

## Guidance notes for students of Project IV

1. **Notes for students.** Work on Project IV occupies terms 1 and 2. The (poster) presentation is near week 7 of term 2 and the report is due at the start of term 3.

- You should spend on average one third of your overall 4H effort on it.
- You should collaborate with the others in your supervisor's group to discuss problems and exchange ideas and information.
- Supervisors expect to meet you at least fortnightly for a tutorial — initially in a group and later to give individual attention as your interests develop.
- Supervisors keep a diary of tutorials as one part of their 'Statement of Assistance' (see below) — you may find it useful to do the same.
- Any medical or other difficulties which affect your progress on this module with regard to poster, presentation, or written report, should be brought to the attention of your college: see the section on illness and absence in the course handbook.

2. **Progress summary and feedback.** At the end of term 1 you should provide your supervisor with a one-page summary of progress to date and plans for the future. It should be returned to you promptly with a paragraph of feedback.

3. **Poster and presentation.** In term 2 you give a short presentation on your project to an audience of other 4H students, the supervisors, and possibly some further members of staff. This presentation normally takes place on the Wednesday afternoon of Teaching Week 17. We recommend that a computer and projector be used to organize the presentation, in which case an electronic copy of your presentation material will be collected.

- You should also prepare a poster of size A2 to summarise and illustrate your work. This can be printed using the A0 printer at the IT Service. Please remove any surplus borders to ensure that the poster is the correct A2 size (594mm x 420mm).
- The poster and presentation are assessed and account for 15% of the module mark.
- Students are encouraged to work out the details of their presentations themselves, singly or as a group. Some formal training is available in second term.
- The poster must be handed in to the Mathematics Office by 5pm of the Friday preceding the oral presentation. By the same deadline you must also submit a pdf version of your poster; you will be informed of the details of this electronic submission before the deadline.

The department expects to keep each poster and puts them on public display. The electronic versions of the presentation material, poster and final report may be placed online at the projects webpage.

**4. Draft report and feedback.** You must produce a first draft of your report by the end of the penultimate week of term 2.

- Your draft report should contain at least the following: a completed specimen chapter, chapter and section headings and content or brief details of intended content within each section.
- Your supervisor reads it and discusses it with you before term ends. It is not the job of your supervisor to proof-read your draft, but to give feedback on actual and intended content.
- You receive a written summary of their feedback (they may also annotate the draft).

A copy of this feedback is the other part of the Statement of Assistance.

**5. Report.** The report must be an account of your individual aspect of the joint investigation. It must contain university-standard mathematics or statistics, with a level of sophistication, detail and explanation appropriate to an audience of 4H mathematics students who are not specialists.

- It should be securely bound and is expected to be 40 to 60 pages in length (A4 paper size, 11pt font size, and standard LaTeX margins as produced with `\usepackage[a4paper]{geometry}` i.e. text width 14cm, text height 20.2cm, 4cm top margin, 5.5cm bottom margin, 3.5cm left margin, 3.5cm right margin), and at a level of exposition appropriate to a 4H audience. Double-sided printing is encouraged, but is not a requirement. The department does not provide a report binding service, but such a facility is available at Durham Students' Union. Access may be granted to the departments rudimentary binding machine – please ask in the Mathematics Office for details.
- For mathematical material, L<sup>A</sup>T<sub>E</sub>X typesetting gives the best results — although e.g. *MS Word* with *MathType* may be used.

The report should have all pages numbered consecutively and must be suitably divided into sections, subsections and appendices.

- It must have a title-page bearing your name.

It should have a table of contents, and should normally include in particular an Introduction giving the background to the investigation, and a Conclusion summarising your results and putting them into context.

- It must include a Bibliography that lists all books, articles, papers, computer packages, etc. used or quoted, and the text must contain appropriate citations.

- Examples of written reports from previous years are available online at the projects webpage / DUO.
- Note the advice on backing-up and protecting your computer-based work that is given by the IT Service in their handbook for students: *MY IT at Durham University* (<https://www.dur.ac.uk/resources/cis/comms/StudentITguide2014.pdf>). Also make sure to allow plenty of time for printing etc., in case of equipment failures. Ignoring elementary precautions is not a valid excuse.
- Supplementary media files, such as sound, video, detailed Excel sheets, Maple code, R code, and so on, if any, must be uploaded somewhere on the internet (e.g. <https://www.dropbox.com/> or <https://drive.google.com/> for media; <https://github.com/> or <http://code.google.com/hosting/> for code). You can then refer to these files in your report via hyperlink. For marking, they are treated as any other reference. Of course, it is acceptable to include source code in your report where it is explicitly discussed, and where it would logically then also count towards your page count.

The department reserves the right to display reports and posters, including electronic versions that may be placed online.

**6. Submission.** One copy of the final report is due on the Friday before the first weekend of term 3. It should be handed in by 5pm to the Mathematics Office, when a receipt will be given. By the same deadline you must also submit a pdf version of your report, as a *single pdf file*, via the Turnitin system on DUO: you will be informed of the details of this electronic submission before the deadline.

- Note that Turnitin does not accept pdf files larger than 20MB. The pdf file of your report must observe this limit. You can limit the size of your pdf by (i) using .jpg format for any pictures, (ii) limiting the resolution of any pictures to, say, 800x600, and (iii) using .jpg format for plots that contain large amounts of data.
- Senate regulations: if an extension to this deadline is not formally granted, then both the paper copy and the electronic copy must be submitted by the deadline; otherwise, the work is not marked, and a mark of zero is recorded.

Your report may be reclaimed from the Mathematics Office after degree results are published.

**7. Resources.** Your supervisor deals with mathematical or statistical issues relating to the topic. There is a designated member of staff responsible for handling other issues, such as advice on preparing the poster, presentation and report. Normally there are opportunities for practising presentations, for example.

General resources will be made available on DUO.

## 8. Assessment guidelines.

- All marks are subject to confirmation by External Examiners.
- Markers look for a clear and logical account that incorporates theory critically and coherently alongside pertinent and well-explained examples or applications. Either the theory or its application may be the primary focus.

A project may consist of a critical synthesis of material from several sources in the literature. This is particularly appropriate if the material is widely scattered or if the existing accounts are at a level significantly beyond 4H. In such cases, the aim of the project should be to provide a coherent account of the material at the level of 4H students, including your own examples where appropriate.

**Note that if you reproduce material literatim from another source, you must clearly indicate which material is not written by yourself (for instance, using quotation marks around copied parts of sentences when closely paraphrasing, or for longer sections, using `\begin{quote}... \end{quote}`), and make a clear reference to the source at that point. If you discuss ideas taken from other sources (which will probably pertain to most of your report!), you should also make a clear reference to your sources at each appropriate point. A good practice is to reference properly as soon as you start writing, as it may be hard to figure out what parts were based on which sources retrospectively.**

- Detailed assessment criteria for the written report, and the presentation and poster, will be made available on DUO.

**9. Plagiarism and declaration.** University guidance on procedures in respect of plagiarism can be found in section 6 of the Learning and Teaching Handbook, which is available online at <http://www.dur.ac.uk/learningandteaching.handbook/>

In addition, information about plagiarism will be presented during a meeting in Term 1.

**IMPORTANT: The report must include the following declaration:**

*‘This piece of work is a result of my own work except where it forms an assessment based on group project work. In the case of a group project, the work has been prepared in collaboration with other members of the group. Material from the work of others not involved in the project has been acknowledged and quotations and paraphrases suitably indicated.’*

Any student work may be uploaded to a plagiarism detection system, if plagiarism is suspected. The system may also be used routinely to screen work for plagiarised text. You can submit a draft version of your report to the plagiarism

checker and view the result for yourself via the TurnitinUK facility available as a link on the Duo module webpage. This may be useful to help you clarify if your use and reproduction of reference material is appropriate. Beware that the tool is fully automated, and a high similarity index does not necessarily indicate plagiarism, particularly if citations and quotations are correctly attributed. Also beware that Turnitin's database is far from complete: a low similarity index provides no guarantee whatsoever. In case of doubt, refer to the plagiarism tutorial.