Freshman Examination Guidelines
and
Guidelines for examinations of Science and Engineering students
(version March 11, 2009)

Note: Some details are different for Moderatorship papers (where the external examiners are directly involved). See different guidelines.

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1 General Information

The grading scheme for examinations in TCD has third class honors (lowest passing grade) at 40% and a first class honors at 70%. There are intermediate thresholds at 50% and 60% for second class honors (2nd division and 1st division). Although there are failing grades of F.1 (30%-39%), F.2 (0-29%) these have limited direct significance. Depending on the course the student is on, a mark above 35% (but less than 40%) may allow the student to pass by compensation.

In the case of Science students taking 1S* and 2S* modules, the results on the mathematics modules are averaged and it is the average rather than the individual module marks that are significant.¹ For other students, the individual module marks are considered by an examiners meeting, which has final approval of the results for each student (and the consequences of applying the various rules regarding progression and compensation and supplementals).

All freshman (JF & SF, or first and second year) students are normally entitled to a supplemental (or second chance) examination. In 2009 these supplementals will start earlier than in previous years (on August 31).

For mathematics students, including those in Theoretical Physics and the Two-subject moderatorship, there are several significant prizes on offer to the students with the best results. For some of the prizes, students from different years compete for the same prize.

¹This will no longer apply in the new modular structure of 2S from 2009–10.
It has undesirable effects if the results on any one module are much higher than the norm, and it also has undesirable effects if they are very low. As a guide, marks above 80% should be rather rare and indicate exceptional merit.

1.1 Design of examination papers

In particular, the questions and the marking scheme on the papers must allow weak students to show what they know, but should not allow the best students to get excessively good marks. Only truly exceptional students can deserve high marks, but this is less of a worry for Science and Engineering students.

In practice this means the following:

- Questions should cover a lot of the content of the module
- Individual questions should have a part that is within the reach of relatively weak students who have studied and understood the part of the module to which the question refers;
- For mathematics students (as opposed to science or engineering ones), all or most individual questions should have some part that allows the best students to show originality (for example a trick needed to finish off something, but it is a bad idea to have a trick needed to even reach the half-way point on a question, or to have too many questions where an error in part (a) precludes the student from making progress on (b));
- Students should be told the structure of the paper (how many questions total, how many they should answer) and a sample paper is appropriate if there is any significant change in the syllabus or the way the exam looks.
- Well-designed examination papers should normally result in average marks for the module in the range 50–65%. Where it does not happen an explanation should be sought. This may be that a small group were exceptionally good or exceptionally weak — this will often be apparent from their other marks — or even a large group can sometimes pull one another down or up. Students should not make the mistake of thinking ‘everybody can’t fail’.
- In cases where the examination results are not in this range, a piecewise linear monotone scaling may be applied to the results.

2 Preparation Procedure

The procedure is that we schedule a meeting among examiners of related modules before the papers are sent off to the Senior Lecturer’s office for duplication. The aim of the meeting is to identify (and address) as many issues as we can. Apart from mistakes that
might be spotted (accuracy is the responsibility of individual examiners), these meetings can consider whether the examination questions appear to be at the right level of difficulty and length. For that, model solutions (perhaps hand-written) should be prepared. It may also help to avoid undue overlap between questions on different papers for the same student (or even on the same paper if there are multiple examiners). We also try to check that the rubric on the examination is clear.

Meetings to be scheduled (in week starting March 30th):

(i) JF Maths/TP/TSM
(ii) SF Maths/TP/TSM
(iii) Science 1S* and 2S*
(iv) Engineering (1E*, 2E* and 3E1)

3 Dates and deadlines

<table>
<thead>
<tr>
<th>Dates for 2009</th>
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<tbody>
<tr>
<td>• Exams needing typing, in the office by the end of Hilary term</td>
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<tr>
<td>• Exams already typed, in the office week after the end of Hilary term</td>
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<tr>
<td>• Exam meetings to take place Mon/Tues 30th/31st of March (times to be decided; four meetings, one for JF Maths/TP/TSM, one for SF, one for Science and another for Engineering)</td>
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<tr>
<td>• Exam period 18th of May – Fri 12th June — Note: Most Examinations will take place by Monday the 8th of June</td>
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<td>• Anonymous exam results should be submitted for de-anonymisation as soon as they are ready, ideally within a week of the exam</td>
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<td>Deadline: results due by Wed the 10th of June except for exceptional ones due as soon as possible</td>
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<td>• Examiners Meetings — dates to be fixed (possibly Tues/Wed June 23/24)</td>
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<tr>
<td>• Publication of results — results are not given to students until they are officially published — variable dates but many published Friday June 26th</td>
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4 Examination period — procedures

Maths Office
As the Maths Office is the first point of call for the Examinations Office if a problem arises, it is vital that each examiner give their contact details/mobile phone number to Helen or Sarah. If an examiner will not be present on the day of their exam it is their responsibility alone to ensure that the contact details of the replacing member of staff are given to the Maths Office. This will avoid any confusion on the day of the exam and any embarrassment for the School.

- Examiner (or deputy) to attend at start of each examination in which they are involved (and remain available throughout examination time in case of queries).
  Please also take care to visit venues for special needs students (if any).

- Scripts to be collected from Examinations Office (with Staff ID) 10am-12pm & 2.30-4.30pm — Monday to Friday. (Also 6–6.30pm on some days.)

- Scripts not to be taken outside Dublin.

- Scripts are anonymous. Anonymous (exam) number and seat number should match list provided. Scripts of special needs students are bundled separately but those students should have a place for their exam number in the main venue.

- When marking scripts, write marks on inside pages and transfer to front of script. Also give computation of raw total of marks on script.

- College requires that there should be evidence on each page of the students work that you have examined it. Write enough (even if only ticks and crosses) so you can reconstruct the rationale for the marks you gave, and ideally so that a colleague would be able to understand what you did. (This may arise particularly if you are away when the candidate appeals their result or asks to view their script.)

- Procedure for converting to list with names and student ID numbers will be circulated nearer the time.

- If the exam says to answer $x$ questions, then it is not permissible to change this during the marking process. Any adjustments should be of a piecewise linear variety, so that the ranking of candidates in each exam is retained.

- As well as return of final marks (for examiners meetings consideration), all material listed in the next section has to be returned to the Maths office.
5 Appeals and queries

Note that we will retain in storage in the Department:

1. The scripts
2. The marking scheme used
3. Model answers
4. Original sheet of (anonymous) marks showing scaling method used (if any)
5. Print out of names, exam numbers and marks which will also show any continuous assessment marks added in.

All this material should then remain available for 13 months.

- Individual students can make appointments with their examiners to view and discuss their scripts ‘at reasonable times’. For such appointments, the examiner will temporarily check out the relevant script from the store.

If any examiner is away for a period, another member of staff should be designated to discuss papers with students. For this to be useful it means that scripts must be properly annotated with the marks and the rationale for them.

Thus comments, ticks, crosses and numerical marks should be written on the scripts and should correspond to the marking scheme used.

Richard Timoney March 11, 2009