



University
of Victoria

Health Information
Science

Nursing

Guidelines for Research Projects for the NUHI Dual Degree Student

The dual degree program requires a completion of 31.5 units of study, including a research project or thesis. The following guidelines and frequently asked questions are designed to assist NUHI students to fulfill the requirements to complete a *research project* in the Master of Nursing and Master of Science in Health Informatics dual degree. Projects should be designed such that they can reasonably be completed within a twelve months from start to finish, the equivalent of 3.0 units. It is expected that students will work closely with, and under the guidance of, their co-supervisors in Nursing and Health Information Science.

What is a research project?

A research project is designed to help students master the skills to complete a complex project in a specific area of study. Research projects address a particular issue or problem that needs investigation. Projects may use a research or an applied approach in seeking new knowledge. Research projects may be undertaken within a student's work environment, but they must demonstrate a high level of achievement in the application of advanced knowledge and be independent from regular work responsibilities. For the dual degree program, a research project must contain knowledge development for nursing and health informatics fields.

How is a research project similar and different from a thesis?

Both the research project and thesis will require an ethics consult prior to initiating any work. Both research projects and theses have a written report deliverable and require an oral defense.

The scope of work for a research project tends to be more limited than a thesis and often takes less time to conduct. The number of units for the research project (3.0) is less than the thesis (6.0) and students completing a research project will need to take at least 2 additional courses (3.0 units). The length and structure of the written report will vary between a research project and a thesis. Typically, a research project written report may be shorter and have a smaller scope of work. The thesis will represent a more in depth discovery of the relevant literature and research methodology within the final thesis. The thesis requires a more formal, rigorous defense with an external examiner.

What are some examples of research projects?

Research projects in the past have included:

- Usability inspection of a user interface
- Replication of prior methods or models with a new publicly available dataset
- Secondary data analysis of an existing publicly available dataset
- Computer simulation modeling using a publicly available dataset

- Small scale interviews or surveys
- Development of conceptual frameworks particular to a setting or clinical situation.
- Synthesis of the literature for policy or practice recommendations
- Systematic literature reviews suitable for publication (e.g. scoping reviews, rapid reviews, etc.)
- Application of evidence in designing a component of a clinical information system

What criteria must my research project meet?

Your research project should:

- Contribute new knowledge to the fields of nursing and health informatics
- Reflect advanced critical thinking and a scholarly approach to problem investigation
- Demonstrate a high level of achievement in the application of nursing and health informatics knowledge
- Contain a written report summarizing the relevant background material, the methods used, the results obtained and a discussion of the implications of your work

What are the steps for completing a research project?

Developing a proposal

1. Please discuss your research topic area with both your supervisors to develop your ideas and maintain a scope that is appropriate for a research project
2. Develop a research project proposal outlining the relevant literature, the project objectives and the intended methods. Your supervisors may have specific requirements for how you organize your research proposal, so please check with them. Please follow the Faculty of Graduate Studies thesis templates for formatting title pages, etc.: <https://www.uvic.ca/graduatestudies/assets/docs/docs/thesis/Thesis%20format%20checklist%20and%20sample%20pages%20-%20UVic%202016.pdf> It is anticipated that the proposal would include the following sections:

- Title page
- Background and significance
 - An introduction which addresses what the student hopes to learn from this project and why it is of interest. It should include a statement of problem or area of concern/interest that links the project to relevant literature
- Research Project Objectives and Deliverables
- Methods to be used
- Proposed time-line for the completion of the project time-line and an estimated budget (if applicable)
- Ethical considerations

The project proposal length will vary. Your supervisors may require several revisions as you refine your objectives and methods. You will need proposal approval from both of your supervisors prior to starting your project. Any subsequent changes to scope or methods for your project also need to be approved by both supervisors.

Obtain ethics consult

3. Once the proposal has been accepted by your supervisors, obtain an ethics consult. **All research projects** must have an ethics consult prior to beginning their work. If your research project does not involve any human data, it is likely that the UVic Human Research Ethics Board will advise you that a formal review is not necessary. Please discuss this with your supervisors. You can obtain this consult by emailing the UVic HREB with your project proposal. Any response from the UVic HREB should be saved and shared with your both supervisors and the Graduate Program Assistants.

Possible HREB Application and Organizational Operational Approvals

4. For some research projects, with the collection of human data, ethics review and approval will be necessary. If you are working with previously collected, identifiable human data, interacting with humans or observing humans, you will need ethics review and approval prior to beginning your work. Your supervisors will guide you in developing an ethics application. Your supervisors and either the Director (Nursing) or the Director (HINF) must approve your ethics application prior to it being submitted to the UVic HREB. You must receive the HREB ethics approval certificate prior to beginning your work.
5. For some students, their projects will involve personnel, resources or facilities belonging to health authorities and those research projects will require operational approval in addition to ethics approval. Your supervisors can assist you with the development of your operational approval applications. In these cases, you must receive operational approval prior to beginning your work.
6. After receiving the appropriate approvals, you may begin your work. As you gather data, conduct analyses, and interpret results, work with your supervisors closely.

Final report and Oral Exam

7. After conducting your research project, you will draft your final report. The organization of your final report may vary depending on the type of project you have worked on. Please consult with your supervisors for guidance before beginning. You will likely submit several revisions of your final report before you have the version ready for an oral defense. Your supervisors will tell you when your work has met the criteria for scheduling your defense. Your supervisors will collaborate to identify a Chair for your oral defense.
8. You will work with your supervisors, the Chair, and the Graduate Program Assistant to schedule the oral defense. The University requires *at least* 10 business days to schedule an oral defense.
9. For your oral defense, you should prepare a 15-20 minute presentation on your work. Your supervisors can give you advice on your presentation as you develop it.
10. Following a successful oral defense, you may be asked to make changes to your written report. Any changes will be specified in writing by your supervisors and they will review your changes prior to approving your defense.

How long does it take to complete a research project?

The length of time to complete a research project will vary depending on the nature of the project. Projects that require ethics and operational approvals tend to take longer than those

that only require an ethics consult or those that only require an ethics review. Research projects that involve human participant recruitment take longer than those that use existing data or already have participants. Other factors influencing completion are whether or not you are working and your writing skills. Students who are working full time and/or who find writing to be a difficult process tend to take longer to complete their projects. Most students complete their research projects in 9-18 months, but your experience may vary.

Do research projects need an ethics consult?

Yes, as mentioned above, all research projects require an ethics consult. Without this documentation, your oral defense of a project cannot be scheduled. For projects that do not involve humans or their data, after your project proposal has been approved by your supervisors, you may email your proposal to the UVic HREB for an ethics consultation. If they reply that an ethics review is not required, save the email for your records and forward a copy of it to your supervisors and the Graduate Program Assistant. If you know your research project will require an ethics review and approval, the certificate of approval from the HREB will serve as your documentation of an ethics consult as well as approval.

Do I have to write a final report for my research project?

Yes, all research projects are required to have a written component, which documents the work done and the knowledge gained from the work. Unlike a thesis, research projects are not required to be submitted to UVic Space for public access. If you have an exceptional research project, your supervisors may ask you to submit it as an example for future students. Often following graduation, students revise their final reports into manuscripts and submit them to peer-reviewed journals.

Are there formatting instructions for a research project?

APA 6th edition formatting is required for the text and references of your final report. Specific organization of the content in your final report will come from your supervisors.

Will I have an oral defense for my research project?

Yes, all research projects require an oral defense.