submissions with similarities higher than 20% were carefully checked. We found quite a lot of similarities between projects on the same topic submitted in this year and in the last year. Similarities were mainly on the

structure, the method, and even the programming code. We did not penalise the similarity since they were presenting their understanding on similar references and lectures, and thus does not really constitute plagiarism. We believe this type of similarity will occur increasingly in the future when we accumulate submissions from our own programme. We may need to emphasise our discouragement of similar projects even on the same topic and after group discussion.

Similarity-check for dissertations gave us a higher originality rate. We only got one suspicious auto-plagiarism case, in which the student shared a significant amount of writing in his dissertation with one of his mini-projects. We forwarded the case to the Proctor with our assessment. The Chair Examiner gave a talk on plagiarism, but had not emphasised the issue of auto-plagiarism. Although this is clearly prohibited in the course handbook, we still think we should emphasise the prohibition of auto-plagiarism in the future.

For the assessment of presentations for dissertations, students asked for special arrangements to avoid a clash in time with their internships/jobs, and some of them were desperate. We announced and applied the following rules this year for special arrangements: (1) Every student must present his/her dissertation in person in Oxford. (2) Students with internships/jobs out of the UK can apply to do the presentation on the day before/after the C++ II exam. (3) Students with internships/jobs in the UK can apply to do the presentation two days before/after the normal presentation day.

This year we started to have one chaperone for each presentation to witness the assessment.

C. Please list any changes in examining methods, procedures and conventions which the examiners would wish the faculty/department and the divisional board to consider.

Since we will have new curriculum from next year, examiners did not suggest much on specific changes in examining methods. For procedures and conventions, we have some suggestion for the future:

- (1) Course Director or Examiner should give a clear guidance on plagiarism, including auto-plagiarism and the sharing of group discussion.
- (2) We need to clarify the criteria for distinction, pass and failure in the course handbook. The current ones sound like sufficient criteria but not necessary. For example, the current criteria for distinction does not explicitly rule out an overall USM 69 to get a distinction,
- (3) We may need to revise the guidance for the marking of mini-projects and dissertations, so that assessors would fit their marks better to the USM system, and be more careful before giving high marks like 80+ or even 90+.
- (4) In C++ exams, we saw 50% and 40% raw marks are about 80 out of 100. Although we scaled raw marks to USM, we were not comfortable with the

scaling which maps full mark to 90. We hope C++ exam questions contain some tricky parts, so that high marks look more precious.

D. Please describe how candidates are made aware of the examination conventions to be followed by the examiners (Please attach a copy of the conventions and any other relevant documentation to the report.)

Candidates were addressed by the Course Director in Michaelmas Term and details of marking conventions were posted on the web. The Chair Examiner gave a talk about the rules on plagiarism before Trinity Term when students were going to start their dissertations.

Part II

A. GENERAL COMMENTS ON THE EXAMINATION

Overall, students this year were similar to those in the last year.

The top end is not as strong as last year, although we also awarded 7 distinctions- the same number as last year. The extreme case is that the student who got the highest mark in exams almost failed to get a distinction because of a relatively poor performance in writing project reports and dissertation.

The lower end sounds better than in the last year, other than the only failed student who was retaking the programme from last year. He deeply failed in all 4 written exam papers as in the last year, and we disqualified him according to the rule that he needed to pass all retaking components.

B. EQUAL OPPORTUNITIES ISSUES AND BREAKDOWN OF THE RESULTS BY GENDER

There were 4 female candidates and 24 males plus one retaking male student. The only failed student is the retaking male. Among the 4 females, 2 are in top 3, the next one is in top ten, and the weakest is in bottom 5—10. These figures clearly shows that both males and females had equal opportunities to thrive.

C. DETAILED NUMBERS ON CANDIDATES' PERFORMANCE IN EACH PART OF THE EXAMINATION

The written papers required some small amount of scaling from raw marks to USMs. Papers A and B were sat in January, papers C and D in April. The standard of papers was comparable to past years.

Paper A: 5 Distinction level performances and 4 fail

Paper B: 7 Distinction level performances and 2 fail

Paper C: 9 Distinctions and 3 fails

Paper D: 6 Distinctions and 3 fails

There were 3 special topics offered to the students in addition to the compulsory C++ course. All student took Time Series Analysis course. The performances across special topics were comparable with averages being in 61—64.

9 dissertations achieved a Distinction level mark, the top mark was 75. No dissertation failed other than the suspicious case of auto-plagiarism, which we are waiting for the Proctor's decision. The only failed student was the retaking student from last year.

D. COMMENTS ON PAPERS AND INDIVIDUAL QUESTIONS

The papers were all comparable. Within individual papers the candidates showed preferences for particular questions but the distribution of answers and results were well spread.

The raw marks from the C++ examinations were higher than others, and were scaled to generate USM marks. The other Special Topics were marked in USM marks after reconciliation. We suggest some tricky parts be included in C++ examinations.

The performance on the C++ exams and Special Topics was satisfactory.

E. COMMENTS ON THE PERFORMANCE OF IDENTIFIABLE INDIVIDUALS AND OTHER MATERIAL WHICH WOULD USUALLY BE TREATED AS RESERVED BUSINESS

F. NAMES OF MEMBERS OF THE BOARD OF EXAMINERS

Dr H. Jin (Chair)
Dr Christoph Reisinger
Dr Jeff Dewynne
Dr Mike Tehranchi (External, Cambridge)