

**UNDERGRADUATE THESIS
GUIDELINES**

**DEPARTMENT OF GEOGRAPHY
BRANDON UNIVERSITY**

Pertaining to 38:449 Undergraduate Thesis in Geography

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1. PURPOSE OF THE HONOURS THESIS

An Honours Thesis is a written document that presents the results of a research project aimed at addressing a practical problem or issue in geography. The thesis should demonstrate the student's competence in completing an independent research project; this includes a demonstration that the student is conversant with the relevant literature and has applied methods appropriate to the specific field of geography under investigation. The thesis may entail cooperation with agencies in the community at large and with other faculties at Brandon University.

The purpose of the thesis is: (1) to develop the student's skills and abilities to conduct applied research in geography; and (2) to develop expertise in preparing clear and concise research reports useful for decision-making. Students are expected to work closely with faculty to identify research topics and secure financial support for a research project, if necessary.

2. PROCEDURE FOR REGISTRATION IN THE HONOURS THESIS

Admission to the Honours Thesis in Geography course (38:449) is open only to 4-year Honours students who will normally register for this course in their final year of studies, starting in September.

Students may enrol in the Honours Program once they have completed 12 Geography credit hours and a total of 30 credit hours. Students planning to register in Honours Thesis in Geography (38:449) are encouraged to have decided to do so by November 30th of the academic year preceding that in which the Honours Thesis will be undertaken. Before this date, the student should consult with the Department of Geography Honours Coordinator to discuss the student's eligibility for the program, their research area of interest, and select a potential Supervisor; the Supervisor must be a member of the Department of Geography. A grade point average of 3.0 in Geography courses is required for acceptance to the Honours Thesis in Geography (38:449).

Following consultation with the Honours Coordinator the student should meet with the potential Supervisor to ascertain whether he/she can accommodate an Honours Thesis student in the following academic year. If so, a potential research project can be discussed at this point.

Upon provisional acceptance by the potential Supervisor, the student must submit a letter of intent to the Honours Coordinator. A form is available from the Honours Coordinator or Department of Geography Secretary.

Upon official acceptance, an Advisory Committee will be established by the Honours Coordinator, consisting of the Supervisor and a Second Reader. The Second

Reader will also usually be a member of the Department of Geography. Both the Supervisor and Second Reader will read and grade the thesis, with the Supervisor having the main responsibility for assigning the grade.

Students should attempt, if at all possible, to collect much of the raw data for the thesis in the winter/summer preceding registration. A Directed Readings course (38:488) or Practicum (38:366/38:466) may be associated with collection of data or background literature for the thesis but cannot constitute more than 20% of the final Honours Thesis document.

Honours students will be required to give a Departmental Seminar on their research topic during the Fall Semester in which they are registered in the Honours Thesis. The Seminar should include the objective of the thesis, methods and progress to-date. Students who have completed a significant portion of the thesis may make a presentation at the annual meeting of the Prairie Division of the Canadian Association of Geographers (usually in late September) in lieu of the seminar.

Honours students are required to give a second Departmental Seminar on their research following the Winter Semester mid-term break of the academic year in which they are registered. Students (with the advance permission of the Advisory Committee) may opt to present their results at the annual meeting of the Prairie Division of the Canadian Association of Geographers the following fall.

The final Thesis must be submitted by the last day of the exam period in April. The Student should submit three (3) copies of the Thesis to be bound by the Department (one for the student, one for the Supervisor, and one for the Department of Geography). Further bound copies will be at the expense of the student.

In rare instances a starting date in January can be arranged (*i.e.* the student will register for January 1 to the final day of exams in December).

3. THESIS STYLE GUIDELINES

3.1 Contents and Organisation

The following items must be included in the order listed:

1. **Title Page:** The title page must conform to the example provided (Appendix A).
2. **Approval Page:** The approval page is provided by the Honours Coordinator.
3. **Abstract:** The abstract must conform to the guidelines for text specified below.
4. **Acknowledgements:** The acknowledgements must conform to the guidelines for text specified below.
5. **Dedication:** A dedication is optional. The dedication must conform to the guidelines for text specified below.
6. **Table of Contents:** The table of contents must conform to the example provided (Appendix B) and list all material within the Thesis beginning with the Abstract. Font style of items listed within the table of contents should be the same as the font used within the text (*e.g.* headings listed within the table of contents are in the same font style as in the body of the thesis).
7. **List of Figures:** The list of figures must conform to the example provided (Appendix C) and include all figures (*i.e.* illustrations, photographs, pie / bar charts, and maps) within the body of the thesis listed by figure number and title.
8. **List of Tables:** The list of tables must conform to the example provided (Appendix D) and include all tables within the body of the thesis listed by table number and title.
9. **Body of Thesis:** All text within the thesis must conform to the guidelines set out in the following sections.
10. **References:** References must conform to the examples provided (Appendix E).
11. **Appendices:** All appendices included must be listed according to the appendix number as they appear within the Thesis.

3.2 General Format and Style

3.2.1 Margins

For all pages, including those with figures and tables, the left hand margin will be 3.5 cm (1.5 in.) and all other page margins will be 2.5 cm (1 in.).

3.2.2 Line Spacing, Justification and Indents

All text in abstract, acknowledgements, dedication and body of the text is double-spaced. Table of Contents and Lists of Figures and Tables are single-spaced. Quotations longer than two lines are indented 1.5 cm (0.5 in.) from both left and right margins, and single-spaced. All text in paragraph form is fully justified. First line indents are 1.5 cm (0.5 in.).

3.2.3 Font

All text throughout the body of the thesis is Times New Roman, 12 pt. Text within figures, charts and other raster or vector graphics should be of a font type and size that is consistent with standard cartographic principles. For tables, font type may be other than Times New Roman (*e.g.* Arial) and size must be at least 8 point. Words that are not in English (*e.g.* Latin names, species scientific names) and the titles of books should be italicised.

3.2.4 Symbols

A standard font for symbols and mathematical notation should be used.

3.2.5 Units and Measures

All units of measure and nomenclature should be in SI units. Use correct SI unit abbreviations (*e.g.* s, min, h, cm, km, etc., NOT sec, hr, Km, or KM). Insert a hard space between values and units of measure (*e.g.* 1200 km, NOT 1200km).

3.2.6 Equations

All equations should be indented and numbered by chapter and equation number consecutively; for example, “(Equation 4.2)”, where the number 4 represents the chapter number and 1 indicates that this is the first equation within chapter 4. The parentheses are required. Equation numbers should be right justified.

3.2.7 Headings

All chapter titles and headings should follow these examples:

1. CHAPTER TITLE

Upper Case, Bold, 12 Point, Left-justified

1.1 First Level Heading

Lower Case, Bold, 12 Point, Indented 0.25 inches

1.1.1 Second Level Heading

Lower Case, Normal, Underlined, 12 Point, Indented 0.5 inches

3.2.8 Page Numbering

All pages, except the title page, are numbered in the lower margin 1.25 cm or 0.5 inches from the bottom of the page and centred between the left and right page margins. Pagination begins with the Approval Page, which is page ii. All other front matter is numbered in lower case Roman numerals (*e.g.* ii, iii, iv, v, vi, vii, etc.). The body of the thesis and appendices are numbered in Arabic numerals starting with page 1 and continuing until the last page of the thesis.

3.2.9 Spelling

Spelling should follow that of Webster's Third New International Dictionary or the Oxford English Dictionary. Canadian spelling, unless part of a proper noun, formal name, or part of a quotation, should be used.

3.2.10 Latin Terms

The following Latin terms are acceptable within the Thesis. Do not use the term “*etc.*” Latin terms are always given in italics.

e.g. *exempli gratia*, “For example”. Used to start a list of examples to either 1) further explain a point made in the Thesis or 2) provide some examples of references that provide the information that requires citation.

i.e. *id est*, “That is to say”. Used to precede a point of further explanation.

| | |
|---------------------|--|
| <i>sensu</i> | “In the sense of”. Used prior to a citation to indicate that you are referring to an idea or a manner previously accorded to someone else, e.g. (<i>sensu</i> MacDonald 2003). |
| <i>et al.</i> | <i>et alia</i> , “and others”. Used for in-text citations that have more than two authors. For example, (Smith <i>et al.</i> 2004). |
| <i>a priori</i> | “from what comes before”. Used to refer to theoretical or research design ideas that are made before the research, without being based on research itself. Hypotheses are made <i>a priori</i> to actual research. |
| <i>a posteriori</i> | “from what comes later”. Can be used to refer to a fact or process that is known from experience or from factual data. |

3.2.11 Figures

A figure is any graphic illustration, map, photograph or chart. Figures should be numbered consecutively by chapter and figure number, as in Figure 4.2, where the number 4 represents the chapter number and number 2 indicates that this is the second figure within Chapter 4. Figures appearing in-line with text will normally have a neatline with the figure number appearing outside the neatline at the lower left of the figure. The figure number should be followed by a brief, descriptive title or caption. If not an original figure, the source of the figure should appear at the end of the title or caption. For example: Figure 4.2: Pleistocene geomorphology of south-western Manitoba (Eelson 1952).

Figures may be placed on the page in portrait or landscape orientation and may appear on a single page or in-line with the text depending on the size of the figure. Figures should follow the page or paragraph in which they are first referred.

Regardless of format or type, all figures must be clearly legible at the size required for inclusion within the thesis. Normally, graphics should be no less than 300 dpi and line work within vector graphics no less than 1-point width.

N.B. Maps must be created by the student. Imported graphics from the internet are not acceptable. Scanned figures of models, from published literature, may be included when properly referenced.

3.2.12 Tables

Tables should be numbered consecutively by chapter and table number, as in Table 2.3, where the number 2 represents the chapter number and number 3 indicates that this is the third table within Chapter 2. Table numbers should be at the upper left of the table

and separated from the table itself by a continuous horizontal line. The table number should be followed by a brief, descriptive title. If not an original table, the source of the table should appear at the end of the title and the table should be redrafted. For example: Table 2.3: Economic growth in the Canadian North (Statistics Canada 1996).

Tables may be placed on the page in portrait or landscape orientation and may appear on a single page or in-line with the text depending on the size of the table. Tables should follow the page or paragraph in which they are first referred.

3.2.13 References

The author-date system is to be used for citing references within the text: (Green 1985); (Green 1985, 283) to indicate the page number of a direct quote; (Green 1985a) for more than one reference to the same author in a single year; (Ziegler and Brown 1983, 111; Green 1985b) for more than one reference.

The Reference list should contain ALL referenced publications, web pages, and personal communications alphabetically by first author. In references with more than two authors, use *et al.* in the citation within the text of the thesis, but include the full list of authors in the reference. Refer to Citation Methods in Appendix E.

3.2.14 Appendices

A cover page must precede each appendix with the appendix labelled by ascending letters (e.g. A, B, C, etc.) and title.

APPENDIX A
TITLE PAGE EXAMPLE

HABITAT USE PATTERNS OF YELLOW RAILS
(*COTURNICOPS NOVEBORACENSIS*)
AT DOUGLAS MARSH, MANITOBA

By:
Henry F. Wilson

In Partial Fulfilment of the Requirements for
38:449 Undergraduate Thesis in Geography

Department of Geography

Brandon University

April 30, 2005

APPENDIX B

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APPENDIX E
CITATION METHODS

Citation Methods

This guide is based on *Scientific Style and Format: The CBE Manual for Authors, Editors, and Publishers* 6th edition, 1994.

Citation examples are provided in **Name-Year** format. **Reference List** items are listed alphabetically at the end of the research paper. These items are referred to in the body of the paper using the **In-Text** style.

Follow the format for each type of reference given below.

Also: A reference with more than 3 authors is given as first author and “*et al.*” for the In-Text reference (e.g. Brown *et al.* 1996). All authors are listed in the Reference List.

When citing a reference In-Text, at the end of a sentence, the period is placed **after** the reference. e.g. Manitoba is cold in the winter (Brown *et al.* 1996).

Book

Reference List:

Quammen D. 1996. *The Song of the Dodo*. New York: Simon & Schuster. 702 p.

In-Text:

(Quammen 1996)

Reference List:

Ford, J.K.B., Ellis, G.M. and Balcomb, K.C. 2000. *Killer Whales*. 2nd Ed. Vancouver, BC: UBC Press, University of British Columbia.

In-Text:

(Ford *et al.* 2000)

Book Chapter

Reference List:

Kruse, S. 1991. The interactions between killer whales and boats in Johnstone Strait, British Columbia. In: Pryor, K. and Norris K., eds. Dolphin Societies. Berkley, CA: University of California Press. p 123-135.

In-Text:

(Kruse 1991)

Journal Article

Reference List:

Duffus D.A. and Dearden, P. 1993. Recreational use, valuation and management of killer whales (*Orcinus orca*) on Canada's Pacific Coast. Environmental Conservation 20(2):149-156.

In-Text:

(Duffus and Dearden 1993)

Dissertations and Theses

Reference List:

Bass J. 2000. Variations in gray whale feeding behaviour in the presence of whale-watching vessels in Clayoquot Sound, 1993-1995. [dissertation]. Victoria, BC: University of Victoria, Department of Geography.

In-Text:

(Bass 2000)

Conference Paper

Reference List:

Jago L.M. and C.D. Malcolm 2003. Birding as a tool for conservation: preliminary development of an educational program to increase environmental awareness in the Assiniboine River Corridor, Brandon, Manitoba. Canadian Association of Geographers, Western Division, Annual Conference; 2003 Sept 27-28; Gimli, MB.

In-Text:

(Jago and Malcolm 2003)

Conference Abstract

Reference List:

Harveson L.A., R.W. Adams and P.B. Robertson 2003. Modeling mountain lion distribution and use of prey in a shrubland ecosystem [abstract]. In: The Wildlife Society 10th Annual Conference Program and Abstracts; 2003 Sept. 6-10; Burlington, VT. Bethesda, MD: The Wildlife Society. p. 140.

In-Text:

(Harveson *et al.* 2003)

Technical Report

Reference List:

Lien, J. 2001. The conservation basis for the regulation of whale-watching in Canada by the Department of Fisheries and Oceans: a precautionary approach. Ottawa, ON: Department of Fisheries and Oceans Canada. Canadian Technical Report of Fisheries and Aquatic Sciences 2363. 167 p.

In-Text:

(Lien 2001)

Newspaper Article

Reference List:

National Post 1999. B.C. whales brace for invasion of the ecotourists. 14 April. p. A1

In-Text:

(National Post 1999)

Electronic Journals

Reference List:

Slater P.J.B. and A.E. Jones. Timing of songs and distance call learning in zebra finches. *Animal Behavior* [serial online] 1995; 49(2):123-248. Available from: EBSCOHost, John E. Robbins Library, Brandon University, via the Internet.

In-Text:

(Slater and Jones 1995)

Electronic Databases and Internet Resources

Note: The *CBE Manual* does not provide examples of citation for most electronic formats (listservs, the World Wide Web, databases). As a general rule follow the author, date method given in the examples above, making sure to address the following:

- **Provide sufficient information** to allow a reader to locate the source you are citing.
- **Web documents share many elements found in print sources.** The citation for a Web document often follows a format similar to that for print, with some information omitted and some added.
- **Cite what is available** when you cannot find some elements of information about a source. For example, publication dates may not be provided for some online information sources.
- **Include the date that you accessed the source** (Note: not required when citing messages in APA style).
- **Cite the address (URL) accurately.** Include the access-mode (http, ftp, telnet, etc.). If it is necessary to divide the URL between two lines, break only after a slash mark and do not insert a hyphen at the break.

Reference List:

Whale and Dolphin Conservation Society 2003. Whale-watching locations around the world. Retrieved December 12, 2003 from Whale and Dolphin Conservation Society web site: <<http://www.wdcs.org>>. Last updated Sept. 29, 2003.

In-Text:

(Whale and Dolphin Conservation Society 2003)