

# Research and Thesis Guide

## Office of Graduate Studies



## **Foreword**

This booklet aims at providing students engaged in research, thesis directors and academic units with information on various aspects of research as well as on the writing and presentation of a thesis. It is not meant to be a substitute for the General Regulations and Policies of Graduate Studies, which are the final authority on the matter, but it does provide additional details that are essential to successful completion of the research endeavour.

## **RESEARCH ETHICS**

### **Ethics Considerations**

The nature of academic research requires intellectual honesty and rigour on the part of the student, both in carrying out the research and in presenting the results in thesis form.

The findings set out in the thesis must be accurate; they must be neither falsified nor concocted in any way. Where research involves human subjects, students must submit their research project for the approval of the Trent University Ethics Committee prior to embarking on the research proper. Forms for ethics review are available on the research web site at <http://www.trentu.ca/research/forms.html>.

In their theses, students must clearly acknowledge every book, article or document used. Quotations must always be properly identified and the bibliography must include every book, article or document used in the thesis.

### **Trent University Policy on Research with Human Subjects**

(Approved by Senate, April 13th, 1999 and by Faculty Board, September 27/91)

#### **Policy:**

All research conducted under the auspices of Trent University by faculty, staff, or graduate students, funded or unfunded, that involves human subjects require approval by the Research Ethics Committee of Trent University.

### **Terms of Reference for the Research Ethics Committee of Trent University (1999):**

The Research Ethics Committee (REC) is a standing committee of Senate, reporting to and accountable to Senate. The REC will advise Senate and the Dean of Graduate Studies on all matters of research involving human subjects at Trent University.

The role of the REC is to review proposals by members of the university, and others who conduct research involving human subjects at Trent, to determine conformance with the whole of the Tri-Council Policy Statement "Ethical Conduct for Research Involving Human Subjects". This document should serve to safeguard the rights and welfare of human subjects and participants. Accordingly, the scope of the Tri-Council Policy Statement and the required ethics review normally applies only to research involving human subjects who are living. Ethics review is usually not required for research based on materials in the public

domain, where interaction with the living human subjects of research is not involved. The University also re-affirms its support of basic guiding values established by the academic community, including a commitment to academic freedom, fairness, and the proportionate approach to ethics assessment and the work of the REC will reflect these values and commitments. In all cases, the REC is to strive to balance the principles of protection of the rights of human subjects and of researchers. In the absence of clear evidence of more than minimal risk to human subjects, constraints on research should likewise be minimal.

All research conducted under the auspices of Trent University by faculty, staff, or graduate students, funded or unfunded, that involves human subjects requires approval in advance from the REC. Research with human subjects at Trent University, but conducted by others, also requires prior approval by the REC.

In the case of undergraduate student research with human subjects, departments/programs shall review student research proposals according to departmental ethics criteria as approved by the REC. In the case where a department/program has no ethics review procedures, they are mandated to develop these so that undergraduate research proposals involving human subjects can be reviewed. Assistance can be provided by REC to departments/programs in developing such procedures. The REC should meet regularly to discharge its responsibilities and render decisions in a timely manner on applications for approval. In cases where researchers and the REC cannot reach agreement through discussions and reconsideration, an appeal against a decision of the REC may be directed to the Research Ethics Appeal Committee (REAC). This is a standing committee which will be convened only in the case of an appeal. Decisions of the Research Ethics Appeal Committee are final, subject to further procedures as may be provided through collective agreements.

The REC makes an annual report on committee activities to Senate for information, with a copy to the Dean of Graduate Studies. Members and the Chair of the REC will be appointed by the Nominating Committee of the University. Composition of the REC shall be as follows:

3 Faculty members (normally one each from each division of Faculty Council) with broad expertise in methods and areas of research covered by the REC;

1 (other) Faculty member knowledgeable in ethics;

1 Community Representative

University Research Officer (ex officio)

It is furthermore recommended that the:

1. Senate change the name of the Committee on Human Research (CHR) to the Research Ethics Committee (REC), and that the REC henceforth be designated as a Senate committee.
2. Senate adopt the Tri-Council Policy Statement on "Ethical Conduct for Research Involving Humans", the complete document, as official university policy in this

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area and that the REC have the mandate to implement this document.

3. Nominating Committee appoint members of the REC for at least a 2-year term. Where possible, membership should be staggered to ensure continuity on the committee. Nominating Committee appoint the Chair of the REC each year, and that he/she be a member of faculty with previous experience on the REC.
4. Vice President-Academic provide appropriate resources for the REC to fulfill its enlarged mandate and Terms of Reference, including additional funds for record keeping, educational outreach, and project monitoring.
5. Senate establish a Research Ethics Appeals Committee (REAC) to provide an independent appeal process against a decision of the REC. Research Ethics Appeals Committee (REAC) should be composed of five members: Associate Dean-Arts and Science (as Chair), the Chair (or his/her designate) of the department of the appellant, two faculty members with previous but not current experience on the REC, and a Community member with previous experience on the REC (selected by the Nominating Committee)
6. Vice President-Academic, through Joint Committee, review the "Policy on Scholarly Misconduct" with the Trent University Faculty Association (TUFA) regarding possible implications of implementing the Tri-Council Policy Statement.
7. Nominating Committee appoint a Community member to the REC each year. The Dean of Graduate Studies will obtain the agreement of such Community member to participate according to the normal operations of the REC, particularly with respect to such matters of confidentiality and conformance with the Tri-Council Policy Statement
8. Department/program research ethics committees submit an annual statistical report to the Dean of Graduate Studies, for review by the REC. The REC will conduct a quinquennial review of department/program procedures relating to undergraduate research involving human subjects. Department/program offices should keep a copy of approved procedures and consent forms on file.
9. Researchers, in consultation with the REC, develop a simple mechanism to facilitate both ongoing reviews of their research activities with human subjects and a final report.
10. Researchers report any adverse event associated with their research involving human subjects to the REC immediately.
11. REC, through the Office of Graduate Studies, establish and keep an inventory of ongoing research involving human subjects. \
12. REC meet, face-to-face, at least twice a year (or whenever new committee

members are appointed) to ensure education of committee members about University policy and procedures. The REC should also develop a system for expedited review of proposals.

13. REC develop a practice of scholarly review on proposals for research that pose more than a minimal risk to human subjects and are not already peer-reviewed.
14. REC continue its practice of forwarding all research proposals which deal specifically with aboriginal people (as a distinct group of living human subjects of research) to the Trent University Aboriginal Education Council for comment.
15. Dean of Graduate Studies, in consultation with appropriate departments, and other groups, develop policy in regard to the study of human remains (bodily remains of deceased individuals) and the rationale for scholarly interests in such study.
16. Dean of Graduate Studies should provide the research community with information about the Tri-Council Policy Statement, the REC, and its policies and procedures.
17. REC amend the application form for "Ethical Review of Proposed Research" to reflect the terms and language in the Tri-Council Policy Statement.
18. University be prepared to provide independent legal advice regarding potential decisions to the REC in cases which have potential legal consequences from a research project involving human subjects. The legal expert must not be the University's counsel.
19. University work with other Canadian institutions of higher education to seek external funding to cover increased administrative costs of implementing the Tri-Council Policy Statement.

Submitted by:

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13 April 1999

Endnotes:

1. The three federal research granting Councils of Canada are the Medical Research Council (MRC), the Social Sciences and Humanities Research Council (SSHRC), and the Natural Sciences and Engineering Research Council (NSERC). The three formed a Tri-Council Working Group to study revisions to the existing guidelines on ethics in research with human subjects in 1994. Intensive consultations were initiated

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nationally by the Tri-Council Working Group. The group released an Issues Paper (November 1994) endorsing creation of a Tri-Council Code of Ethics, and a Discussion Draft (May 1995), both of which received extensive comment from the academic community. Based on these discussions, the Working Group issued a final report (July 1997). This was discussed by the Councils with the Humanities and Social Sciences Federation of Canada (HSSFC), which sponsored regional meetings across Canada, with various scholarly associations and societies, University Vice Presidents (Research) via the Association of Universities and Colleges of Canada (AUCC), and the Canadian Association of University Teachers (CAUT). The final adopted version of the Policy Statement reflects these meetings, and was revised in light of those discussions.

2. Previous Council guidelines governing research in Canada with human subjects included: SSHRC's Ethics Guidelines: Research with Human Subjects, and MRC's Guidelines on Research Involving Human Subjects (1987).

3. The National Council on Ethics in Human Research (NCEHR) is a non-profit Canadian organization whose mandate is to assist Research Ethics Committees (REC) of universities and hospitals conducting research involving humans. They assist RECs in resolving contentious issues, foster education, dialogue, and understanding in and among institutions, RECs, researchers, professional personnel, organizations that fund research, and the public, on ethical aspects of research involving human subjects. The NCEHR seeks to assist institutions to develop and maintain expertise concerning the evolution of ethical perspectives on all aspects of research involving human subjects. Trent invited, and received, a site visit from a NCEHR panel in November, 1998 to discuss the new Tri-Council Policy Statement. A public forum with NCEHR members was held (November 3, 1998), and advice on Trent policy and practices was received. Much of the advice has been incorporated in the recommendations of this report.

4. The Advisory Committee wishes to thank all members of the University community who participated in this exercise. Their viewpoints have been incorporated wherever possible.

5. In a submission to the Tri-Council, the University has sought an exemption from Article 1.3d, requiring a member of the community to serve on the REC. A response is expected in Spring, 1999. If an exemption is approved, all reference to a Community member will be removed from the REC Terms of Reference and Recommendations. Appendix A. Memorandum to All Faculty on Tri-Council Policy Statement (25 Sept. 1998).

Appendix B. Memorandum on Public Hearings and Invitation for Comment on Tri-Council Policy Statement (8 Jan. 1999).

Appendix C. List of Speakers from Public Meeting on Tri-Council Policy Statement (29 Jan. 1999).

Appendix D. Excerpt from NCEHR Report on Policies and Procedures of the Trent REC.

Appendix E. Current Terms of Reference for the Committee on Human Research (1991).

### Intellectual Property Rights

### **RESPONSIBILITIES: GRADUATE PROGRAM, THESIS SUPERVISOR, SUPERVISORY COMMITTEE AND STUDENT**

#### **The Graduate Program**

The Graduate Program has the responsibility to oversee the complete graduate degree program. Its responsibilities may include:

1. Making admission decisions based on equitable and uniformly applied standards;
2. Overseeing the selection of a supervisor and supervisory committee and any

request for their change;

3. Routinely monitoring the progress of each student, as reported by the supervisory committee, and encouraging timely completion of degree requirements and the preparation of a thesis or major paper without undue delay;
4. In the event that a supervisor permanently leaves the University or is unavailable for a significant period time, ensuring that the student is not penalized and to facilitate the student's completion of degree requirements;
5. Maintaining an overall high quality of academic and professional standards for the program and for the content and style of theses or major papers;
6. Ensuring that the Graduate Program guidelines for financial support of students are clearly stated and applied fairly.

**The Supervisor may expect to:**

1. Have the student consider seriously his/her advice concerning research methodology and written material, particularly drafts of a thesis or a major paper;
2. Have those portions of his/her research which may be included in a student's thesis or major paper properly acknowledged;
3. Have a student working as his/her research assistant agree to the incorporation or utilization of the student's research in other related research projects under the supervisor's direction, with the understanding that the student will retain scholarly credit for his/her contributions;
4. Request withdrawal as supervisor of a student when for specific reasons he or she feels that continued supervision could not lead to the satisfactory completion of the degree requirements by the student.

In such circumstances, the supervisor should discuss the reasons with the student and the supervisory committee and provide a written statement of the reasons to the student and to the Program Director. The Program Director should meet with the student and the supervisory committee to review the request and to facilitate its resolution.

**Selection of a Supervisory Committee**

The supervisory committee should be established by the Program Director in consultation with the potential supervisor(s) and in accordance with Graduate Program guidelines.

The Supervisor is expected to discuss with the student:

1. The specific nature and subject of the proposed research;

2. The degree to which such research may be an integral part of a larger research project of the supervisor and the consequential possible implications for authorship of resulting publications, including the aspects or areas of the research project over which the supervisor wishes to exercise rights to pursue and/or publish;
3. The extent to which the supervisor is able to support the research project in space, equipment and facilities, and provide financial support to the student;
4. The expectations of the supervisor for the student's academic performance and progress towards completion of the proposed research.

**The Supervisor is further expected to:**

1. Be reasonably accessible to the student for consultation and discussion of the student's academic progress and research problems;
2. Assist the student in developing a program of study that will allow for completion of all degree requirements within the specified time limits;
3. Inform the student of the approximate time it will take for submitted written material to be returned with comments;
4. Be thorough in the examination of written material submitted by the student, making constructive suggestions for improvement;
5. Indicate when a draft thesis or major paper is satisfactory for submission to the supervisory committee or, if the supervisor believes that it cannot be successfully completed, to so indicate to the student (and the supervisory committee, if appropriate) with reasons;
6. Make satisfactory arrangements for the supervision of the student when the supervisor is on leave or extended absence from the campus;
7. Make every effort to ensure that all resources (e.g., laboratory/field facilities and essential operating funds) necessary for execution of the thesis research project will be available as required so the student can complete the project without undue delay, and, when necessary, to assist the student in gaining access to facilities or research material;
8. Know Graduate Program and University regulations and standards to which a thesis or major paper is required to conform, and to ensure that the student is informed of them;
9. Show student round the Program.

**The Supervisory Committee is expected to:**

1. Be reasonably accessible to the student for consultation and discussion of the student's academic progress and research problems;
2. Ensure that a "Program of Study" is established with the student's involvement;
3. Identify potential problems that may arise in the student's program and to help alleviate them;
4. Meet, at least once each year, to review the student's progress and to promote constructively the student's research;
5. Submit progress reports to the Graduate Program and to make recommendations concerning the student's program;
6. Read and comment on drafts of written material in a timely manner and to indicate when a major paper is complete or a thesis is ready for examination.

**The Graduate Student may expect to:**

1. Be informed by the Supervisor of what is expected in research and the writing of a thesis or major paper, such as the quantity and quality of research required, the length and composition of a thesis or major paper, and the mechanism for reviewing progress;
2. Receive guidance from his/her supervisor in establishing a research project, approaching problems in the research, assessing the progress of the research, and producing an acceptable thesis or major paper;
3. Receive fair assessment of the completed thesis or major paper, with explanations of criticism and constructive suggestions;
4. Retain authorship, singly or jointly as appropriate, to his/her research (recognizing the timely nature of the research and the importance of rapid publication) and to receive credit for significant contributions to other research;
5. Have the right to request the reconsideration of a decision regarding his or her program or to lodge an appeal as in the Appeals Section of the Graduate Calendar.
6. To be able to request a change of supervisor when for specific reasons the student feels that he or she would be unable to complete the degree requirements under current supervision, or wishes to pursue another area of research.

In such circumstances, the student should discuss the reasons with the supervisor and the supervisory committee and provide a written statement of the reasons to the supervisor and to the Program Director. The Program Director should meet with the student and the supervisory committee to review the request and to facilitate its resolution.

**The Graduate Student is expected to:**

1. Choose a topic of research acceptable to his/her supervisor and to produce a thesis or major paper which is essentially his/her own work, and which meets the University and Graduate Program standards for style and quality, reflecting a capacity for independent scholarship in his/her discipline;
2. In the thesis, students should give evidence that they have made a logical and intelligent approach to the selected problem, and the language of the thesis should be clear and precise. The thesis should be as original as possible;
3. Conform to basic principles of academic integrity and professionalism; in particular, to acknowledge assistance, materials and/or data provided by other scholars, including fellow students or technicians;
4. Recognize that the supervisor and members of the supervisory committee have a spectrum of educational and research obligations which may result in delays in responding to the graduate student;
5. Give serious consideration to the advice and criticisms provided by his/her supervisor or members of his/her supervisory committee;
6. Know the Graduate Program and University regulations and standards for academic performance and to which a thesis or major paper is required to conform;
7. Maintain a regular work schedule and communications with his/her supervisor (or designate); to meet with the supervisory committee in accordance with program requirements; and to keep the supervisor informed of where he/she may be contacted;
8. To submit to the supervisor for comment any work which has been carried out under his/her supervision and which is intended for publication;
9. To complete all work required for the degree within specified time limits.

## **THESIS RESEARCH: BEGINNING**

The master's thesis must show that the student is able to work in a scholarly manner and is acquainted with the principal works published on the subject of the thesis. As much as possible, it should be an original contribution.

The doctoral thesis must constitute a significant contribution to knowledge, embody the results of original investigation and analysis and be of such quality as to merit publication.

Normally a candidate for a Master's/ Doctoral degree will undertake research and write a thesis. In this document, students should give evidence that they have made a logical and intelligent approach to the selected problem and the language of the thesis/dissertation should be clear and precise. The thesis should be as original as possible. However, the goal of originality should not be stressed to the extent that it precludes the examination of old subjects in new ways; nor should it elevate the "undone" for its own sake, lest the obscure and trivial be emphasized. Note: All research conducted under the auspices of Trent University by faculty, staff, or graduate students, funded or unfunded, that involves human subjects require approval by the Research Ethics Committee of Trent University. In exceptional cases, for a Master's degree only, the thesis may be replaced by other appropriate course work. When the degree is taken by course work, a comprehensive examination may be required.

Although a thesis/dissertation may be submitted at any time, candidates should note the thesis submission deadlines for the Spring convocation in the academic Calendar. The thesis examination process normally takes 10 weeks, with a longer period depending on availability of examining committee and/or corrections required. (See deadlines for submission of completed thesis/dissertation noted in the Graduate Diary.)

### **Choosing a Thesis Supervisor**

The choice of thesis supervisor is crucial to success in graduate studies. Some students already have a supervisor and topic in mind when they register, but this is not true in all cases.

If students discover that they are unable to work with their thesis director for intellectual or personal reasons, they may choose another one. They should discuss the matter with their Program Director. In such matters it is better to act quickly.

## **THESIS RESEARCH: GETTING IT DONE**

### **Time Limits**

The maximum time allowed to complete all requirements for the Master's degree from initial registration is three years for a full-time candidate or five years for a part-time candidate. The

maximum time allowed to complete all requirements for the Doctoral degree from initial registration is five years for a full-time candidate or nine years for a part-time candidate. (Note: see regulations pertaining to full-time/part-time status.)

When students change status from full-time to part-time (or vice-versa) the time remaining to complete degree requirements will be adjusted with one term of full-time study being equivalent to two terms of part-time study. Such adjustments will take effect at the start of the next term. In all cases, the total time to complete all degree requirements will not exceed five years (Master's) or nine years (Doctoral).

In the case of full-time students, the completion of course work is an absolute requirement by the end of two years (Master's), or three years (Doctoral) in order to continue in the program.

### **Acknowledgement of Joint Work**

Joint work, including portions of work already published, may be incorporated directly into the body of the thesis. This may be in the form of figures, diagrams, tables etc. which derive from the joint work. Or it may be a paraphrase of material already published elsewhere. You must have obtained copyright permission(s) and clearly state, at each figure, diagram, or table, that such permission has been granted. If text is used, you must take steps to avoid any elements of plagiarism.

If any portion of the thesis research has been performed jointly with others, the collaboration should be acknowledged in the Acknowledgements section. If a significant portion of the work has been achieved jointly with others, a statement in the Acknowledgements section should specify the nature of the contributions of others. Here is a sample statement to illustrate appropriate acknowledgement of joint work:

**Much of the material contained in this thesis has been obtained through collaboration with [name(s) of collaborators]. Some of the material has been published (is in press/ is intended for publication). The written material in this thesis is my original work. Certain figures (tables/diagrams) are reproduced from other sources by permission of the co-authors and the publisher, as indicated in each case.**

The following illustrates a statement to clarify the nature of the contribution by collaborators:

**In the work performed jointly with Dr. X, the author was responsible for all the measurements and the analysis of the data. Dr. X contributed to this work by providing access to the instrumentation and writing the data analysis software.**

or

**In the work performed jointly with Ms. Y, the author was responsible for the data analysis and interpretation. Ms. Y contributed by making the primary measurements.**

### **Copyrighted material and permissions**

You must take care that there is **no substantial amount** of copyrighted material in your thesis. Under the Copyright Act, the "fair use" provision allows you to quote a reasonable extract of someone else's work, if properly cited. However if you want to quote more than this, you must get written permission from the copyright holder(s) and include this permission in your thesis.

If you wish to include in your thesis, text that you have published as a journal article or book chapter, you must obtain permission from the publisher and include this permission in your appendices. Any chapters that have been published, accepted for publication, or submitted for publication must carry the following footnote:

*A version of this chapter has been published/ accepted for publication/ submitted for publication. Cite the reference.*

### **Final Text: Material Presentation**

The thesis should be no longer than necessary; avoid verbosity and padding. The thesis must be accompanied by an abstract.

The thesis must be written in accordance with the rules of methodology observed in the Graduate Program. It is important that the quality of the finished product be such as to allow for microfilming and/or reproduction.

**Note: Before you bring all the copies in after your defence, you must check to ensure the format is correct with the Office of Graduate Studies.**

- Individuals who contributed to the thesis must be properly recognized
- All copies of the thesis must be clear and clean; the text must be typed in double space; a 12 point font must be used; all the thesis pages must be numbered and printed (on one side only) on standard letter sized good quality paper (8 ½ x 11 inches), and making sure all the pages are in order.
- Colours, non-standard paper, transparencies, slides, cassettes, CDs or diskettes should be avoided.

### **Papers and Publications**

Participating in conferences and publishing articles are an important part of graduate training. Thesis supervisors should encourage students to get involved in these activities as much as possible.

## **THESIS RESEARCH: EVALUATION**

### **PRINCIPLES GOVERNING SUBMISSION AND EXAMINATION OF THESES**

#### **1. Submission of Thesis for Examination**

- 1.1 Supervisory committee members shall review a complete typed version of the thesis and send a signed form to the Program Director verifying that the thesis should proceed to examination.
- 1.2 Depending on program requirements, at least 3-5 copies of the thesis shall be deposited with the Program Director not less than ten weeks before the convocation at which the candidate expects to receive the degree.

#### **2. Examining Committee**

- 2.1 After the supervisory committee has confirmed that the thesis can proceed to examination, the supervisor identifies three potential external examiners to participate in the thesis examination and defence. The Examining Committee is named by the Graduate Program Director, in consultation with the Graduate Dean, and the date, place and time of the defence determined.
- 2.2 The Examining Committee consists of a chair plus 3-5 members, of whom at least one must be from outside the university.
- 2.3 The candidate's supervisor is a member of the Examining Committee and any or all members of the supervisory committee may be named as members of the Examining Committee, subject to the policy of the program concerned.
- 2.4 The external examiner must not have any affiliation with the university or the candidate that might be construed as creating a conflict of interest.

#### **3. Thesis Examination**

- 3.1 Copies of the thesis shall be distributed amongst the Examining Committee by the Program Director at least three weeks before the scheduled date of the oral, along with a covering letter from the Graduate Dean explaining the status of the thesis and the range of options for its disposition.
- 3.2 A form is supplied on which each examiner should verify whether they recommend that the oral examination should proceed. These forms must be returned to the Program Director at least one week before the scheduled date of the oral.
- 3.3 A negative response by any member of the Examining Committee will result in cancellation of the defence and return of the thesis to the student and

supervisory committee.

#### 4. Defence

- 4.1 The thesis will be defended by the candidate in an oral examination before the Examining Committee. In the examination candidates will be required to give evidence that they have a thorough knowledge of the field in which they have been working.
- 4.2 The defence shall be scheduled within a period of no fewer than three, and no more than six weeks from the submission of the thesis.
- 4.3 The Examining Committee, and the thesis defence examination, will be chaired by a person appointed by the Graduate Program Director.
- 4.4 A quorum consists of the external and two other members of the Examining Committee, not including the original Chair.
- 4.5 The parties concerned may agree upon a postponement and the examination rescheduled as soon as possible. If the external examiner cannot be present, the defence is postponed automatically unless arrangements can be made to the satisfaction of the Graduate Dean. The candidate shall not be penalized unduly by a postponement.
- 4.6 Subject to the policy of individual graduate programs, any member of the university is free to attend a master's oral thesis defence examination.
- 4.7 The Chair will give priority to questions from members of the Examining Committee, and will adjourn the examination when the Examining Committee decides that further questioning is unnecessary.
- 4.8 The deliberations of the Examining Committee are held in camera. That is to say, only appointed members of the Examining Committee are present at this stage.
- 4.9 It is the responsibility of the Chair to see that a report on the examination is prepared before the Committee adjourns.
- 4.10 The voting is to be based on a simple majority, with two negative votes resulting in a failure of the defence.
- 4.11 Four recommendations are open to the Examining Committee:
  - i. the thesis is approved as it stands, or
  - ii. the thesis is approved provided certain minor revisions are made, or
  - iii. the thesis is approved provided certain major revisions are made, or
  - iv. the thesis is not approved as it stands but may be resubmitted, and re-examined by some or all of the Examining Committee (this may or may not involve another oral defence), or

- v. the thesis is not approved.
- 4.12 If revisions are required, each member of the examining committee must provide a written list of required revisions to the Program Director immediately following the oral. Minor revisions are defined as corrections which can be made immediately to the satisfaction of the supervisor. Major revisions are defined as corrections requiring structural changes, or other substantive revision. When a thesis is accepted with major revisions, a precise description of the modifications must be included with the Examining Committee's report. It is then the responsibility of the candidate's supervisor to demonstrate to the Examining Committee that the required revisions have been made.
- 4.13 If the Examining Committee is not prepared to reach a decision concerning the thesis at the time of the thesis defence, it is the responsibility of the Chair to determine what additional information is required by the Committee to reach a decision, to arrange to obtain this information for the Committee, and to call another meeting of the Committee as soon as the required information is available. It is also the Chair's responsibility to inform the candidate that the decision is pending.

## 5. Final Submission

- 5.1 The Program Director, in consultation with the thesis supervisor, must verify that appropriate corrections have been made, and then submits a summary of the thesis defence and examination to the Office of Graduate Studies.
- 5.2 An approved thesis may be submitted at any time following the oral defence. However, for candidates wishing to graduate at a particular convocation, a specific deadline date is printed in the Graduate Academic Calendar section of the Graduate Studies Calendar. The general formula for establishing this date is five weeks before convocation. **Candidates not meeting this deadline are required to re-register until the thesis has been formally submitted and approved by the University.**
- 5.3 The formal submission of the thesis to the University is made to the Graduate Studies Officer. At this point, the thesis should be in its final typed version, but only the original copy should be submitted. The Graduate Studies Officer checks through the thesis with regard to format and then seeks final approval from the Committee on Graduate Studies. If there are any discrepancies in format, the student will be contacted by the Graduate Studies Officer.
- 5.4 After the thesis has been formally approved, the candidate submits the required copies and pays the cost for binding and microfilming.

## 6. Microfilming of Thesis

- 6.1 When the thesis is submitted, the candidate is required to complete a "Non-Exclusive License to Reproduce Theses", Form NL/BN 91 [90-09]. This gives

consent for the thesis to be microfilmed by the National Library of Canada. There is a fee for this service and the candidate is billed for this at the time the final approved theses are submitted.

## **7. Binding of Thesis**

- 7.1 Theses must be bound in Trent Green with front cover and spine writing in gold. Binding arrangements are made through the Office of Graduate Studies.

## **8. Copyright Regulations**

- 8.1 For information concerning thesis borrowing and copyright law, please see below.

## **SPECIFICATIONS FOR THESES**

### **Titling the thesis**

The thesis will be a valuable resource for other scholars only if it can be easily identified and located. Library catalogues and online bibliographic data bases use the words in the title (and sometimes a few other descriptors) as a way to retrieve a thesis. It is therefore essential that the title provide a meaningful description of the content of the work. If possible, include in the title several key words that other researchers may be expected to use when searching for something on your topic. Avoid oblique references; if your title is a catchy but uninformative quotation, make sure that the subtitle clarifies what the thesis is about, for example, "The One and the Many: Mutability in Shelley's *Adonais*" or "The One and the Many: Canada's Wooden Aircraft Program in World War Two." Use word substitutes for formulas, symbols, superscripts, subscripts, Greek letters, and so on.

### **Order of Elements**

For consistency, the order of the front matter should be as follows:-

Title Page  
Abstract  
Preface, if any  
Acknowledgements  
Table of Contents  
List of Figures  
List of Tables, if any  
List of Abbreviations and Symbols, if any  
Glossary  
Body of Thesis  
Bibliography  
Appendices (copyright releases should be included where applicable)

### **Title Page**

The title page contains the copyright notice and the information necessary to identify your thesis in catalogues and bibliographies. See Appendix I for the required format. The title page is the only page in the thesis that is not numbered on the page itself, but the presence of the title page is accounted for in the numbering of pages.

### **Abstract**

Each thesis must contain an abstract, typed on a separate single sheet. It must include the title "ABSTRACT", the thesis title, the author's name, and a summary not exceeding 150 words (See Appendix II for a sample format). The thesis abstract provides a succinct summary of the thesis. To satisfy the requirements of the National Library and University Microfilms International, the abstract must be no longer than 350 words for a doctoral thesis and 150 words for a Master's thesis. The purpose of an abstract is to give a potential reader enough information about your thesis that a reader can decide whether or not to consult the complete work. Since people who consult abstracting services such as *Dissertations Abstracts International* or *Masters Abstracts International* rely only on the title and abstract, you should make sure that the abstract includes an indication of all the elements that would make your thesis worth consulting. If your thesis includes in the appendix a transcribed interview with an author, you might want to refer to this feature in the abstract. Include important place names and proper nouns because these can be important key words for electronic retrieval. Do not include graphs, charts, illustrations or tables in your abstract. The expected content of an abstract varies among disciplines, but all abstracts can be expected to include the following:

- a statement of the research problem or question
- an indication of the research method(s) used or theoretical orientation taken
- findings or major discoveries made
- conclusions and significance.

**The abstract should have the same line spacing as the text of the body of the thesis.**

### **Keywords**

At the end of the Abstract, you should provide a list of keywords. The Cataloguing Staff in the Trent University Library System will use these keywords when assigning subject headings and index terms as part of the Cataloguing Record. Since you are the person most familiar with your own research and its significance, it is appropriate that you should be involved in choosing the terms that help other scholars get access to your work. For example, the following keywords could be used for a thesis studying fuzzy relational modeling:

Keywords: fuzzy relational modeling, fuzzy simulation, fuzzy c-Means, Centre of Gravity, Centre of Area, Weighted Average of Cluster Centres, Polyline algorithm.

The following could be used to describe a thesis entitled "The Other of Grammatology: Lacan, Derrida, Kristeva," which studies the relationship between psychoanalysis, deconstruction, and feminism as they relate to linguistic representations:

Keywords: Psychoanalysis, Deconstruction, Freud, Derrida, Kristeva, Lacan, Feminism, Reference.

### **Acknowledgements**

You should include an acknowledgement, where applicable, of the extent to which you have received help (paid or unpaid) from faculty, supervisors, fellow students, technicians or others in the collection of materials or data, the design and construction of apparatus, the analysis of data, and the writing of the thesis. The acknowledgement section is also the place to clarify your role in joint work. It is appropriate to acknowledge the support and advice provided by supervisors.

### **Table of contents**

The table of contents provides a listing of the main elements in the thesis. See Appendix III for suggested formats. As a precaution, check the table of contents against the final form of the thesis to make sure that the page numbers reflect the final printing.

### **Appendices**

The purpose of an appendix is to include in the thesis supporting material that is not an essential part of the text itself. For example, in a Social Science thesis, letters of information to subjects, questionnaires, or other research instruments may appear in an appendix. An appendix to an Arts thesis may include a primary document that is otherwise inaccessible and is analyzed in the text itself. Appendicized material must be of sufficiently high print quality that legible copies and microfilms may be made. An appendix to a thesis in the Natural Sciences may include necessary raw data on which analysis has been performed in print format. Copyright releases from publications must be included here.

### **Style for spelling, punctuation, and bibliographic citations**

Select a standard style manual recommended by your graduate program and follow it consistently. The form and location of notes and the presentation of references/bibliographies must be consistent throughout the thesis and conform to a style appropriate to the discipline. Notes may be placed at the bottom of the page, at the end of each chapter, or collected at the end of the thesis. Either American or British spelling is acceptable, and the chosen style should be used consistently throughout the thesis. The use of a spell checker is highly recommended.

### **Typescript, point size, and print quality**

The type of font, font size, footnote/reference method, pagination, margins, and any other aspects of production are to be consistent throughout the thesis.

The thesis must be printed on one side of the paper only to conform to a requirement of the National Library. To ensure legibility of all copies, the original of the thesis must be of laser-print quality or letter quality. The entire thesis, with the possible exception of figures, tables,

graphs, and chapter headings should be in the same font throughout. For the text, print smaller than 12 points should not be used, but you may use a smaller point size for footnotes, graphs, formulas and appendices.

### **Line spacing**

All textual material (including the abstract, acknowledgements and other preliminary material) must have double spacing between lines. The only exceptions to this requirement are references, bibliographies, and indented long quotations, which may be single-spaced.

### **Margins**

Because of the requirements of binding and microfilming, you must observe the following specifications for margins on all copies. Leave a margin of at least 38 mm (1.5 inches) from the left-hand edge of the paper. Leave a margin of at least 25 mm (1 inch) from the top, bottom and right edges. These margins apply equally to all illustrative material: diagrams, maps, photographs, charts, tables etc.

### **Illustrative material**

All illustrative material from ink drawings to printed maps, charts and graphs to photographs must be readable not only in the original copy but in microfilmed copies. For this reason, you should avoid using colour on charts, graphs or maps, since the colours that look so striking in the original will probably be reproduced in indistinguishable shades of grey. Lines on a graph should be identified by labels or symbols rather than by a colour code. Cross-hatching provides better contrast for shaded areas (such as a pie chart or countries on a map) than does colour. When photographs are incorporated into the thesis, they should be highly contrasting black-and-white or colour prints or laser-prints. High quality colour laser photocopies are acceptable. Please note, if you do choose to include colour images, you must provide a copy in black and white for microficheing.

Explanations or captions of figures and tables appear beneath the figures and tables to which they refer.

### **Oversize and Undersize Material**

When the size of drawings, charts, computer tables, etc. does not remain within the normal margins, these margins may be reduced to 1.3 cm on the right and 2.54 cm on the left. Since a further reduction would not allow the volume to be bound, it may be necessary either to fold the material, making sure the folds lie within the prescribed limits, or to place the material in an envelope which will eventually go into a pocket at the back of the bound volume. Material of a smaller than standard size, such as a photograph, should be securely mounted on standard paper.

It's better to avoid using charts, graphs, maps and tables that are larger than the standard page size because oversized pages make the process of microfilming more complicated. If oversized pages must be used, they should be carefully folded into the manuscript. The fold

must not extend to the full width of the page in case the edges are trimmed by the binder and the fold-out is destroyed. The fold must be at least one inch from the right edge of the page.

### **Numbering pages**

**Each and every page in the thesis must be numbered.** The following system should be used, with small Roman numerals for the preliminary pages and Arabic numbers for everything else. The pages of **preliminary material** should be numbered with small Roman numerals placed in the centre of the page, not less than 12.5 mm (.5 inch) from the bottom. The title page counts as page I, but the number does not appear. Therefore numbering of the preliminary pages starts with the Abstract as ii.

The **body of the thesis**, starting with the first page of the Introduction or Chapter One as page 1, should be numbered with Arabic numerals placed in the upper right-hand corner, not less than 12.5 mm (.5 inch) from each edge. Running chapter titles are not allowed.

### **Mathematical Formulae and Symbols**

When necessary, mathematical formulae and symbols can be legibly written in script. A permanent black ink is recommended.

### **Binding of the thesis**

After the format and all forms have been approved by the Program and the Office of Graduate Studies, you must submit the **original** and **three copies** to the Office of Graduate Studies for binding and microfiching.

These required copies are to be printed on one side of the paper only and must be complete and identical in content, each containing all necessary charts, tables, photographs, illustrations and appendices.

### **Number of University Copies**

Four copies are required (one original copy and three photocopies). The bound original copy remains in the Bata Library, one bound copy is given to the student's program, one bound copy is given to the student's supervisor, and one copy is microfiched and then sent to the National Library. The student may also wish to have one or more personal copies of the thesis bound. There is a binding fee, per copy, and the student is responsible for all costs for binding. This is payable at the Office of Graduate Studies at the time the final approved theses are submitted.

**Please note: the copy that will be microfiched must be in black and white. No coloured tables/charts/photographs are permitted.**

If the thesis is not presented in the required format, it will not be accepted nor will the degree be conferred until all the required specifications have been met.

## **Granting of the degree**

When all the procedures for approving and submitting your thesis are completed, your graduate program will be notified of your completion. On receiving this notification, the Graduate Chair informs the Faculty of Graduate Studies that all program requirements have been met. As a final step, your name is placed on the Convocation List by the Registrar's Office, subject to approval by the Senate of the University.

## **Intellectual and physical access to your thesis**

The final step in the research process is publication, so that the research contribution joins the body of knowledge in the discipline and becomes available for use by others. To allow access to your research, the Office of Graduate Studies deposit one bound copy of both Master's and Ph.D. theses in the University Library System and a further copy in the appropriate program library. In the case of both Master's and Ph.D. theses, one of the submitted copies is sent first to the National Library for microfiching. When your thesis is registered with the Canadian Theses Service of the National Library, it is listed in various bibliographical services including Canada's national bibliography *Canadiana*, *Canadian Theses* on microfiche and *Bibliodisk* in CD-Rom format.

So that your research is accessible to international scholars, Ph.D. theses are included, with your permission, in University Microfilms International's *Dissertation Abstracts International*, a bibliographic database that includes a 350 word abstract; Master's theses are included in *Master's Abstracts International*, a bibliographic database that includes a 150 word abstract. For more information about University Microfilms International (UMI), you can access the Web site at: <http://www.umi.com>.

At the time of final submission of the thesis, you will be asked to sign a form to permit the listing of your thesis in UMI's abstracting services as well as a form to allow the National Library the non-exclusive right to reproduce or loan copies of your thesis in microform, paper, or electronic formats. The term "non-exclusive licence" means that the author retains the copyright of the thesis and can seek other forms of publication.

## **Language Requirement**

M.A. and Ph.D theses/dissertations will be written and defended in English (or in French, subject to individual program's policy/practice), unless the Dean of Graduate Studies, acting on the recommendation of the Director of the Graduate program involved, grants an exception to this rule. The Dean must take into account: a) the relevance of this language to the content of the thesis/dissertation, and b) the availability of Trent graduate faculty members fluent in the language (both verbal and written) who can supervise the thesis/dissertation, and c) the availability of External and Internal Examiners fluent in the language (both written and verbal) who can effectively participate in the thesis/dissertation examination. Application to defend in a language other than English or French must be submitted to the Dean of Graduate Studies by the Program Director at least one (1) year in advance of the proposed date of the thesis/dissertation defense. In any case, the Title and Abstract of the Thesis/Dissertation must also be provided in English.

### **Off-Campus Defences**

All graduate thesis/dissertation defences will be conducted on the Trent Campus in Peterborough with the examining committee and the candidate physically present at the examination. Under exceptional circumstances, the Dean of Graduate Studies, acting on the recommendation of the Director of the Graduate Program involved may permit some members of the examining committee and/or the candidate to participate by video or teleconference. Requests for this exam status must be submitted by the Program Director to the Dean of Graduate Studies at least one month in advance of thesis/dissertation defence.

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**THESIS GUIDE...Appendix I**

SAMPLE ONLY: Front Page of Thesis

THE UTILIZATION OF FISH RESOURCES BY THE COAST TSIMSHIAN:  
PREDICTING OPTIMAL PATTERNS OF EXPLOITATION

A Thesis Submitted to the Committee on Graduate Studies  
in Partial Fulfillment of the Requirements for the Degree of Master of Arts  
(or Science) in the Faculty of Arts and Science

TRENT UNIVERSITY

Peterborough, Ontario, Canada

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Anthropology M.A. Program

June 1977 (Convocation month & year)

**THESIS GUIDE...Appendix II**

SAMPLE ONLY Format for Abstract

ABSTRACT

The Utilization of Fish Resources by the Coast Tsimshian:  
Predicting Optimal Patterns of Exploitation

Richard William Nolan

This thesis is an attempt to explore the explanatory potential of predicting optimal patterns of exploitation. By examining currently available data on hunter-gatherer subsistence behaviour, we may establish a number of generalizations which would seem to legitimately describe hunter-gatherer subsistence. These generalizations provide the theoretical foundation of the analysis....

(Maximum 150-200 words)

**THESIS GUIDE...Appendix III**

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You can also use the format of ChapterNumber.FigureNumber, for example Figure 1.1 (chapter 1, figure 1), Figure 1.6 (chapter 1, figure 6) Figure 3.6 (chapter 3, figure 6), etc.

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