Notes for embarking on an MSc project

— Iain Murray, 2018

Final Project Marking criteria

The point of the IPP is to do groundwork and planning for your project in Summer. Looking ahead, to pass the final project you must address all of the basic criteria below. To do well, you also need to touch on the additional criteria, so think about how you might do that. However, the exceptional criteria are *not* required for a distinction — don't make your plan rely on overly ambitious goals.

The bullets below are copied verbatim from:

http://www.inf.ed.ac.uk/teaching/courses/diss/diss.marking.guidelines.html

- Basic Criteria
 - The problem is clearly stated and the student demonstrates an understanding of the problem.
 - The work is 'complete', with a coherent conclusion and evidence in support of it.
 - The quality of the work demonstrates a thoroughness and clarity in approach.
 - The quality of presentation is of an adequate standard, with the arguments well-structured and the English fluent.
- Additional Criteria
 - The student demonstrates extensive knowledge of the literature
 - There is an excellent critical evaluation of previous work
 - There is a critical evaluation of the student's own work
 - There is sound justification of design decisions
 - There is a novel solution of conceptual problems
 - The amount of work undertaken is more than one would expect, in the time available.
- Exceptional Criteria
 - There is evidence of outstanding merit e.g. originality
 - The dissertation includes material worthy of publication in peer-reviewed outlets.

'Good scholarship' is *essential*: acknowledging work correctly is not just a marking criterion: not doing so can count as plagiarism and lead to disqualification from the MSc!

Never copy-paste material into a draft for editing, or even if you plan to remove it later. If you include a figure from a source, add the acknowledgement *at the same time*. Redrawing a figure doesn't make it 'yours': you still need a citation, and you should usually just include the original. Editing a document until a service like *turnitin* says there is no plagiarism is wilful misconduct. *Please* just don't include anything by someone else in the first place.

If you hand in an IPP or dissertation draft with plagiarized material we won't give it feedback, and will then only mark the final submission. If you want feedback from us, please treat our time with respect. If you need clarifications on any of the previous paragraph, please ask Iain.

IPP Requirements

Expectations for the IPP are outlined here:

http://www.inf.ed.ac.uk/teaching/courses/ipp/ipp.guidelines.html

Here are the specific things you'll be judged on, from the IPP mark form:

- Literature: Concise review of literature, correct referencing
- Introduction: Accessible to non-experts; motivation and relevance; audience
- Objectives: Clear statement of objectives; hypotheses
- Approach: Method; plan of work; evaluation metric; time-table
- Presentation: Reasonable length, correct English, correct level

Your primary aim is to ensure your report covers these objectives by the deadline.

Your secondary aim is to get as good a start on the project as you can. Gather the data, tools, and understanding that you need. Some of the best students even start implementing things (such as baseline experiments).

Miscellaneous advice and pointers

Have a good look around http://www.inf.ed.ac.uk/teaching/courses/diss/Also, there's an old guide to doing MSc projects hidden here:

http://www.inf.ed.ac.uk/teaching/courses/diss/docs/doc_projectDoingGuide.pdf Please read it (ignoring out-of-date statements about regulations), and heed the advice on writing lucid explanations and justifications of what you are doing *early*. It says:

"Eighteen weeks is remarkably short. If you are the kind of person who relaxes until it is time to panic, then works flat out, you need to know: now is the time to panic. There is no second chance."

This advice is out of date: you now only have about twelve weeks after the exams. If you want a good project, get as good a start as you can during the IPP.

A way to get a good start is to *do things*. Check that you have access to data and can load it in. You could run a baseline; excellent grant proposals have pilot experiments. Reinterpret literature in the context of your project, don't just regurgitate what the paper or existing reviews say, but add value.

To reiterate: a poor goal for a week is "I'll read some papers". Have specific aims: summarize the datasets and models used; make a list of how approaches in two papers differ; identify particular parts of a paper you might want to try reproducing and/or altering. Each week you should be making notes that will help you form an interesting plan and report.

Get a good writing system working now, complete with remote backup and version control. Please use LaTeX. Save notes on the papers you find as you go. Use bibtex, or a system that will export to bibtex. Use the bibtex or database key to name the PDF file of the paper. Personally, I name all papers first-surname-year-letter.pdf. Don't rely on file or directory names to find papers, and certainly don't rely on your memory. Put informative keywords and notes in a 'comments' bibtex field.

There are notes on writing and presentation, core skills for research, at the top of my teaching page: http://homepages.inf.ed.ac.uk/imurray2/teaching/

Meetings

Your group will meet most weeks before the IPP deadline and after exams. Over the next week, you should confirm with your supervisor when your meetings will be. It is up to you to make progress this month. **We won't reschedule meetings to make up for people being behind.** Don't ignore IPP just because you have other coursework! Your IPP report is worth 100% of 10 credits...

Someone, usually your supervisor, will give you feedback on one draft ahead of the IPP deadline. You should usually prepare this draft before the end of March so you can get and incorporate feedback in time (see timeline below). Find out if, like Iain, your supervisor is going to be away in the next two months.

The main point of each group meeting is to get advice on anything you're stuck with, and get feedback on your thoughts so far. You should think about how to clearly and briefly articulate your update before each meeting. Remember your supervisor hasn't been looking at the same things you have during the week. Finally, by the end of each meeting, try to agree what you will do next.

You should aim to be collaborative. Listen to each other, and help each other. Where appropriate you can use code or data prepared by other students. Ultimately you have to write your own dissertation, but it's usual to lean on external resources; you just need to acknowledge code/data/ideas from other people. You will also need to describe what *you* did. It may help to deliberately distinguish your project in some obvious way, such as dataset(s) used, or implementation language.

March					2018	April Sunday Monday Tuesday Wednesday Thursday Friday						2018	
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