**MATHEMATICAL, PHYSICAL AND LIFE SCIENCES DIVISION**

**PROJECT INITIATION PLAN**

All of the study activities that you engage with will involve an element of self-management and organisation. However, the activity where these qualities will be especially important is in the independent research project that you will undertake to complete your DPhil/MSc (R) thesis.

Completing an independent research project on time, and to the best of your abilities, requires the completion of multiple, interrelated activities, and multiple deadlines. You will also need to be able to respond dynamically to any additional challenges you might face along the way.

Having a clear plan for your research project will help you to develop a clear sense of direction early on in the project, and to support you in organising, planning and monitoring your project. This form is designed to help you to think about a range of factors that might have an impact on the progress of your project. You may find it difficult to complete some of the sections below at the start of your project. However, you can use the gaps to help you identify where you need to begin work and can review and update your plan/timetable at useful intervals making any necessary adjustments according to the experiences gained during your research.

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| **1. Research Topic:** |
| *Formulate a clearly defined and delineated research topic. The more clearly your research topic is defined at the start of the project, the better. This will give you confidence and clarity in what you are trying to achieve, and will allow you to monitor your progress more effectively. Think realistically about the practical implications of your choice, in terms of: time required; necessary travelling/fieldwork; access to equipment or room/lab space; possible costs etc.*  *You should choose an area that you find particularly interesting, since your interest in the subject is going to be vital in sustaining your engagement, and where you will have access to reliable resources, and appropriate supervision.* |

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| **2. Research Question/Problem:** |
| *Once you have defined your topic you need to refine it and turn it into something that is focussed enough to guide your project. Try describing it as a research problem that sets out the issue you are investigating, your argument (what you want to prove, disprove or explore) and the limits of your research i.e. what you are not going to be investigating. This will ensure your project keeps going in the right direction. What skill(s) would you like to develop?*  *Make sure your objectives are ‘SMART’ – specific, measureable, advantageous, realistic and time-limited.*  *You should also be willing to revise your research problem as you find out more about your topic.* |

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| **3. Research Methodology/Methods:** |
| *Think about the way in which you will conduct your research. Is your research going to be experimental, observational, theoretical, textual, qualitative, quantitative etc.? Will it involve human subjects? Are there ethical considerations – specific protocols, procedures, approaches to follow? Think about why you intend to conduct your chosen research/topic, what insights might it yield, and any difficulties might it pose?* |

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| **4. Skills/Resources/Equipment required:** |
| *What equipment will you need to complete your project? Are you dependent on anyone else to complete your project? What will you do if they are unable to help? What other skills and resources will you require e.g. statistical analyses, laboratory methods, improved writing skill or computer software etc.?* |
| **5. Conduct of tasks/research:** |
| *This is the practical activity of collecting raw information/data or developing methods or theory, or building new experimental equipment or technology etc. Think about where this might take place; e.g. in a laboratory, library, at a computer, on the streets or in the field. Will you need to attend any conferences, or spend time off site with an industry? Are some tasks dependent on the completion of other tasks? Which tasks are most important, and why? Which are most time-consuming? Which are most difficult and why? What are the responsibilities of the supervisor or other individuals associated with the project?*  *Produce a draft timetable of the different tasks you intend to take and the estimated duration. Always include time for ‘delays’ e.g. holidays and emergencies such as family or personal crises etc. Consider how you are going to store and retrieve your data. Be aware of any key milestones you need to apply for and achieve, and what the relevant timescales/requirements are e.g. transfer of status, confirmation of status.* |

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| **6. Costs associated with tasks/research:** |
| *Estimate any costs associated with each task, and any other expenses needed to complete the project e.g. travel costs for fieldwork etc.*  *You should ensure that you have sufficient funds or funding sources to be able to complete your project within your funded period.*  ***Note:*** *All graduate research students who started their research programme in or after September 2011 and who have reached the end of their standard period of fee liability are liable for the* [*University continuation charge*](http://www.ox.ac.uk/admissions/graduate/fees-and-funding/tuition-and-college-fees/continuation-charges)*.* *All graduate research students who have reached the end of their standard period of fee liability may be liable for a college continuation charge.* |

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| **7. Risk Assessment/Limitations:** |
| *Think about what factors might threaten the successful completion of tasks? How can you minimise or eliminate such impediments to progress?*  *If you do encounter any problems during your research always consult with your supervisor(s) at an early stage to analyse and discuss if and how it can be resolved. If necessary look at modifying/refining your research.*  *Keep a record of every problem your encounter, and successfully solve, as this is useful information in writing up your research, as you can show your examiners how you overcame them.* |

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| **8. Training and Professional Development:** |
| *Identify any general and project related courses/training to attend (research, academic and generic transferable skills)? Do you have any specific personal career goals/options you would like to develop/pursue?*  *The [Researcher Training Tool](https://weblearn.ox.ac.uk/portal/hierarchy/grad/" \t "_blank" \o "LInks to course booking system [opens in new window] [opens in a new window]) brings together all of the graduate training available not only from the division and its departments, but also includes details of graduate training available from all the providers in the University.*  *In collaboration with your supervisor you can tailor your training programme to support your needs and future ambitions.* |

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| **9. Publications: (if relevant)** |
| *Outline any publication strategy for the project, providing co-authors, length in pages, outlet (e.g. a named conference or journal), and approximate time of submission. Indicate who has the primary responsibility for the publication.*  *You and your supervisor(s) should always be realistic about the amount of time and impact any publications will have on your research and completion schedule.* |

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| **10. Teaching Opportunities: (if relevant)** |
| *Would you like the opportunity to gain teaching experience?*  *The opportunity to teach whilst a graduate student is a valuable one and should be considered as a useful skill to be acquired as a part of graduate study. The most useful type of teaching, from this perspective, involves student contact through involvement in class or tutorial teaching or laboratory demonstrating. However, teaching is potentially very time consuming and can significantly interfere with the progress of a research project. Any proposal to take on a significant amount of teaching, for either a College or Department, should be discussed with your supervisor in advance, and he or she should be able to request that the arrangement should cease, if in his or her judgement it is interfering significantly with research progress.*  *It should also be noted that the Division requires that a graduate student must attend an appropriate teaching skills workshop, or receive some other form of relevant training, before undertaking any teaching activity, which also carries an additional time demand.* *The Division and Departments organise and advertise this training, and in some departments it is compulsory for all students. Please view the* [*Divisional training*](http://www.mpls.ox.ac.uk/content/training-teaching-skills) *for further information.* |

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| **11. References/Literature Review:** |
| *Undertake a literature review by looking at material that has already been published, either in hard copy or electronically, that may be relevant for your research project. Keep a record, and log any permissions for inclusion of 3rd party copyright material.*  *You will need to be able to demonstrate the rationale for your research, and to describe how it fits within the wider research context in your area.* |

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| **12. Transition from research to writing up:** |
| *When will you stop researching and start writing up? How much time you will need for writing up and editing? Allow sufficient time for your supervisor to review your work.*  *Always aim to stick to your plan, unless you have a clear reason why you need to continue your research longer.*  *Include breaks in your research timetable so that you can review and reflect on the work you have achieved, and then assess whether you need to do more research.*  *Remember to be realistic about your goals. You will not be able to achieve everything in your thesis. Having a section where you discuss ‘Further Work’ at the end of your thesis will allow you to outline any ideas for further, relevant research, and will show your examiners that you have thought about the implications your work has for the academic community.* |

***Key points you may want to discuss with your supervisor:***

* *A timetable of meetings for you to stick to*
* *A focus for your supervisions so you make the best use of the time e.g. ‘setting a research problem’; ‘analysing the data’ etc.*
* *Identifying what you can send to your supervisor in advance to form the basis of a discussion about progress to your supervisor before each meeting, e.g. your research plan, early results of your data collection or draft chapters.*
* *Think about what action points you might agree to focus on before the next time you meet.*
* *Keep a record of what you decide in each supervision session, you can use the termly supervision system (GSS) to record and monitor progress and reflect on development (recording skills training needs and training attended).*