School of Planning Master's Research Paper Guidelines

Preamble: These guidelines need to be read within the context of other relevant university policies, including but not limited to the <u>General Policies outlined on the Secretariat website</u> and the rules and regulations outlined in the <u>University of Waterloo Graduate Studies Academic</u> <u>Calendar</u>. Students and supervisors should also consult the guidelines and procedures outlined on Graduate Studies and Postdoctoral Affairs' website, including the <u>Guide for Graduate</u> <u>Research and Supervision</u>.

The Master's Research Paper (MRP) should be an applied research project focused on an issue related to urban and regional planning. It identifies a problem and seeks a solution to demonstrate problem-solving ability. Normally completed in eight months (or two terms), the research project is narrower in scope and shorter in length than a thesis and entails a lesser time commitment than a thesis. Students explore a well-defined research problem in planning. The MRP discusses the research students undertake and the lessons learned in relation to published literature. The MRP is assessed by a supervisor and a reader, who review the paper independently, and then agree upon a final numerical grade.

Aims and Scope

The essential learning outcomes for the MRP are to demonstrate: 1) competence in the application of research methods to a planning problem; 2) understanding of the literature on the chosen planning topic; 3) written communication skills. In completing the MRP, the student will also make a moderate contribution to knowledge in one or more of several ways:

- a) Empirical contribution to planning knowledge through the collection of new data (e.g. primary data) where necessary, and/or the interpretation of existing data (e.g. secondary data).
- b) Practical contribution to urban and regional planning policies through critically reviewing and analyzing a set of related planning policy documents or a particular planning policy/document.
- c) Conceptual/theoretical contribution to planning knowledge through refining a particular concept or theory and/or apply an existing concept or theory to an empirical case study that has not previously been examined from this conceptual/theoretical perspective.
- d) Methodological contribution to planning knowledge through the development of a new epistemological or methodological framework and its application to a new research area in planning.

A standard literature review is not acceptable, as one of the goals of the MRP is to demonstrate proficiency with methods of data collection and analysis. However, a systematic literature review, where the student is using recognized methods of data collection and analysis to generate a novel perspective on the literature, is acceptable.

Format

The Master's Research Paper should be normally 8,000 - 10,000 words, excluding references, tables, footnotes, and endnotes (if these are used). Appendices and supplementary materials (e.g., questionnaires, datasets that can be shared publicly) are additional to the word limit. The master's research paper is to be structured in the form of a professional report or an extended briefing document. Most research papers contain an abstract and four to six sections, usually including the following elements:

Abstract: This section includes the research problem and context; research objectives or research questions; research methods; research findings and interpretations; and conclusions and prospects for future research. A typical abstract should not exceed 200 words.

Introduction: This section sets up the context and background for readers. It situates the research in its broader context and introduces the specific objectives of the research project. This section introduces the research question(s) and the significance of the research. For a case study, a brief description of the study area(s) should be included in this section. The section ends with an outline summary of the following sections of the paper.

Literature Review: This section summarizes existing research on the paper's topic, evaluates the previous research, and relates existing studies to the student's research. The synthesis of previous research should discuss how the existing research relates and contributes to the paper's work. This section ends with a discussion of how the review guides and informs the research methodology and states how the master's research paper contributes to the field. The length of the literature review will vary depending on the nature of the topic. For example, a research project that aims for more of practical contribution to planning may only contain a brief discussion of seminal literature, whereas a study that aims for a theoretical/conceptual contribution would likely require a more fulsome literature review.

Research Methodology: This section explains the research methodology of the research project and how the methods address the specific research question(s). The section should discuss how the existing literature leads to the methodological design and outline the specific methods of data collection and analysis. The section should also include a discussion of relative strengths and weaknesses of the selected research methods, as well as any ethical considerations. Students may use maps, diagrams, or charts to visualize their research methodological design and phases.

Analytical Results and Discussion: This section could include multiple subsections guided by subheadings. These subsections elaborate the outcomes and findings of the analysis, with detailed interpretations of the qualitative and/or quantitative research outputs. There should also be at least one subsection that relates the study's findings to the concepts, theories, and results of previous studies, highlighting new information or conclusions that arise from this study.

Conclusions: This section highlights the main research findings and clearly connects this information to the stated research questions. It also discusses possible generalizations of this research beyond the specific case(s) under study. It summarizes the value of the research and its contribution to planning knowledge and profession. The section suggests implications for planning policy and/or practice and, where appropriate, may offer specific recommendations. Research limitations and future research prospects are also included in this section.

Recommendations (if applicable): Recommend a new and/or revised course of action based on findings.

Roles and Responsibilities

An MRP must be an independent piece of applied scholarship. It may be connected to a larger research project being undertaken by the faculty supervisor. In these instances, the student must have enough latitude to demonstrate proficiency with research methods and exercise considerable judgement in the design and implementation of the research project.

The **supervisor** provides advice and mentorship on the selection of the research topic, relevant bodies of literature, and appropriate methods of data collection and analysis. The supervisor also guides the writing of the research paper and provide comments on draft work. The supervisor is ultimately responsible for deciding when the work is ready to be assessed by the reader.

The **reader** is an arm's length assessor, selected by the supervisor, who has not had substantial previous involvement in determining and/or overseeing the direction of the research. In most instances, a student's previous course instructor would not be precluded from serving as a reader. The supervisor should determine who fits the criterion of an arm's length assessor on a case-by-case basis. Readers are normally affiliated with the School of Planning, as faculty, professors emeriti, cross-appointed faculty, and adjunct faculty. Planning practitioners may be eligible, provided they have prior experience with the assessment of student work (e.g. through university course instruction or the adjudication of OPPI/CIP scholarships). The appointment of a planning practitioner as a reader requires prior approval from the Associate Director, Graduate Studies. The reader works with the supervisor to assess and determine a grade for the Master's Research Project.

Assessment

An MRP is an assessed piece of work and will receive a numeric grade agreed to by the supervisor and the reader. All Master's Research Papers in the School of Planning will be assessed according to the following holistic rubric:

Grade	Description
A+ (90-100)	Grades in this category a sign of excellence and are not something that should be expected for work that simply meets the requirements of an MRP. In this category, a student has demonstrated a full understanding of the subject matter, has capacity to analyze, has demonstrated critical thinking, shows evidence of creative thinking, familiarity with literature and previous work in area, highly developed communication and presentation skills. The work is of outstanding quality and makes a substantial contribution to planning research and/or practice.
A (85-89)	Grades in this category are not something that should be expected for work that simply meets the requirements of an MRP. In this category, a student has demonstrated a full understanding of the subject matter, has capacity to analyze, has demonstrated critical thinking, shows evidence of creative thinking, familiarity with literature and previous work in area, highly developed communication and presentation skills. The work is of very good quality and makes a modest contribution to planning research and/or practice. With some revision, it would have the potential to make a substantial contribution to planning research and/or practice.
A- (80-84)	Student has demonstrated a full understanding of the subject matter, has capacity to analyze, has demonstrated critical thinking, shows evidence of creative thinking, familiarity with literature and previous work in area, highly developed communication and presentation skills. The work is of good quality and makes a modest contribution to planning research and/or practice.
B+ (77-79)	Student has demonstrated a good understanding of subject matter and a competent application of research methods, with some areas for improvement. There are minor gaps or errors in how they communicate their research findings and discussion. The work is of satisfactory quality according to MRP requirements.
B (73-76)	Student has demonstrated a fair understanding of subject matter and a competent application of research methods, with more significant areas for improvement. There are more significant gaps or errors in how they communicate their research findings and discussion. The work is of adequate quality according to MRP requirements.

B- (70-72)	Student has demonstrated a satisfactory understanding of subject matter and an acceptable application of research methods, with significant areas for improvement. They can communicate basic aspects of their research findings and discussion. The work only just meets the MRP requirements.
Not acceptable (69 and below)	Inadequate understanding of subject matter, insufficient demonstration of critical thought, lack of proficiency with research methods, communication skills very poor. The work is of unacceptable quality according to the MRP requirements.

If desired, the supervisor and reader may agree to a more refined breakdown for the grade. For example, they may agree to assign a certain proportion of the overall grade to certain characteristics or elements of the MRP (e.g. a certain percentage for each of the recommended sections and/or for the organization and structure of the document as a whole and/or for grammar and style). In these instances, an analytic rubric should be developed that communicates the characteristics of A, B, and failing grades for each of the assessed components. The analytic rubric must address the essential learning outcomes and maintain the spirit of the holistic grading rubric provided above, such that an A+ and A grade for each of the assessed components is given only to work that exceeds the basic requirements of an MRP. The revised grading scheme must also be discussed with the student well before the MRP is submitted for assessment.

An acceptable grade for the MRP is 70% or higher. A student whose MRP is deemed to be unacceptable will be given only one opportunity to make the revisions necessary to bring their MRP up to a 70%. The advisor and reader must clearly communicate, in writing, what deficits need to be remedied and should suggest specific revisions. The maximum grade that a student can receive on a revised MRP is 70%.

iThenticate[®]

The Master's Research Project must adhere to the principles of academic integrity. Students are strongly encouraged to use iThenticate[®] to identify and address any citation issues before submitting their MRP for assessment. They should discuss the report with their Supervisor, who may also request an iThenticate[®] report when providing feedback on an earlier draft.