

# **FNH 499 Thesis Guidelines**

## **General Course Description**

This course provides a means for individual students to undertake customized projects with a supervising faculty member, to develop and strengthen research skills, and to accommodate special research interests that cannot be met through other FNH courses. FNH 499 may be taken in lieu of FNH 425 in majors where this course is required. There is no set or synchronous time for this course. Instead, the work plan is arranged and agreed to by the student and the supervising faculty member. Students will be expected to spend approximately 300 hours on this course.

## **Course Registration**

Students should contact the individual faculty member(s) with whom they are interested in conducting a thesis, well in advance of the beginning of the academic term. For example, students can approach potential supervisors in May or June regarding a thesis starting in September. Opportunities for conducting thesis projects are limited. Upon identification of a supervisor and mutual agreement on a research topic between student and supervisor, admission to FNH 499 is facilitated through a course coordinator, and must be recommended by the faculty member who will be supervising the work that the student is to undertake.

Formal registration into the course requires submission of the registration form to the course coordinator. If the project to be conducted is associated with a paid or volunteer position held by the student, care must be taken to ensure that any hours of work on the thesis project are over and above those required by the related position. The supervisor must be satisfied that this requirement has been met. Normally, a minimum of 50% of the work required for the course must be conducted during the session in which the student is enrolled in the course. Exceptions to this requirement may be requested in advance where its application would result in a course overload, unnecessary delay in time to graduation, or the imposition of extra fees.

## **Course Evaluation**

The precise breakdown of how the student will be evaluated must be agreed upon by the student and faculty supervisor and included in the course registration form. The grade breakdown must follow the requirements in the table below. Examples of evaluation schemes for FNH 499 can be found on the Canvas site and the [course wiki page](#). The evaluation scheme must include a thesis report and an oral presentation. Additional assessments such as evaluation of lab work, or the design of a research poster may also be included if desired.

<b>Assessment</b>	<b>Weight</b>
Project Timeline	2.5%
Progress Update	2.5%
Thesis Report	40% - 85%
Oral Presentation	10% - 55%
Others (optional)	Determined in consultation with supervisor

### **Course Deliverables**

Course deliverables required by all students enrolled in FNH 499 are clearly described below, and must be submitted through the course Canvas site. Examples of each required submission are provided on Canvas as a guide, but the specific structure and content may vary for different projects. Each submission should be created by the student in consultation with their faculty supervisor. Students must upload all submissions according to the instructions, and by the deadlines posted on Canvas. The required submissions are listed in the table below with typical deadlines.

<b>Item to Submit on Canvas</b>	<b>Due</b>
Copy of the Course Registration Form	Start of the course
Project Timeline	Within 4 weeks of the start of the course
Progress Update*	Mid-point of course
Thesis Report	End of course

\*The name of a faculty member who will serve as a second evaluator for the thesis report must be stated in the progress update.

The **project timeline** should clearly summarize the work plan and is arranged and agreed to by the student and the supervising faculty member. It must be set out in writing and is generally no more than two pages. Typically, the planned work includes a literature search, design of experiments, experimental work, and generating a report(s) and presentation(s). A regular schedule of consultations should be pre-arranged between the supervisor and the student in order to monitor and discuss progress and time spent by the student on the project. If the project is to be conducted totally, or in part, at a location other than UBC, the supervising faculty member will make appropriate arrangements for regular monitoring of student progress and the project timeline. This may entail the appointment of an on-site co-supervisor.

The **progress update** is typically a 1-2 page written progress report that is shared with the project supervisor approximately halfway through the term. This document should be viewed as an opportunity to reflect on the work plan and adjust as needed. Typically, it will include a short description of the progress to date, a comparison of progress against the originally proposed timeline, any significant changes in the aim or approach for the project, and the remaining experiments that are expected to be completed. The document should also include the name of a second evaluator for the thesis report, selected in consultation with the faculty supervisor. Typically, the second evaluator will be another faculty member that is also supervising a thesis student and who has some subject matter expertise in the topic.

Students completing an undergraduate thesis must present an **oral presentation** to an audience outside of the research group. A day will be scheduled during the exam period for students to present to peers and faculty members, who will provide written feedback on the presentation. The supervisor will then assign a grade based on the audience's collective feedback. If alternative venues such as MURC, LFS community meeting, or a conference etc. are used, then it is the responsibility of the supervisor to collect adequate feedback to assign a grade. In all cases, the feedback should be shared with the student and the grade posted to Canvas in a timely manner.

The format for the **thesis report** should follow that of a traditional thesis (outlined below); however, another format suitable for the project may be used as directed by the faculty supervisor. Feedback on the thesis report should be shared with the student and the grade posted to Canvas prior to submission of the student's final grade in the course.

### **Thesis Report Guidelines**

A traditional thesis report should contain, in the order given, the following sections:

**Title Page:** This page contains the title, author's name, and the date.

**Abstract:** This is a condensation of the contents of the thesis, usually 200 words or less, giving significant information in the report.

**Table of Contents:** This should list all major and subheadings accompanied by the page on which they are found.

**List of Tables:** The table number, caption, and page on which it is found are listed.

**List of Figures:** The figure number, legend, and page on which it is found are listed.

**Acknowledgements:** This section expresses thanks and appreciation to individuals, institutions, or organizations that were particularly helpful in the carrying out of the thesis work. This section is optional.

**Introduction:** The introduction outlines to the reader the thesis subject, its importance, presents the specific problem of the thesis and indicates the nature of the investigation carried out.

**Literature Review:** This section generally outlines or discusses findings reported by others in books and journals, relating to and leading to the proposed investigation as related in the thesis.

**Materials and Methods:** This section describes the experimental procedures employed and the equipment and facilities used, in a manner which would allow others to duplicate the work.

**Results and Discussion:** This section can be written separately or as a combination of the two. The format of tables and figures should be as in a major journal in the related field.

**Conclusion:** This section reports the conclusions reached on the basis of evidence presented in the discussion and proposes new avenues to explore in future research.

**References:** This should be a listing of literature cited in the thesis. The format to be used should be the same as in a major journal in the related field.

**Appendix:** Appendices are repositories for details that must be recorded because they may be needed, but would slow the reader down unnecessarily if placed in the body of the thesis. Appendix materials must be referred to in the body of the thesis. Calculations, detailed analyses, and test figures are typically found in this section.

### **Student Responsibilities**

- Reach out to potential faculty supervisor(s) who they are interested in working with
- Complete the course registration form in consultation with faculty supervisor and submit to course coordinator
- Allocate appropriate time to the course
- Take initiative in gaining the necessary background knowledge and skills, and planning and executing the research
- Complete course requirements by the designated due dates (submit via Canvas)

### **Supervisor Responsibilities**

- Select an appropriate research project in conjunction with the student
- Discuss the project objectives, assessment methods and rubrics, and grade breakdown with the student prior to the student completing their course registration form
- Provide suitable laboratory supplies and equipment to perform the work
- Review the student's project timeline and mid-course progress update
- Provide guidance on experimental design, data analysis, and presentation of results
- Schedule regular meetings with the student (e.g. weekly or biweekly)
- Review feedback from the student's oral presentation and assign a grade
- Provide feedback on the student's draft of their thesis report in a timely manner
- Assess student's final thesis report and provide feedback

### **Course Coordinator Responsibilities**

- Make sure all required information is correctly included in the course registration form
- Submit approved forms to LFS Student Services to enroll students
- Monitor Canvas site to ensure students have submitted the required activities on time, and send one-time reminder emails if needed
- Coordinate final presentations during the exam period
- Submit students' final grades to LFS Student Services

## Frequently asked questions (FAQ)

*How does FNH 497 differ from a thesis (FNH 499)?*

A thesis requires that a student spend 6 credit hours conducting research, write a formal thesis, and deliver an oral presentation of the project findings. FNH 497 also includes a written report but the structure is more flexible, and a presentation may or may not be required in addition to other possible deliverables. Note that FNH 497 cannot substitute for FNH 425 for students required to complete FNH 425 or FNH 499 in order to graduate.

*How do I enroll in FNH 499?*

- First, contact the faculty member you would like to work with, to see if they have the capacity to supervise you as an undergraduate thesis student in the term(s) in which you would like to complete FNH 499
- If a faculty member agrees to supervise you, develop a plan for an appropriate thesis project through discussion with them
- Fill out the course registration form in consultation with your faculty supervisor and submit it to the course coordinator
- The course coordinator will then send your course registration form to LFS Student Services who will enroll you in the course.
- After being enrolled in the course you will have access to the Canvas course where you will submit your required course activities

*Can FNH 499 be conducted in 1 term?*

Yes, you can complete an undergraduate thesis in one term but be prepared to dedicate twice as much time to your project. It is important to consider the nature of your project and whether 3-months is enough time to collect/analyze the data.

*Can I enroll in FNH 499 in Winter Term 2 and Summer Term 1?*

Unfortunately, you cannot enroll in an undergraduate thesis that starts in Winter Term 2 and finishes in Summer Term 1.

**APPENDIX**

**FNH 499 Directed Studies Registration Form**

<b>Student Name:</b>	
<b>UBC Student #:</b>	
<b>Term(s):</b>	
<b>Credit Level:</b>	
<b>Start Date:</b> (if other than the start of term)	
<b>End Date:</b> (if other than the end of term)	
<b>Project Site:</b>	
<b>Site Supervisor:</b> (if applicable)	
<b>Faculty Supervisor:</b>	

<b>Approvals</b>	<b>Electronic Signature</b>	<b>Date</b>
<b>Student</b>		
<b>Faculty Supervisor</b>		
<b>Site Supervisor (if applicable)</b>		
<b>Course Coordinator</b>		

***Project description and grade breakdown must be provided on the following page***

## Project Description and Evaluation

Please fill in each of the sections below. Example project descriptions, evaluation schemes, and grading rubrics can be found on the [course Wiki page](#).

### Project description including objectives

### Student roles and learning outcomes

### Evaluation Scheme (review requirements in the FNH 499 guidelines)

### Grading rubrics for each assessment method: