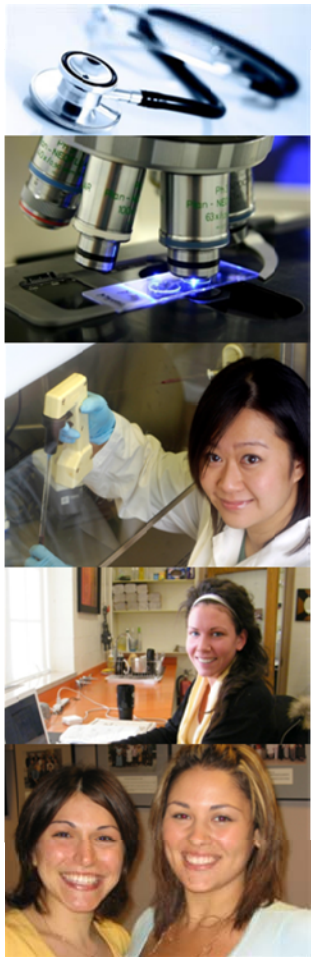
DEPARTMENT OF PATHOLOGY

GUIDELINES FOR GRADUATE STUDENTS
RESEARCH-BASED



Department of Pathology
Schulich School of Medicine & Dentistry
University of Western Ontario
2010-2011

Pathology MSc Research Based Graduate Program

Acknowledgement of

Criteria for Graduation, Student Expectation's & Responsibilities

I understand that to graduate from the Pathology M.Sc. program: I have to fulfill the following requirements:

I have to:

Pass the following courses (unless exempted) with a minimum average of 70% or above;

a) Pathology 9240 Understanding Disease (Lecture and WebCT portion)
b) Pathology 9510, 9511(9555,9556,9557,9558) Journal Club Seminar Series (2-yr course)
c) One Statistics Course (list of courses is presented in your guidelines)
d) Any additional courses as advised by my supervisor and/or advisory committee

I have to:

a) in consultation with my supervisor, set up my advisory committee and present my research plan to the committee within first 6 months of registration
b) in consultation with my supervisor, set up my advisory committee meetings at least once a year and present my research progress report
c) Submit my thesis and pass an oral defense examination of the thesis

I have to:

Abide by all rules and regulations as required by the Graduate Education Committee, Department of Pathology, UWO.

Please note: If you receive the Schulich Graduate Scholarship, students must annually achieve a minimum of **80 per cent in their graduate courses.**

_____

Student Name (Print)

_____

Student Signature Date

Please return your signed form to Tracey Koning, Dept. of Pathology, DSB, Room 4044.

Pathology PhD Research Based Graduate Program

Acknowledgement of

Criteria for Graduation, Student Expectation's & Responsibilities

I understand that to graduate from the Ph.D. program: I have to fulfill the following requirements:

I have to:

Pass the following courses (unless exempted) with a minimum average of 70% or above;

a) Pathology 9240 Understanding Disease (Lecture and WebCT portion)
b) Pathology 9610, 9611(9665, 9666,9667,9668)Journal Club Seminar Series (2 yr. course)
c) One Statistics course (list of courses is located in your guidelines)
d) Any additional courses if advised by my advisory committee

I have to:

a) in consultation with my supervisor, set up my advisory committee and present my research plan to the committee within first 6 months of registration
b) Pass a comprehensive examination (see guidelines) within 18 months of my registration in the Ph.D. Program.
c) in consultation with my supervisor, set up my advisory committee meetings at least once a year and present my research progress report
d) Submit my thesis and pass an oral defense examination of the thesis

I have to:

Abide by all rules and regulations as required by the Graduate Education Committee, Department of pathology, UWO.

Please note: If you receive the Schulich Graduate Scholarship, students must annually achieve a minimum of **80 per cent in their graduate courses.**

_____

Student Name (Print)

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Student Signature Date

Please return your signed form to Tracey Koning, Dept. of Pathology, DSB, Room 4044.

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1. DEPARTMENT OF PATHOLOGY GRADUATE PROGRAM

1.1 INTRODUCTION

The Department of Pathology offers course-based (M.Sc. only) and research-based graduate program leading to either a M.Sc. or Ph.D. Research-based program is offered on a full-time or a part-time stream. These guidelines apply to the research-based students. Students entering the program come from a variety of different backgrounds including four year honours undergraduate science programs, dental sciences, or medical programs (e.g. residency programs). There are no set prerequisites for the program although entering students may find it helpful to have taken courses in anatomy, biochemistry, histology, immunology, or molecular biology.

Normally, students are admitted into the M.Sc. program and are assigned to a supervisor who determines, in conjunction with the student and an advisory committee, a project and how to proceed. Students should meet regularly with their advisory committee; a minimum of once a year is a requirement. The Graduate Education Committee meets on a regular basis to oversee the program and monitor progress of all students.

In the Pathology Graduate Program, all students are expected to take a General Pathology course to provide a basic understanding of the pathological mechanisms underlying disease, a Biostatistics course to provide understanding of experimental design and statistical analysis of collected data, and to participate in a weekly Journal/Seminar Club. Successful completion of a comprehensive examination, taken at the end of the student's first year or beginning of the second year, is a requirement for those students in the Ph.D. program.

Training of students in methods and techniques necessary for their research work takes place in the supervisor's (and/or advisor's) laboratory and adequate progress in the mastering of the required technical skills is monitored by the supervisor and the advisory committee. The students also have to submit and defend his/her thesis.

Upon graduation from the program, students are expected to demonstrate specific skills as enumerated below. Our graduates have gone on to receive positions in academia, industry and government.

1.2 GOALS – at the M.Sc. Level

During the M.Sc. program, the student is introduced to the research process and obtains **elementary research skills**. During the thesis project, the student learns how to pose a relevant scientific question; determine the most appropriate technology to use to answer that question; master that technology and answer the question posed.

By the time of graduation the student should have demonstrated a **general knowledge of the discipline of pathology** and a more **detailed knowledge of a specific area of current pathology research forming the basis of his/her thesis**. The student should have **excellent written communication skills** and should have demonstrated these in the production of a thesis proposal and progress reports throughout their two-year program and the successful production and defense of a written thesis. Additionally at the M.Sc. level, the student should be aiming for one or two abstracts and at least one publication in a refereed journal. The student should have **good verbal communication skills** and have demonstrated these in presentations to the supervisor and the advisory committee, at journal club presentations and in successfully defending a thesis. The student should look for opportunities to present his/her work at local, national or international meetings. Other skills include getting along with and working well with others in the laboratory, department and university.

It is essential that the student have some **familiarity with computers** and their use in word-processing; data collection and statistical analysis; searching the medical literature;

communications and preparing material for presentations.

1.3 GOALS – at the Ph.D. Level

Doctoral students are expected beyond mastering basic technical skills to have demonstrated **some degree of independence and originality** in their thesis work. At this level, publication of research material is a must (not only as a learning exercise for the student, but also for future career advancement). An introduction to basic teaching skills is also strongly recommended. The student should have demonstrated, by time of graduation, a **general knowledge of the discipline of pathology** and a more **detailed and in-depth knowledge of a specific area of current pathology research**. The student should have gained fundamental **skills in teaching and research**. At the completion of the Ph.D., the student should be someone who is **well on the way to becoming an independent investigator** in that they can pose a relevant scientific question, determine the best methodology to answer that question, apply that methodology to solve the question asked. In many cases, the student may "invent" the methodology to be used or improve upon existing techniques.

At Ph.D. level, the student should also have had the opportunity to write and submit a request for funding for salary support (student's own salary) and, at discretion of the supervisor, participated in a written submission to a granting agency for external research support. Further skills in **written and verbal communication** should be demonstrated in written reports submitted to the supervisor and the advisory committee throughout their research program; a successfully defended thesis; abstracts and journal articles submitted to refereed scientific journal; and presentations at local, national and/or international meetings.

The student should also have had the **opportunity to act as a "peer" reviewer for a fellow student** in either a written or verbal presentation (e.g. at journal club) and at the discretion of the supervisor to act as a peer-reviewer for a journal manuscript or grant proposal.

The student should have a greater **familiarity with computers** for word-processing, data collection and statistical analysis, presentation of materials for seminars and for teaching, searching and following the medical literature through computer-based retrieval systems and using the computer to solve specific problems in their research area (e.g. via genetic databases).

Although, we have no teaching assistant (TA) positions in this department, there are opportunities to apply for TA positions in other UWO Faculty of Science or Medicine departments and also to take advantage of the training courses provided through the School of Graduate and Postdoctoral Studies and the Education Development Office. Opportunities to help develop course material are available in the Journal Club/Seminar course. At the minimum, the student should have had an **introduction to teaching** by either acting as a teaching assistant or by taking the teaching course offered through graduate studies.

Revised June, 2008

1.4 PART-TIME GRADUATE STUDIES IN PATHOLOGY

The Department of Pathology, Schulich School of Medicine & Dentistry, UWO, has recently introduced a Part-Time Graduate Program in Pathology leading to M.Sc. and Ph.D. degrees. This part-time program essentially uses the assumption that two terms of part-time study is equivalent to 1 term of full-time registration.

Eligibility requirement:

Similar to the full-time program in Pathology, for admission to the M.Sc. program, the applicant must have a Undergraduate (Bachelor's) degree in Science or equivalent, or MD or DVM degree from an accredited institution. The cut-off average for acceptance is 78%. Candidates must have a M.Sc. for direct admission to the Ph.D. program. However, students admitted to the M.Sc. program may also transfer to a Ph.D. program following a similar procedure as in the full-time program. The time frame for the conversion for a part-time student, however, will be extended until the end of 36 months from initial registration.

2. COURSE OFFERINGS

2.1 Required Courses for all Research-based Students

Understanding Disease (9240) - September to December

This is a survey course for students covering, in the first term, fundamental mechanisms of common disease processes. The lectures will be delivered conjointly with undergraduate students. The graduate students will also have to participate in case studies of disease.
Lectures, assessment is by written examinations, labs

Biostatistics

There are a number of statistics courses offered through different departments/faculties. They differ in content and emphasis; hours/week and tutorial time. You are **required to take <u>one</u>** of the following:

- Biology 2244 A/B
- Statistical Sciences 2035 <u>or</u> 2122 A/B <u>or</u> 2141 A/B
- Psychology 2810
- Health Sciences 2800 <u>or</u> Health Sciences 3801 A/B (preferred) or any other similar statistics course.

Journal Club/Seminar Course (9510, 9511, 9610, 9611) - September to May

Current students in the program will still be using the old course numbers as per above. New students beginning September 2010 – we have implemented new course numbers (see table below).

This course will emphasize critical review of the literature and also give the student an opportunity to practice his/her presentation skills. Research papers will be assigned for reading and presentation. Each student will be required to make at least two presentations during the year. One of these must be a presentation of their work. New students will be expected to present their initial thesis proposal presentation during the first four to six months of the course. Students will provide written evaluation of one another's presentations. Final grade will be assigned by course co-ordinator based on student's presentations, participation in seminar, preparation for seminar and assessment of written evaluations.

Table: New course numbers for Journal Club/Seminar course (beginning Sept 2010)

	Year 1		Year 2	
	Fall	**Winter**	**Fall**	**Winter**
M.Sc.	9555	9556	9557	9558
Ph.D.	9665	9666	9667	9668

2.2 Other Courses Offered

Ecosystem Health (9514) – January to April

This multi-disciplinary graduate course will include a seminar presentation related to the student's research project, a critical review of one contemporary ecosystem health research article in the peer-reviewed literature, a critique of one article in the popular press (newspaper or internet), and preparation of a case study involving ecosystem health issues at either the national or international level. There will also be specialist guest lecturers discussing ecosystem health issues from different perspectives to assist in preparation of the case studies.

The Biology of Human Cancer (9500)^3 – January to May

This course covers recent developments in carcinogenesis, including etiology, control of gene expression, oncogenes, suppressor genes, initiation, progression, mechanisms of chemical carcinogenesis and types of treatment. The course is offered in alternate years.

Public and Private Partnerships (9520)^3– January to May

This course has been developed in association with the UWO Richard Ivey School of Business and the Department of Oncology and Department of Pathology, and the London Regional Cancer Program. Basic and clinical researchers, industrial research partners, and business faculty will participate in developing the ability of cancer researchers to work with the private sector in translating new technology into clinical and community practice. Topics include: business approaches to cancer research and development; securing venture capital funds; appropriate recording publishing, and disclosing of data to preserve intellectual property in a form appropriate for development by the private sector; generation of appropriate cancer research agreements; when, and when not, to form a company, to develop cancer research ideas or products; government and regulatory body requirements for cancer drugs and treatments; and other relevant topics. The course is open to graduate students and clinical trainees in the CIHR Strategic Training Program and to other graduate students and clinical trainees with permission of the course coordinators.

Exemption from Required Courses

A student may submit a request, in writing to the Graduate Education Committee, for exemption from taking any of the Department's required courses. The request must be accompanied by documentation that shows the equivalent course (equivalent to that required by the department; e.g. a course outline; course notes) taken within the last 5 years and that the student received an A standing in the course (80% or above from those universities submitting numerical grades).

Other Notes

Student(s) may be required to take additional graduate courses as determined by the supervisor and/or the advisory committee.

3. GUIDE TO NORMAL PROCEDURES FOR GRADUATE STUDENTS

1. A prospective graduate student applies to the Department.

2. The application is assessed by departmental members of the Graduate Faculty and assessed by the Graduate Education Committee. If the application is rejected, the applicant is notified.

3. If acceptable, the student may be invited for an interview with interested graduate faculty members. Following the interview and consideration of the application, a supervisor is identified. Final acceptance depends on availability of a supervisor who is willing to supervise the prospective student and has research funds available to support the student's salary and research activities. ***No students are accepted unless there is assurance of sufficient salary support.*** The level salary support is set according to SGPS guidelines.

4. The student is notified of acceptance. In general, students enter the M.Sc. program with the privilege of applying for transfer to the Ph.D. program after one year (for specific details and important timelines see section 4) and having attained a B^+ average or better.

5. The supervisor, in consultation with student, then recommends an Advisory Committee. ***Within the first four to six months***, the Graduate Education Committee should receive a written outline of:

   a) the student's research project (this usually takes the form of a short thesis proposal written by the student, submitted to the Graduate Education Committee and presented to the department at a journal club meeting).
   b) other activities of the student during the term, e.g. courses to take, etc.

6. Within six months, the Graduate Education Committee assesses the research project in collaboration with supervisor and Advisory Committee.

7. The supervisor and Advisory Committee will monitor the progress of the student, with an expected report in writing at least once a year to the Graduate Education Committee - or sooner if problems arise with progress or changes are required. The written report must be received by the Committee before registration in the next term is allowed.

8. At least once a year, the student shall be informed in writing as to his/her general progress through the program. A copy of the advisory committee's report may be used for this purpose.

9. The Advisory Committee considers the results of examinations in courses designated, presentations at Journal/Seminar Clubs and advises Graduate Education Committee of developments - recommending changes if necessary.

10. At the end of the first year of the M.Sc. program, the Advisory Committee may recommend a transfer to the Ph.D. program. (See guidelines for transfer from M.Sc. to Ph.D. program). If the request for transfer is approved, the student will be expected to take a comprehensive examination within the next 6 months.

11. The comprehensive examination is taken at the end of the first year and **no later than 18 months after entrance** into the program.

12. The supervisor and Advisory Committee, in consultation with the student, define topics for comprehensive examination with approval of the Graduate Education Committee and make recommendations concerning the examining committee. These are given in writing to the Graduate Education Committee with a copy to the student. The Graduate Education Committee approves topics and the examining committee conducts examination. The Chair forwards the results to the Graduate Education Committee who informs Advisory Committee, supervisor and student of results.

13. The Advisory Committee considers and makes recommendations to the Graduate Education Committee if deemed advisable.

14. Recommendations are discussed by the Graduate Education Committee. If the Advisory Committee recommendations are not accepted, the two committees will meet for resolution of the problem. If necessary, the matter is referred to the whole department.

15. The supervisor and Advisory Committee supervise the thesis and ensure it is in acceptable form in accordance with the university regulations. Each advisor must inform the Graduate Education Committee in writing that they have reviewed the thesis and find it in a form acceptable for examination. Graduate Education Committee recommends examiners for thesis defence on advice of Advisory Committee and supervisor.

16. Appeal/Petition mechanisms as specified by the School of Graduate and Postdoctoral Studies Calendars and departmental guidelines.

Revised June 2004

4. GUIDELINES FOR TRANSFER FROM M.Sc. TO Ph.D. PROGRAM

Most students entering the Department of Pathology register in the M.Sc. program unless there is clear evidence of outstanding performance [For example, A grade in all courses during undergraduate or professional degree (B.Sc.; M.D.; D.D.S. or D.V.M.); Dean's Honour List; a major award holder (MRC: NSERC: OGS), or holding of a previous postgraduate degree (M.Sc.)].

If after the first year (**but no later than 18 months after entrance into the program**), a student wishes to transfer to the Ph.D. program, the following procedure will be used:

1. The student must, in writing, request permission from the Pathology Graduate Education Committee to transfer to the Ph.D. program. This request must be accompanied by supporting letters from the student's thesis supervisor and Advisory Committee stating clearly the reasons for recommending the transfer.

2. The student must submit a detailed Ph.D. thesis proposal.

3. Criteria (of roughly equal weight) for judging whether a student should be admitted to the Ph.D. program will include:
   a) Academic Performance - both undergraduate and graduate transcripts will be assessed
   b) "Testimonials" - will include letters of reference (admission) and report(s) of the supervisor and the Advisory Committee
   c) Research Progress - departmental progress reports; publications; presentations at scientific meetings; graduate research seminars and departmental research seminars
   d) Thesis Proposal – the quality of the thesis proposal sumbitted
   e) Awards - scholarship or studentship from an outside granting agency.

4. The student should take a comprehensive examination before transfer to a Ph.D.

Consideration of the request for transfer will be made at the first regular Committee meeting after which all the supporting documentation has been compiled. The student will be notified of the Committee's decision in writing immediately following this meeting.

A student may appeal the Committee's decision by reinstituting the request for transfer with complete documentation.

Revised January, 1996

5. GUIDELINES FOR PH.D. COMPREHENSIVE EXAMINATION

1. The principles outlined below will apply only to Ph.D. students (those who already have a M.Sc. degree and those who are transferring from the M.Sc. program) The Comprehensive exam may include one of the following options listed below.

2. The examination must be completed **within 18 months of being registered in the M.Sc. or Ph.D. program**.

3. The result of the comprehensive examination may be a factor in determining whether a student can continue with his or her studies.

4. The proposed content of the examination and a suggested examination committee consisting of three examiners will be presented by the supervisor, in consultation with the advisory committee and the student, to the Graduate Education Committee for approval. The Chair of the examining committee (selected by the Graduate Education Committee) or designate will state clearly, to the examining committee and to the student the Options (A or B), topics and the scope of the exam, dates, time and place of the examination as applicable. Any questions a student may have regarding the examination may be addressed to the supervisor or advisory committee.

5. During the examinationm the Chair of the examination should ask the examiners and everyone present in the room to turn off all electronic communication devices, such as cellular phones, beepers and pagers. These may distract the exam proceedings.

6. Any appeal of the result of the examination will be conducted according to the guidelines set out by the School of Graduate and Postdoctoral Studies in the Calendar.

Option A:

1. The examination will consist of two equally weighted parts:

   ii. a written examination that will offer a choice of questions and that will test the student's knowledge of the areas that he or she should be familiar with in relation to the major project being undertaken. This will normally be two to three essay questions, although a properly devised short answer examination will be acceptable.

   iii. an oral examination that will assess a student's familiarity with the necessary approach to his or her own research project, the methodology involved, specific problems and pitfalls likely to be encountered, as well as a broader knowledge of scientific information pertinent to the project.

2. A candidate's mark of B or higher in the required courses in Pathology will constitute acceptable evidence of familiarity with this field. General and systemic pathology would, therefore, not be normal constituents of the comprehensive examination except where related to the subject of the thesis.

3. The student will be given a final Pass/Fail mark based on the mean of the two equally weighted parts of the examination which will be given numerical marks. The numerical pass mark is 70%. A fail mark will be discussed at a joint meeting of the Graduate Education Committee and the Advisory Committee of the student. A recommendation for a repeat examination may be made. Ordinarily, a student may repeat the comprehensive examination once.

Option B:

1. The student will prepare a research proposal of up to 10 typewritten pages (excluding literature references, tables and figures for discussion), in the format of a Canadian Institutes of Health Research (CIHR) grant proposal. The range of topics is unrestricted except the grant **MUST NOT BE** the same as the research of the student and must be an original idea. The grant is to be written by the student as an **independent exercise**. The student should initially submit the summary page (one page) along with the necessary from to the Graduate Education Committee for their approval before proceeding with the complete application. The Advisory Committee may provide feedback as to the scope of the research and the specific aims during the preparation of the initial summary page only. The student's Advisory Committee may also be consulted on matters of grant format.

2. The proposal should include background information, a summary of progress to date, as well as an outline, significance, rationale for the proposed Ph.D. research work, references, figures, tables. A CIHR budget module also has to be completed.

3. The Advisory Committee must first approve the proposal before being considered by the Graduate Education Committee.

4. The student must submit the Ph.D. Examination Form and six copies of the Proposal to the Graduate Administrator. **The deadline for receipt of the proposal is <u>four weeks</u> prior to the end of the term.**

5. The candidate will give a 15 minute oral presentation on the research project. The examination Committee will assess the student on the proposed research and its defence, his/her intellectual capabilities and perseverance, and background knowledge in relation to the general field of research. This generally will entail 2 rounds of questions.

6. The student will be given a final Pass/Fail mark based on the written proposal and the oral defence. The numerical pass mark is 70%. A fail mark will be discussed at a joint meeting of the Graduate Education Committee and the Advisory Committee of the student. A recommendation for a repeat examination may be made. Ordinarily, a student may repeat the comprehensive examination once.

Revised June 13, 2009

Schulich
MEDICINE & DENTISTRY
Department of Pathology

PROPSAL FOR COMPREHENSIVE EXAM **(Option B only)**

Once completed, this form must be submitted along with a one page summary of the research proposal to the Pathology Graduate Education Committee for Approval as described in the Pathology Graduate Student Guidelines.

Candidate's Name (Last, First)	
Candidate's Email	
Candidate's Signature	
Supervisor's Name (Last, First)	
Supervisor's Signature	
Co-Supervisor's Name (Last, First)	
Co-Supervisor's Signature	

In the Pathology Graduate Education Committee's opinion the summary is;

❒ Approved ❒ Not Approved

REMARKS:

Revised July 13, 2009

Schulich
MEDICINE & DENTISTRY

PATHOLOGY GRADUATE PROGRAM
PhD Comprehensive Examination Form (only)

STUDENT NAME: _____ **Option you will be completing:**

☐ **Option A** ☐ **Option B**

PROPOSAL TITLE: _____

_____

SUGGESTED EVALUATION DATE(S): _____

_____

_____

Suggested Examiners: _____

_____

_____

_____

_____

IMPORTANT:
The signatures below indicate that the above proposal is considered ready for examination.

Supervisor:

_____
Signature

_____
Date:

Advisory Committee Members:

_____
Signature

_____
Date:

_____
Signature

_____
Date:

_____
Signature

_____
Date:

Revised November 22, 2007

6. APPEALS PROCEDURES

Within the department, there are resources available to you in the form of your supervisor, Advisory Committee, the Graduate Chair and the Graduate Education Committee. Please feel free to use them for help and advice.

Full documentation on graduate programs, regulations, appeals and thesis preparation is available on the School of Graduate and Postdoctoral Studies website at http://grad.uwo.ca/current_students/graduate_regulations/section_11.htm.

The procedures to be followed in cases of conflict in this department are outlined below:

If a conflict or difference of opinion arises between a student and supervisor which cannot be resolved:

1. You may ask your supervisor to convene a meeting of your Advisory Committee. A compromise or mutually agreeable settlement may be reached at that meeting.
2. If this agreement is not reached or is unsatisfactory, you may appeal to the Graduate Chair. You should put in writing your appeal and specify what you would like to see happen. At this step, the Graduate Chair may act alone to resolve the issue or depending on the nature of the case, bring the matter before the departmental Graduate Education Committee.
   The Chair of the Graduate Education Committee will inform you and your supervisor in writing of its decision.
3. If you are unsatisfied with the final decision of the Graduate Education Committee, you may appeal its decision to the Chair of the Department. Upon review, the Chair will either uphold or overturn the decision.
4. If the problem cannot be resolved at the departmental level, you are entitled to appeal to the Dean of the School of Graduate and Postdoctoral Studies. At that level, the Dean may settle the issue or establish an *ad hoc* appeals committee (See the School of Graduate and Postdoctoral Studies).
5. Your final appeal of the School of Graduate and Postdoctoral Studies ruling is to the Senate Review Board Academic.

APPEAL OF GRADES

Grades in courses given through the Department of Pathology should be appealed in the first instance to the course manager.

If the issue cannot be resolved at that level, an appeal may be made to the Graduate Chair and departmental Graduate Education Committee (steps 2 to 5 above).

Revised September, 1998

7. RESPONSIBILITIES OF GRADUATE SUPERVISOR

Before accepting a graduate student into the department, it is the responsibility of the proposed supervisor to ensure the availability of adequate space and facilities for the proposed research project. It is desirable that the supervisor also have existing grant support or a reasonable expectation of funding for student and project.

The research supervisor should provide:

1. Guidance in the choice of a suitable Advisory Committee and help in setting up regular meetings of the Advisory Committee with the student.

2. Advice in the selection of a research topic and selection of appropriate course work in conjunction with the Advisory Committee.

3. Help in acquisition of the requisite technical skills to complete the research project and advise in the critical and scholarly interpretation of scientific literature.

4. Guidance in the presentation and interpretation of scientific data.

5. Guidance in the preparation of abstracts, scientific papers and theses.

6. Adequate access to the supervisor and other resource persons to facilitate successful completion of the graduate program and the thesis.

7. Opportunities to attend scientific meetings.

8. A guaranteed minimum level of funding. The amount will be determined in consultation with the Graduate Education Committee. In the case of acceptance of a student ineligible for WGRS funding, this is an absolute requirement before acceptance into the program.

Graduate supervisors must be members of the School of Graduate and Postdoctoral Studies.

Revised January, 1996

8. GUIDELINES FOR ESTABLISHMENT OF ADVISORY COMMITTEE

1. The supervisor of the student should be the chair of the Advisory Committee and should be responsible for nominating the other members of the committee. The Chair of the Graduate Education Committee, or designate, will sit as an *ex officio* member on each committee.

2. The student should have an opportunity to discuss the committee membership and make suggestions.

3. The committee, including the supervisor, should have at least three members.

4. One member other than the supervisor should be a member of graduate faculty and preferably should have an appointment in the Schulich School of Medicine & Dentistry.

5. One or more members could be from other faculties, from other universities or from outside the university community (e.g. industry, government labs, etc.).

6. The committee membership, when nominated by the supervisor, must be approved by the Graduate Education Committee.

Revised January, 1996

9. ROLE OF AN ADVISORY COMMITTEE

1. The principle role of the committee is to act as a resource to the student in dealing with problems related to studies and research, and to the supervisor in planning the student's program and assessing progress.

2. Members, in accepting an appointment, must recognize a commitment to these roles and be prepared to give help and advice when needed.

3. The committee is required to meet, at a minimum, once every year and review the progress of the student.

4. Committee members should try to attend the student's formal seminars and presentations at Journal Club.

5. The committee must review the results of examinations and are responsible for making recommendations to the Graduate Education Committee on such matters as continuation or cessation of the program, changes in the research project, transfer from M.Sc. to Ph.D., and the suitability of the thesis for defense.

6. Each advisor should signify in writing that he/she has reviewed the thesis and finds it acceptable for submission and defense.

Revised June, 2004

10. RESPONSIBILITIES OF THE GRADUATE STUDENT

The survival skills which will serve you best in graduate school can be summed up as organization, communication, self motivation and critical thinking.

Organization

The organization of your time, and of your records, is your responsibility.

Without planning and organization, you may easily spend months in wasted efforts. Careful planning of your project (on a month-to-month as well as a day-to-day basis) may take you more time initially but will save in the long run.

Record-making is essential. Without systematic records now, it will be difficult to write your thesis later. Furthermore, you may find that you do not truly appreciate the significance of some of your current findings until months from now. Finally, you may need to repeat some of your early work later - why not make it easier on yourself?

Communication

Maintaining open lines of communication with your graduate supervisor and your committee will make your progress smoother. Keep them well informed about how you are doing, with regular formal or informal meetings or with written updates.

Feel free to ask other faculty members and technical staff for advice. They may have faced similar problems in the past, and you might as well learn from their experience.

If you are asked to give a public presentation, either within the department or at a conference, welcome it as a chance to develop your speaking, writing and presentation skills.

Self-Motivation

Keeping yourself on track often makes the critical difference. Your deadlines are now largely self-imposed and your hours (long hours!) are yours to set. You may find you need to break your project into “brain-sized chunks” in order to make it manageable, and then set yourself a deadline for each section.

It is easy to get sidetracked - by other interesting academic ideas and projects, or simply by personal matters. Learn to set your priorities, and after looking at them you may find it easier to say “no” to distraction. Time is the enemy.

Critical Thinking

Now is the time to think for yourself. No longer can you believe something just because a faculty member says so, or because you see it in print. Learn to approach each new paper you read with a sceptical eye, and to question any factoid that seems devoid of a rational basis. This will not only help you to design a better thesis but also to reject much of the mountain of literature you will soon be buried in.

Remember that every faculty member was once a graduate student, and that every other graduate student has been through the same disoriented beginning as you. Talk to the other graduate students as well as your thesis advisor, and if you have a little problem don't let it grow into a large one. Good luck.

Revised January, 1996

11. GRADUATE STUDENTS - YEAR I

Pre-admission	Entry: September (January and May)	By End of February (June, October) Submission of Thesis Proposal First written report of Advisory Committee	By end of August (December, April) Written Report of Advisory Committee Transfer to Ph.D.?
Student interviewed, accepted & supervisor designated	Introduction to supervisor, laboratory & initiation of thesis project	Begin literature review for thesis project	Continuation of research work; increasing familiarity and competence with laboratory techniques; collection of research data.
	Choice of Advisory Committee members (submit names to GEC)	Write up & present thesis proposal to Journal Club & Advisory committee	Meet with Advisory Committee as necessary (submit progress report to GEC).
	Journal Club starts.	Submit revised proposal to GEC & written report of Advisory Committee meeting(s).	
	Biostatistics course		
	Understanding Disease course		

12. GRADUATE STUDENTS - YEAR II

September	By end of February Written report of Advisory Committee Comprehensive Exam	Before the end of August Submit and defend thesis (M.Sc. – to Department)
Continuation of research work.	Regular Advisory Committee meetings	Completion of research work.
Collection of data	Comprehensive exam if preceding to Ph.D.	Meet with Advisory Committee to determine if sufficient data for M.Sc. thesis.
Abstracts; presentation of work at Journal Club, at meetings.		Write up thesis; review of final draft by all Advisory Committee members before submission to department.
Journal Club		Defense of thesis.
		Review of direction for Ph.D. studies.

13. GRADUATE STUDENTS – YEARS III & IV - Ph.D. Program

- Continuation of research work - submission of material as abstracts or journal articles.
- Presentation of work and attendance at scientific meetings.
- Additional course work as required.
- Teaching workshops/Teaching Assistantships if available.
- Continued regular meetings with Advisory Committee; written reports required on a six-month basis; final meeting to determine whether sufficient material for Ph.D. thesis.
- Review of final draft of Ph.D. thesis by the supervisor and if necessary by all members of Advisory Committee.

14. GUIDELINES FOR VOLUNTARY WITHDRAWAL FROM GRADUATE STUDIES

In the past, a student was able to voluntarily withdraw from his/her graduate program without question. In an attempt to understand and gather statistics on reasons why students voluntarily leave a program and to identify potential areas where the Graduate Community can be more accommodating or better supporting our students, we have revised the withdrawal procedure and have included further steps which will provide us with more detailed information and insight into a student's reasons for voluntarily withdrawing from a program.

In the case where a student voluntarily chooses to withdraw from a program he/she must complete the following steps:

1. The student must formally notify his/her program.
2. The program, along with the student, must submit a completed Voluntary Withdrawal Change of Status form (below) to SGPS to notify of the student's intent to withdraw.
3. Submission of this form to SGPS will be followed up by a brief meeting between the student and the Coordinator of Graduate Student Recruitment and Retention (CGSRR) and the completion of a Voluntary Withdrawal Survey (below).
4. The Change of Status will be entered into PeopleSoft and the student will be officially withdrawn.
5. Paperwork will be forwarded to the Graduate Program.
6. An annual meeting will take place between the CGSRR and the Associate Dean of SGPS to review reasons for withdrawal across programs and possible modifications to curricular structure/milestones.

You will find the Voluntary Withdrawal Form on the following website:
http://www.uwo.ca/grad/documentation/voluntary%20withdrawal%20C%20of%20S.pdf

You will find the Voluntary Withdrawal Survey on the following website:
http://www.uwo.ca/grad/documentation/voluntary%20withdrawal%20survey.pdf

Revised May 4, 2006

15. GUIDELINES FOR REQUEST FOR TRANFSER FROM Ph.D. to M.Sc.

SGPS is introducing a new procedure for students to request a transfer from their current doctoral degree studies to master's degree studies. This procedure will apply to all doctoral students including those who were admitted through the new direct entry option. In the past, students wishing to transfer degrees were required to voluntarily withdraw from the Ph.D. and apply to the master's degree.

Now, students wishing to request a transfer from doctoral to master's studies must complete the following steps:

1. The student must formally notify his/her program.
2. The program, along with the student, must submit a completed Request for Transfer from Doctoral to Master's Degree form (below) to SGPS.
3. Submission of this form to SGPS will be followed up by a brief meeting between the student and the Coordinator of Graduate Student Recruitment and Retention (CGSRR) and the completion of a Doctoral to Master's Degree Transfer Survey (below).
4. The Request form will be reviewed by the Associate Dean of SGPS and if approved, the transfer will be made official in PeopleSoft. Please note that these transfers may only occur at the beginning of a term.
5. Paperwork will be forwarded to the Graduate Program.
6. An annual meeting will take place between the CGSRR and the Associate Dean of SGPS to review reasons for doctoral to master's degree transfers across programs and possible modifications to curricular structure/milestones.

You will find the Request for Transfer from Doctoral to Master's Degree on the following website:
http://www.uwo.ca/grad/documentation/Request%20for%20D%20to%20M%20Transfer.pdf

You will find the Doctoral to Master's Degree Transfer Survey on the following website:
http://www.uwo.ca/grad/documentation/D%20to%20M%20transfer%20survey.pdf

Revised May 4, 2006

16. ADVISORY COMMITTEE MEETING PROGRESS REPORT DEPARTMENT OF PATHOLOGY

Student:	***Date of Meeting*:**
Supervisor:	**Co-Supervisor:**
Members of Advisory Committee: (Please print Clearly)	
Progress:	
Strengths:	
Areas to Improve:	
Action Taken:	
Next Proposed Meeting :	
Signature of Supervisor:	
I intend to submit my thesis this term:	
Please return to Tracey Koning, Dept. of Pathology, Room 4044, Dental Sciences Building, UWO, when completed. Thank you. **(Please add additional pages if necessary)**	

Revised August 10, 2006

17. GRADUATE STUDENT EXIT SURVEY
DEPARTMENT OF PATHOLOGY

Date: _____

Student's Name: _____
Supervisor: _____
Date Started: _____
Degree Program: _____
Date Completed: _____

Members of Advisory Committee: _____

_____

Thesis Title: _____

_____

Funding			
Start Date	**End Date**	**Name of Scholarship(s)**	**Amount of Scholarship per year**

Honours and Awards			
Start Date	**End Date**	**Name of Award**	**Amount of Award per year**

Graduate Student Exit Survey cont'd: **Page 2**

Student's Name:

List Courses Completed		
Course Number	**Name of Course**	**Grade**

Seminars/Presentations:		
Date	**Title of Seminar/Presentation**	**Place**

Graduate Student Exit Survey cont'd: **Page 3**

Student's Name:

	Publications
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	

Evaluation of Programme

Please mark as to level of satisfaction with the course offerings; supervisor and advisory committee.
1 = very satisfactory; 2 = satisfactory; 3 = unsatisfactory; 4 = very unsatisfactory; 5 = N/A

	1	2	3	4
Appropriateness of course offerings.				
Quality of teaching.				
Appropriateness of degree requirements.				
Quality of research supervisor.				
Relationship with your supervisor.				
Laboratory facilities and equipment.				
Computing facilities.				
Library facilities.				
Contact with program administration (Chair/Graduate Education Committee & Graduate Assistant).				
Procedure for thesis review and submission.				
Oral Defense Process				

Graduate Student Exit Survey cont'd: **Page 4**

Student's Name: _____

Additional Comments:

Date: _____ ***Signature***: _____

August 2008

18. PATHOLOGY JOURNAL CLUB EVALUATION SHEET

DEPARTMENT OF PATHOLOGY
JOURNAL CLUB SEMINAR SERIES
EVALUATION BY THE STUDENTS AND FACULTY

DATE: _____ STUDENT (PRESENTER) NAME: _____

PRESENTATION STYLE AND VISUAL AIDS: **/10**

BACKGROUND, RATIONALE, HYPOTHESIS: **/10**

EXPERIMENTAL APPROACHES RESULT: **/10**

DISCUSSION AND CRITIQUE: **/10**

RESPONSE TO QUESTIONS: **/10**

COMMENTS:

PLEASE RETURN EVALUATION TO DR. CHANDAN CHAKRABORTY, DEPT. OF PATHOLOGY, DENTAL SCIENCES BUILDING, ROOM 4044.

Revised August 10, 2006

19. TERMS OF REFERENCE (GRADUATE EDUCATION COMMITTEE)

1. Review regularly the objectives and progress of the departmental graduate training program and make recommendations to the department for future modifications or developments.

2. Meet on a regular basis, and furnish reports of deliberations to the department as a whole.

3. Consider the applications for graduate training and make recommendations for acceptance or rejection. Scrutinize proposed programs of the students and approve, disapprove or suggest modifications.

4. Review standards for acceptance into graduate programs from time to time as considered desirable.

5. Set rules and standards for content and format of examinations, and review these as needed.

6. On recommendation from supervisors, approve examining committees and general content of examination and ensure that proper arrangements are made for examination.

7. Review examination performances and biannual reports of advisory committees of graduate students and make recommendations on their future program.

8. Make recommendations concerning awards and scholarships to graduate students where needed.

9. Ensure proper liaison between the Graduate Education Committee and Advisory Committees; department members; and where applicable, with the Residency Training Committee.

10. Periodically evaluate performance and operational methods of the committee.

11. The committee structure consists of:
    a. Departmental Chair
    b. Graduate Education Committee Chair (nominated/appointed by the Departmental Chair)
    c. Three departmental members (nominated/appointed by the Departmental Chair from the departmental graduate faculty members). One of these members must be a graduate educator.
    d. A representative from the course based graduate education (PA program) committee.
    e. A graduate student representative.

Committee Membership and Length of Tenure: The tenure of office for faculty members will be three years; for the student representative, two years. The committee chair will be appointed by departmental Chair. The student representative will be elected by all departmental graduate students.

12. Committee members concluding a term of elected office will not be eligible for re-election for a period of one year.

13. Committee members who miss four consecutive meetings must be removed from the committee and a new member elected.

14. Members who go on sabbatical are to be replaced and a new member elected.

15. Nominations for membership to the graduate faculty are made by the Chair of the Department after review by the Graduate Education Committee.

Revised March 10, 2010

20. SCHOOL OF GRADUATE AND POSTDOCTORAL STUDIES: STUDENT ROLE AND RESPONSIBILITIES

Student: Role & Responsibilities

1. The student should make and maintain a strong commitment to devote the required time and energy needed to engage successfully in graduate work and research, write a thesis, and contribute fully to the scholarly and intellectual life of the University. The student should show dedicated efforts to gain the background knowledge and skills needed to pursue graduate work successfully, and adhere to the highest standards of ethical behaviour to assure academic integrity and professionalism.

2. The student should discuss with the supervisor, very early on, any expectations concerning authorship on publications, and issues surrounding ownership of intellectual property (this may include patents/licenses). This may result in written agreements or contracts between the student and supervisor covering these issues. In this regard, the student should become familiar with relevant policies in these domains.

3. The student should become aware of, very early on, all program requirements and deadlines, information about various sources of funding, and university policies covering the proper conduct of research, race relations, sexual harassment, AIDs, appeals, and any other relevant safety and/or work place policies and regulations.

4. The student should, very early on, discuss and formulate with their supervisor a plan of study for completion of degree requirements and thesis work, with clear milestones denoting progress. This would include, for example, setting a viable time schedule and adhering to it for all graduate work, including thesis progress and completion. Any variations to this schedule, including prolonged absences by the student, should be discussed. More generally, the student should maintain open communication and feedback with the supervisor on all issues, including supervisory practices.

5. The student and supervisor should discuss and agree on an appropriate schedule for supervision meetings. This discussion should also include agreement regarding appropriate time-frames for the submission of student materials to be reviewed by the supervisor, and the supervisor providing feedback to the student.

6. The student should be reasonably available to meet with the supervisor and supervisory committee when requested, and be able to report fully and regularly on thesis progress and results.

7. The student should give serious consideration and response to comments and advice from the supervisor and committee members.

8. The student should maintain registration throughout the program and ensure, that where required, visas and employment authorization documents are kept up to date. The student should be aware of and conform to program, The School of Graduate and Postdoctoral Studies, and University requirements relating to deadlines, thesis style, award applications, and other graduate requirements, etc.

9. The student should pay due attention to the need to maintain a workplace which is safe, tidy, and healthy. The student should respect the work and equipment of others, and show tolerance and respect for others sharing the same facilities. This would include, for example, cleaning up work space when finished, and complying with all safety and work regulations of the program/university.

10. The student should be thoughtful and reasonably frugal in using resources, and assist in obtaining resources for the research of other group members, when applicable.

11. Where applicable, the student should comply with all ethical policies and procedures governing human or animal research.

12. The student should meet agreed performance standards and deadlines of funding organizations, to the extent possible, when financing has been provided under a contract or grant. This would include adherence to any contractual terms under which the thesis research is conducted.

13. The student should meet the terms and conditions of any financial contractual agreements, such as RA or TA positions.

14. The student should inform the program (i.e., graduate chair or chair), in a timely fashion, of any serious difficulties which may arise in supervision. These might include major professional academic disagreements, interpersonal conflicts, or potential conflict of interest situations.

NOTE: This document is also available on the School of Graduate and Postdoctoral Studies Web Site at: "www.uwo.ca/grad/". This web site also contains information on further topics of interest, such as: admission requirements, registration and progression requirements, funding sources and eligibility criteria, the appeals process, general program requirements, and thesis examination and submission regulations.

21. TRAVEL - DUTKEVICH MEMORIAL FOUNDATION

Introduction:

The School of Graduate and Postdoctoral Studies does not provide any funds for graduate students to attend and present papers at Scientific Meetings. It is now the responsibility of the supervisor to provide funds for students to present their work at scientific meetings. By offering partial funding, the Department of Pathology will support students who present at scientific meetings.

Eligibility:

All graduate students registered in Pathology program (full and part-time students.)

Application:

The applications should be submitted to the Chair, Graduate Education Committee before June 1st and December 1st each year. The applications should include 3 copies of the abstract as submitted or will be submitted, an explanation of the meeting (place, time, registration fee, etc.) and a letter from the supervisor (which can be sent directly to the Chair of the Graduate Education Committee), indicating the importance and benefit for the student to be able to attend the meeting.

The Graduate Education Committee will provide its discussion in late Summer.

Selection of Award:

The award will be approved by the Graduate Committee. The award will be based on the merit of the abstract and letter from the supervisor.

Amount and Number of Award(s):

The Travel Award will be a partial one to defer some of the expenses. The maximum award will be $500 per student per year.

A maximum of up to 4 awards will be given in each year. The Graduate Education Committee however may change the amount or number of awards.

Revised October 16, 2007

22. DEPARTMENTAL SCHOLARHSIP - DR. CAMERON WALLACE GRADUATE STUDENT AWARD IN PATHOLOGY

This award was established by friends and family of Dr. Cameron Wallace, former Chair of the Department of Pathology at the University of Western Ontario. The award will be managed by Foundation Western.
Value: $1,500 annually.

Purpose:
The award recognizes student accomplishments in pathology research and course work undertaken during their graduate program. The award is given in recognition of Dr. A. Cameron Wallace who was head of the Department of Pathology (1965-1974) and who also served as Acting Chair of the department on several occasions. He was the Chair of the Graduate Education Committee (1979-1983). Dr. Wallace's major research interests included the study of renal diseases, oncology and immunology. He was the first director of the Cancer Research Laboratory at the University of Western Ontario. He was an academic pathologist with strong commitment to the pursuit of basic research in the Department of Pathology. He worked closely with his clinical colleagues in surgery and nephrology and pursued studies related to the recognition of the early stages of organ rejection in renal transplants at University Hospital. Dr. Wallace supervised several graduate students in the Department of Pathology and was recognized for his excellence as a mentor and teacher.

Eligibility:
A graduate student who is currently enrolled as a full-time or part-time student in the 2nd year (or beyond) of the Pathology program.

Criteria:
The emphasis will be placed on choosing a candidate who demonstrates a high level of academic achievement and excellence in research work including publications, presentations at meetings (local, regional, provincial, national or international) during graduate study in pathology. A student can receive this award only once.
Applications will be evaluated by the Graduate Education Committee.

Application:
Eligible candidates can submit applications to the Graduate Chair. The application (5 page maximum) should consist of:

- Brief C.V. with name and address (2 pages maximum). (Highlight your education, grades, scholarships, any presentations/publications, any teaching activities, and awards).
- Statement of thesis research project and current progress (2 pages maximum).
- Personal statement (1 page maximum). Explain why you should be considered for this award.

Deadline for the application for the award is February 15th of every year.

Revised June 4, 2004

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