Research Methods Process
Conducting empirical research (i.e. collecting your own data for a research project)

Establish your research focus, title and questions

This is usually done through a proposal stage, and may involve negotiation and compromise with your supervisor to ensure that you have an appropriate, achievable project. Make sure that you define clearly what your **aims** are (i.e. what you want the research to be able to do, the outcome), the **rationale** (why it's important to do the project, often a problem to be solved), and the **questions** (what you need to find out in order to meet your aims).

Plan your time

Keep a diary for the year to track what you have to do by when. Enter **deadlines** for each step of the project or dissertation so this reminds you. Create a more specific **to-do list** for each step. Estimate how long each step will take. Identify time in the week to work on assignment. Set specific tasks to do at particular times. Then stick to it. With your supervisor, negotiate this timeline, meetings and what feedback you can expect from your tutor.

Research and reading / Literature review

What does previous research already tell us about the topic and focus? Look for mainly journal articles reporting on **primary empirical research**, but you may also need to look for **theoretical sources** if you intend to work within a particular theoretical framework. Search the **library catalogue** (NELSON) using keywords. Top up with specific **databases** and/or talk to your Academic Librarian. See Skills Hub for more help with searching.

Take notes, include references, and **think critically** about what you are reading in terms of: its currency, reliability, bias, authority, and evidence. See 'Critical Reading' guide for more information.

You may **draft** your literature review at this stage, but expect that you will come back to it to make it fit well with the rest of your dissertation or project.

Establish your methodology or approach

What information do you need to answer your research questions and how are you going to get it? Decide in detail **how you are going to collect and analyse your data**. Consider what skills you will need to carry out this research (interview skills, statistical analysis, particular software) and how you can get support with them (e.g. Learning Development). Reading is key: establish what similar studies in your area have done for their methodology and see if you can learn lessons from them (either by imitating them or doing something different to avoid problems). Also refer to methodological sources and textbooks to establish good practice in general. Decide as much as you can in advance, but be flexible; your approach might not work. You may **draft** your methodology section, but expect that it will change later too.

NB: if your approach is based on the analysis of text, image, documents, or statistics where the information is publicly available, then this step and the next will not apply.

Obtain any necessary ethical clearance and negotiate access
You may need to get your research approved by an **ethics** committee, depending on your level of study and the nature of your research. This means you will need to submit the correct forms and proposals in enough time to still allow you to collect your data. If you are going to be doing research in a particular setting, for example a school or hospital, you will need to obtain **permission** from management to do so. Allow time for this, and for you to meet with key people to persuade them that it would be useful and not inconvenient. Remember you cannot proceed with the data collection until you have this formal permission.

Make contact
This may overlap with the step below in some cases, but is usually separate. Get in touch with your potential participants in the most appropriate way (e.g. email or phone), explain the nature of your research, why you would value their participation, any benefits they could get out of it and what the next steps will be. If you are making contact with strangers (e.g. cold-calling or emailing), be prepared for a low response rate. Consider ways you can make this more relevant e.g. by approaching them through their work or an existing social group. Allow plenty of time for this stage. Make careful notes in **a research diary** about how you did this, especially if you had to change your approach from the methodology you had planned in the proposal. It's natural for this to change, but you need to explain and justify it.

Collect your data
Once people have agreed to be part of your research and signed a **consent form**, you can proceed to collecting the data, e.g. by giving them a questionnaire, conducting an interview, or observing them in a natural situation (there are other methods too - see the Qualitative Methods guide). **Stay organised** at this stage e.g. by keeping all documents relevant to 1 interview (consent form, notes, questions asked, transcript) in one folder. Make careful notes in a **research diary** about what actually happens, especially if it differs from your plan.

Process your data
Put the data in a form that can be analysed. If you have done an online survey, it may be as simple as importing it into an SPSS database. If you have done a paper-based questionnaire, you may need to manually input it into the analytical software. If you have done interviews, you will need to transcribe them (i.e. write down exactly what people say, word for word).

Analyse your data
In Step 4, you will have read about different approaches to data analysis (see Qualitative Data Analysis guide and Quantitative Data Analysis guide). Now you need to apply your chosen method. Try to be as systematic as possible. If you are writing a traditional dissertation structure (Introduction, Literature Review, Methodology, Results, Discussion, Conclusion), write your results section as you do this analysis. If you are writing a more narrative style and structure, you might prefer to write each section thematically as you develop particular ideas.

Compare your data and the literature

Does your data answer your research questions? If so, how? If not, why not? Go back to your literature and compare your findings with the previous research. What are the similarities and differences? If there are differences, why do you think they have happened? If there are similarities, draw on their findings to interpret your findings. This will be the basis of your discussion/ analysis chapter. If you are writing more thematically, include it throughout.

Write your introduction and conclusion

Now that you have your findings and interpretations, you can write the beginning and end of your project or dissertation. Make sure that in the introduction you place the research in context and explain why it is important, and that the conclusion considers the implications and possible uses of your research. Also, prepare any necessary **appendices** (e.g. sample interview questions, example of text analysis) to clearly present your methodology or findings.

Revise early drafts

Now that you have completed the major chapters, you need to go back and revise the draft chapters that you wrote earlier. You will need to revise the methodology if you did anything differently from the initial plan. Also the literature review may change, because you will need to cover any unexpected ideas or themes which came out of the analysis. So you'll have to add these sections in afterwards. Remember the point of a dissertation is to develop an overall argument, so ensure that you are saying the same thing in each chapter of your project.

Get in touch with your research participants again

Say thank you, and provide them with a summary of the results if they are interested. If you have done your research in a specific place, offer to prepare a leaflet or run a presentation session to contribute to staff development on your findings. This stage of 'giving something back' is often forgotten in research, but is really crucial to maintaining positive relationships between researchers and participants. Remember, even if you never do another project in that environment, other future students may, so try to leave a good impression.

Proofread, finalise and submit

Print it off and check for misspellings, awkward phrasings (read it out loud), long sentences, and coherence of paragraphs. Check your presentation and formatting against the specifications in the brief. Review the criteria and make sure you are meeting all of the requirements.