

Graduate Program Handbook

- Doctor of Philosophy in Applied Health Sciences
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1.0 Doctoral Program in Applied Health Sciences

1.1 Introduction

The Doctor of Philosophy Program in the Faculty of Applied Health Sciences is centered in the development of knowledge through the systematic evaluation of evidence related to the health and well-being of individuals and groups. The goal of the PhD Program is to provide students with the fundamental educational background and rigorous research training for the student to gain the skills and independence necessary to critically examine basic and practical issues related to the health sciences. Course work emphasizes a broad approach to the subject area, with particular attention to research techniques and the application of research methodology, current paradigms, and related conceptual, philosophical, and theoretical issues in health science research.

The Program offers the student the opportunity to participate in an individualized program of study, including mentorship-style learning and concentrated inquiry in an area of interest, leading to the completion of a research thesis. The required course work is aimed at developing the student's theoretical background and analytical skills; the optional courses will complement the student's research focus, and provide additional breadth of knowledge.

The graduate faculty members involved with the Applied Health Science doctoral program are grouped into three fields - Health Biosciences, Behavioural and Population Health, and Social and Cultural Health Studies.

1.2 Mission and Goals of the Doctoral Program in Applied Health Sciences

The Graduate Program in Applied Health Sciences prepares students for careers as university and college faculty, research scientists, teachers, and public policy analysts. The overall goals of the program are to develop well-trained individuals who think creatively, are able to evaluate critically both their own work and that of others, and are capable of conducting research and scholarship at the forefront of their chosen field.

The PhD Program in Applied Health Science offers the student an educational opportunity that emphasizes an individualized program of study, including mentorship-style learning, and concentrated inquiry in an area of interest, leading to the completion of a research dissertation. The required course work provides students with the in-depth knowledge of conceptual and theoretical issues, while fostering superior research skills and a thorough understanding of the scientific process. The optional course work specific to the student's research area complements the student's research focus, and provides additional breadth of knowledge. Thus, students gain in-depth training, knowledge, and research experience through their thesis work, while also benefiting from a broad, cross-disciplinary approach, with extensive small group learning. A PhD candidate must demonstrate the ability to

conduct research independently, and the program of research must be both original and make a significant contribution to the candidate's field.

Specific objectives of the PhD Program are as follows:

- to foster students' ability to do high-quality, scientifically-rigorous research
- to expand students' understanding of concepts, theories, and research practices in their discipline
- to provide students with the knowledge base and analytical skills to undertake independent research in the various fields of applied health science
- to enhance students' abilities to apply and disseminate new knowledge and practices to colleagues, practitioners, policy makers and other professionals in health sciences

2.0 Governance of the Program

2.1 Faculty of Graduate Studies

The Graduate Program in the Faculty of Applied Health Sciences is overseen by the Dean of Graduate Studies and subject to review by the Senate Committee on Graduate Studies. The Senate Committee on Graduate Studies is responsible for considering and reporting to Senate on all matters relating to graduate studies, making recommendations to Senate on matters relating to graduate student admission, awards, curricula, examinations, promotion, and regulations with respect to graduate academic matters.

2.2 Faculty of Applied Health Sciences Graduate Committee

A Graduate Committee, comprised of faculty members representing the Departments of Community Health, Nursing, Physical Education and Kinesiology, Recreation and Leisure Studies, and Sport Management, plus the President of the FAHS Graduate Students Council, manages the Graduate Program on behalf of the Faculty of Applied Health Sciences. This committee establishes FAHS policies and procedures regarding admissions, curriculum, and examinations. The Associate Dean, Research and Graduate Studies, FAHS, as the Graduate Program Director, is an ex officio member of the Graduate Committee. Day to day operations of the Graduate Program are administered by the Graduate Program Director through the FAHS Graduate Studies Office.

3.0 Administration of the Program

3.1 Admission Policy - General

Admission to the Doctoral Program in the Faculty of Applied Health Sciences requires that the student fulfill admission requirements of both the Brock University Faculty of Graduate Studies and the Faculty of Applied Health Sciences. Recommendation for

admission comes from the Graduate Committee of the Faculty of Applied Health Sciences. Final approval, and the offer, for admission are by the Faculty of Graduate Studies.

The Brock University Faculty of Graduate Studies establishes regulations for admission, which specify the minimum entrance requirements. These requirements are designed to ensure that students entering a graduate program have both the capacity and preparation necessary to effectively undertake a program of study at the graduate level. However, possession of the minimum entrance requirements is not a guarantee of admission. Since resource allocations play a significant role in the number of students which any graduate program can adequately accommodate, the University reserves the right to limit enrolment and to refuse admission to any candidate.

Brock University has a non-discriminatory policy to ensure against discrimination of applicants on the basis of race, color, national or ethnic origin, creed, sex or sexuality.

3.2 Admission Requirements & Procedures

3.2.1 Minimum Admissions Requirements

The Faculty of Applied Health Sciences normally accepts only full-time, degree students. A degree student is registered in the Faculty of Applied Health Sciences through the Brock University Faculty of Graduate Studies, and is considered as a candidate for the degree following admission.

To be eligible for admission, applicants must have completed a thesis oriented master's degree or equivalent with at least a B+ standing from a recognized university in a discipline appropriate to the intended field of doctoral study. Agreement from a Faculty Member of the Faculty of Applied Health Sciences to act as a Supervisor is required in order for a student to enter the Doctoral Program.

Applicants whose primary language is not English, or who have not completed three or more years of post-secondary work at a Canadian institution or an institution, at which English is the primary language of instruction, must provide certification of English language proficiency through one of the accepted assessment tests:

- (i) Completion of Level 5 of the Brock Intensive Language program; or
- (ii) A minimum score of 550 on the test of English Language Proficiency (TOEFL), plus a 4.0 minimum for the TWE; or
- (iii) A TOEFL CBT score of 213, plus a 4.0 minimum for the TWE; or
- (iv) A minimum score for the TOEFL iBT (Internet based) of 80, with no sub-test score under 19; or
- (v) A minimum score of 6.5 on the International Language Testing System (IELTS), with no section under 5.5, or
- (vi) A minimum overall score range of 520-545 (Range 2), with a minimum writing score range of 225-235 on the Brock University International Test of English Language Proficiency (ITELP), or

- (vii) Achievement of an overall Band Score of 60, with 60 in writing, and no other score below 50 on the Canadian Academic English Language Assessment (CAEL); or
- (viii) An average of at least 4.5, with no band score lower than 4.0 on the Canadian Test of English for Scholars and Trainees (CanTest).

Students admitted on the basis of an English Language Proficiency test score are required to take the Brock University ITEL P test upon arrival as a condition of admission. Depending on the result, applicants may be required to complete English language courses (e.g., APLS1P90, 1P91, or the Intensive English Upgrading Program for Graduate Students) as part of their graduate program.

Transfer from Master's Program to Doctoral Program

In the initial stages of the program, i.e., until the program has graduated the first intake of students (n=6), students entering the program will be limited to those who have completed a Master's program (duration will depend on the timing of our next OCGS Periodic Appraisal -the last Appraisal was in 2005). Once the first intake of students has graduated, we will consider transferring students from our Master's program into the Doctoral program, i.e., so-called "fast-tracking".

Exceptional students will be considered for transfer ("fast tracking") at the time of the Master's Protocol Defence. In these cases, the student's grades, research skills (as documented by a letter from the Supervisor) and research productivity will be considered; in addition, the potential transfer student will be required to present a plan by which his/her current Masters' project can be expanded into a PhD research program.

3.2.2 Admission Process

Initial inquiries concerning Graduate Studies at Brock University may be made to the Faculty/ Department/Program offering the desired program. Formal application for admission should be submitted on the standard forms and supplementary materials available on the Faculty of Graduate Studies website. Additional materials must be sent to the Brock University Faculty of Graduate Studies. Included with the application form, applicants must submit the following:

- **A Statement of Intent.** This is written as a free form essay, of no more than two pages in length. Applicants should indicate their career aspirations and plans, specific research interests, and experience relevant to the program. The statement of intent enables the Admissions Committee to match an applicant to a potential Supervisor with similar interests; if a potential thesis supervisor has been contacted, he/she must be identified in the statement of intent. (NOTE: prospective students are required to make personal contact with potential FAHS Supervisors as part of the application process. See individual Department websites for a listing of the Faculty and their research interests).

- **A Curriculum Vitae.** This should indicate the applicant's education, employment, teaching and research activities/experience, and publications (if any).
- **A copy of the applicant's Master's thesis.** An electronic copy is preferred.
- **Transcripts.** One official, original, sealed copy of the student's complete academic record from each university and institution attended. Faxed records are not considered official. Academic records become the property of the Faculty of Graduate Studies and are not returned to the applicant.
- **Letters of Reference.** Three confidential, sealed and signed letters of reference, including one from the Master's thesis Supervisor. These must be from qualified scholars attesting to and documenting the applicant's potential in graduate level research and scholarly activities. The three reference letters must be sent directly to the Faculty of Graduate Studies under separate cover.

NOTE: applications with documentation written in languages other than English or French must include a certified English translation of all documents.

3.2.3 Receipt of Applications

Completed applications should be received by the Brock University Faculty of Graduate Studies by February 15 for a September start. A completed application consists of the completed web application and the additional supporting documentation (the three reference letters must be sent directly to the Brock University Faculty of Graduate Studies by each referee, and must be received by February 15). Only those applicants whose materials are received by February 15 can be assured that they will be considered for a place in the program of their choice and for financial support. Applicants will receive confirmation of receipt of their application by e-mail.

Applications received after February 15 will be considered only if places and awards are still available. Applications from outside Canada should be made well in advance of the desired date of admission to ensure timely arrival of the application, particularly where special documentation (and/or translation) and proof of English language proficiency is required.

3.2.4 Acceptance

Assessment of academic background and eligibility for admission to graduate programs is the responsibility of the FAHS Graduate Committee. Recommendations for acceptance of applicants are made by the FAHS Graduate Committee to the Brock University Faculty of Graduate Studies. The official letter of acceptance and offer of admission will be issued by the Dean of Graduate Studies or designate.

Applicants who are offered admission pending receipt of final transcripts must submit an official copy of the final transcripts to the Brock University Faculty of Graduate Studies before registration in the Graduate Program is approved.

Normally, students accepted for admission to the Doctoral Program in the Faculty of Applied Health Sciences must commence their program of study on the date specified in their letter of acceptance. If circumstances prevent a student from starting study on the specified date, the Faculty of Applied Health Sciences may recommend that the offer of admission be valid for a period not to exceed 6 months from the original commencement date. If the period exceeds 6 months from the original date of expected commencement, the original offer will be rescinded, and the applicant will be required to submit a new application.

Applicants receiving an offer of admission to the Doctoral Program in the Faculty of Applied Health Sciences must normally accept that offer within three weeks from the date of issue. Failure to do so may result in the offer being withdrawn.

Only under exceptional circumstances will the Faculty of Applied Health Sciences consider degree program students for an entry point other than September.

International applicants who are considering graduate studies at Brock University should not leave for Canada until admission into a graduate program has been confirmed by the Brock University Dean of Graduate Studies. These applicants should have their status cleared with the appropriate immigration authorities and ensure that they have in their possession a Student Authorization Form issued by Immigration Canada. Because of the time required to complete the immigration formalities and obtain the necessary documentation, applicants are advised that it may take several months from the time of admission to the receipt of a student visa.

NOTE: the University may nullify an admission and revoke registration for admission if it finds that an applicant has in the process provided false or incomplete information.

3.3 Registration and Residency Requirements

Guidelines for course registration and residency requirements are provided to current and incoming students prior to Fall registration, and are outlined in the "Academic Regulations" section of the current Graduate Studies Calendar. Students will receive registration materials, including the deadline date for registration by mail. Students must register in person.

The Doctoral Program in Applied Health Sciences is only offered on a full-time basis. The residency requirements follow those specified by Brock University as outlined in the Graduate Calendar. Students enrolled in a Doctoral Program are required to complete nine terms (three years) of full-time registration during which they are required to be on campus.

3.4 Academic Regulations and University Policies

Academic regulations and university policies are outlined in the Graduate Studies Calendar. All students are required to be aware of, and adhere to, these regulations and policies. In the event of a change in policies, students shall be guided by those policies that were in effect at the time of their entry to the degree program (see

Academic Regulations and University Policies at the Faculty of Graduate Studies
website: <http://www.brocku.ca/webcal/2011/graduate/>

3.5 Fees

The fee structure of the degree programs offered through the Faculty of Applied Health Sciences are as outlined by Brock University and the Faculty of Graduate Studies. Students should consult the Graduate Studies Calendar and the information provided in their registration package for the most current fee scale for their program of interest.

3.6 Financial Assistance

Many Graduate Students require financial assistance to pursue their studies. Graduate students in the Faculty of Applied Health Sciences are eligible for a variety of scholarships, fellowships, and awards administered by Brock University and the Ontario and Canadian Governments (e.g. NSERC, SSHRC, OGS). A listing of these awards can be obtained by consulting the section on Financial Assistance in the Graduate Studies Calendar, or at <http://www.brocku.ca/graduate-studies>

The Faculty of Applied Health Sciences also attempts to offer financial support, where possible, in the form of research fellowships and teaching assistantships. Based on OCGS policy, the upper limit for hours of paid work in activities, other than those related to a student's thesis, is an average of 10 hours per week to a maximum of 150 hours per term. While the Faculty of Applied Health Sciences cannot guarantee the maximum number of hours to each student, the Faculty does provide opportunities on the basis of the availability of resources and student qualifications. Upon acceptance to the program, and every May thereafter, students will have an opportunity to apply for available teaching assistantship/instructor positions within the Faculty for the duration of the defined length of their program (four years for the PhD Program).

4.0 The Doctoral Program in Applied Health Sciences

4.1 Overview

It is the intent of the Doctoral Program in the Faculty of Applied Health Sciences to broaden the students' level of understanding of their chosen discipline, and provide them with the necessary scholarly and technical research skills to pursue a high quality research project culminating in the presentation of a formal written thesis and oral defence of the thesis. The program emphasizes a multidisciplinary approach that fosters students' appreciation of theories and research developments in the various disciplines represented in the program, sharpens their critical thinking skills, and expands their analytical competence both within their area of interest, as well as outside the realm of a particular discipline.

Students in the PhD Program pursue a course of study in one of the following fields: Activity, Leisure, Sport and Health, Behavioural and Population Health, or Health Biosciences.

Each of the three streams is designed as a four-year program involving a combination of course work (2.0 Full Course Equivalents, see Section 4.4.1), and a focused program of research. The streams are highly flexible and designed to enable each student to work individually with a Supervisor and Advisory Committee to construct a program of study and research that meets the students' interest and needs. Lastly, the development of a program of research studies, the writing of a thesis, and the defence of the thesis to an Examination Committee consisting of both an External and an Internal Examiner are common elements for all streams.

4.2 Residency Requirements and Recommended Timelines

Full-time doctoral students, once they have first registered, must maintain continuous registration until all degree requirements have been fulfilled. The residency requirement of a graduate degree program is the minimum number of terms in which the student must be registered on a full-time basis. The residency requirement for the Doctoral Program in the Faculty of Applied Health Sciences is nine terms (three years) of full-time registration.

Students must maintain adequate progress towards degree completion to remain eligible for further enrolment and financial support. There are maximum time limits for the completion of graduate programs. Doctoral Students must complete all degree requirements within six years from the date of first registration. All data collection for the thesis should be completed by the end of the fifth year after initial registration. Six months should be allowed for analysis of data and thesis writing.

Application for extension beyond these terms can be made to the Graduate Program Director, FAHS, and is approved by the Brock University Faculty of Graduate Studies. Recommended timelines for completing various "landmarks" leading to degree completion are presented in Handbook Appendix 1. To document progress toward their degree, students are required to complete the FAHS Graduate Program Progress Report Form (Handbook Appendix 2) during each Advisory Committee Meeting. Students are required to have at least one Advisory Committee Meeting per term, and to submit an updated Progress report to the FAHS Graduate Program Office following each Advisory Committee Meeting.

4.3 Degree Requirements

The Ph.D. in Applied Health Sciences is designed as a 3-4 year program involving a combination of course work (2.0 Full Course Equivalents - FCE), a Comprehensive Examination, including both written and oral components, and the conduct of an original research program, and the writing and subsequent defence of a thesis. Appendix 1 of this Handbook describes the expected progression route and relative time sequence for students enrolled in the Doctoral degree program in Applied Health Sciences. Details regarding coursework requirements, the comprehensive examination process, and the research component of the program are provided below. All students are required to continually update their progress form (Appendix 2 of this Handbook) as the various components of the degree are completed.

4.3.1 Coursework Requirements and Grading

General. All course offerings in the Graduate Program are offered by full-time faculty. All courses in the course bank can be taken by PhD students, and are open to other graduate students in the Brock Faculty of Graduate Studies. Undergraduate courses are not taken for credit as part of the requirements for the PhD degree. Students must take 2 half-courses from the list of required courses and 2 optional graduate level half-courses. In addition, the student must complete both the oral and written components of the Comprehensive Exam, formally defend the Thesis Proposal, and once the research is complete and the thesis written, the student must defend the thesis in an internal defence (Faculty Oral Defence) followed by the University Oral Defence.

Specific course requirements include:

A. Required Courses -

- i) Each student must select ONE of the following 0.5 FCE courses:
AHSC 7P00 - PhD Seminar in Applied Health Science
- ii) Each student must select ONE of the following 0.5 FCE courses:
AHSC 7P17 - Advanced Qualitative Analysis
AHSC 7P27 - Biostatistics in Applied Health Science Research

B. Electives Courses: Each student must complete a minimum of 1.0 FCE elective courses with at least 0.5 FCE being selected from the program's course bank (see below), and the other 0.5 FCE being selected from the graduate level course offerings across the Faculty of Graduate Studies, including the courses offered by the FAHS.

Notes:

- I. In the case of a student, who has already taken a required graduate course during the Master's degree, the student is required to replace the required course with another graduate level course as approved by the Graduate Program Director.
- II. In the case of a student, who has already taken a graduate level statistics or research methods course during the Master's degree, the student may substitute an additional graduate level course.
- III. The 2.0 FCE requirements are a minimum for the program; a student's Advisory Committee may recommend that a student needs additional course work to develop an area of expertise.

4.3.2 Scheduling of Courses:

The schedule for all graduate courses is available on the Faculty of Graduate Studies website (<http://www.brocku.ca/registrar/guides/grad/timetable/terms.php>); in addition, students will be informed of class schedules at registration.

4.3.3 Grading:

Evaluation procedures for courses will follow the current academic regulations for graduate studies at Brock University. As such, a candidate must achieve and maintain satisfactory academic performance, with a standing of at least B in graduate level courses.

Failure in courses: a supplemental examination is mandatory for failures in REQUIRED courses where the failing grade is between 50-69%. A failure in an elective course can be replaced by another course.

4.3.4 Transfer Credits

Students admitted to the Doctoral Program may be granted transfer credit, at the time of admission, to a maximum of one-third of the graduate degree course requirements, for courses completed at another university that are approved by the Graduate Program Director.

Only graduate courses completed with a grade of B+ or higher, within the last five years, will be considered for transfer. Credit will not be granted for courses that have been credited toward another degree or diploma at Brock or another university.

Candidates must submit official transcripts, course descriptions, and other supporting documentation before consideration will be given to granting transfer credit.

Students admitted as transfer students must be in good standing with their previous institution and eligible to enrol at that institution at the time of admission to Brock.

4.4 Comprehensive Examination

The purpose of the Comprehensive Examination is to provide the student with an opportunity to demonstrate his/her ability to synthesize current research, discuss strengths and weaknesses of area-specific research methodology and design, and to engage in knowledgeable academic discourse with other individuals in the chosen field of study.

4.4.1 Conduct and Format

The Comprehensive Examinations are to be conducted upon successful completion of no less than 80% of the student's course work and within the first 18 months of the student's enrolment in the program. At the time of taking the Comprehensive Examination, the student should have no standing deferred or incomplete grades, and the Comprehensive Examination must be successfully completed prior to defence of the Thesis Proposal.

The Comprehensive Examination will consist of both written and oral components.

The written component of the Comprehensive Examination will consist of a total of five questions:

- One required question in research design and methodology, and

- Four elective questions from the student's area of focus within applied health sciences, of which three must be answered.

Responses to each question are expected to be written within a six-hour time frame. To pass the written portion of the comprehensive examination, the student must obtain a Pass (i.e., a grade of no less than a B- as described in the Graduate Studies Calendar) on each of the four written questions.

The oral component of the Comprehensive Examination will be conducted within one week of successful completion of the written examination. The examination length will be approximately three hours in duration, and will consist of a minimum of two rounds of questioning. The student will respond first to the question which was not answered during the written examination, with subsequent questions being directed towards further clarification/enhancement of the written examination responses (round 1); this is followed by a more in-depth exploration of topics within the body of knowledge in the area of expertise (round 2). The Examining Committee may deem subsequent rounds of questioning necessary. The oral portion of the comprehensive examination will be recorded.

4.4.2 Responsibilities of the Student

The student is referred to section 4.4.4 of this document for information regarding the composition of the Examination Committee, and for information regarding acquisition of the reading lists.

The student is responsible for initiating a meeting with his/her Supervisor no less than six months prior to the time when he/she wishes to take their Comprehensive Examination in order to discuss the composition of the Examining Committee. The student should then contact each of the selected faculty and ensure their willingness to participate.

The content of the Comprehensive Examination will reflect the student's course work, the content of the reading lists, which have been mutually developed and agreed upon by the student and each of the individual Examiners, and any other materials (e.g., content of a pertinent symposia, a series of lectures, etc.), which have been agreed upon by the student and the Members of the Examination Committee. The student is responsible for informing the Advisory Committee of his/her intent to take their Comprehensive Examination no less than four months prior to the anticipated date. Through a collaborative process, the student and each examiner should develop an outline of the respective knowledge expectations and the associated reading materials (e.g., reading list). The student should complete this process with each Examiner no less than three months prior to the agreed upon date of the written component of the Examination. The student should formalize the date with the Graduate Program Director to ensure that an examination room is booked for both parts of the Examination, and that all Committee Members can be present.

4.4.3 Evaluation

Responses to the written examination questions are to be graded on a Pass/Fail basis by the individual Committee Member who developed the question. A PASS (i.e., a grade of no less than a B- as described in the Graduate Studies Calendar) is required on EACH of the 4 questions in order to PASS the written component of the Comprehensive Examination. It is the responsibility of each Examiner to provide a verbal evaluation of the student's response to the student's supervisor no more than 72 hours following completion of the Examination. This should then be followed as soon as possible by a formal written evaluation to both the student's supervisor and to the Graduate Program Director. The student should be notified of the results of the written component of the Examination by their supervisor within 72 hours of completion of the Examination.

The oral component of the Comprehensive Examination will take place within 5 business days following successful completion of the written portion of the Examination. The oral component of the Examination will be evaluated on a PASS / FAIL basis by each member of the Examination Committee. To successfully complete the oral component of the Examination component of the Examination, the student must receive a passing grade from each of the four examining committee members.

Failure to Successfully Complete the Written Examination

When a student fails to successfully complete the written component of the Comprehensive Examination, he/she will be eligible to retake the written component within six months. The second examination will consist of the same content areas, but not necessarily the same questions, and should be conducted whenever possible by the same Examination Committee. Failure to successfully complete the written portion of the Examination after two attempts will result in the student's withdrawal from the PhD Program.

In conjunction with the Supervisor and the Examining Committee, the student should identify the content weaknesses and develop a plan (course work, supplementary reading, etc.) to address deficiencies in his/her knowledge base.

4.4.4 Examination Committee

The Examination Committee will be composed of four faculty members, each of whom hold an appropriate graduate appointment in the Faculty of Graduate Studies, with the Graduate Program Director or designate acting as Chair. The four selected faculty do not have to be members of the student's Dissertation Committee, but should be representative of the student's area of interest.

The content of the Comprehensive Examination will reflect the student's course work, the content of the reading lists, which have been mutually developed and agreed upon by the student and each of the individual Examiners, and any other materials (e.g., content of a pertinent symposia, a series of lectures, etc.), which have been agreed upon by the student and the Members of the Examination Committee.

Administrative notes: the written component of the Comprehensive Examination will be administered by the Graduate Program Director in conjunction with the student's Supervisor. It will be the responsibility of the Graduate Program Director to ensure that the written responses are delivered to the appropriate Examiner immediately following completion of the written examination.

Questions for the written component of the Examination should be forwarded to the Graduate Program Director no less than one week prior to the written component of the Examination to allow adequate time for examination preparation, and to ensure that there is minimal duplication across questions, etc. The Graduate Program Director should provide assistance to the student on issues of scheduling of the Examination. A tentative date should be set for the oral component of the Examination at the same time that the written component is scheduled.

A note of confirmation should be issued by the Graduate Program Director indicating the tentative examination dates, a list of the Examiners, and the date by which reading lists should be established by the student and each Examiner.

The oral component of the Examination will be chaired by the Graduate Program Director or designate. It will be the responsibility of the Chair to ensure the fairness and timeliness of the process, and to ascertain the Examination Committee's evaluation of the student's performance.

Results of the oral component of the Examination should be forwarded in writing to the Graduate Program Administrator by the chair following the oral component of the Examination.

4.4.5 Procedures for Appeal

If, in the event of failing either component of the Comprehensive Examination, the student wishes to appeal the results, the following procedures should be followed:

- I. The student should arrange a meeting with his/her Supervisor as soon as possible after receiving the results of the Examination to review the evaluation. If deemed necessary, a formal meeting, including all members of the Examination Committee, should be arranged by the Graduate Program Director. If, on completion of this review meeting, the student is still not satisfied with the assigned result, the student should then formally appeal the grade.
- II. The student should obtain and complete an Appeals Form from the Graduate Program Office. In completing the form, the student should provide specific details and reasons for requesting reconsideration of the grade. If it is necessary to obtain a transcript of the oral examination, the student should arrange this through the Graduate Program Director.
- III. The Dean of the Faculty of Applied Health Sciences, in conjunction with the Graduate Program Director, and the Faculty's Appeals Committee, will review

the petition submitted by the student, a submission from the Examination Committee, any other relevant information, and render a decision. The Faculty's Appeals Committee will be an independent body from the Graduate Program in Applied Health Sciences, consisting of three graduate faculty from various academic units from within, and outside, the Faculty. The results of this decision will then be provided to the student in writing.

- IV. If the student still wishes to have the grade re-examined, the student may request, within 30 days of the date of the rendering of a decision from the Dean of the Faculty of Applied Health Sciences, to appeal to the Dean of Graduate Studies. The petition must clearly state, in detail, the student's reason for appeal of the decision of the Faculty's Appeals Committee. See section 14.10.2 of the Faculty Handbook - <http://www.brocku.ca/secretariat/facultyhandbook/section3.php#N> for the steps involved in the appeal process.

4.5 Thesis Proposal and Protocol Defence.

In addition to the evaluation associated with the required course work, PhD Degree candidates are formally evaluated at two stages during the research/thesis phase of their program. The first of these evaluations involves the presentation and defence of the Thesis Proposal. This evaluation should take place after the student - in consultation with their Supervisor and Advisory Committee - has developed a research plan, and prior to submission of the project to ethics review.

The aims of the Thesis Proposal Defence are:

- (a) To introduce students to the basic technical and scholarly skills of research;
- (b) To provide the student with the opportunity to present the research plan, both in written form and orally,
- (c) To discuss and defend the research plan, and
- (d) To obtain feedback on the research plan and readiness to proceed with the research. The thesis proposal and protocol defence should be within 24 months of enrolment in the program.

4.5.1 Conduct, and Evaluation of Thesis Proposal and Proposal Defence

The specific procedures used for the Thesis Proposal and Protocol Defences will be identical to those used for the final Thesis Defence (both the Faculty and University Defences), which are outlined in section 4.6.

4.6 Original Research and Dissertation

The purpose of the research and dissertation in the PhD Program is to give the student an opportunity to undertake advanced research in a significant problem in the field of health science. The candidate shall present a dissertation embodying the results of original investigation, conducted by the candidate. The dissertation shall constitute a significant contribution to the knowledge of the field and must be based on original research conducted while registered in the PhD program. The results of the dissertation should be publishable, either in whole, or in part, by the student as first

author. Upon successful completion of the dissertation, the graduate will be qualified to conduct original, authoritative, independent research.

Shortly after successful completion of the Comprehensive Examination, the student must defend, before their Advisory Committee, a research proposal that has been developed in consultation with the Supervisor and Advisory Committee. Following a successful defence of the Thesis Proposal, the student must submit a formal submission to the appropriate University Ethics Review Committee for approval before data collection can begin (see <http://www.brocku.ca/researchservices/ethics/>).

When the Supervisor believes a defensible dissertation has been written, the Advisory Committee is called to an informal meeting to discuss the dissertation. If the Committee believes that sufficient work has been conducted, and that the dissertation is ready for defence, a formal and public Faculty Defence is held. If the thesis passes the Faculty Defence, a formal University Defence, with External and Internal Examiners, is scheduled. Successful completion of the University Defence, in conjunction with the fulfillment of the other degree requirements, constitutes completion of the PhD program.

4.6.1 Selection of a Supervisor and Advisory Committee

All Graduate Students must have a Supervisor, who oversees their programs of study, including: selection of courses, development and defence of the research proposal, progress through ethics review, conduct of research, and the writing and defence of the thesis. In accordance with Senate regulations, it is the responsibility of the Graduate Program Director, FAHS, to ensure continuity of graduate student supervision.

Students should be aware that only members of the Faculty of Applied Health Sciences, who are appointed to the Graduate Program, can supervise Graduate Students. Furthermore, acceptance of a Graduate Student for supervision is the prerogative of the Faculty Member, and students are not usually admitted to the Graduate Program unless a Faculty Member has expressed interest in supervising their studies. When approached by a student, potential Supervisors are expected to inform the student of their availability, noting plans for sabbaticals or other planned leave, for the student's normal period of study. Note: during discussions regarding any future Supervisor-Student relationship, Faculty Members must not make any promises regarding admission into the Graduate Program.

The ideal process for the matching of student and supervisor is one in which the interests of both student and supervisor are represented well and expressed deliberately. This implies that both of them would have to declare an interest in working with each other.

Initiation of the Graduate Education Progress Form (Appendix 2 of this Handbook) formally establishes a contract between the Graduate Student and the Supervisor regarding:

1. the expected steps and suggested timelines to be followed by the Graduate Student, and
2. The Supervisor's obligations to the student. Graduate Students may change Supervisors through notification in writing to, and approval from, the Graduate Program Director, FAHS. Graduate Students are not permitted to continue in the program for more than six months without a designated Supervisor.

4.6.2 Regular Meetings of Student and Supervisor

It is difficult to conceive of a successful collaboration between graduate student and supervisor without effective, regular consultation. This means that there should be regular meetings between student and supervisor, and the Advisory Committee, during all stages of the program, including course work, research, writing and defence of the thesis. It also implies that graduate students have the right of reasonable access to their Supervisors. Under normal circumstances, graduate students should be able to expect to have written work (of reasonable length) returned to them with the Supervisor's comments within two weeks after it was submitted.

There should be a regular schedule of meetings between graduate student and supervisor; however, the frequency of meetings at any given time depends on the stage and nature of the research project. Supervisors should establish a fixed meeting schedule with students.

4.6.3 Structure of the Advisory Committee

A student's thesis research program will be overseen by an Advisory Committee that includes the Supervisor. The student's Advisory Committee advises the student specifically on the research proposal, conduct of the research, and write-up of the thesis. The Advisory Committee will also examine the student at both the proposal defence and at the final oral examination of the thesis.

The Supervisor, in consultation with the student, recommends the members of the Advisory Committee to the Graduate Program Director, who confirms their appointment to a particular Advisory Committee. The Advisory Committee must include:

- (1) The Supervisor, an FAHS Faculty Member, appointed to the FAHS Graduate Program, and holding the rank of Associate Professor or higher.
- (2) Two Advisory Committee Members, who, in addition to the Supervisor, are FAHS Faculty Members appointed to the FAHS Graduate Program, and hold the rank of Assistant Professor or higher.
- (3) one Advisory Committee Member who can be, but need not be, from the Faculty of Applied Health Sciences (Note: a Committee Member, who does not hold an academic appointment, must be approved by the Associate Dean, Research & Graduate Studies).

In the event that an Advisory Committee Member should become unavailable (e.g., goes on sabbatical, leaves the University, etc.), the student, in consultation with his/her Supervisor, should seek to replace this individual. If that Committee Member

is the student's Supervisor, the student must consult with the Graduate Program Director, regarding how to replace this individual. Finally, if the student and any Committee Member find their working relationship to be unacceptable, they are advised to consult with the Graduate Program Director.

4.7 Procedures for the Defence of the Thesis Proposal

Note: the conduct of the Thesis Proposal and Protocol Defence follows essentially the same protocol as used in the Faculty and University Defences

The thesis proposal should contain a detailed statement of the research problem and its significance in terms of its contribution to knowledge and/or practice, a clear presentation of the research questions/hypotheses to be investigated, a precise account of the methodology or research techniques to be employed, plus an outline of the proposed data analysis procedures. The candidate must present and defend the thesis proposal to his/her Advisory Committee.

It is the purpose of the proposal defence to establish the student's level of understanding of the research topic and to ensure that:

- (1) The proposed research design and methodology are consistent with standardized practice in the student's area of study, and
- (2) The methods chosen will enable the student to develop a scholarly piece of research.

The Proposal Defence should also be seen as an opportunity for the student to give and receive feedback so that weaknesses can be identified and addressed in preparation for the submission to the appropriate Research Ethics Review Committee.

Finally, while it is important that this evaluation be viewed as a positive opportunity for scholarly exchange and discussion of the topic between the student, the Advisory Committee, and other members of the academic community, it must also be recognized that the Proposal Defence is an evaluation of the student's readiness to move further with the research phase of the degree. It provides an opportunity for the student to update the committee on other aspects of the student's progress (e.g., coursework) and academic preparation (e.g., conference attendance, teaching experience, etc.).

4.7.1 Format of the Proposal Defence

This defence will be scheduled for three hours and will be chaired by the Graduate Program Director (or designate). All members of the Advisory Committee must be present at this meeting.

The following materials must be distributed to all members of the Advisory Committee a minimum of two weeks prior to the proposal defence:

- (1) Thesis proposal,
- (2) Timelines for course work and research activities,
- (3) A list of courses completed/in progress with grades, if available, and
- (4) An up-to-date CV.

In the Proposal Defence, the candidate will verbally present (*suggested approximate times*):

- (1) a proposed timeline for course work and research activities (*5 minutes*)
- (2) an overview of any teaching experience, research progress, publications, conference presentations, or other scholarly or academic activities such as seminar attendance, journal club participation, student council activities, etc. (*5 minutes*)
- (3) a summary of his/her academic progress to date (*5 minutes*)
- (4) his/her thesis proposal, including: introduction, review of literature, objectives, hypotheses, methods, proposed statistical analyses (*duration: 15-20 minutes*)

The format of the defence following the presentation follows that of a final thesis defence, i.e., two rounds of questions, with each Examiner questioning the candidate for 10-12 minutes in each round (the Examiners may request a third round if they feel it is necessary). The Chair will track the questions being asked, and note any issues or areas that need to be addressed with regard to the research and/or the thesis.

4.7.2 Evaluation of the Proposal Defence

The student will be evaluated on the following components of the proposal:

- **Written Thesis Proposal.** As the thesis proposal often represents the first three chapters of the thesis, it is important that there is a critical discussion and feedback about both the content and the written scientific presentation of the proposal. It is advisable that the proposal be evaluated using criteria similar to those which will form the basis of the evaluation of the final thesis so that the student is aware of the expectations of the various Advisory Committee Members, and so that specific suggestions regarding content, writing style, and presentation can be incorporated into the final written document.
- **Presentation.** The presentation should be evaluated on the basis of both content and style. It is important that the student be made aware of features associated with good scientific presentation, style, and format. Feedback from the presentation should serve to better prepare the student for the presentation associated with the final oral defence of the thesis.
- **Defence of the Proposal.** The student should be evaluated on his/her ability to defend the scientific merit of the study, to clearly explain the rationale and need for the study based on existing literature, and to discuss the strengths/potential weakness of the research questions, experimental design, methods, and data analysis of the study. Whenever possible, the format of questioning and the type of questions should be similar to what would occur at the final oral examination.

4.7.3 Notification of the Candidate and Record of Evaluation/Completion

Upon completion of the questioning of the candidate, the Advisory/Examination Committee discusses the thesis proposal to ascertain what remains to be done before the student can apply for ethics approval, and subsequent to ethics approval, begin

data collection. Both verbal and written follow-up instructions should be provided to the candidate.

It is both the Graduate Student's and the Supervisor's responsibility to ensure that each Committee Member approves the thesis proposal prior to submission of to the Research Ethics Board. Formal approval to submit to the Research Ethics Board is verified by the signature of each Advisory Committee Member on the FAHS Graduate Program Progress Report Form (Appendix 2 of this Handbook).

In the instance when the proposal is deemed "unsatisfactory", a second Proposal Defence must be scheduled after the student has had an opportunity to follow-up with each Advisory Committee Member. It is the Supervisor's responsibility to ensure that the changes being made to the proposal are in accordance with the requirements of the Advisory Committee. A second "unsatisfactory" Proposal Defence will result in the student being asked to withdraw from the Doctoral Program.

4.8 Procedures for Defence of the Ph.D. Thesis

4.8.1 Timing of Faculty and University Oral Defences

Once the student has a completed thesis and has received approval from his/her Advisory Committee to proceed to the Faculty Oral, the student and/or Supervisor should contact the FAHS Graduate Studies Office to arrange a date and time for defence. The student, all members of the Advisory Committee, and the Graduate Program Director, or designate, must be present at the Faculty Oral Defence.

Students are advised to use the following time-table to work backwards from the tentative date of the University Oral Defence. Eight weeks before the University Oral Defence, the Graduate Program Director, requests an official examination date from the Brock Faculty of Graduate Studies, and suggests the names of the three prospective External Examiners, and two potential Internal Examiners.

When a graduate unit has requested an oral exam, the Faculty of Graduate Studies will contact another graduate unit to request a Chair for the University Oral Defence. The Faculty of Graduate Studies will send a letter of appointment and instructions to the designated Chair (with a second copy to the graduate unit scheduling the exam). It is the responsibility of administrative officers or staff in the graduate unit scheduling the exam to contact the faculty member who has been appointed as chair the day prior to exam, reminding him or her of the time, date, and location of the Oral Defence and ensuring that he or she has the exam file in hand.

4.8.2 Preparing for the Thesis Defence

Following the oral presentation of the research, an oral examination by an Examining Committee, will determine whether the completed thesis is representative of proper standards of scholarship, and to examine the student on both the substance and implications of their research. It is the responsibility of the Graduate Program Director to ensure that all other requirements for the degree have been satisfactorily

completed. The oral defence should be viewed as public, with all members of Academic Staff, Graduate Students, Undergraduate students, and Public being welcome to attend. Planning for a thesis defence should take into account the deadlines for convocation as noted in the Brock University Graduate Studies Calendar. Note that difficulties in scheduling a thesis defence may be compounded by holiday schedules. Therefore, in order to arrange for a defence, ***it is critical that the thesis be ready at least six weeks prior to these dates.***

Last date for requesting a Defence MUST BE SUBMITTED to the Faculty of Graduate Studies by:	Last date for a scheduled Defence	Complete Thesis Degree Recommendation to the Faculty of Graduate Studies	Expected Convocation
July 15, 2011	August 13, 2011	September 2, 2011	October 22, 2011
January 13, 2012	March 2, 2012	May 4, 2012	June 9, 2012

Note: These are approximate dates used by the FAHS Graduate Program and are somewhat flexible; see the FAHS Graduate Program Administrative Assistant should you have any questions.

4.9 Faculty Oral Defence of the Thesis

Before an examination can be requested, the Supervisor and Advisory Committee must ascertain the student's readiness to successfully defend the thesis; this is confirmed via a Faculty Oral Defence, which follows an identical format to the University Oral Defence, and should take place a minimum of two months before the Graduate Program Director requests the University Oral Defence, allowing sufficient time for any revisions to the thesis.

The Faculty Examination is chaired by the Graduate Program Director or designate. The Examination Committee consists of the Supervisor and the members of the student's Advisory Committee. The members of the Faculty Examination Committee must have final drafts of the thesis a minimum of four weeks before the Faculty Defence.

The thesis must be submitted to the FAHS Office of Graduate Studies no less than four weeks prior to the Faculty Defence for circulation to the Faculty Oral Defence Examination Committee.

Students are strongly urged to submit chapters to their supervisor throughout the process of writing. This will reduce the chance of the dissertation moving too far in an inappropriate direction. Depending on the nature of the research, it is often wise to submit selected chapters to appropriate members of the thesis Advisory Committee as well.

4.9.1 Examination Committee Structure

Examination Committee. The Examination Committee will consist of the student's Supervisor and three Advisory Committee Members, and the Graduate Program Director (or designate), who chairs the Faculty Oral Defence.

4.9.2 Roles and Responsibilities Prior to the Thesis Defence

- **Student.**
 - The student must ensure that the thesis is complete and follows the format guidelines specified by the Faculty of Graduate Studies as described in the Faculty Handbook (see <http://www.brocku.ca/secretariat/facultyhandbook/section3description#N.9>, section 14.8.4)
 - The student must ensure that all members of the Examination Committee and the Graduate Program Director receive a copy of the thesis at least four weeks prior to the scheduled defence. All typing and other costs of preparing the thesis are the responsibility of the student.
 - Finally, the student is strongly advised to schedule a meeting of the Advisory Committee in preparation for the defence. A key agenda item should be a discussion of Committee Members' availability for the defence in order to develop a short list of agreeable dates and times.
- **Supervisor and Advisory Committee.**
 - The thesis must be approved by the Supervisor and all Advisory Committee Members before being forwarded to the FAHS Graduate Program Director to begin the process of scheduling a defence.
- **Office of the Graduate Program Director, FAHS.**
 - After being notified by the Supervisor that the candidate is prepared to progress to the defence, the Graduate Program Director will ensure that the candidate has completed all other degree and course requirements. (NOTE: a defence cannot be scheduled if there are any outstanding grades.)
 - The Graduate Program Director will, in consultation with the Supervisor, complete the Appointment of External Examiner form and submit to the Brock Faculty of Graduate Studies. Note that this must occur at least two months before the expected date of defence. The Dean of Graduate Studies will formally contact and invite the External Examiner. The Faculty of Graduate Studies will send the completed thesis to the External Examiner.
 - After the composition of the Examination Committee has been finalized, the FAHS Graduate Office will notify all members of the Examination Committee of the scheduled date and time of the defence.
 - Finally, the FAHS Graduate Office will arrange the booking of a room and the necessary equipment, and will distribute notices of the defence to all academic faculty and students in FAHS, and to other Brock Faculties through notices and an insert in the Brock News.

4.9.3 Roles and Responsibilities at the Thesis Defence

The quorum for an examination is three appointed Examination Committee members plus the Chair of the Examination Committee. Voting members of the Examination Committee include: the Supervisor and the Advisory Committee Members. The Chair of the Examination Committee does not vote.

- **Chair of the Examination Committee.**
 - The Chair is responsible for verifying that there has been satisfactory completion of all degree requirements and that the appropriate documentation is available to confirm completion of the degree requirements.
 - The Chair is responsible for verifying that all members of the Examination Committee have read the thesis, and have sufficient knowledge of the thesis to examine the candidate, and will not abstain from the voting on the basis of a lack of knowledge.
 - The Chair of the Examination Committee is responsible for ensuring that the examination is conducted properly, within the guidelines outlined in this document (see below).
 - The Chair, who is expected to exercise full control over the examination, does not participate directly in the questioning of the candidate.
 - It is the responsibility of the Chair:
 - (1) To guarantee that the candidate is given fair opportunity to defend the thesis,
 - (2) To ensure that the candidate alone, and not the Supervisor or other members of the Committee, defends the thesis, and
 - (3) To protect the candidate from harassment.
- **Members of the Examination Committee.**
 - The Examination Committee operates within the full authority of the Faculty of Graduate Studies with respect to the examination of the candidate and the thesis.
 - The specific responsibilities of the Examination Committee are to examine the candidate on the content and implications of the thesis, to assess whether the thesis meets the proper standards of scholarship, and to vote on whether the thesis and its defence are acceptable (see below for additional details), and that the Candidate and thesis are ready to proceed to the University Oral Defence.
 - At the end of the Faculty Oral Defence, the Supervisor and Advisory Committee acting as the Faculty Oral Defence Examination Committee will also propose a list of three potential External Examiners, and two potential examination dates; the Graduate Program Director will propose two potential Internal Examiners.
- **Candidate.**
 - The candidate will present and defend the thesis as described below.

4.9.4 Format of the Thesis Defence

Precursory Meeting of Examination Committee.

All Members of the Examination Committee will assemble at the scheduled location 20 minutes before the planned start of the defence. At this time, the procedures for the examination are reviewed by the Chair of the Examination Committee. These procedures include:

- The Chair of the Examination confirms that a quorum of a minimum of three appointed members is present. Should there not be a quorum, it is the responsibility of the Chair to determine whether to delay the examination or to postpone it to another date.
- The Chair reports on the completion of all course requirements.
- The Chair confirms that each member of the Examination Committee has read the thesis and has sufficient knowledge of the thesis to form a judgement as to its acceptability; this ensures that there will be no abstentions in voting on the grounds of ignorance of the contents of the thesis.
- The Chair reminds the Committee of the scope of the examination, specifically that:
 - (1) The Candidate is to be judged on both the content of the thesis and the oral defence of the thesis,
 - (2) All modifications, other than minor corrections (i.e., typographical errors), that might be requested, must be raised in the questioning of the candidate to allow the candidate an opportunity to defend the issue, and
 - (3) The study represents an independent piece of scholarship/research. It is particularly important that when the study is part of a larger investigation, or when an individual other than the Candidate is the principal investigator, that the Examination Committee fully establishes that the Candidate's personal contribution is sufficient to meet the requirements of the Doctoral degree.
- The Chair discusses with the Examination Committee the order of questioning, the number of rounds of questioning, and the time allotment per Examiner. The recommended sequence is: Members of the Advisory Committee followed by the Supervisor. It is also recommended that there be two rounds of questions, with each Examiner being allotted 10-12 minutes for questions in the first round and 5-10 minutes in the second round. A third round of questioning may occur if an Examiner has issues concerning the thesis which have not been raised, and which are important to the outcome of the defence.

Conduct of the Examination.

- Once the Examination Committee completes its pre-examination meeting, the room will be opened to the candidate and observers.
- The Chair will make the introductions, explain the procedures to be followed, and invite the candidate to begin his/her presentation. The recommended format for this presentation is that of a 30-40 minute public seminar summarizing the research and conclusions.

- This presentation will be followed by a short period of questioning in which the Members of the Examination Committee will ask up to three rounds of formal questions. Following the formal questioning, 10 minutes are allocated to additional questions from the audience. It is the responsibility of the Chair of the Examination Committee to intervene if, at any time during this questioning, the examination is becoming an inquisition of the candidate and/or is being unduly dominated by an examiner.
- As part of the dialogue of learning and as a collegial courtesy, the candidate is given an opportunity to make final remarks or address questions for clarification to the Members of the Examination Committee. Once the questioning period is complete, the Chair asks the candidate and the audience to retire while the Examination Committee makes its deliberations.

4.9.5 Evaluation of Thesis and Defence of the Thesis

Voting. Prior to voting, both the thesis and the oral defence of the thesis should be discussed with regard to the various options available. Upon conclusion of the discussion, a vote is taken to accept, or not to accept, the thesis and its defence. Decisions Regarding the Thesis and the Thesis Defence.

As the decision following the Faculty Oral thesis defence concerns the readiness of both the document and the Candidate for the University Oral Thesis Defence, the decision is essentially a Pass-Fail.

With either decision, the Examination Committee makes recommendations concerning the presentation, necessary changes to the document, and further preparation that should be undertaken by the Candidate.

5.0 Procedures for the University Oral Defence of the Thesis

Deadlines for completion of the defence of the thesis are contingent upon the candidates' preferred date of convocation. Under normal circumstances, students should complete all degree requirements, including submission of the final version of the dissertation to the Brock Faculty of Graduate Studies.

Planning for the University Oral Defence should take into account the University deadlines for convocation (see previous Table above). However, in order to arrange for a defence, the thesis must be ready at least eight weeks prior to these dates. Note that difficulties in defence scheduling may be compounded by holiday schedules.

5.1 Nominating the University Defence Examination Committee

At least eight weeks before the oral exam, the graduate unit scheduling the exam will submit a Nomination Form to the Faculty of Graduate Studies.

The Examination Committee will consist of the members of the candidate's Advisory Committee, an Internal Examiner from Brock University, and the External Examiner.

Internal and External Examiners. The External Examiner will be full-time, graduate appointed faculty members external to Brock University, have the rank of Associate or Full Professor, have had an "arms-length relationship" to the Supervisor, the Candidate, and the project, as well as be a recognized expert in the field, with considerable knowledge and experience in the area upon which the thesis is based.

A University Oral Defence Examination Committee Membership form will be sent to the Supervisor to be completed and returned to the FAHS Graduate Office.

Note: the Candidate must not be privy to these deliberations, nor to the forwarded list of potential External Examiners as per the Faculty of Graduate Studies regulations.

External Examiners will receive an honorarium (plus reasonable expenses) for their participation in the thesis defence.

Internal Examiners will be faculty members of Brock University at the rank of Associate or Full Professor from any academic unit, except the Supervisor's home department, and will have had an "arms length relationship" with the Candidate, and the project.

5.2 The Certificate of Completion and Abstract

The graduate unit must submit the requisite information to the Faculty of Graduate Studies confirming that the student has completed all other academic requirements for the degree, such as any language and/or field requirements. A copy of the abstract of the thesis not longer than 350 words must also be submitted.

5.3 University Examination Announcement/Program

The graduate unit scheduling the exam is responsible for submitting a copy of the Examination Program to the Faculty of Graduate Studies at least two weeks in advance of the oral exam so that details of the exam can be posted on the University web site.

5.4 Appraisal

The graduate unit is responsible for submitting a copy of the Internal and External Examiners' letters of appraisal to the Faculty of Graduate Studies as soon as they are received. The letters of appraisal are not to be distributed prior to the University Oral Thesis Defence.

5.5 Exam File

The graduate unit scheduling the exam must deliver the Exam File to the Chair of the prospective exam at least five days before the exam. The documents included in this file are: a copy of the oral exam program; a copy of the thesis abstract (for chair's information); the Chair's summary form; enough voting ballots for all voting members

of the exam; instructions for voting; and a copy of the Internal and External Examiners letters of appraisal.

5.6 Chair of the University Oral Thesis Defence

The Chair of the University Oral Defence is appointed by the Dean of Graduate Studies.

5.7 Examination Committee Structure

The Examination Committee will consist of the student's Supervisor, the three Advisory Committee Members, the Internal Examiner and the External Examiner; and the Graduate Studies appointed Chair.

5.7.1 Roles and Responsibilities Prior to the Thesis Defence

Student.

- The student must ensure that the thesis is complete and follows the format guidelines specified by the Faculty of Graduate Studies as described in the Faculty Handbook (see <http://www.brocku.ca/secretariat/facultyhandbook/section3description#N.9>, section 14.9.1)
- The student must ensure that the requisite numbers of copies of the thesis are delivered to the FAHS Graduate program Office eight weeks prior to the scheduled date for the thesis defence.

Office of the Graduate Program Director, FAHS.

- Delivers the copies of the thesis and the exam materials to the Faculty of Graduate Studies.

Faculty of Graduate Studies.

- Ensures that the thesis copies are distributed to the Examination Committee five weeks prior to the thesis defence.
- Appoints the Chair, and secures a room for the Thesis Defence.
- Advertises the Thesis Defence across the University campus.
- Prepares the Examination File for the Thesis Defence.

5.8 Roles and Responsibilities at the Thesis Defence

The quorum for an examination is five appointed Examination Committee members, including the External Examiner, plus the Chair of the Examination Committee. Voting members of the Examination Committee include: the External Examiner, the Internal Examiner, the three Advisory Committee Members, and the Supervisor. The Chair of the Examination Committee does not vote.

Chair of the Examination Committee.

- The Chair is responsible for verifying that there has been satisfactory completion of all degree requirements and that the appropriate documentation is available to confirm completion of these degree requirements.

- The Chair is responsible for verifying that all members of the Examination Committee have read the thesis, and have sufficient knowledge of the thesis to examine the candidate, and will not abstain from the voting on the basis of a lack of knowledge. The Chair of the Examination Committee is responsible for ensuring that the examination is conducted properly, within the guidelines outlined in this document (see below).
- The Chair, who is expected to exercise full control over the examination, does not participate directly in the questioning of the candidate.
- It is the responsibility of the Chair:
 - (1) To guarantee that the candidate is given fair opportunity to defend the thesis,
 - (2) To ensure that the candidate alone, and not the Supervisor or other members of the Committee, defends the thesis, and
 - (3) To protect the candidate from harassment.

Members of the Examination Committee.

- The Examination Committee operates within the full authority of the Faculty of Graduate Studies with respect to the examination of the candidate and the thesis.
- The specific responsibilities of the Examination Committee are to examine the candidate on the content and implications of the thesis, to assess whether the thesis meets the proper standards of scholarship, and to vote on whether the thesis and its defence are acceptable (see below for additional details).

External and Internal Examiners.

- The External is responsible for the provision of an independent and objective evaluation of the academic quality of the thesis.
- The External Examiners will prepare a written appraisal of the thesis (External Examiner's Report), which provides an assessment of the following:
 - (a) Contribution to knowledge (originality, quality, and quantity),
 - (b) Adequacy and thoroughness of research and experimental work,
 - (c) Understanding of the research (adequacy of the review of the literature, evaluation of results, and validity of conclusion),
 - (d) Presentation of thesis (organization of material, presentation of results, style and bibliography), and
 - (e) Quality of typescript (format, freedom from errors). This report must be sent to the Faculty of Graduate Studies, at least 1 week prior to the defence.

NOTE: if the External Examiner's evaluation of the thesis (see below) is so unfavourable as to jeopardize the final approval of the thesis, the defence will be postponed, and an ad hoc committee will be established to recommend a subsequent course of action.

Candidate.

- The candidate will present and defend the thesis as described below.

5.9 Format of the Thesis Defence

Precursory Meeting of Examination Committee.

All Members of the Examination Committee will assemble at the scheduled location 20 minutes before the planned start of the defence. At this time, the procedures for the examination are reviewed by the Chair of the Examination Committee.

These procedures include:

- The Chair of the Examination confirms that a quorum of a minimum of three appointed members is present. Should there not be a quorum, it is the responsibility of the Chair to determine whether to delay the examination or to postpone it to another date.
- The Chair reports on the completion of all course requirements.
- The Chair confirms that each member of the Examination Committee has read the thesis and has sufficient knowledge of the thesis to form a judgement as to its acceptability; this ensures that there will be no abstentions in voting on the grounds of ignorance of the contents of the thesis.
- The Chair reminds the Committee of the scope of the examination, specifically that:
 - (1) The Candidate is to be judged on both the content of the thesis and the oral defence of the thesis,
 - (2) All modifications, other than minor corrections (i.e. typographical errors), that might be requested, must be raised in the questioning of the candidate to allow the candidate an opportunity to defend the issue, and
 - 3) The study represents an independent piece of scholarship/research. It is particularly important that when the study is part of a larger investigation, or when an individual other than the Candidate is the principal investigator, that the Examination Committee fully establishes that the Candidate's personal contribution is sufficient to meet the requirements of the Doctoral degree.
- The written assessment of the thesis are read by the External Examiner. The Supervisor and other Advisory Committee Members, should they wish, are invited to make an oral statement concerning the Candidate and the thesis.
- The Chair discusses with the Examination Committee the order of questioning, the number of rounds of questioning, and the time allotment per Examiner. The recommended sequence is:
 - (1) External Examiner;
 - (2) Internal Examiner;
 - (3) Members of the Advisory Committee; and
 - (4) The Supervisor.
- It is also recommended that there be two rounds of questions, with each Examiner being allotted 10-12 minutes for questions in the first round and 5-10 minutes in the second round. A third round of questioning may occur if an Examiner has issues concerning the thesis which have not been raised, and which are important to the outcome of the defence.

5.10 Conduct of the Examination

Once the Examination Committee completes its pre-examination meeting, the room will be opened to the candidate and observers.

The Chair will make the introductions, explain the procedures to be followed, and invite the candidate to begin his/her presentation. The recommended format for this presentation is that of a 30-40 minute public seminar summarizing the research and conclusions.

This presentation will be followed by a short period of questioning in which the Members of the Examination Committee will ask up to three rounds of formal questions. Following the formal questioning, 10 minutes are allocated to additional questions from the audience.

It is the responsibility of the Chair of the Examination Committee to intervene if, at any time during this questioning, the examination is becoming an inquisition of the candidate and/or is being unduly dominated by an examiner.

As part of the dialogue of learning and as a collegial courtesy, the candidate is given an opportunity to make final remarks or address questions for clarification to the Members of the Examination Committee.

Once the questioning period is complete, the Chair asks the candidate and the audience to retire while the Examination Committee makes its deliberations.

5.11 Evaluation of Thesis and Defence of the Thesis

Voting.

Prior to voting, both the thesis and the oral defence of the thesis should be discussed with regard to the various options available. Upon conclusion of the discussion, a vote is taken to accept, or not to accept, the thesis and its defence.

Decisions Regarding the Thesis and the Thesis Defence.

- All Members of the Examination Committee will have an equal vote.
- Acceptance of the thesis and its defence requires a positive vote from a minimum of 5 of the 6 Examiners. If the vote is in favour of acceptance, then a second vote will be taken to determine the terms of acceptance and nature of the changes to the thesis. The Examination Committee will specify the necessary revisions to the thesis and the date by which the revised 'final' draft of the thesis is to be returned to the FAHS Graduate Office. This date will normally be within three months of the examination. If there is more than one negative vote and/or abstention, the thesis is deemed unacceptable, and the examination is adjourned.
- In the instance of an unacceptable thesis/defence, the candidate may, at the discretion of the Examination Committee, be permitted the option of re-working, re-submitting, and re-defending the thesis for a second and final time. This defence must be scheduled no later than one calendar year after the original defence.

- Voting Members of the Examination Committee must provide the candidate with specific written feedback to guide the revision of the thesis. Under normal circumstances, the composition of the Examination Committee for the second thesis defence will be identical to that of the original Examination Committee, and the same examination format will be followed.
- A fee may be charged for the re-examination of a thesis.

6.0 Appeal Procedures

6.1 Grades

Students who have concerns about a grade in a particular course should first discuss the issue with the Instructor of the course in question. If the issue cannot be resolved, the Student should refer the matter to the FAHS Graduate Committee through the Graduate Program Director. If the Student is not satisfied with the decision of the FAHS Graduate Committee, the Student may appeal to the Dean of Graduate Studies. Lastly, if the Student is not satisfied with the decision of the Dean of Graduate Studies, the Student may appeal to the University's Special Sub-committee for Graduate Appeals (see the Brock University Graduate Studies Calendar for the appeals process and timing).

6.2 Academic Decisions

Decisions regarding academic standing (e.g., passing the Proposal, or Final Thesis Defence) should be referred to the FAHS Graduate Committee through the Graduate Program Director.

If the Student is not satisfied with the decision of the FAHS Graduate Committee, the Student may appeal to the Dean of Graduate Studies.

Lastly, if the Student is not satisfied with the decision of the Dean of Graduate Studies, the Student may appeal to the University's Special Sub-committee for Graduate Appeals (see the Brock University Graduate Studies Calendar for the appeals process and timing).

Appendix 1: Suggested Schedule of Tasks, Target Dates, and Approval Processes for Completion of the Ph.D. Degree in Applied Health Sciences

TASK	APPROXIMATE TIMING	APPROVAL REQUIRED
YEAR I		
Approval of First Year's Courses	September	Supervisor
Establish Advisory Committee	January	Supervisor, Associate Dean
Obtain Reading Lists from Advisory Committee for Comprehensive Exam	May	Advisory Committee
Prepare for Comprehensive Examination	May - October	Supervisor, Advisory Committee
Meetings with Advisory Committee to Discuss Research/Future Directions	Ongoing	Supervisor, Advisory Committee
YEAR II		
Approval of Second Year Courses	September	Supervisor, Advisory Committee
Notify Graduate Program Administrator of Intent to take the Comprehensive Examination, including Expected Date, and Examination Committee Members	October	Supervisor, Advisory Committee, Associate Dean
Comprehensive Examination	November - January	Supervisor, Advisory Committee
Prepare Thesis Proposal	January - May	Supervisor, Advisory Committee
Defend Thesis Proposal	June	Advisory Committee, Associate Dean
Submit Proposal for Ethics Review	July	Advisory Committee
Meet with Advisory Committee to Discuss Research and Future Directions	Ongoing	Supervisor, Advisory Committee
YEAR III		
Complete Review of Literature and Methods	August	Supervisor
Approval of Third Year Courses (if needed)	September	Supervisor, Advisory Committee
Begin Data Collection	September - ?	Supervisor, Advisory Committee
Meeting with Advisory Committee to Discuss Results/Future Directions	Ongoing	Supervisor, Advisory Committee
Year IV		

Data Collection and Analysis Complete	September/October	
First Draft of Thesis to Supervisor	January/March	
Revision Process with Supervisor	March/April	
Distribute Thesis to Advisory Committee,	April	Supervisor, Advisory Committee
Acquire Committee Approval to proceed with a Thesis Defence and establish Date of Faculty Defence	April	Supervisor, Advisory Committee
Notify Graduate Program Administrator of Intent to Defend, Names of Examiners, and Date of Defence	April	Associate Dean
Practice Run of Thesis Presentation		Supervisor, Advisory Committee
Faculty Thesis Defence	June	Advisory Committee, Associate Dean
Select External and Internal Examiners (with Alternates) and Anticipated Date of University Defence (with Alternates) and Notify the Graduate Program Administrator	June	Supervisor, Advisory Committee
Complete Thesis Corrections	June - August	Supervisor
Distribute Thesis	August	Supervisor
University Defence	September/November	Faculty of Graduate Studies
Thesis Corrections	October - December	Supervisor, Associate Dean

APPENDIX 4 – Progress Report Form

Student Name: _____

Student Number: _____

Undergraduate Degree: _____

Institution & Year: _____

Master's Degree: _____

Institution & Year: _____

Date of Entry PhD Program: _____

Advisory Committee:

Supervisor: _____

Committee Member: _____

Committee Member: _____

Committee Member: _____

Advisory Committee Approved: _____
(initialed by AD, R&GS)

Course Requirements and Grades:

(list courses taken, term, year, and grade)

Required Courses _____

Elective Courses: _____

Date Coursework Completed: _____

Comprehensive Examination:

Date Written Exam: _____

Result (circle as appropriate): Pass Fail

Date 2nd Attempt (if needed): _____

Result (circle as appropriate): Pass Fail

Date Oral Exam: _____

Result (circle as appropriate): Pass Fail

Date 2nd Attempt (if needed): _____

Result (circle as appropriate): Pass Fail

Thesis Title: _____

Date of Proposal Defence: _____

Proposal Approved: Yes No

Ethics Review(s) (circle as appropriate)

Human Ethics Review Required: Yes No

Animal Protocol Review Required: Yes No

BioHazard(s) Review Required: Yes No

Date Ethics Approval received: _____

Protocol Number(s): _____

Thesis Progress:

Date **Data Collection** begun: _____

Date **Data Collection** complete: _____

Date **Data Analysis** complete: _____

Date **First Draft** Submitted to Supervisor: _____

Committee Approval of Thesis for Defence:

Date of Meeting: _____

Suggested External Examiner: _____

Alternative External Examiner: _____

Suggested Date of Defence: _____

Alternative Defence Date: _____

Supervisor Initials on Behalf of Advisory Committee that
the Thesis is Ready for Defence: _____

Thesis Defence:

Thesis Defence Date: _____

External Examiner: _____

Internal Examiner: _____

Chair of Defence: _____

Defence Result: _____

Thesis Corrections Completed: _____
(Supervisor initials + date)

Program Completion: _____

Date

Associate Dean, Research & Graduate Studies