



LWS 548 – MLWS Major Project

2021-22

LWS 548 (6 credits) is the “capstone” course for the professional Master of Land and Water Systems program. It is an opportunity for students to demonstrate how they can address a land and water system issue within a holistic framework, one that is based on credible scientific analysis and synthesis, and that is communicated clearly and objectively. The final products include a “professional paper” and an open forum oral presentation, where students can demonstrate their academic achievements in the professional program. To accompany this, students will publish a unique “communication feature” that highlights their key findings and recommendations, to inform and engage alternative audiences.

The LWS 548 course provides the opportunity for each student to: identify an area of focus that is of particular interest to them and, either in a team approach, or as an independent project, demonstrate their capabilities as professional graduates of the MLWS program.

Leading up to the LWS 548 capstone course, students will have completed several courses related to the land and water system, as well as attended the LWS 510 seminar. The seminar series introduces issues, constraints and concerns related to the land and water system, as well as provides guidelines on how to prepare research and project proposals, and the basic elements of oral presentations. The LWS 550 – Professional Communication Strategies course will equip students with tools for professional writing, as well as digital and multimedia formats.

Major Project Assessment Components

1. **Written Proposal (10%)**
2. **Final Report (70%)**
3. **Communication Feature (10%)**
4. **Oral Presentation (10%)**

Written Proposal

Students are encouraged to discuss their ideas, their educational passions and concerns with their professors and, of course, with the MLWS Team. Students will be required to identify the “topic” of their Major Project to meet the requirements of LWS 548 **by the end of Term 1 (see timeline on p. 3).**

Students will continue their investigation into their topic through literature review and dialogue with a range of academics and non-UBC professionals. Students will submit a draft LWS 548 Project Proposal **by the Term 2 Reading Break (February 27, 2022).**

The Final LWS 548 Proposal must be submitted to the Director **by the end of Term 2 (April 29, 2022)**. *
The MLWS office will attempt to identify appropriate professional co-supervisors following the submission.

The written proposal (2-3 pages) must provide:

1. A title and a rationale of the proposed land and water issue,
2. The theoretical framework, including the assumptions, objectives, and the proposed contribution to the land and water system issue,
3. The proposal must be approved (signed) by a supervisor (and co-supervisor as appropriate), and
4. The proposal shall be forwarded to the MLWS office for final approval.

All students are encouraged to make arrangements with their supervisors (and their co-supervisors) to schedule meetings during the duration of the LWS 548 program.

****Keep in mind that in LWS 510, you will be giving an oral presentation on your Major Project proposal in mid-March. Feedback on this presentation will help to inform your Final Proposal due in April.***

Final Report

The final report will consist of a professional paper based on an approved topic. The usual length is 30-40 pages, including Tables and Figures.

A final draft of the LWS 548 report must be presented to the student's major supervisor **by July 4, 2022**, in order for the supervisor to make comment and suggestions on the draft. The suggested format for the report is explained below on p. 4.

The final report must be submitted to the MLWS Academic Coordinator **by August 2, 2022 for review**. The oral presentations will then be scheduled (see below) and will allow for peer review of the LWS 548 project. Following the presentation, final revisions of the document must be made and submitted to the Director for approval and assignment of academic grade **by August 17, 2022**. The LWS 548 Major project grade will be submitted, and the Faculty of Graduate and Postdoctoral Studies will be notified if your program requirements have been completed.

Communication Feature

As we embark on a new venture in terms of both a requirement for a Major Project (Professional) and not a traditional thesis, as well as experimenting with untested formats, we encourage innovations in the delivery of your project results. Some might argue we have a responsibility to make our work as accessible as possible, without compromising the quality of the message. So, in addition to your Final Report, you must provide an illustrative message of the major outcomes of the professional paper.

The format of your communication feature could include one of the following: **infographic, visual abstract, poster, website, story map, etc.** Your choice of format will depend upon your target audience, the key message you want to convey, and ultimately it is your choice. The intent is for it to be concise (i.e., one page) and engaging (i.e., visual), and to inform potential readers of your key findings to help

them decide if they want to read your entire report. It is not a substitute for the report, for it cannot include all the details of your analysis.

This is an opportunity for you to be creative! More information about different communication forms will be provided in LWS 550 – Professional Communication Strategies.

The communication feature is also due at the time as the final report, **by August 2, 2022 for review.**

Oral Presentation

Each student has up to 15 minutes to present the key elements of the final report, followed by a question & answer period. Oral presentations will take place in the **second week of August**. These will be scheduled in July.

Evaluation criteria for the oral presentation follow the criteria presented in the LWS 510 Seminar Syllabus.

Timeline

DATE	COMPONENT
DECEMBER 15, 2021	Major Project Topic Statement due
FEBRUARY 27, 2022	Draft Major Project Proposal (in consultation w/supervisor) due
<i>Late-MARCH, 2022</i>	LWS 510 Proposal Oral Presentations
APRIL 29, 2022	Final Major Project Proposal due (to be approved by supervisor)
JULY 4, 2022	Submit Complete Draft Report to Major Supervisor for feedback
AUGUST 2, 2022	Final Report and Communication Deliverable Due
AUGUST 8-12, 2022	Final Oral Presentation scheduled this week
AUGUST 17, 2022	Revised Final Report and Communication Deliverable Due

Potential Format for Professional Paper (LWS 548)

*Note: Students are not required to follow this format; this is meant as a guideline. Please contact mlws.program@ubc.ca if you would like to discuss an alternative format.

1. TITLE PAGE

The title provides the first impression of whether someone wants to read the document, thus it should be accurate about the subject matter, short, descriptive and “catchy”. The page should provide essential information about the author including name, affiliation, date and contact information.

2. EXECUTIVE SUMMARY

The executive summary is an expanded “abstract”! Expanded by the fact that it summarizes the complete “story” so that the casual reader (Busy Executive?) has a complete appreciation of the topic, the approach, the limitations and the conclusions. Usually NO references are included unless there is a “direct quote”! (*~250 words in length*)

3. INTRODUCTION

- An “attention grabber” or a brief statement that informs the reader that this document is important - an example, a statistic, etc.
 - e.g. Approximately 70% of cultivated land is degraded, but the application of novel innovations show promise of reversing this trend.
- Present an overview of the concern,
- Define or describe key terms and concepts,
- Identify key and pertinent literature,
- State any assumptions or limitations on the breadth of the paper.
 - e.g. This paper focuses on the concerns in British Columbia and how they compare to the global literature.
- A concise “thesis statement” or statement of overall goal. Inform the reader what the document is about and why it is important.
- All positive statements, definitions, statistics, claims, etc. MUST be cited and referenced.
- **Then Specific Objectives should appear near the end of the Introduction section.**

4. METHODS

A brief description of the approach and methods used. In the MLWS program, seldom do students have the opportunity to incorporate “original” data, thus the methods most commonly are analysis of published or modelled data sets, literature synthesis, and personal communications.

5. THE BODY (Results & Discussion)

This section may be separated into “Results” and “Discussion” or combined into Results and Discussion. It is common for professional papers to have a combined section of Results and Discussion, as professional papers rarely contain original data.

- Clearly present the results of the work as outlined by your specific objectives and indicate the method(s) used to gain the results. Make every effort to identify that the results are in agreement with the stated specific objectives.
 - Carefully prepare appropriate Tables and Figures that highlight the results.
 - Keep in mind that Tables present lists of numbers used to provide detailed information to the reader. Usually the actual number is important. Tables are commonly used to present raw data; not relationships among the data.
 - Figures are visual presentations such as graphs, charts, drawings, photos, or maps. They provide visual images that many people find effective to understand trends and patterns of relationships.
 - Figures and Tables must not present the same data, or information (avoid redundancy).
- The use of appropriate statistical analysis of data and testing of models (sensitivity analysis) is recommended.
- Follow the results by a discussion of your results in relation to the literature pertinent to your subject matter. Explain any similarities, differences and how the results have added to the understanding of the goals of the work.
- Use, as appropriate, quotations and literature evidence to support the results.

6. CONCLUSIONS

- Using new words and style, remind the reader of the specific objectives.
- Briefly provide a summary of the major points made in the Discussion and that respond directly to each of the stated objectives.
- Attempt to give a response to the “attention grabber” from the Introduction section.
- Do NOT bring in any new information - everything reported here must have been discussed in the document prior to the Conclusions!

7. RECOMMENDATIONS

- This provides the author the opportunity to reiterate the significance of the work, or how the results are meaningful!
- Also provide any limitations (but not apologies) of the document and suggestions for further analysis.

8. LITERATURE CITED

Carefully record correctly all the literature cited and all personal communications. Use a consistent citation style and format (e.g., APA. Visit the UBC Library website for more information on citation styles).

Note: It is recommended that you use a citation management system (e.g., RefWorks) right from the beginning of the Major Project exercise. Visit UBC Library Research Help for more information.

9. ACKNOWLEDGMENTS

This is a personal decision whether the author wishes to express gratitude to individuals or institutions that aided in the preparation of the document.

10. APPENDICES

If there are data that are relevant to the goals and specific objectives and aid in providing information on which the Discussion was based, this may be presented as an appendix. Appendices must have a title and must be self-explanatory.

ACADEMIC INTEGRITY

The integrity of academic work depends on the honesty of all those who work in this environment and the observance of accepted conventions such as acknowledging the work of others through careful citation of all sources used in your work. Plagiarism - including self-plagiarism - and other forms of academic misconduct are treated as serious offences at UBC, whether committed by faculty, staff or students. You should be aware of the sections of the University Calendar that address academic integrity and plagiarism (<http://www.calendar.ubc.ca/vancouver/?tree=3,54,111,959>).

The UBC library also has a useful web-based Plagiarism Resource Centre that explains what plagiarism is and how to avoid it (<http://help.library.ubc.ca/planning-your-research/academic-integrity-plagiarism>).

Turnitin is an online plagiarism checker and educational resource provider. They have created a helpful infographic, identifying the 10 most common examples of plagiarism, called the *Plagiarism Spectrum*.
http://turnitin.com/assets/en_us/media/plagiarism_spectrum.php