



Welcome to your Master of WRM Thesis year!

This year will be very different to your previous years at university. If you are undertaking research for the first time, this can be an exciting opportunity for you to learn how the frontiers of knowledge are expanded using research, and to focus completely on something that really interests you.

It can also be difficult to come to grips with a year that does not revolve around lectures, assignments and exams. Some new researchers can struggle with pacing their work through the year, keeping up their motivation, the relationship with their supervisors and knowing what is expected of them ... to name just a few of the challenges.

This document provides information that will help you succeed this year. You will already have chosen your topic and a supervisor (we will not enrol you into a thesis until we have your "Topic Outline" on file).

FORMS

Inevitably there are forms to complete during the year. These include progress reports, human ethics applications, field activity forms, health & safety forms etc.. These forms are referred to below, and you can access most via the WCFM website: <http://www.waterways.ac.nz/pgstudentforms.shtml>

If forms are not posted on the website, then they are specialised and your supervisor will provide them to you. WCFM's Administrator will remind you when it is time to complete these forms ... but only once. It is your responsibility to complete and submit these forms on time, and through the appropriate channels. These processes are designed to ensure that you stay safe, focussed and progressing well through your thesis year.

YOUR SUPERVISOR(S)

The role of the supervisor(s) in a Masters thesis is very important but can be quite variable, depending on specific student-supervisor arrangements. There are few hard and fast rules, so it is important that you and your supervisor(s) have the same expectations of how much guidance you need, working hours/conditions, resources and use of specialised space (e.g., labs), how often you will meet, how research costs will be met, how quickly they will check and return your work and what opportunities might exist for you (e.g. conference attendance) during the year .. etc.

Remember that your supervisor is there to **advise** you, not to do your research for you or even with you. It must be your thesis, and your's alone. Talk about all of these things at the start of your thesis, so that you

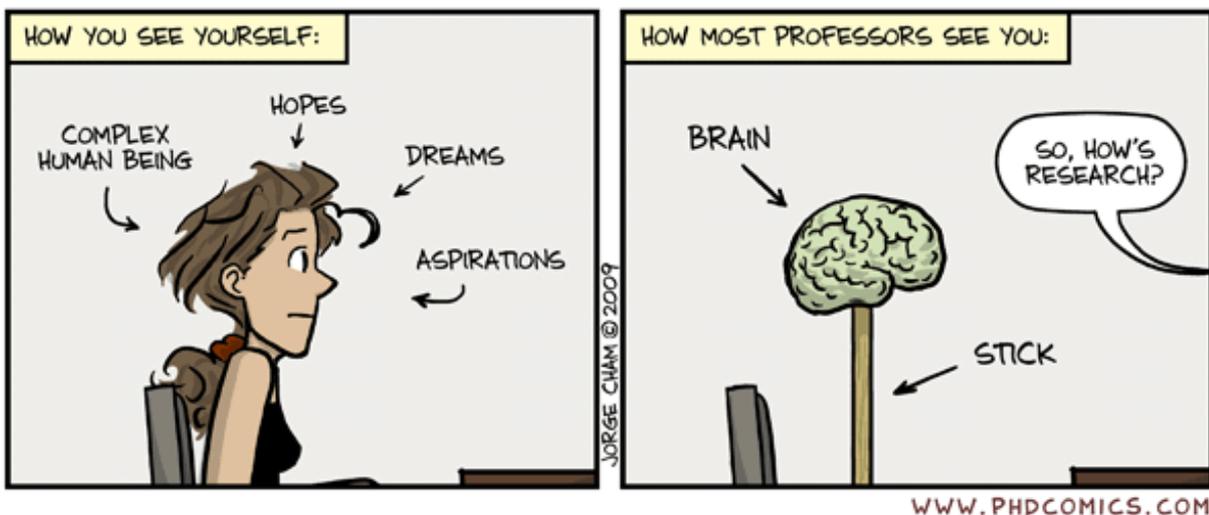
can commit to them when you complete the MEA form (at LU) or the Research Proposal application form (at UC).

You are required to have at least **TWO** supervisors; a main supervisor and a co-supervisor. You can have more co-supervisors, but too many can become problematic;

- Your **main supervisor** will be your principal source of advice and point of contact for the research. Do **NOT** use an intermediary, such as the Centre's Administrator, a tutor or a fellow student to convey information, queries or concerns to your supervisor. It is important that you keep a direct line of communication open with your main supervisor throughout your thesis. Always assume that it is up to you to seek help from your supervisor when you need it, **not** up to them to seek you out and see if you are OK. With the best will in the world, academic staff become very busy during the teaching year and you will need to fit in with their schedules as much as possible ... but they should always be willing to meet up and discuss your work. Making appointments is critical!
- Your **co-supervisor** is not usually appointed at the very start. You and your main supervisor will normally make a decision on this in the first month or so. The co-supervisor may have some expertise that is of relevance to your study, but more commonly their expertise will be in a related field. They may play a major part in your thesis supervision, or have very minor role. Again, it is important to be clear about expectations at the start of the thesis.

If you have concerns about your supervisor, supervision or thesis research that cannot be constructively discussed with, or resolved by, your main supervisor, **then** you should talk to the following people (in order, if the issue is not resolved) as quickly as possible;

- The co-supervisor
- The WCFM Postgraduate Coordinator
- The WCFM Director
- The Postgraduate Office at your university



Well ... it is not quite as bad as that, but remember that your supervisor is principally there to guide your **academic** development. If you are having problems in other areas of your life that impact on your ability to deliver on your research, let your supervisor know. They will help if they feel they can, but will more often guide you to more appropriate student health, advice or counselling services.

THE MWRM THESIS PROCESS at UC

(i) Getting set up and underway

Make a time to meet with your supervisor or supervision team either before, or as soon as possible after, your start date to plan your research. You will be allocated a desk and computer either within the Waterways Centre office, or close to your main supervisor's office depending on the nature of your project.

Whoever manages the space you are in will run through a Health & Safety orientation, set you up on your computer and make sure you have access to everything you need. If you have any problems with this process contact the WCFM Administrator (suellen.knopick@canterbury.ac.nz).

If you are using **laboratory** or other **specialised space**, you will also be required to undergo training in order to use that facility safely and appropriately. Your supervisor will help you get this set up with the facility manager as they know what it is you will be doing, and the risks or issues involved.

If you plan to do research with human or animal subjects, you will need to get **Ethics approval** before you begin the research. This can take time so get this application into the relevant UC Ethics Committee as early as possible. Your supervisor will guide you through this process.

(ii) The research proposal and proposal application form

One of your first tasks is to begin work on your formal research proposal, which is due **8 weeks** after your start date. Follow the "**WCFM thesis proposal guidelines**" document (on the Waterways website). The main part of this research proposal is a literature review to establish the context for your research. It should cover the wider issue, what has already been done, where the knowledge gaps are and how you propose to fill them (your research aim or hypothesis, and objectives).

You need to allow time for your supervisor to read and comment on your research proposal. This may be the first time your supervisor has seen your written work and they may make a lot of comments. Don't be discouraged, but do take their advice seriously. They know what is required for a Masters thesis, and they are trying to encourage you to write at that high standard now so your thesis writing will go well.

You will submit your final research proposal to the Waterways Centre's Administrator, together with a completed UC College of Science proposal application form.

NB. For **International NZ** Scholarship students, you will also need to supply a copy of your research proposal to your International study advisor at UC, and notify them of your plan for home-based research (an expected part of your study here). You would therefore be wise to get your proposal in earlier than the usual deadline in case the home based research component needs to be revised to be acceptable. The time allowed for home-based research is usually between 1 and 3 months, but alternative arrangements can sometimes be made.

(iii) Fieldwork health & safety

If your thesis work involved field work (e.g., work away from the UC or LU campuses) you will be required to complete and lodge various forms that describe what you are doing, where you are going, how you will minimise health and safety risks and when you will check in (with your supervisor or alternative contact) to confirm you are OK.

These forms include “Field Activity Plan” and “Field Activity Intentions”, “Activity Leader Health consent” and “Participant Field Activity consent” forms, and can be found on the WCFM website. Please be aware that you **cannot** undertake any fieldwork before you have completed (including your main supervisors signature) and submitted these forms to the person who will be your main contact while you are off site.

(iv) Research expenses

Your research proposal will include a draft budget for your research expenses. This would normally be no more than \$1500-\$2000. If your budget is higher than \$2000, then you and your supervisor will need to show that there are funds available (from somewhere) to make up the difference, before your research proposal will be approved.

WCFM will provide up to \$1500 for your research expenses over the course of the thesis. If you are housed in a different department, your supervisor(s) department or school will contribute some of these expenses, in accordance with the way your supervision and management is split between WCFM and that department or school.

All WRM students (and all students supervised by Waterways Centre members) can apply to the mid-year Waterways Contestable Fund, which can provide up to a further \$1000 for research expenses. This is usually awarded in August

NB. International NZ students can receive up to \$1000 from MFAT for their research expenses. They should include this in their research budget.

(v) Connecting with other WRM thesis students

Our thesis students can sometimes be spread across many different department at both universities, making it more difficult for you to connect with each other to share your experiences. The **Waterways Writing and Research Group** meets regularly to provide an opportunity to connect with each other, and to learn new skills or perspectives on a water issue.

(vi) The 6 month progress report

At the half way point of your thesis a brief progress report is required. This is simply a report on progress against milestones that were identified in the research proposal. The form is on the WCFM website and you will be reminded (once) when it is due. Please send this to the WCFM postgraduate coordinator when it is complete and signed by your supervisor.

(vii) The WCFM Postgraduate Conference

All students engaged in MWRM a thesis research are expected to present at the **WCFM Postgraduate Student Conference**, which is held in **November** each year. An oral presentation is required, but you

may also present a poster if you would like to. Other freshwater research students supervised by WCFM members (there are over 40 staff at both universities) are also invited to present, as oral presentations or posters, and the day is well attended by external agencies such as regional councils, CRI's, environmental consultancies and freshwater industries, agencies and interest groups.

(viii) Writing the thesis

There will be two examiners for your thesis .. neither of them will see how hard you have worked, the challenges you have faced or the hours you have put in. **All** they will see is your **thesis**. If it is not as well written and carefully prepared as you can possibly manage ... you will **not** get the grade you deserve.

Discuss how you want to go about writing your thesis with your supervisor(s). It is important to establish a thesis structure early and it is normally a good idea to write "through" your thesis year ... developing ideas for your chapters and populating them with information as it becomes available. It is usually a good idea to give your chapters to your supervisor one at a time, as they are finalised, and wait for their comments before further changing that chapter, or submitting others to them. Please allow your supervisors at least **two weeks** to read and comment on your chapters, unless you have been able to make other arrangements with them (as confirmed in an email). Once all of your thesis chapters have been prepared and reviewed, your supervisor will normally want to see a correctly formatted draft of the full thesis, together with the abstract and any other sections they may not have seen previously (e.g., table of contents, reference list, appendices... etc).

Note that a supervisor will normally only read each full chapter draft once, so the more complete and correct your draft is, the more constructive comments you will get from your supervisor. Don't ever submit a half-finished chapter to them, hoping they can fill in the gaps for you! However, if you are unsure about how to structure a particular chapter, then run your ideas past your supervisor early on.

It can be very dispiriting if you get a lot of comments and suggested revisions from your supervisor ... but remember that this is one of the main ways they can help you produce your best possible thesis. Many supervisors will make lots of comments and suggestions on the first draft chapter you submit, but will not repeat themselves on subsequent chapters if you don't take this advice.

Other general suggestions:

- **Back-up** your work regularly ... both draft thesis chapters and your research data. You can use the university provided P or H drive, as it is backed up every night, or another back-up option that you know to be secure. Do not rely on a single memory stick as your back up, and if you are saving to the "cloud" or similar, remember that there is no one to chase if you lose data there.
- Use **Endnote** to manage your references. The library offers Endnote tutorials if you need them.
- **Long document** format training can be helpful. The library offers tutorials on how to format long documents in MSWord using Styles.

(ix) Other research outputs

During your thesis year you may get opportunities to present your research to different audiences, or to talk about your work to external groups such as the media, community groups, industry, councils etc. Or you may be asked to prepare articles on your work for general distribution, or other written work (e.g., technical reports). This is all good experience and we encourage you to develop and hone your communication skills.

However, you must always run any such communications by your supervisor **and** give them enough time to review the work and give you feedback (usually at least two weeks for written work, and at least 3 days for oral or poster presentations and short articles). Allow for this time, and time to make changes, when you are planning to meet submission deadlines etc. If your research is being funded by external bodies, they may also need to vet such communications (this will be written into your funding agreement with them).

(x) Thesis submission.

Finally ... the end is nigh! The **UC Postgraduate Office** establishes the procedure for thesis submission and this can change slightly from year to year. Check the PG Office website for the latest information. Your thesis is due no later than midnight on the last date of your enrolment. There are forms you need to complete (and your supervisor needs to sign) as part of the submission process, so don't forget to allow time for this. At the time you submit your thesis, can you please also send a **pdf copy** to the **WCFM Administrator**, together with a copy of any useful data you collected, that is not included in your thesis.

Your main supervisor will complete the notification and selection of examiners forms as soon as they are able to ... the PG office will ensure that these are completed in a timely fashion. You will be asked to confirm that you are happy with the choice of examiners (or otherwise). As soon as examiners are confirmed, your examination will proceed. It may take a month or two, depending on how quickly the examiners are able to read and review the thesis. You will be contacted by the UC PG office once your grade has been finalised.

THE MWRM THESIS PROCESS at LU

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Whoever manages the space you are in, will run through a Health & Safety orientation, set you up on your computer and make sure you have access to everything you need. If you have any problems with this process contact the WCFM Administrator (suellen.knopick@canterbury.ac.nz)

If you are using **laboratory** or other **specialised space**, you will also be required to undergo training in order to use that facility safely and appropriately. Your supervisor will help you get this set up with the facility manager as they know what it is you will be doing, and the risks or issues involved.

If you plan to do research with human or animal subjects, you will need to get **Ethics approval** before you begin the research. This can take time so get this application into the relevant LU Ethics Committee as early as possible. Your supervisor will guide you through this process.

(ii) The research proposal and Mutual Expectations Agreement (MEA) form

One of your first tasks is to begin work on your formal research proposal, which is due **8 weeks** after your start date. Follow the "**WCFM thesis proposal guidelines**" document (on the Waterways website). The main part of this research proposal is a literature review to establish the context for your research. It should cover the wider issue, what has already been done, where the knowledge gaps are and how you propose to fill them (your research aim or hypothesis, and objectives).

You need to allow time for your supervisor to read and comment on your research proposal. This may be the first time your supervisor has seen your written work and they may make a lot of comments. Don't be discouraged, but do take their advice seriously. They know what is required for a Masters thesis, and they are trying to encourage you to write at that high standard now so your thesis writing will go well.

Lincoln University's Research Proposal Form is available on the WCFM website. You will submit your final research proposal on this form to the Waterways Centre's Administrator, together with a completed MEA form.

NB. For **International NZ** Scholarship students, you will also need to supply a copy of your research proposal to your International study advisor, and notify them of your plan for home-based research (an expected part of your study here). You would therefore be wise to get your proposal in earlier than the usual deadline in case the home based research component needs to be revised to be acceptable. The time allowed for home-based research is usually between 1 and 3 months, but alternative arrangements can sometimes be made.

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The faculty that your main supervisor is in at LU will provide up to \$2000 for your research expenses over the course of the thesis.

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(vi) The 6 month progress report

You will be required to complete a 6 month progress report for every 6 month milestone that you are enrolled for. You may already have completed some 6 month progress reports in your first year, if you enrolled directly in the Masters degree at LU, rather than doing a PG Dip in you first year. These reports will keep happening for along as you are enrolled in your thesis. The form is on the WCFM website and you will be reminded (once) when it is due. You need to complete it in discussion with your supervisor, then send it to the WCFM Postgraduate Coordinator at LU (jennifer.webster-brown@lincoln.ac.nz).

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- Use **Endnote** to manage your references. The library offers Endnote tutorials if you need them.
- **Long document** format training can be helpful. The library offers tutorials on how to format long documents in MSWord using Styles. The LU Library provides specific guidance on how to prepare at LU Masters thesis at:
<https://library2.lincoln.ac.nz/Documents/2015%20Style%20GuideThesisDissertation.pdf>

(ix) Other research outputs

During your thesis year you may have the opportunity to present your research to different audiences, or to talk about your work to external groups such as the media, community groups, industry, councils etc. Or you may be asked to prepare articles on your work for general distribution, or other written work (e.g., technical reports). This is all good experience and we encourage you to develop and hone your communication skills.

However, you must always run any such communication by your supervisor **and** give them enough time to review the work and give you feedback (usually at least two weeks for written work, and at least 3 days for oral or poster presentations and short articles). Allow for this time, and time to make changes, when you are planning to meet submission deadlines etc. If your research is being funded by external bodies, they may also need to vet such communications (this will be written into your funding agreement with them).

(x) Thesis submission.

Finally ... the end is nigh! At LU you do not have to complete your thesis in 12 months (as at UC) ... you can take longer if you wish to. However, you do have to keep paying fees and keep completing progress reports for as long as you are enrolled, and you cannot submit your thesis if you have not been continuously enrolled up to (and at) that time. We **strongly recommend** that you try to complete your thesis in **12 months**.

The **Faculty Office** establishes the procedure for thesis submission and this can change slightly from year to year. Check your Faculty contact (usually the Faculty Administrator) for the latest information. There are forms you need to complete (and your supervisor needs to sign) as part of the submission process, so don't forget to allow time for this. At the time you submit your thesis can you please also send **a pdf copy** to the **WCFM Administrator**, together with a copy of any useful data you collected, that is not included in your thesis.

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