Hints for thesis-as-a-series of papers
(especially if including published-paper PDFs)
(version I – August 2014)

1) Note the GRS rules on formatting
See: http://www.postgraduate.uwa.edu.au/students/thesis/style
In particular:
- Theses should be double or one-and-a-half space typed on international A4 sized paper (weight at least 70 gsm for original copy) with a left hand margin of 4 cm.
- There should be a 2 cm margin on all other edges.
- Typing on both sides is encouraged, and margins should be mirrored accordingly

Also, check the School of Plant Biology Thesis Submission Checklist

2) Discuss your ideas about the format of your thesis with your supervisors and ask them for examples of well-presented and well-structured theses in your research area.

3) Look at a diverse range of examples

Look in the UWA thesis repository: http://www.is.uwa.edu.au/repository/home
- Xiangling Fang (PhD awarded with Distinction) – most chapters are PDFs
- Lalith Suriyagoda – some chapters are PDFs
- Khalil Kariman – some chapters are PDFs
- Peter Grose – Chapters as text, PDFs in appendices
- Budiastuti Kurniasih – Chapters as text

4) Include a section on structure (e.g. at end of Introduction)
This is important as it forewarns examiners who are expecting a traditional format what is coming:
For example:
This thesis is in agreement with the Postgraduate and Research Scholarship Regulation 1.3.1.33 (1) of the University of Western Australia, Australia and is presented as a series of three scientific papers. Two manuscripts have already been published and are included as PDFs and the remaining one is ready for submission. All the work presented has resulted from work done towards this thesis. There are five main chapters in this thesis; a General Introduction, three Experimental Chapters and a General Discussion. The General
Introduction covers the broad background for the work presented in the thesis in order to justify the research objectives presented above. A more focussed review of literature is presented in the Introduction of each experimental chapter. The three Experimental Chapters are presented in the format of scientific papers that can be read individually or as a part of the whole thesis. Each Experimental Chapter includes the following sections: Summary, Introduction, Materials and Methods, Results, Discussion and References. Each experimental chapter is preceded by a short preface, which serves to link the chapter to the broader hypotheses addressed by the thesis and clarifies the role of each listed author of the paper. This “thesis-as-a-series-of-papers” format results in some unavoidable repetition, especially in the Materials and Methods sections of Chapters 2 with 4; I have tried to keep such repetition to a minimum. The references for Chapters 1, 4 and 5 are combined into the back of the thesis.

Thanks to Kevin Foster for use of this excerpt.

5) Consider the use of chapter prefaces as a way to link published manuscripts and to report any key information that could not be included in a published manuscript (e.g. treatments that did not work or other constraints)

For example: Preface to Chapter Three

This chapter has been published as follows: “Foster, K., Ryan, M., Real, D., Ramankutty P., Lambers, H. (2013). Seasonal and diurnal variation in stomatal conductance and paraheliotropism of tedera (Bituminaria bituminosa var. albomarginata L.) in the field, Functional Plant Biology 40, 719-729”. The framework for this study is that light, relative humidity, and temperature are often quite contrasting in controlled-environment studies compared with field conditions and as such, stomatal behaviour in response to water stress might be considerably different. This study utilised two field sites within the medium-low rainfall zone of the WA wheatbelt with contrasting soil types. The first site at the Merredin site has a naturally highly acid soil (pH in CaCl₂ 3.8 at 100 cm), however, this was destroyed by rabbits following damage to a perimeter fence before many of the measurements could be completed and no results are reported. The second site at Newdegate is the focus of this chapter. I undertook the majority of work related to this chapter, including all tasks related to setting up the field experiments, germplasm selection, site preparation, planting, nutrition, irrigation design, scheduling of watering, biomass sampling, plant physiological and morphological measurements, and interpretation of the results. Associate Professor Ryan, Adjunct Professor Real and Winthrop Professor Lambers all contributed meaningful comments on the ideas presented. Dr Ramankutty provided statistical assistance and Dr Jane Speijers was responsible for the initial experimental design. Dr Davies contributed editorial assistance with the manuscript.

Thanks to Kevin Foster for use of this excerpt

The preface can also provide a suitable space to include a couple of colour photos – use a caption to explain their significance. An addendum could be similarly used. It may be handy,
for instance, if material was removed for publication, but is useful to present in the context of the thesis. See Peter Grose’s thesis for an example of effective use of prefaces to link together a series of published chapters.

6) Consider linking chapters with a diagram
For example (thanks to Mandy Trueman)
a) At end of Introduction
b) At start of each results chapter.

7) Other important things to consider:

a) If the journal has larger pages than the allowable thesis format you will need to shrink each page of a published PDF to fit – this may make the text very small (perhaps too small). Check in advance.

b) Copying and pasting in the PDF can result in loss of quality – this will differ among journals. Also best to check in advance. See Xiangling Fang’s thesis for an example of these issues.

c) The GRS still requires students to address examiners’ comments on published material. Examiners can still comment on published papers – although they are probably much less likely to if papers are inserted as PDFs as opposed to put in as text. I have never had a case where a student has had to address comments when a paper is inserted as a PDF – but if that did occur, you could probably address their comments through use of a preface or addendum to the chapter under question.

d) If inserting PDFs note that in the Certification of Final Version of Thesis Form, Section 7, you will need to check with the journal if the authors hold the copyright. If the journal holds copyright, you need to seek permission from the publisher (usually not a problem for a thesis). If you are including published papers in your thesis and do not
have permission you need to tick YES here and indicate which parts of the thesis these are.

e) Forewarn examiners in your invitation letter (ask for the School template for letter).

For example include a section such as the following:

Dear XXX,
I was hoping you could examine the PhD thesis of one my students. Nazanin Nazeri is a PhD student in the School of Plant Biology at The University of Western Australia, supervised by Mark Tibbett, Hans Lambers and myself. Nazanin plans to submit her PhD thesis in at the very start of July. Please find a draft abstract attached.

The thesis is structured as a series of 3 papers – two of these are already published:


etc

8) The last word

Joanne Edmondston from the Graduate Research School notes the following:

We have recently systematically reviewed of examiner’s comments in reports for theses containing published work - the evidence suggests examiners are looking for the same things in a thesis irrespective of whether the thesis contains published work or not. So we suggest the students consider the usual issues with theses which include:

- the coherence of the argument
- minimal repetition of information
- inclusion of sufficient background
- rationale for methods
- synthesis and assessment of collective significance of results.

While we believe formatting the thesis as a series of papers makes sense because it is an efficient way to build a track record and obtain a doctorate, some students may consider reformatting their publications if they feel they can’t address the issues listed above.