

UNIVERSITY OF SUSSEX
DEPARTMENT OF MATHEMATICS
846G1 MMath Project

Department of Mathematics

The Project consists of two components: the Project Report (dissertation) and the Oral Presentation.

In marking the Project, examiners assess both the Project Report and the Oral Presentation and use the published assessment criteria, which are available on [the main projects webpage](#).

Project Report

85% of your Project module mark will come from the written *Project Report*, which should be an essay of approximately 15,000 words. The deadline for the submission of Project Reports will be listed on your Sussex Direct timetable, but will usually be during the Semester 2 Assessment (i.e., exams) Period. Be sure to check Sussex Direct for the precise deadline.

Submit your Report electronically (pdf file) via Canvas. Work handed in late will be subject to normal University rules.

The Project Report marks will be assigned as follows:

- Originality and independence of the work (30%)
- Mastery and understanding of the topic (30%)
- The extent to which the topic is dealt with (30%)
- Written presentation (10%)

More detailed information on guidelines for project markers is given on the main projects webpage:

<http://www.sussex.ac.uk/mps/internal/departments/mathematics/ug/studyingmaths/assessment>

Do not write your name on your report. Only write your candidate number.

The main text of your Report must be typeset using LaTeX, with *no* hand-written insertions. Use the article class with the A4 paper and 12pt options. Hand-drawn diagrams are permissible, though computer-generated ones are preferable. If you want advice on how to include these in the LaTeX document, ask your Project Supervisor or the Senior Tutor. It is probably best to put computer-generated material in an appendix and then refer to it from the main body of the text. LaTeX will take care of numbering the pages, but ensure that they are in the correct order.

The Report should deal concisely but adequately with the topic: more than 15,000 words is likely to be considered verbose, and may be penalised. Attention should be paid to correct documentation of computer programs submitted as part of a Report. Writers of Reports on Statistics Projects should pay particular attention to good tabular and graphical presentation, and good data handling (source of data, limitations, quality in relation to assumptions required, etc).

Your attention is drawn to University rules on plagiarism and collusion, which apply to all Mathematics Projects. See the Chapter entitled *Academic Misconduct* in the Handbook for Candidates. **You should avoid any suggestion of plagiarism, by ensuring that (apart from acknowledged and properly indicated quotations) you write the Project Report in your own words, and that you clearly indicate the source of all arguments and pieces of exposition that rely to any extent on published (or even unpublished) material.**

In your Report you should adopt some simple form of referencing. For example:

(a) Within the text insert a sequence of bracketed numbers – “... as the following argument due to Møller [7] shows ...”.

(b) At the end of each chapter give a listing which precisely identifies the reference (i.e. relevant section or pages, not simply the work) – “7. Møller, 1972, §12.2”.

(c) At the end of your Report give a complete listing of all sources (alphabetical by author and year of publication) which identifies the abbreviated form used above – “Møller, C. (1972), *The Theory of Relativity*, 2nd edn., Oxford University Press”.

Oral Presentation

The remaining 15% of your Project module mark will come from an additional ***Oral Presentation*** component which will take place at the end of Term 2. In this component, you will give a short (ten-minute) presentation describing your project (more details are given below). Closer to the time, you will receive an e-mail telling you the exact time and place for your presentation. Be sure to arrive at least 5-10 minutes ***early*** for your presentation, so that you do not miss your allotted time.

The Presentation marks will be assigned as follows:

- Content (40%)
- Visual aids usage (20%)
- Audience engagement (20%)
- Ability to take questions (20%)

Please note the following when preparing for your presentation:

1. Your presentation should be no more than 10 minutes long.
2. You will present in front of at least 3 Mathematics faculty members, who will ask you questions for up to 5 additional minutes either during or after your presentation, or both.
3. **NB: For the 2020/2021 academic year, presentations must be deliverable electronically via Zoom; please therefore adjust the following guidance appropriately. If you want to give a 'blackboard' presentation, you must be able to do this via a virtual 'whiteboard' or similar, for example with an electronic stylus and a compatible computer or tablet.** You should either prepare slides on your computer (you can make the computer presentation for example using a LaTeX package such as “Beamer”, see <https://ctan.org/pkg/beamer?lang=en> , or in Powerpoint with a TeXpoint add on, see <http://texpoint.necula.org/> , or you could even write them *very* neatly and clearly by hand and scan them into a PDF file which can be presented using a computer projector) or *carefully* prepare a blackboard presentation. If you prepare a computer presentation, you should bring it with you to the presentation on a standard USB memory stick.
4. Prepare the content of your presentation as if it were to be presented to 3rd-year Mathematics undergraduate students who have not taken modules specifically in the area of your project. That is, expect that the panel members have little to no knowledge of the problem or area you are working in -- you will have to explain it to them in a way that can be quickly and easily understood by someone with knowledge of basic mathematics only.
5. If you prepare slides (the preferred format), your presentation should only include about 3-6 slides as 10 minutes is a very short amount of time, and you will need to spend some time explaining each of your slides
6. Think *very* carefully about what you will put into your presentation, as 10 minutes is not much time to get across the main points, which should be as follows:
7. You might basically have three sections: (a) an introductory section where you give a little bit of background about the area you are working in to “set the stage”, (b) an intermediate section in which you clearly and concisely state the problem or intent of the project you are working on, and (c) a final section in which you give your conclusions and maybe explain some of the key tools or calculations you used in obtaining them. This is a lot of information to give in only 10 minutes, so it needs to be very carefully thought out and prepared in advance.
8. Practice your presentation beforehand, making sure in particular that it fits within the time constraints and that you are comfortable using a computer or blackboard to give the presentation. You might consider practicing by giving your presentation to some of your classmates or peers.
9. You may also want to discuss your presentation with your project supervisor and get their input on your presentation well in advance of the date of your presentation.