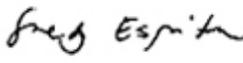


May 20, 2011

To : Graduate Council Members

From : Medy Espiritu 
Assistant Secretary and SynApps System Administrator

Please note that the next meeting of Graduate Council will be held on **Wednesday, May 25, 2011 at 10:30 a.m.** in the **Council Chambers, Gilmour Hall-111.**

Listed below are the agenda items for discussion.

If you are unable to attend this meeting, please email espiritu@mcmaster.ca.

A G E N D A

- I. Report from the Associate Vice-President and Dean of Graduate Studies
- II. Report from the Associate Deans of Graduate Studies
- III. 2011 Spring Graduands (*to be circulated*)
- Faculty of Business: MBA program

MOTION: "that Graduate Council approve the list of the 2011 Spring Graduands for the MBA program with amendments/corrections to be made as necessary by the Associate Graduate Registrar."
- IV. Leaves of Absence - Section 2.4.5 of the Graduate Calendar
- V. Proposal to repeal the *Policy on the Steps for the Creation of New Graduate Programs or New Fields in Existing Doctoral Programs* in view of the changes to the Institutional Quality Assurance Process (IQAP)
- VI. Proposal to revise the *Protocol for the Closure of Graduate Programs or Fields* in view of the changes to IQAP
- VII. Thesis Guidelines
- VIII. Other business

2.4.5 Leaves of Absence

GENERAL REGULATIONS

Leaves of absence are normally granted on a term-by-term basis. Whenever possible the leave should start and end at the beginning of a term (i.e., January 1, May 1, or September 1). During the period of a Leave the student cannot expect to be given supervision or be entitled to use the University's facilities. During a Leave of Absence, no tuition will be charged, nor will the student be eligible for any scholarship support. The length of time for completing the degree, and for scholarship support eligibility (see qualifier below), will be extended by the duration of the Leave on the resumption of studies. If a leave begins or ends in the middle of a term, term count will be determined upon return in consultation with the Associate Dean.

Leaves of Absence affecting Teaching Assistantship duties are covered by the Collective Agreement with Local 3906 (Unit 1) of the Canadian Union of Public employees.

Students should be aware that in the event of Leaves of Absence, continuation of the same research project and/or supervisor cannot be guaranteed. Students applying for a leave of absence for personal reasons must normally have completed at least one year of full time graduate studies. Students who have not completed a minimum of 16 weeks of graduate studies at McMaster will not be eligible for maternity leave scholarship funding as noted below. For additional information related to parental and maternity leaves, please refer to the next section.

REASONS FOR LEAVES OF ABSENCE

A Leave of Absence for up to one year is permitted for reasons of illness, provided that the request is supported by adequate medical documentation. Students who have successfully completed at least one full year in a graduate program may apply for a Leave of Absence once for up to one year for other personal circumstances, provided that the student's supervisor and the department support the request. Alternatively, the student may request withdrawal (Withdrawal at the Request of the Student). Should the student opt to withdraw, he/she may be eligible for reinstatement upon reapplication.

A Leave of Absence to obtain externally paid relevant work experience may be granted for one term for a Master's student, and for two terms for a Ph.D. student. No two Leaves taken to obtain relevant work experience may be consecutive.

A Leave of Absence will not be granted to pursue another program of study.

Note: Students who hold fellowships, scholarships or grants from NSERC, SSHRC, CIHR, or OGS should be aware that these agencies have policies governing the interruption and continuation of awards that may differ from the University's policy on leaves of absence. Students holding such awards and who intend to keep them are responsible for ensuring that any leave of absence taken does not conflict with the granting agency's regulations. The appropriate agency should be contacted for details.

Complete Policy Title:
**Steps for the Creation of New Graduate Programs or
New Fields in Existing Doctoral Programs**

Approved by:

Senate

Date of Original Approval(s):

May 6, 1991

Responsible Executive:

**Associate Vice-President and
Dean of Graduate Studies**

Policy Number (if applicable):

Date of Most Recent Approval:

April 8, 2009

Supersedes/Amends Policy dated:

October 13, 2004

Enquiries:

[University Secretariat](#)

A. Procedures for Approving New Graduate Programs

1. *Broad consultation among faculty members in the development of a draft proposal.* Such consultation is especially important when proposing interdisciplinary programs as those with the initial idea often do not know all the disciplines or individual faculty members who might potentially be interested, or have expertise.
2. *A meeting involving those proposing the new program, the Associate Vice-President and Dean of Graduate Studies, the Faculty Dean(s), and the Provost.* There are two issues to be examined: academic suitability and resource requirements. The proponents are responsible for arranging this meeting. A written proposal should be provided by the proponents in advance of the meeting, which covers some items that will appear in the OCGS submission, as well as some additional issues. The following items need to be addressed:
 - the nature of the program, and the fields to be included (if any);
 - the faculty members who are prepared to serve as core faculty;
 - whether mounting the proposed program is dependent on hiring new faculty, how many new faculty are required and whether this has been approved or not by the relevant Faculty Dean(s);
 - the justification for the program in light of the faculty complement, the societal need for the program, and the existing demand from students;
 - the anticipated enrolment for the program, in terms of both the number of students, and the prospective pool from which students will be drawn;
 - funding needed to support students, and the anticipated sources of that funding;
 - how the new program would be expected to fare on quality indicators;
 - support staff needed, and how they could be funded;
 - space requirements, and how they will be met; and
 - laboratory and/or library expenses, both one-time and continuing

Details of the program structure and course content are not needed for this meeting. Emerging from this meeting will be a determination of relevant departments, programs, and/or Faculties that should be part of the consultation process outlined in step 3, below.

Following approval to proceed beyond this step, the submission for OCGS needs to be prepared. Volume 1 of that submission, or extracts from it, will be provided to the bodies reviewing the proposal internally for steps 3 and 4.

3. *Consultation with affected parties.* The proponents should discuss the proposal with the Chairs of any departments that are home to faculty involved in the proposal, or that are involved in the provision of courses or other resources, to ensure that the relevant departments can provide the required support. Written confirmation of the ability and willingness to provide requested resources should be obtained from the relevant Chair(s). Similarly, if there is a proposal to cross-list a course, or to permit or encourage students in the new program to take courses in an existing program, the Chair of the affected department should be consulted, and their written agreement obtained. These consultations should take place sufficiently in advance of step 4 to allow Chairs to carry out appropriate consultations with their departments. In the case of interdisciplinary programs, the proposal should also be presented to a meeting of the chairs and directors of any relevant Faculty, to ensure that there is widespread awareness of the program, and of its potential impacts on others. If a new interdisciplinary program proposes to draw on, or cross-list one or several new courses to be hosted by other departments, it is important that such new courses be proposed by those departments rather than by the new interdisciplinary group, and that departments be given adequate time to do so.
4. *Review by the committee in the Faculty (or Faculties) mandated to consider graduate curriculum matters.* (The title of this committee varies across the Faculties, hence no specific committee name is mentioned here.) Volume 1 of the OCGS submission will be the basis for this review. Given that the curriculum committee's mandate is to assess the academic integrity of the program, the following components of the OCGS submission will be of particular interest at this step:
 - core and supporting faculty
 - program objectives
 - description of the fields, if any
 - program regulations, including admission policies
 - course requirements
 - course descriptions
 - comprehensive examination procedures
 - provisions for part-time study, if any
5. *Approval of the following four bodies: the Faculty (or Faculty Council if the Faculty By-Laws allow it to act on behalf of the Faculty); Graduate Council (or its Executive if Graduate Council will not be meeting in the near future); the University Planning Committee; and Senate.* These approvals need not be obtained in the order just listed, although it is the preferred order whenever that can be accomplished without undue delay. If one of the meetings will not be held for some time, the approvals should be obtained in the most expeditious order, having in mind the timing of the meetings of the various bodies. If any one of the bodies requires changes to the proposal, those changes should subsequently be provided for information to the other approving bodies.

The Faculty does not normally need to receive the full OCGS submission, but may on occasion request it. The usual practice would be to provide a summary of the nature of and rationale for the proposal, extracted from that submission, together with the statement of program regulations and new courses.

Graduate Council wishes to receive the full set of material that is contained in Volume 1 of the OCGS submission. What Graduate Council approves, however, is the proposal and program, not the document itself, which may continue to undergo editorial changes prior to its submission to OCGS.

The University Planning Committee does not wish to see the full proposal, but only a summary of two or three pages focussing on the resource requirements for the new program, and how they will be met. The material considered at step 1 can provide most of this information.

Senate also does not wish to receive the full OCGS submission, but only a summary of the nature of and rationale for the proposal, such as went to the Faculty.

Chairs of Departments named in the proposal either as departments housing the proposed faculty members of the program or departments providing courses or other resources to the program, should be informed of the schedule for its presentation to these four bodies and of the decisions of these bodies with regard to the program.

6. *OCGS appraisal.* Following approval by all four of these bodies (Faculty, Graduate Council, University Planning Committee, Senate), the proposal will be sent by the Associate Vice-President and Dean of Graduate Studies to OCGS for appraisal. In order to expedite the appraisal process, the Dean may submit a proposal to OCGS following approval by the University Planning Committee and prior to approval by the Senate. Once it has been received by OCGS, the program is allowed to be advertised to prospective students, provided that a disclaimer, “subject to approval by OCGS”, and when appropriate “subject to approval by the Senate of McMaster University”, appears as part of the ad.
7. *Ministry funding approval.* When OCGS approval has been received, students can be admitted to and registered in the program. The proposal will go to the Ministry for funding approval, but it is usually reasonable to begin admitting students prior to receiving that approval. Note however that OGS awards cannot be held by students in programs that do not have funding approval.

B. Procedures in the Case of a New Field Submitted Separately from a Periodic Appraisal

The steps to be followed are identical to those for a new program, with one addition. Between steps 2 and 4, graduate students in existing fields in the program should be consulted for their views on how the introduction of the new field will affect the existing fields.

The general consensus of the students should be summarized and included when describing the rationale for the program. A written statement outlining the methodology and results should also be included.

C. Alterations to the Procedures in the Case of a New Field Submitted as Part of a Periodic Appraisal

Students should be consulted in Step 2 and the Provost and Associate Vice-President and Dean of Graduate Studies should provide a written statement of the steps to be completed. If there are additional resources required, the appropriate involvement of the Dean and the Provost should be included in the process.

Only Step 2 needs to be completed, and approval obtained, prior to including a proposal for a new field in a periodic appraisal submission to OCGS. At the time the submission goes to OCGS, and in any event no later than September 15, the department or program must provide the material that is to be reviewed at Steps 3 and 4, which should be informed by consultation with current graduate students as described for the previous case. These steps need to be completed prior to the visit of the OCGS consultants. Of course it would be desirable to have these approvals begun, if not completed, prior to the due date for the periodic appraisal submission, but failure to accomplish that should not preclude proposing a new field as part of that submission.

D. Revisions Made to Fields in Response to OCGS or its Consultants

Revision, re-organization, or re-definition of fields in response to suggestions from OCGS or its consultants requires only the approval of the Faculty Dean and the Associate Vice-President and Dean of Graduate Studies. The bodies identified in step 5 should be informed of the changes that have been made.

Complete Policy Title:
Protocol for the Closure of Graduate Programs or Fields

Approved by:

Senate

Date of Original Approval(s):

January 14, 1998

Responsible Executive :

Associate Vice-President and Dean of Graduate Studies

Policy Number (if applicable):

Date of Most Recent Approval:

January 14, 1998

Supersedes/Amends Policy dated:

Enquiries:

[University Secretariat](#)

PROTOCOL FOR THE CLOSURE OF GRADUATE PROGRAMS OR FIELDS

1. Consideration of whether a graduate program or field should be discontinued can be initiated by:
 - a. a recommendation from the Department (or academic unit) that delivers the graduate program or field, or from the Faculty Dean, to the [Associate Vice-President and](#) Dean of Graduate Studies.
 - b. a recommendation from ~~OCGS~~[the McMaster Quality Assurance Committee](#), based upon a periodic appraisal, to the [Associate Vice-President and](#) Dean of Graduate Studies that a graduate program or field should be closed.
 - c. a recommendation from the [Associate Vice-President and](#) Dean of Graduate Studies, based upon (i) a review prior to the submission of ~~an OCGS~~ report [to the McMaster Quality Assurance Council](#), that a graduate program or field is in serious jeopardy and no report should be forwarded ~~to OCGS~~, or (ii) a review in accordance with the "Procedures for University Reviews of Departments, Schools and Major Instructional Programs" that indicates that a graduate program or field should be considered for closure.

No recommendation ~~from a Faculty Dean, OCGS, or the Dean of Graduate Studies~~ to close a graduate program or field shall be forwarded to Graduate Council until the Department (or academic unit) concerned has been notified of the intention to make such a recommendation.
2. Regardless of its origin, a recommendation that a graduate program or field should be closed or considered for closure should be forwarded to Graduate Council. Graduate Council shall receive from the Chair/Director [or equivalent](#) and [Faculty](#) Dean(s) a statement of academic and resource decisions that have been made ~~by the Department and Faculty respectively~~ with regard to the program/field under consideration. In addition, both the Department (or academic unit) and Faculty shall indicate the priority accorded the graduate program/field under review. Other Departments (or academic units) for which the program in question is integral to their own graduate offerings should also be informed of the proposed closure and given an opportunity to comment to Graduate Council on the ramifications of closure on their

graduate work. Graduate Council shall recommend to the University Planning Committee whether or not the program/field should be closed.

3. The Associate Vice-President and Dean of Graduate Studies shall transmit Graduate Council's recommendation to the University Planning Committee, together with documentation supporting the recommendation and, if appropriate, his/her comments on the recommendation.
4. Based upon information provided by the Associate Vice-President and Dean of Graduate Studies, Graduate Council, the Department/academic unit, Faculty, and the University-wide academic and financial context, the UPC considers whether the graduate program/field should be discontinued and forwards its recommendation to Senate.
5. Senate makes the final decision on whether or not to proceed with closure of the program or field.

GUIDE FOR THE PREPARATION OF MASTER'S AND DOCTORAL THESES



SCHOOL OF GRADUATE STUDIES HAMILTON, ONTARIO

MAY 2011

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1.0 GENERAL REQUIREMENTS

1.1 Introduction

A Doctoral student may prepare and defend either a **standard thesis** (see sections 1.2 and 2.0) or a “**sandwich**” **thesis** (see sections 1.3 and 5.0) at oral examination (also known as the ‘thesis defense’). A Master’s student may submit only a standard thesis (see section 2.0). Each department or program offering graduate work is wholly responsible for setting up oral examinations for Master’s candidates (see Sections 6.1 and 6.2). The School of Graduate Studies is wholly responsible for arranging all Ph.D. oral examinations (see Sections 6.3, 6.4, and Appendix 1). **If after reading the material in the guide, you have any questions, please do not hesitate to contact the Thesis Coordinator in the School of Graduate Studies at extension 23680, Email: gthesis@mcmaster.ca.**

Starting on May 1, 2011, all candidates for Master’s or Doctoral degrees who have successfully completed their oral examinations and who have made all required revisions must file an **electronic version** of their final thesis to ‘**Digital Commons**’ (<digitalcommons.mcmaster.ca>) and forward the “Final Thesis Submission Form”, which was previously signed by the Chair of their examination committee and later by the supervisor, to the Thesis Coordinator at the School of Graduate Studies.

1.2 Criteria for Acceptance of Master’s and Standard Ph.D. Theses for Thesis Defense

A thesis is a coherent document that provides a complete and systematic account of the research work accomplished by the writer. The criteria for acceptance are listed in detail later in this guide, but in general, the requirements are summarized as follows:

- (a) Before submitting for defense, the text and accompanying illustrative material must be clear and error-free and written using Canadian English and grammar; the student is advised to use a spell and/or grammar checker. The entire text of the Ph.D. thesis must not exceed 300 pages; normally, a Master’s thesis must not exceed 200 pages but further information about a Master’s thesis will be supplied by the student’s department or Graduate Program.
- (b) Normally, only an electronic version of the thesis is acceptable for submission for thesis defense. The word-processing program or format used by the student will be one that is mutually agreed between the student and the supervisory committee. The arrangement and numbering of each page must be within the specified margins (see section 2.2). However, it may be necessary to distribute a printed copy of the thesis to accommodate the wishes of an **internal or external examiner** who prefers to read a hard copy. **Consequently, the student should be prepared to supply a printed copy (or copies) of the thesis to the Thesis Coordinator at the School of Graduate Studies before the defense (see Appendix 1).**
- (c) After a successful defense and after the corrections have been made and approved, the student is responsible for making sure that the final electronic thesis is correctly prepared (i.e. page numbering of the preliminary pages, order of sections, chapters, etc.) before converting the document to a pdf file and then uploading the pdf file to ‘Digital Commons’.

1.3 Criteria for Accepting a Sandwich Ph.D. Thesis (Containing Previously Published/Prepared Material) for defense

It is increasingly common in many disciplines to present for defense a Ph.D. thesis which consists in part of **previously published peer-reviewed articles (or articles submitted for peer review)**. If some of the research undertaken expressly for the degree has been previously published or prepared for publication as one or more journal articles, or parts of books, then electronic files of these published, ‘in press’ or ‘submitted for publication’ items may be included *verbatim* within the thesis; the thesis is then termed a ‘sandwich’ thesis. **In addition to the criteria in 1.2, certain important conditions need to be followed when preparing a sandwich Ph.D. thesis:**

- (a) There must be a written introduction preceding the published (or ‘in press’ or submitted) article or articles which thoroughly sets the context for the entire thesis, and draws out the overall objectives and implications of the work.
- (b) If there are multiple authors of the separate articles, there must be a preface to the thesis that **documents clearly the student’s contribution to each of the papers, and the student’s contribution to the originality of the work, thereby clarifying in what way this work becomes the student’s thesis.**
- (c) It is permissible to include electronic articles as they appear in an on-line journal (or by photocopying them for a hardcopy version of the thesis); however, the Associate Vice-President and Dean of Graduate Studies, on a recommendation from the examining committee, may require that the published articles be reproduced as the final word processing file submitted for publication and in a form described in section 2.2. Illegible captions due to small fonts, miniaturized Figures or Tables, and irregular margins are among the reasons for insisting on incorporating the

word processing file rather than reproducing the electronic reprint into the electronic thesis.

(d) If copies of previously published material are presented in the thesis, the material must indicate the names and order of the co-authors exactly as published. The name of the journal and other publication information (date, volume, pages and so forth) must also be included. All of the required information must be presented at the beginning of the chapter or section of the thesis that reproduces the previously published material. The objective of this requirement and of requirements (b) and (c) is to assure examiners that there has been full disclosure of collaborative activity.

More details of the requirements for writing a sandwich Ph.D. thesis are described in section 5.0.

2.0 PREPARATION OF THE MASTER'S and the STANDARD Ph.D. THESIS

2.1 The Electronic Thesis for Oral Defense

The **Master's thesis** which has been prepared for defense will be e-mailed by the student as an electronic file to those members of the supervisory committee who will act as examiners and to the Chair of the defense. The master's student can obtain information about his/her thesis defense (i.e. the date, time, and venue; the names of the examiners) from the Graduate Coordinator or Graduate Administrator in the department or Graduate Program in which he/she is registered.

The **Ph.D. thesis** for defense will be e-mailed by the student to **all** supervisory committee members prior to initiating the thesis defense system (see Appendix 1). In addition, the Ph.D. student **should be prepared to deliver a print copy (or copies) of the thesis** to the Thesis Coordinator who will be responsible for distributing it to an **internal** or an external examiner if he/she requires a hard copy. **The hardcopy version must be the same version as the electronic thesis**, and must be printed on regular quality 8½" x 11" printer paper and back-printed to save paper.

When the thesis has been successfully defended and required changes have been made to the text, the student may wish to print one or more copies of the final version for binding at their own expense. Alternatively, the student may be able to e-mail their final thesis to the binding company. Up-to-date Information about thesis binding is available either from the Thesis Coordinator (gthesis@mcmaster.ca), or from the SGS website (www.mcmaster.ca/graduate)

2.2 The Text of the Thesis

2.2.1 General

The thesis must be typed in either 10 or 12 point font. There are two types of fonts: proportional and fixed (typewriter style) and different space values for each character in a proportional font. Arial and Times New Roman are examples of proportional fonts. If you are using a proportional font for your thesis you must use a 12-point font. A fixed font has the same value for each character, and an example of this is Courier. If a fixed font is used, the smallest you can use is 10 point (10 characters per inch). **The student is encouraged to select a font that is easy for the examiner to read.**

The text may be single or double spaced; footnotes and long quotations should be single spaced. Word processors such as WordPerfect, LaTeX and MSWORD are automatically set to create footnotes in the correct format. The entire thesis must be in the same typeface and font, and, for hardcopies, care should be taken to ensure an even black copy is produced.

It is recommended that a laser printer be used for hardcopies. If an ink-jet printer is used, be sure to use paper that is specifically designed for this kind of printer, to avoid smudging and to achieve good print quality. The student is urged to find a text processing program which includes unusual symbols or characters should they be necessary. Characters that are not readily available (e.g. unique symbols) may need to be created in an electronic format which can be readily downloadable from a pdf file by future readers.

2.2.2 Margins and Indentations

For students who wish to send a copy (or copies) of their finally-approved thesis for binding, the following should be noted. To ensure sufficient space on the page for binding, the TOP and LEFT margins should be 3.8 cm, and the RIGHT and BOTTOM margins should be 2.5 cm. If the thesis is to be back printed, both LEFT and RIGHT margins

should be 3.8 cm. These margins also apply to all illustrative material, including diagrams, maps, photographs, charts, tables, and computer printouts.

2.2.3 Header

All pages of the thesis, beginning with the Introductory chapter (or Chapter 1), must have header information containing the degree program, the author's name, McMaster University and the department, e.g.

Ph.D. Thesis - J. Smith; McMaster University - Mechanical Engineering.

The word processing program should automatically insert headers at the top of each page. The purpose of the header information is to provide identification if people subsequently print or photocopy sections of the thesis.

2.2.4 Pagination

All pages are to be numbered EXCEPT the half title page, which is disregarded in the pagination, and the title page, on which the number (i) is implied but not written. The remaining pages of the preliminaries should be numbered with lower-case Roman numerals (ii, iii, iv, etc.) placed in the centre at the bottom of the page, approximately 2 cm from the bottom edge of the paper. Page numbers should be in a consistent location on each page.

All pages of the thesis, beginning with the Introduction or Chapter 1, must be numbered with Arabic numerals (1, 2, 3 and so on). This includes pages with tables, illustrations, diagrams, bibliographies and appendices.

2.2.5 Preparing and Sending the Electronic Thesis for Binding

After a successful defense and required changes have been made and approved by the supervisor, the student will upload a pdf version of the final thesis to Digital Commons. Inevitably, the student will also want some copies of the final thesis printed and bound. To this end, students are encouraged to e-mail the same pdf file to the binding company to ensure that electronic and printed versions are the same. Details of selected companies who are organized to print and bind the thesis are listed on the School of Graduate Studies website (www.mcmaster.ca/graduate) or advice may be provided by the Thesis Coordinator. The student when ordering copies of the bound thesis will be expected to pay all costs for binding and delivery. Delivery of copies of the bound thesis will be arranged by the student; **the bound thesis must not be delivered to the School of Graduate Studies.**

2.2.6 Illustrative Material

Maps, diagrams, Figures and Tables may be drawn or prepared using a black font colour. Colours should not be used on graphs or maps that are to be reproduced in black and white, since the distinction between shades of grey may be lost. The finished drawing should be scanned into an electronic format which can be incorporated into the text of the thesis using the word-processing program. Similarly, photographs should be scanned or converted into an electronic format which is suitable for including in the word-processing program.

For examiners who prefer to read the thesis as a hard copy, illustrations must be dark enough to reproduce well, and have standard margins on all sides. Pages wider than 8.5" x 11" should be photo-reduced provided the material is still readable. Drawings for a hardcopy of the thesis may be photocopies of high quality. Photographs should be originals, not photocopies. Students should consult McMaster Printing Services for page-reduction advice. *Oversized pages* (charts, graphs, maps, tables, etc.) should be carefully folded into the hardcopy thesis and should not extend the full width of the standard page.

2.2.7 Abbreviations and Symbols

Abbreviations and symbols must be those that are generally accepted in the field of study, must be defined in a list of Abbreviations and Symbols at the start of the thesis (see section 3.1.h below), and must be used consistently throughout the thesis.

3.0 SEQUENCE OF PARTS OF THE THESIS

A standard graduate thesis consists of the following parts, and is arranged in this order:

3.1 The Preliminary Pages

The following preliminary pages will precede the main text: The Half Title Page; Title Page; Descriptive Note (page ii); Abstract; Acknowledgements; Table of Contents; List of Illustrations, Charts, Diagrams; List of Tables; List of Abbreviations and Symbols, **Declaration of Academic Achievement. Preliminary pages from (c) onwards will be numbered using Roman numerals.**

(a) *Half Title Page*: The purpose of the half title page is to indicate to the binder what words should be put on the spine of the bound volume to serve as a significant label. The length should not exceed sixty (60) characters (including Spaces). This page must **not** be numbered. **See Example 1 on p. 13 for the required format.**

(b) *Title Page*: All text on the title page must be centred between the margins. The top and left margins should be 3.8 cm (1.5 inches) and the right and bottom margins should be 2.5 cm (1.0 inch). The copyright line should be placed as the last line of the page. This page must not be numbered. **See Example 2 on p. 14 for the required format.**

(c) *Descriptive Note*: This page simply lists degree and year; department; university name and location; full title in lower case; full name of author followed by degrees previously conferred; supervisor; and number of pages, counted separately for the preliminary pages and the text. This page must be numbered 'ii'. **See Example 3 on page 15 for the required format.**

(d) *Abstract*: An abstract of not more than 300 words must be included and will indicate the major emphasis of the thesis, new discoveries, and its contribution to knowledge. The style of abstract varies somewhat from discipline to discipline; the student should follow an appropriate style. This page must be numbered 'iii'.

(e) *Acknowledgements*: An expression of thanks for assistance given by the supervisor of research and by others should be either set forth on a separate page or incorporated into the Preface (if there is one). These and all subsequent preliminary pages listed under (f), (g) and (h) must be numbered in lower case Roman numerals, i.e. 'iv', 'v', 'vi' etc.

(f) *Table of Contents*: Must include the titles of all section or chapter headings and subheadings with their respective page numbers and must be numbered in lower case Roman numerals continuous after (e).

(g) *Lists of Figures and Tables* with their respective titles and page numbers; must be numbered in lower case Roman numerals continuous after (f).

(h) *List of all Abbreviations and Symbols* with their appropriate definitions; must be numbered in lower case Roman numerals continuous after (g).

(i) *Declaration of Academic Achievement*: **The student will declare his/her research contribution and, as appropriate, those of colleagues or other contributors to the contents of the thesis.**

NOTE: The Preliminary pages described above will also precede the main text of a 'sandwich' thesis

3.2 Text, References and Footnotes

The text of the standard graduate thesis consists of the 'Introduction' section or chapter, followed by several well-defined sections or chapters which contain the research results, finishing with a Conclusion and Discussion section or chapter, or a summary statement of the results of the investigation.

The List of References section (or bibliography) follows the text, and this section is followed by any appendices. **See Example 4 on p. 16 for the recommended format of the bibliography for different disciplines.**

Regarding the style of writing, it is common practice to adopt the style (e.g. phraseology, nomenclature, abbreviations) practiced within the field of study. For more advice, the student may wish to be advised by the guidelines presented in A Manual for Writers of Term Papers, Theses and Dissertations (Kate L. Turabian, 7th edition, published 2007). These guidelines provide alternative formats to accommodate the practice in different disciplines but, once chosen, the format must be adhered to consistently.

Footnotes should be numbered (as necessary) and placed at the foot of the page or, with less convenience to the reader, at the end of the chapter or section, or at the end of the thesis. If footnotes are collected in one place, their location must be shown in the table of contents by title and page. Most word processors, by default, place footnotes at the end of each page and assign them consecutive numbers (see Turabian, Ch. 13, Section 13.17).

Students should contact their department to ascertain any departmental specifications for the preparation of a master's thesis.

4.0 CITATIONS AND REFERENCES

4.1 Citing Published Articles within the Text

In the basic and applied sciences, referencing within the text must follow a **consistent system** which **normally** gives the surname of the author(s) followed by the year of publication (see Turabian, Chapter 10). The Thesis Writer's Handbook by Miller & Taylor (1987) may also be consulted for instructions and examples of MLA and APA document styles (also see the section on Electronic References below).

Note: Citing Master's and PhD theses written by others fall into this category. These are publications that are available (either via the internet or through interlibrary loans, or through Library and Archives Canada) and should be cited as publications.

4.2 Citing Unpublished Articles by the Student within the Text

In respect of articles not yet published in the literature, the term "*to be published*" is not to be used, since a more precise term is desirable both for bibliographic accuracy and for information as to the status of the material. Either of the following wordings must be used, as appropriate:

- (a) *Accepted for publication in the [Name of Journal].* (If the issue in which the article will appear is known, it should be cited.) If the issue is not known, the date of acceptance should be stated immediately after the word accepted.
- (b) *Submitted [Date] to [Name of Journal].*

Note: The author of a thesis could alternatively treat an item in section 4.2 (b) as a 'private communication' (see section 4.3), but if there seems good cause to suppose the submitted article will be accepted, it may be of more value to mention the likely journal of publication.

4.3 Citing Other Unpublished Information or Articles within the Text

This category includes anything other than published accepted or submitted items. It could include material that is in draft prior to submission, internal reports that are not available through the internet or in standard reference library lists, and personal letters and oral communications. In the case of a letter or a report, a reference could read e.g.:

Private Communication from Dr. John Doe: Dept. of Gastronomy, McMaster University, Report No. 10/70.

4.4 Electronic References

The following are recommended website links which provide information on how to cite electronic references:

Columbia Style Guide: http://www.columbia.edu/cu/cup/cgos/idx_basic.html

APA Style Guide: <http://www.apastyle.org/electsource.html>

<http://www.apastyle.org/electext.html>

MLA Style Guide: <http://www.tsufl.edu/library/5/mla.htm>

University of Alberta Library: <http://www.library.ualberta.ca/guides/citation/>

5.0 PREPARATION OF THE “SANDWICH” Ph.D. THESIS

Some of the research undertaken by the student expressly for the Ph.D. degree may have previously been published or prepared as one or more journal articles, or chapters of books; these items may be included within the Ph.D. thesis subject to the following regulations and to obtaining permission from the supervisory committee. A thesis consisting of **peer-reviewed** journal articles, whether previously published, submitted for **peer-review**, or prepared for publication but not yet submitted, is often referred to as a **“sandwich” thesis**. A **minimum of three published or submitted but not yet published journal articles** must be included within the sandwich thesis; **normally, at least one** of these must be published or ‘in press’ at the time the thesis is submitted for defense. The following points pertain specifically to the sandwich thesis:

5.1 The sandwich thesis must be a coherent presentation of the candidate's research work which includes an introductory chapter (normally ‘Chapter 1’) that outlines the general theme and the objectives, and a final chapter of conclusions that draws out the overall implications of the research. The introductory and concluding chapters need to be substantial in content, depth and length, not paper thin. In addition to setting the overall context, and identifying how the several papers relate to each other, it would be valuable if the introduction could also warn a reader of any overlap in the article chapters, such as in the literature reviews or the methods section of each article. Likewise, the concluding chapter should show clearly how the preceding chapters form a coherent substantial body of work and how significantly this body of work advances our knowledge. The different chapters (or sections) which include the published or prepared articles must contribute to the general theme of the thesis. Repetition of material that appears in more than one journal article (e.g., introduction, background, methodology) should be avoided. **The author of the thesis shall normally be the main contributor to these published or prepared articles.**

5.2 A sandwich thesis may be the choice of document for a doctoral student who has researched a topic for 4-6 years. In contrast, a Master's student who has undertaken a research topic for a relatively short time (1-2 years) **would normally** write a standard thesis rather than a sandwich thesis **but in exceptional circumstances the supervisory committee may agree that the Master's student should write a sandwich thesis.**

5.3 The Preliminary pages (see section 3.1) for the sandwich thesis are similar to those of a standard thesis. However, the Preliminary pages of a sandwich thesis must include a preface that clearly documents the student's (and the other authors') contributions to each multi-authored work and when the work was conducted. The student must justify why his/her original contributions should be included in the main body of the thesis.

5.4 There must be a written introduction **preceding each published (or ‘in press’, or submitted) article** which sets the context and draws out the overall implications of the work. The metaphor, ‘sandwich thesis’ implies that the ‘meat’ is in each of the articles, but it is also important that there is ‘bread’ to hold the sandwich together.

5.5 For any chapter of the sandwich thesis that includes a **published article**, the student may choose to either incorporate **an electronic version of the published reprint** (with pages renumbered to fit in with the pagination of the thesis; see item 5.10 below), or **an electronic version of the published article** (e.g. MSWORD document) that complements the first (Introductory) and last (Discussion and Summary) chapters of the sandwich thesis in respect of font type and size, margins, and overall style.

5.6 In addition to the written text which may include diagrams, Figures and Tables, the student may also include film or sound files with the electronic thesis. It will be the student's responsibility to ensure that all electronic files supplied to an external examiner are in formats that the examiner may access easily. In the event an **internal or an external examiner** prefers to assess a hard-copy of the thesis, the student will **provide a print copy (or copies) of the sandwich thesis (including a CD or DVD as appropriate)** to the Thesis Coordinator prior to the thesis defense.

5.7 Written permission to include copyright material in a Ph.D. thesis must be obtained by the student from the copyright holder. **This permission must also include a grant of an irrevocable, non-exclusive license to McMaster University and to Library and Archives Canada to reproduce the material as part of the thesis.**

While these licenses should normally be obtained at no cost, any payment which might be required by the rights holder is the exclusive responsibility of the student. If the material has been published in an academic journal, copyright will normally have been assigned to the publisher of the journal. If the material has been published in another format (e.g. as part of a book, or as a technical report, etc.) the copyright may not have been assigned to the publisher, but rather licensed by the author(s) for a specific purpose. The exact status of the rights attaching to the material must be determined. If the material has been co-authored, the status of the rights of each co-author in the work must be determined. The candidate must secure from any coauthor of a published work a written waiver of all rights in favour of McMaster University and Library and Archives Canada so as to permit publication of the thesis. In addition, written permission must be obtained from any coauthor who retains copyright or the person to whom the coauthor has assigned copyright, by way of a grant of an irrevocable non-exclusive license to McMaster University and to Library and Archives Canada, to reproduce material generated by the co-author as part of the thesis. The thesis should indicate that articles have been printed either "with permission" or "under license" (either by a statement in the preface or on the first page of each article). **Electronic copies of the letters of permission or licenses should be submitted to the School of Graduate Studies prior to the defense. See Appendix 3 for an example of a letter of Permission.**

5.8 For unpublished work (e.g., a paper that has been submitted for publication in a peer-reviewed journal but not yet published), a statement concerning the status of any dealing or contemplated dealing with the copyright or the auspices under which the work was prepared must be on the first page of the separately prepared, unpublished work. If copyright has already been legally assigned, written permission, as described in item 5.7 above must be obtained.

5.9 For each published article, a complete citation, including first and last page number in the journal publication (or the Digital Object Identifier (doi) number) and recognition of the copyright holder must be written on the first page of the chapter.

5.10 The previously published or prepared articles must be assigned page numbers that are sequential within the thesis. To avoid confusion, it is essential to remove the original journal page numbers; this information will be included in the citation given on the first page of the chapter.

5.11 Journal articles typically contain many more words per page than a page of a thesis. Such articles must be prorated to assess their acceptability within the maximum-allowed 300-page length of the thesis.

5.12 A list of references is included in most journal articles or manuscripts that are included in a sandwich thesis. References should remain self-contained within each article, as they appear in the original published document. Frequently, this may appear as a serial number, often a superscript incorporated appropriately within the text, which relates to a non-alphabetic bibliography at the end of the article (or chapter; see for example Turabian 10.33). It is acceptable that, because journal articles from more than one journal may be included, more than one referencing styles will also be included within the sandwich thesis. References for the new material in the thesis, e.g. the first and last chapters, should be listed in the main reference list at the end of the thesis as in the standard thesis (see section 3.2). A reference in one or more of the reproduced articles or manuscripts should only be included in the main reference list if it is also cited in the new material.

Finally, after a successful defense and all changes and corrections have been completed to the satisfaction of the supervisor (or examination committee as necessary), the student will upload the sandwich Ph.D. thesis (including all associated approved files) as a pdf file to 'Digital Commons' as described for the standard thesis (see section 6.4).

6.0 SUBMISSION OF THE THESIS: BEFORE AND AFTER THE DEFENSE

6.1 Submission of a Master's Thesis prior to Defense

To meet the requirements for a Master's degree, the thesis must be submitted by the student to the graduate administrator of the department (or Graduate Program) prior to the defense, either in an electronic form (e.g. by e-mail or a memory stick) which is preferred by the examiners or, if preferred, as a hardcopy no later than the date specified in the 'Sessional Dates' section of the School of Graduate Studies Calendar for the degree to be recognized at the appropriate convocation.

6.2 Submission of a Completed Master's Thesis After a Successful Defense

After a successful defense, the Chair of the examination committee will inform the student in general terms of the changes to the thesis which are required by the examiners. Usually, the supervisor will be asked by the Chair of the

examination committee to supervise these changes. In addition, the Chair of the examination committee will give to the student a form [entitled: 'Final Thesis Submission Sheet'] which will be initialed by the Chair to indicate whether the examination committee have decided that minor or major changes are required to the thesis. This form will be given to the student to hand to the supervisor when all changes have been made. The form must be signed by the supervisor if the changes are minor (or by all of the examiners if major changes are required) when all changes have been approved. When the supervisor has signed the form, the student will prepare a pdf version and upload the final thesis to 'Digital Commons', **and either send (by internal mail) or take the signed form to the Thesis Coordinator. It is the student's responsibility to ensure that all pages of the final thesis are complete and placed correctly before uploading to Digital Commons.**

The student is advised to submit their final thesis after defense no later than the date specified in the 'Sessional Dates' given in the School of Graduate Studies Calendar for the appropriate convocation.

6.3 Submission of a Doctoral Thesis Prior to Defense

Having e-mailed a copy of the thesis to each member of the supervisory committee, the student will access the 'Thesis Support' portal in the School of Graduate Studies website and follow the instructions provided (see APPENDIX 1 for details, and follow steps 1-4). The student, in consultation with the supervisor and supervisory committee members, will also provide the Thesis Coordinator with a preferred date(s) for the defense. The Thesis Coordinator will then e-mail the supervisor and all supervisory committee members to ask them to (i) approve the date for defense and (ii) approve the written thesis as defensible; the supervisor and all supervisory committee members will reply appropriately to the Thesis Coordinator. When the thesis has been approved by the supervisory committee as worthy of defense, the Thesis Coordinator will arrange the selection of an external examiner (from a list of prospective examiners supplied by the student's supervisor), and the date and time of the Oral Defense. If the external examiner is able to evaluate the written thesis but is unable to attend the thesis defense, the Thesis Coordinator will seek to find (through an e-mail list to all faculty members) an internal examiner from the university community.

When all of the examiners have been determined by the Thesis Coordinator, they will be notified of the date, time and place of the thesis defense. Furthermore, the external examiner and internal examiner (as necessary) will be sent an electronic copy of the thesis. **If an internal or external examiner prefers to evaluate a hard copy of the thesis, the student must be prepared to provide the Thesis Coordinator with a printed copy (or copies) of the thesis. The printed version of the thesis must be the same as the submitted electronic copy.** If an external examiner requests a printed copy of the thesis, the Thesis Coordinator will supply it to the examiner.

6.4 Submission of a Completed Doctoral Thesis After a Successful Defense

After a successful Oral Defense, the examination committee will invariably ask for changes to the written thesis. The Chair of the examination committee will give to the student a form [entitled: 'Final Thesis Submission Sheet'] which will be initialed by the Chair to indicate whether the examination committee have decided that the changes, collectively, are of a major or a minor nature (a decision which is made by the examination committee).

If the changes are deemed to be minor, then the Chair will ask only the supervisor to oversee the changes by the student. There will be no requirement for the revised thesis to be sent to all supervisory committee members for further comment.

If the changes are deemed to be major, the Chair will ask the supervisor and appropriate members of the supervisory committee to supervise the student in making these changes; when suitable changes have been made, the revised thesis will be sent (in electronic format) to all examiners for further appraisal. The members of the examination committee, in consultation with the examination Chair, will then decide whether the revised thesis is 'approved' or if it requires further alteration and scrutiny. It is conceivable that the student may be called by the examination committee for a formal re-examination and re-defense of the written thesis.

When the student's supervisor (or the examination committee) is satisfied that all changes have been made correctly, the supervisor will complete and sign the "Final Thesis Submission Form". The student will then send the signed form by internal mail (or deliver personally) to the Thesis Coordinator. Finally, the student will convert the final thesis to a pdf file; **it is the student's responsibility to ensure that all pages are complete and correctly numbered AFTER converting the final thesis to a pdf file and before uploading to Digital Commons.** Having registered with Digital Commons and after the thesis has been uploaded, the student will automatically receive an e-mail invitation from the Associate Vice-President and Dean of Graduate Studies to complete the on-line 'Ph.D. Student's Exit Survey'.

After the final thesis has been uploaded to Digital Commons but **before** its official publication, the Thesis Coordinator will access the thesis over the next 5 - 7 days to check **the information given by the student to Digital Commons, and check the essential details on the Preliminary pages of the thesis**. If the Thesis Coordinator is satisfied that the essential information is correct, only then will the thesis be officially published. An e-mail giving the official date of publication of the thesis will automatically be sent to the student.

The student is encouraged to upload the final thesis after defense no later than the date specified in the Sessional Dates contained in the School of Graduate Studies Calendar for the appropriate convocation.

6.5 Binding Copies of the Final Master's or Doctoral Thesis

As of May 1, 2011, McMaster University will no longer require that a graduate student provide the university library or the student's department, School, or Graduate Program with suitably bound copies of their printed thesis. Furthermore, Library and Archives Canada will no longer require an unbound copy but will access the student's thesis directly via Digital Commons. Nevertheless, after a successful defense and after all the corrections and changes have been approved by the supervisor, the student will probably want to have copies of their Master's or Ph.D. thesis bound for personal reasons or for presentation, for example, to their supervisor or even to the department. Either the Thesis Coordinator or the School of Graduate Studies website will give advice on reputable companies and their costs for thesis binding. It is the student's responsibility to ensure that the electronic thesis sent to the bindery (or print copies sent for binding) is **the same version** as that uploaded to Digital Commons. The student will be expected to pay for all copying and binding costs including any charges for delivering copies of the bound thesis to the student's address. The student should **not** instruct the bindery to deliver copies of the bound copies of the thesis to the School of Graduate Studies at McMaster University.

Example 1: Half-Title Page

GOVERNOR JOHN WENTWORTH

(Note: All Capital Letters)

The length should not exceed 60 character spaces, including spaces between words.

Example 2: Title Page

THE CHARACTER AND ADMINISTRATION OF GOVERNOR JOHN WENTWORTH

(Note: All Capital Letters)

By KATHLEEN STOKES, B.A.

(Note: All Capital Letters) (All previous degrees should be listed)

A Thesis Submitted to the School of Graduate Studies in Partial Fulfilment of the Requirements for
the Degree Master of Arts

McMaster University © Copyright by Kathleen Stokes, June 1992

Example 3: Descriptive Note

McMaster University MASTER OF ARTS (1992) Hamilton, Ontario(History)

TITLE: The Character and Administration of Governor John Wentworth AUTHOR: Kathleen
Stokes, B.A. (McMaster University) SUPERVISOR: Professor H.E. Duckworth NUMBER OF
PAGES: vii, 212

(To follow the title page and to be numbered ii)

Example 4

BIBLIOGRAPHY

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APPENDIX 1

STEPS FOR THE SUBMISSION, EXTERNAL EXAMINATION, AND DEFENSE OF A Ph.D. THESIS

STEP 1: Student Initiates the Ph.D. Thesis Defense Process Online

The link to initiate a thesis defense through the **Thesis Defense System** is available on the School of Graduate Studies website (*graduate.mcmaster.com*). Once the defense is initiated, the supervisor will be contacted by e-mail through the Thesis Defense System to submit nominations for an external examiner. The names of the potential examiners nominated by the supervisor must **not** be revealed to the student. **The selection of an external examiner is the responsibility of the Associate Vice-President and Dean of Graduate Studies.** All nominees must be at 'arm's length' from all members of the supervisory committee and the student. To maintain this distance, all communication with the external examiner must originate only from the School of Graduate Studies, and **not** from the supervisor or members of the supervisory committee.

As it takes time to contact a proposed External Examiner and to receive word of his or her acceptance, this completed electronic form must be submitted by the supervisor **at least 4-6 weeks** before the student moves to Step 2.

STEP 2: Propose a Date and Time for Ph.D. Thesis Defense

The student will be prompted via email to submit a date and time for their thesis defense. The student is expected to have conferred with the supervisory committee members regarding suitable dates before submitting the thesis online via the **Thesis Defense System**. Once the student has submitted the thesis, the members of the supervisory committee will be prompted via email to (a) agree on the time and date for defense, and (b) agree that the thesis is ready for defense. **ONE hard copy of the thesis should be submitted by the student to the Thesis Coordinator at the School of Graduate Studies six to eight weeks in advance of the expected date for oral defense.** A majority of the Supervisory Committee must approve the thesis before it can be sent out for external examination.

This means that if two out of the three members approve the thesis and the 3rd member does not approve, the thesis can still be sent to the external examiner for review. However, if the student has a four-member supervisory committee and only two members approve, the thesis cannot be sent for external examination.

A **300-page limit** on the **text** is imposed on all Ph.D. theses [i.e. excluding the Preliminary pages (see Section 3.1), bibliography and any appendices]. In cases where students and their supervisors believe that the thesis topic requires substantially greater length than 300 pages, written approval from the appropriate Associate Dean of Graduate Studies must be obtained before the external examiner is contacted. Potential external examiners must be informed of the exceptional length of a thesis in advance.

The thesis (whether an electronic or hardcopy version) will not be sent to the External Examiner until it has been approved for submission and defense by the Supervisory Committee.

STEP 3: The Defense

In addition to three members of the supervisory committee (one of which will be the supervisor) who will act as examiners and assuming that the external examiner is unable to attend the thesis defense, the Thesis Coordinator in the School of Graduate Studies will search for and recruit one internal external examiner from the faculty within McMaster University who is available to attend the defense. In addition, a Chair of the examination committee will be selected by the Thesis Coordinator; the Chair is not expected to be an expert in the topic of the defense, but is expected to facilitate a fair and orderly examination process.

If the external examiner's report on the thesis is favourable and he or she gives their approval that the defense should proceed, the date and time of the thesis defense is then confirmed by the Thesis Coordinator who will send out a notice of the examination to the examination committee, the student and the relevant department or program. The Thesis Coordinator will then select a Chair. If the external examiner wishes to attend the thesis defense, there will be no search for an internal external examiner. If the external examiner's report is negative, the examination will be postponed until the external examiner's concerns have been addressed (or alternative arrangements have been agreed) by the supervisory committee and the student in consultation with the Associate Vice-President and Dean of Graduate Studies.

STEP 4: After the Defense

The Chair of the examination committee will discuss in general terms with the student the examiners' conclusions and desired changes to the thesis (i.e. whether 'minor' or 'major' in nature), and give the student a form, 'Final Thesis Submission Sheet'; this form will be initialed appropriately by the Chair. When the student has completed the changes and corrections indicated by the examination committee and the supervisor (or supervisory committee) has approved these changes, the supervisor (or supervisory committee) will sign the form to indicate completion. The student will either bring or send (by internal mail) the signed form to the Thesis Coordinator, and submit an electronic file (as a pdf) of the finally approved thesis to Digital Commons (see Section 6.4).

APPENDIX 2

PROCEDURES AND INSTRUCTIONS FOR THE EXAMINATION OF Ph.D. THESES

1. Purpose of the Examination (or Thesis Defense)

The examination will be chaired by a senior professor or professor emeritus of the University who will be recruited by the Thesis Coordinator; the Chair's role is to ensure that the examination proceeds in a fair and orderly manner and is completed within a reasonable time (three hours maximum). The Chair will not question the candidate, will make no judgment on the candidate's performance and will have no vote.

It is the examiners' task to determine whether the student has met the University's thesis requirement, that each doctoral candidate present and successfully defend a thesis that embodies the results of original research and mature scholarship. The examiners represent Graduate Council and through it the Senate of the University, and are therefore responsible for the standard of the Ph.D. degree in this University.

The oral thesis defense at McMaster University is an examination of a Ph.D. candidate's ability to defend publicly his or her written work. Therefore, questions having to do with the detailed content or the general argument of the thesis are relevant, as are questions regarding the relationship between the content of the thesis and the body of knowledge to which it contributes. (The more general judgment of the candidate's proficiency in his or her discipline and particular area of specialization are presumed to have been made at the time of the comprehensive examination.)

The committee of examiners, both of the written thesis and of the oral defense, will not likely all be expert in the candidate's specialty, or even in his or her discipline. It is the particular responsibility of the external examiner(s) and the supervisory committee to ensure that the thesis does indeed present an original and significant contribution to knowledge. The examiners may reasonably be expected to exercise their judgment of the written thesis and the oral defense as members of the University faculty, keeping in mind the standards of excellence expected by the University of its Ph.D. graduates.

The examiners are expected to judge whether the student's thesis and defense are satisfactory or unsatisfactory. The examiners have previously read and reported on the written thesis and they must now give their final judgments on the oral defense of it and on the written thesis in light of the defense. Examiners are expected to exercise their judgments on both of these matters. Only in exceptional circumstances may they abstain.

2. Ph.D. Oral Examination Procedure

(a) When the candidate arrives, the Chair will introduce those committee members not known by the candidate.

(b) The Chair should explain to those present the composition of the examining committee.

(c) The Chair will confer with the examination committee **in the absence of the student and audience members** to determine if anyone has misgivings or any doubt about the worth of the thesis, and to determine the order of questioning.

(d) When the Chair invites the candidate and audience members to return to the examination room, the Chair will ask the student to present an oral statement about his/her thesis of approximately 15 minutes duration (in no case more than 20 minutes). **The student should stress the main points of the contribution to knowledge and the principal technical difficulties either of an experimental or theoretical nature which he or she has overcome. A simple summary of the thesis is neither necessary nor desirable.** The Chair should remind the candidate that notes or other aids may be used **but the statement may not be read from a prepared script.**

(e) **Individual examiners will question the candidate according to the order established by the Chair. All members of the examining committee are expected to put questions to the candidate. Issues that have been raised by members of the supervisory committee in the course of composition of the thesis may nevertheless be profitably brought up now, when the candidate will have to respond in the presence of others.**

(f) If present, the external examiner should be given full opportunity to question the candidate. If the external examiner is not present, it is the Chair's responsibility to see that questions raised in the external examiner's report are put to the candidate by some member of the examining committee, preferably the supervisor.

(g) Candidates who are unwilling or unable to respond to questions should be cautioned by the Chair that such an action may cause the examination to be adjourned, or in extreme cases, could lead to failure when the examination committee are asked to judge on the success or failure of the defense (see item (k) below).

(h) When the examiners have completed their questions, the Chair will invite members of the audience to ask questions or make comments.

(i) When there are no further questions, the Chair should ask the candidate and audience members to withdraw from the room.

(j) In the event that the external examiner is not present, the Chair and committee will decide whether the examiner's report is to be read or summarized before the vote is taken.

(k) After a discussion of the examination, the Chair will ask for a judgment on each of the two questions, the acceptance or rejection of the written document and the success or failure of the defense. If there are two or more negative or abstaining votes on either question, with at least one of these votes being from a member of the supervisory committee, adjournment is mandatory and a reconvened oral defense must be held at a later date. The candidate should be told as clearly as possible what he or she must do to improve either or both the written thesis and his/her defense of it.

If the oral defense is reconvened, no new examining committee members will be added, except for necessary replacements, to expedite the timing of the reconvened examination. It is the duty of the examiners to attend the reconvened examination. The reconvened examination is the candidate's final opportunity to defend the thesis satisfactorily. No subsequent defense may be held, and there is no appeal of the final decision.

(l) In the event that the written thesis is approved conditionally, the Chair is responsible for ensuring that (1) the candidate is advised of the conditions in writing, (2) the candidate receives and understands the form, 'Final Thesis Submission Sheet', which will be used to confirm that the conditions have been met, and (3) the supervisor is also aware of this form.

(m) Following the committee's decision, the Chair will secure the initialed votes of each examiner and then will complete and sign the 'Examination Committee Report'.

(n) The Chair will then go to the candidate, inform him or her of the committee's decision(s), and bring him or her into the examination room for any congratulations or discussion appropriate to the examiner's decision. An unattributed copy of the external examiner's report will be given to the candidate. In cases where the external examiner is not present, a successful candidate may be informed of the identity of the external examiner, providing that the external examiner has permitted this identification to be made.

(o) It is the responsibility of the Chair to inform the candidate that the corrected electronic thesis (when finally approved by the supervisor) must be uploaded by the candidate as a pdf file to Digital Commons, and to invite the candidate to sign the necessary forms to give the University permission to publish the thesis electronically (or to temporarily withhold as the case may be), **and Library and Archives Canada permission to access the thesis for their archives**. The Chair will then return the examination file containing the signed Examination Committee Report and permission forms to the Thesis Coordinator in the School of Graduate Studies.

(p) The examination then will be formally adjourned. Normally, examination of a PhD candidate will take about two hours and in no case should take more than three hours.

(q) If the student has failed or if the oral defense is to be reconvened, the Chair of the examining committee should discuss the situation as soon as possible with the Associate Vice-President and Dean of Graduate Studies.

Appendix 3

SUGGESTED FORM OF A PERMISSION REQUEST LETTER

[Department letterhead stationery (preferred) or return address] [Date] [Name and Address of copyright holder]

Dear ,

I am completing a [Ph.D. or M.Sc., or M.A., etc.] thesis at McMaster University entitled [.....]. I would like your permission to reprint in full the following journal article in my thesis:

[Complete citation of the article]

Please note that I am [a co-author/the author] of this work.

I am also requesting that you grant irrevocable, nonexclusive license to McMaster University [and to the National Library of Canada] to reproduce this material as a part of the thesis. Proper acknowledgement of your copyright of the reprinted material will be given in the thesis.

If these arrangements meet with your approval, please sign where indicated below and return this letter to me in the enclosed envelope. Thank you very much.

Sincerely,

[Name and Signature]

(Licence to the National Library is to be requested only for Ph.D. theses)

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