



**Department of
Epidemiology and Biostatistics
PhD Student Handbook**

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Department of Epidemiology and Biostatistics

Graduate Program Orientation

Program Timeline

The academic year in the School of Graduate and Postdoctoral Studies (SGPS) consists of three terms, commencing on or about September 1 (Fall), January 1 (Winter), and May 1 (Summer). Students are entitled to 3 weeks holidays, the timing of which must be pre-approved by their supervisor.

Students are admitted in the fall term. Due to students coming to our program from a wide variety of educational backgrounds, there is a fairly heavy course-work requirement. **To ensure timely completion of the degree, there is a necessary rate of progress through the program.** PhD students must complete 4.0 credits and maintain continuous registration by paying tuition fees in each successive fall, winter and summer term (from program entry, until the thesis is successfully defended, and corrections submitted to SGPS).

Full-Time PhD Students

Epidemiology students must have completed all courses requirements except Biostatistics 9681Q and Epidemiology 9690R by the end of the first two terms of registration and these courses must be taken in term four.

Biostatistics students must have completed all course requirements except Biostatistics 9681Q and Epidemiology 9690R by the end of the first two terms of registration and Biostatistics 9681Q and Epidemiology 9690R are to be completed in term four.

Additional courses may be taken at the student's discretion at any time, in consultation with his or her supervisor.

The comprehensive examination will be written during the fourth term, provided all first-year course work has been completed successfully. All eligible students will write this examination simultaneously at a date set by the Comprehensive Examination Committee. The student must pass the comprehensive examination before defending the thesis proposal.

The thesis proposal will, ideally, be defended during the fifth term of registration (the winter term of the second year). The thesis proposal must be successfully defended by the end of the ninth term of registration (end of the third year). Within two to four months after successfully defending the thesis proposal, the student will prepare and present a thesis proposal public lecture.

The thesis will, ideally, be completed by the end of the twelfth term (end of the fourth year). The thesis must be completed by the end of the sixth year or the student will be withdrawn from the program.

Registration Period

The minimum registration requirement for a PhD candidate holding a Master's degree or a degree in Medicine, Dentistry or Veterinary Medicine is six terms of full-time enrolment (or two years).

The doctoral degree must be completed within six calendar years (twelve terms) from initial program entry. The deadline for degree completion will be extended in the case of an approved leave of absence (refer to section on Leave of Absence).

Progress Requirements

The Departmental Graduate Affairs Committee will require a student to withdraw from the program if he or she is not making adequate progress. This progress includes: following the recommended time line, regularly meeting with the thesis supervisor and maintaining a continued effort on the thesis research as well as maintaining a cumulative average of at least 70% calculated each term over all courses taken for credit, with no grade less than 60%.

Review of Student Progress

Success in the graduate program is marked by achieving key milestones in a timely manner. The primary purpose of the annual review of student progress, conducted at the end of terms 3 and 5 and every Winter Term after term 6, is to identify departures from the normal time line so that appropriate actions can be taken as soon as possible. It is the student's responsibility to initiate the process, and timely compliance is itself a formal progression requirement. All students are required to submit a completed and signed progress form by the deadline. Registration for future terms will be conditional on the student having submitted a progress form by the deadline. It is the student's responsibility to prepare the Annual Review of Student Progress Form when it is e-mailed out.

Review of student progress is a 2-step process whereby the student (1) completes Part A of the form and (2) schedules an in-person meeting with his/her supervisor(s) to complete Part B. The form is then signed by both the student and supervisor(s) and submitted by the deadline to the Academic Programs Coordinator. Copies should be kept by both the supervisor(s) and the student.

If there is more than one supervisor, all supervisors' signatures are required on the forms.

Selection of Thesis Supervisory Committee

Students should feel free to solicit advice from any faculty member in the department. However, most advice will be provided by the supervisory committee and the choice of this committee is important in ensuring a strong thesis and successful thesis examination.

PhD students are admitted into the program with an assigned thesis supervisor who has already indicated his/her willingness to guide the student through the thesis. The primary thesis supervisor must have School of Graduate and Postdoctoral Studies (SGPS) PhD supervisory credentials within the program. Students are free to switch supervisors if there is a credentialed PhD supervisor who is willing to accept the student and if both current and potential supervisors are agreeable to the funding implications.

Supervisory Committee Membership

In consultation with the thesis supervisor, an appropriate supervisory committee will be selected. By the end of the **third term** in the program, you should have identified at least one other supervisory committee member in addition to any primary or co-supervisors. It is important that the student have this second source of advice. The remaining members of the supervisory committee should be added if/when needed, to fill gaps in the expertise required to supervise the thesis topic.

In addition to the supervisor or co-supervisors, at least one other person on this committee **MUST** be a member of the Department of Epidemiology and Biostatistics, and all committee members **MUST** hold at least Teaching and Advisory Membership with the School of Graduate and Postdoctoral Studies (list available at <http://schulich.uwo.ca/epibio/faculty/>). Supervisory Committee membership is subject to the approval of the Departmental Graduate Affairs Committee. Committee members may be drawn from eligible faculty in any department at Western or faculty at other institutions who also hold Western appointments.

In choosing supervisory committee members, students should consider the research interests, as well as the supervisory experience, of potential committee members. The following criteria are guidelines, not requirements:

- there should be at least one person whose primary field matches that of the student (e.g. at least one biostatistician for students in the biostatistics field; at least one epidemiologist for students in the epidemiology field)
- there should be at least one "experienced" member who has supervised PhD students through to completion in this department or another Epidemiology and Biostatistics program (someone who "knows the ropes")
- there should be at least one person expert in the content area of the inquiry; iv) the full supervisory committee should cover, as much as possible, content areas in which the student and/or supervisor perceive a need for support

The department website has a list of all full-time and cross-appointed faculty and their research interests (link available at <http://www.schulich.uwo.ca/epibio/people/faculty/>). Discuss possible choices with your supervisor and also discuss who will be responsible for contacting potential supervisory committee members (the student or the supervisor). Any additions or removals to the supervisory committee must be communicated to the Academic Programs Coordinator using the form on the departmental website.

Additions and Changes to Membership

Students are responsible for completing and submitting a 'Supervisory Committee Change' form (available at http://www.schulich.uwo.ca/epibio/graduate/documents_forms) whenever a change in committee membership takes place (with the exception of changes made immediately prior to the Annual Review of Student Progress). All change forms should be submitted as close to the date of the change as possible to ensure timely approval and tracking of committee membership.

Meeting Frequency

It is the student's responsibility to schedule regular meetings with the supervisor. While the meeting schedule needs to be tailored to the student/supervisor working styles, it is recommended that you meet with your supervisor **at least** once a month, regardless of the stage of your program. When you are actively designing your project, it is recommended that you meet with your supervisor **at least** every two weeks. Frequent meetings between the student and supervisor and occasional meetings of the entire supervisory committee have been reported by many students as a helpful part of the process and are strongly encouraged.

Graduate Student Supervision: Roles and Responsibilities

The Program (Department)

1. The program should implement and follow the policies of the School of Graduate and Postdoctoral Studies (SGPS).
2. Programs should provide sufficient information in the letter of offer of admission to new graduate students. This would include, for example, details about means of support (e.g., GTA, scholarship, supervisor funding), amount of funding, time of funding, and any initial program expectations. Information should also be provided regarding supervisor arrangements, including the assignment of supervisors, or availability of potential supervisors and their research areas.
3. Programs should provide orientation/information sessions for both new and continuing graduate students. Information conveyed in these sessions might include: overviews of program policies and requirements, areas of expertise of faculty members for research supervision, expected performance and time-lines for completion of degree requirements, intellectual property policies, publication and authorship issues, scholarship and funding information, GTA information (and for international students, information about visa requirements and employment regulations), information on policies regarding the proper conduct of research, sexual harassment and race relations, AIDS policies, information about safety and work place regulations, procedures for complaints and appeals, and information on help lines, advisory offices, and counseling services.
4. The program should ensure that each new graduate student has an identified supervisor (or interim supervisor/program consultant) as soon as possible after starting the program. The program should also ensure that the supervisory committee is in place at the appropriate point in time.
5. The program shall ensure that arrangements are made for an alternate supervisor if the regular supervisor either departs or is absent for an extended period.
6. The program should provide students with written guidelines of program policies and notification of any changes.
7. The program should assess and review each student's academic and research progress, at least on an annual basis. This review would include such factors as performance on course work and PhD comprehensive examinations, and thesis progress. The program should provide feedback which may include specific goals and time-lines for completion of various components of degree requirements. Feedback may also take the form of a written contract of expectations. Areas of concern and lack of progress must be clearly identified for the student.
8. The program should identify paths/resources available to students for assistance, and if they wish to raise concerns about their program, supervisor, etc.
9. The program should encourage open communication and feedback between students and supervisors on all issues, including supervisory practices.

10. The program should strive to maintain an atmosphere conducive to scholarly work by graduate students, and help enhance their creativity and productivity.
11. The program should provide mechanisms for monitoring/resolving problems which may arise between graduate students, supervisors, and members of supervisory committee, and do so in a timely fashion. Programs should further ensure that these mechanisms are congruent with established appeals policies and procedures.
12. The program should ensure a safe working environment for students, and inform them of all relevant safety and work regulations.
13. The program should ensure that a supervisor takes on only as many graduate students as he/she can properly supervise.
14. The program should ensure students are aware of evaluation criteria for all work before work commences.

The Supervisor

1. The supervisor should make and maintain a strong commitment to devote the required time and energy needed to successfully engage in graduate student supervision. As part of this commitment, the supervisor should display the highest ethical standards of behavior at all times.
2. Potential supervisors should have sufficient familiarity with the field of research to provide appropriate guidance and supervision, or indicate a willingness to gain that familiarity before agreeing to act as supervisor.
3. The supervisor should discuss with the student, very early on, any expectations and the relevant policies 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 supervisor and student covering these issues.
4. The supervisor should make the student aware, very early on, of program requirements and deadlines, various sources of funding, policies covering the conduct of research, and any relevant safety and/or work place regulations. The nature of any financial support provided by the supervisor should be communicated clearly to the student, in writing, including such details as the amount of financial support, the length of time of such support, and any specific conditions pertaining to this financial support.
5. The supervisor should, very early on, discuss and formulate with the student a plan of study for completion of degree requirements and thesis work, with clear milestones denoting progress. This would include, for example, assisting the student in selecting and planning a suitable and manageable research project, as well as setting a viable time schedule and adhering to it for thesis progress and completion.

6. The supervisor should be available for regular consultation with the student. The supervisor and student should discuss and agree on an appropriate schedule for supervision meetings, and the supervisor should provide constructive and timely feedback to the student. More generally, the supervisor should maintain open communication and feedback with the student on all issues, including supervisory practices.
7. The supervisor should provide regular evaluations and assessments of the student's progress and academic performance. This would include a review with the student and supervisory committee, at least on an annual basis, of progress on thesis research and any other relevant degree requirements. The supervisor should then provide input to the program regarding the student's progress.
8. The supervisor should make reasonable arrangements to ensure that adequate and appropriate research resources are available for the student's thesis project.
9. The supervisor should help ensure that the research environment is safe, healthy, free from harassment, discrimination, and conflict. To this end, the supervisor should be aware of all pertinent regulations and policies covering these issues.
10. The supervisor should provide guidance, instruction, and encouragement regarding the research activities of student. The supervisor should help ensure that the student has access to intellectual resources and research opportunities, and should also encourage the dissemination of research results by publications and conferences.
11. The supervisor should monitor any major discrepancies in advice given to the student by members of the supervisory committee and/or supervisor, and attempt to achieve resolution and consensus on the issue(s) involved.
12. Supervisors should be familiar with all program, School of Graduate and Postdoctoral Studies, and University policies and procedures pertaining to graduate students and supervision, along with information on graduate student financial support.
13. Supervisors should make satisfactory alternative supervisor arrangements if away for a prolonged period of time.
14. Supervisors 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.

Supervisory Committee

1. In conjunction with the supervisor, the supervisory committee should help the student develop a program of study, and also report on the progress of the student's work. Members of the supervisory committee thus serve to broaden and deepen the range of expertise and experience available for providing advice and for assessment of the student. As such, membership on this committee should be determined by consultation between the supervisor, student, and program (e.g., graduate chair).
2. The supervisory committee may assist the supervisor with the monitoring process. This may include at least an annual meeting between the student, supervisor, and supervisory committee to review progress on degree requirements.
3. Members of the supervisory committee may provide additional guidance and advice on the student's thesis research project, thus complementing the expertise of the supervisor. The supervisory committee members should be available to provide other sources of information to the student, and also provide constructive criticism and discussion of the student's ideas as they develop.
4. Members of the supervisory committee should be reasonably accessible to the student when called upon for discussion of the student's academic progress, consultation on issues related to the thesis research project, and for general guidance. Supervisory committee members should be reasonably available to meet at the request of the student or supervisor.

The Student

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 behavior 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. 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.
6. The student should give serious consideration and response to comments and advice from the supervisor and committee members.
7. The student should maintain registration throughout the program and ensure, that where required, visas and employment authorization documents are kept up to date.
8. The student should be aware of and conform to program, 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. Where applicable, the student should comply with all ethical policies and procedures governing human or animal research.
11. 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.
12. The student should meet the terms and conditions of any financial contractual agreements, such as a TA position.
13. 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.

Comprehensive Examination

Fall 2017 Comprehensive Exam Committee:

- Dr. Piotr Wilk (Graduate Chair) - pwilk3@uwo.ca
- Dr. Greta Bauer – gbauer@uwo.ca
- Dr. Samantha Wells – swells@uwo.ca

Exam Information

All PhD students are required to write a comprehensive examination after completion of the core courses in epidemiology and biostatistics. The exam is written in the fourth term, provided that the first-year course work has been successfully completed.

The PhD comprehensive exam will provide the opportunity for students to demonstrate their ability to integrate material across the core courses. It is expected that all students will be able to critically evaluate published and proposed research, taking into consideration both epidemiology and biostatistics principles.

The PhD comprehensive exam will be held from 9:00 am to 1:00 pm on two consecutive days in October. Each day will consist of an independent exam of the following format:

- Day 1 – Exam questions will take a more structured format, examining students' depth of understanding of key concepts in epidemiology and biostatistics.
- Day 2 – The second portion of the exam will have a more open-ended format, examining students' ability to apply epidemiologic principles and critical appraisal skills, as well as their ability to conceive of and design "next steps". Examples include peer review of a published paper or designing a study on a given topic.

Important note: The two portions will be graded as a single exam.

Potential Outcomes

- If the student does not perform satisfactorily on a specific question or topic, the comprehensive exam committee may request additional written or oral response, or require the student to take remedial action (ex. take an extra course). This option is at the sole discretion of the committee.
- If a student fails, the entire exam must be rewritten, typically within 4 months of the original exam. Failure at the second attempt will result in withdrawal from the program.

Resources for Review

Suggested Epidemiology Readings:

- Bhopal (2008) Concepts of Epidemiology, 2nd Edition
- Rothman (2012) Epidemiology: An Introduction, 2nd Edition
- Koepsell & Weiss (2014) Epidemiologic Methods: Studying the Occurrence of Illness, 2nd Edition
- Szklo & Nieto (2007) Epidemiology: Beyond the Basics, 2nd Edition
- Rothman, Greenland, & Lash (2012) Modern Epidemiology, 3rd Edition
- Porta (2008) A Dictionary of Epidemiology, 5th Edition
- Required and supplementary articles assigned in Analytic Epidemiology

Suggested Biostatistics Readings:

- D'Agostino et al. (2006) Introductory Applied Biostatistics
- Vittinghoff et al. (2012) Regression Methods in Biostatistics

Please note: Copies of previous exams and examples of student responses are available from the Academic Programs Coordinator.

PhD Thesis Proposal Defense

An approved thesis topic and a designated thesis supervisor are requirements for admission to the doctoral program. A doctoral thesis must be based on an original piece of research that the candidate has designed and carried out. After successfully writing the PhD Comprehensive examination, the student will begin preparations to write and defend the PhD thesis proposal. Departmental approval of a thesis proposal is provided only after the student has been successful in a formal defense of the proposal.

Guide to Preparing A PhD Thesis Proposal

1. Introduction

The purpose of this guide is to outline how to select a thesis topic and supervisory committee and, how to prepare a thesis proposal. As well, the proposal defense process is described.

It is your responsibility to note the following:

1. Each PhD student must defend his/her thesis proposal prior to initiation of thesis research. If you begin your thesis research prior to defending the proposal, you risk losing all work done to date if the committee requires revisions.
2. The proposal should be defended within a year of writing the comprehensive examination.
3. All research involving human subjects must be approved by the Review Board for Health Sciences Research Involving Human Subjects (Office of Research Ethics, Support Services Building, Room 4180) before subjects are recruited.

2. Selection of the Topic

The selection of your thesis topic may be the most important decision you make in the PhD program. The topic you choose will be a major determinant of your success in the program and may also shape the direction your career takes after graduation. As well, going through the experience of selecting a suitable topic is excellent preparation for a research career in which you will often be selecting research questions.

The selection of your thesis topic is a creative process and, except under unusual circumstances, should be done by the student, not the supervisor. Supervisors have a major role to play in helping guide the student toward a good choice. The process varies from individual to individual but often the student first selects the general area of interest and then independently reviews the literature in their chosen area to determine what study would move the state of knowledge forward. An acceptable variant on this pattern would be the situation where the supervisor suggests the area but then the student independently reviews the literature and narrows the topic. Another variant might occur when the student has not as yet decided on the general area but reads something which stimulates a question worthy of inquiry.

The actual research question(s) should generate a study of appropriate scope: small enough to be completed in a reasonable time frame but large enough to be a substantial effort and contribution. In this regard, input from faculty is needed as it is impossible to quantify what constitutes "enough but not too much" since this varies with subject area and study type. A good rule of thumb is that, when completed, the study should be suitable for publication as 2-5 papers in reputable epidemiology, biostatistics or public health journals. However, the scope of a PhD dissertation should have more depth and dimension than a journal paper study. For example, small "side questions" enrich a PhD thesis whereas in a journal paper these side questions may not be discussed.

When selecting a topic, students should consider the technical skills, methodology and content areas with which they are already familiar as well as those in which they wish to acquire familiarity during the process of doing a thesis. The thesis supervisor's areas of interest should also be considered.

3. Study Design

A biostatistics PhD thesis should be methodological in nature. Statistical methodologies should be proposed or evaluated. The methods could be algebraic or simulation based. Data analytic studies would, ordinarily, not be suitable. However, data analysis for the purpose of providing examples of the application of the methods under study would be seen as complimentary to the methodological components of the thesis.

An epidemiology PhD thesis should be based on the study design most appropriate for the question. The study may involve primary data (collected for the purpose of the study) or may involve the use of secondary data. When data are from secondary sources, the student should be careful to ensure that the study is question driven and not data driven (i.e. no "fishing") and that the study is adequately complex. A routine clinical trial would, ordinarily, not be a suitable PhD thesis.

4. Proposal Preparation

The length of the proposal should be about 20-25 pages (printed on one side of the paper, with 1.5 or double spacing between lines) and should mimic a grant application in that the reader should be able to judge the science based on those 20-25 pages.

The components of the proposal should include: **(1) an introduction** (1 page or so) stating what is being studied and why it is being studied; and **(2) a literature review** covering the most important studies which have been done and explaining to the reader how the proposed study will move knowledge forward in this area. It is understood that the student will have prepared a full literature review prior to proposal submission. However, the examination committee is only interested in reviewing a summary of the literature review. You may wish to bring your full literature review to the defense in case any questions are directed toward the literature; **(3) a statement of study objectives**; and **(4) a description of study methods**. For most study types, this would usually include study design, data collection, data analysis and sample size calculation. Some indication should also be given regarding the feasibility (e.g. subject availability, time frame for completion) of the study.

Appendices should include: data collection forms, testing instruments, letters of permission for secondary data source access and any other materials necessary to convince the committee of the proposal feasibility. Note that for secondary data sources, there may be situations where the letters of permission may not be available at the time of the defense (for example, if the student needs to submit the defended proposal to the agency prior to obtaining permission). Do not add appendix materials that are not essential for judging the science of the proposal.

A well-written proposal will link all sections of the proposal. For example, it should be clear to the reader how each data item collected is going to be used and how data will be analyzed to satisfy each of the objectives. Examples of past thesis proposals are available for loan from the Graduate Program Administrator.

Four copies of the thesis proposal should be submitted at least 4-5 weeks prior to the proposal defense.

5. Ethics Approval

It is essential that ethics approval be sought before the study begins. However, it is recommended that the ethics submission should follow the proposal defense so that the final proposal is submitted. Information regarding the process for ethics submission can be obtained from the office of Human Research Ethics (<http://www.uwo.ca/research/services/ethics>).

6. Purpose of the Proposal Defense

The primary purpose is to protect the student. The examiners of the proposal will have read the entire proposal critically and will, in many cases, have searched the key references in the literature to ensure that: i) the proposed study will move the literature in the area forward ii) the methodology proposed is appropriate and iii) if completed, the project is worthy of a PhD. If a thesis proposal passes critical review at this stage, the student is reasonably assured that following the proposed methods will result in a defensible PhD thesis. The proposal defense was implemented primarily to prevent students from reaching the stage of final thesis defense only to learn that their project has a fatal flaw which makes it indefensible.

A secondary purpose is to strengthen the thesis design, methods, theory, and rationale through productive conversations and critical feedback.

Another objective of the proposal defense is to screen out students who clearly are unsuitable for the program. It must be stressed that it is highly unlikely that any student who has successfully completed the courses and the comprehensive examination will not be capable of developing a suitable proposal. However, in the unlikely event that this does occur, it is much better to reach this conclusion before any more time and effort are invested by the student. Following a successful defense, the student's task is then to complete the work using appropriate methods and using the proposal as a guide.

7. Proposal Defense Examination Committee

The proposal defense committee will consist of a Chair and three carefully selected examiners. At least two of the examiners will be faculty members from within the department, usually from the specific field which the student is concentrating (Epidemiology or Biostatistics). The third examiner must be from another department at Western, selected because of expertise in the content area of the proposal. This is a decision which needs to be tailored to the specific area of the thesis proposal.

Usually, the thesis supervisor will suggest names for the committee (with input from the student). However, it must be recognized that workloads vary and the department may have to substitute another examiner. Please see the department's PhD Thesis Proposal Defense Timelines document for additional important information. Note that the proposal defense process begins 8 weeks prior to the intended defense date.

8. Structure of the Proposal Defense

When the student and supervisor feel that the proposal is ready for defense, a full supervisory committee meeting must be held. This is for the protection of the student and also to ensure that the examiners' time is not wasted on a proposal which is not ready. The Intent to Defend a PhD Proposal form must be signed by the supervisor and student, and submitted the Academic Programs Coordinator 6-8 weeks in advance, prior to the setting up of the examining committee.

The proposal defense is a formal process, but is not public. At the beginning of the defense, the Chair of the examining committee will ask the student to leave the room while the committee members talk briefly with the supervisor. They will discuss how the proposal looks generally, ascertain the nature of the questioning, review the objectives to be met and decide the order of questioning and the format (e.g. 15 minutes per examiner in round 1 and 5 minutes per examiner in round 2).

When the student returns, he/she will give a brief (15 minute) summary of the proposal. Questions will be posed by the three examiners in the order agreed upon and the student will have an opportunity to respond to the questions. No outer limit is set on the length of the defense. It may run 1-2 hours. During this period of time, the thesis supervisor will take notes on any points he/she feels are important to discuss later with the examining committee and/or the student.

Following the defense, the student will be asked to leave the room temporarily so that the examining committee and the thesis supervisor can discuss. The thesis supervisor will be given an opportunity to make any comments he/she considers important. Following this, the examiners will discuss the outcome of the proposal, which will be one of:

- a) **acceptable** for the project to be undertaken (there may be minor revisions but committee does not need to review the revisions)
- b) **acceptable subject to revisions and/or submission of feasibility data** (concerns are sufficient that the committee or designated member(s) need to re-review the revised document; however, meeting specified requirements should ensure a suitable proposal)

- c) **unsure pending revisions and feasibility data** (committee will re-examine the revised proposal)
- d) **unacceptable as a PhD project**

In the case of outcomes b) or c), a revised proposal or new information pertaining to the proposal will be reviewed. The same examination committee will remain in place and the re-review will be considered as part of the same attempt. In the case of outcome d) [unacceptable], examiners will discuss whether a change of specific focus might allow the student to develop a proposal in the same general subject area or whether the student should be advised to pursue another area entirely.

The student will be informed by his/her supervisor when it is time to return to the room to hear the decision. The examiners will give a brief description of the reasons for the decision and then will make arrangements to meet, either individually or collectively, with the student at a later time to provide the student with more detailed feedback. It is anticipated that the thesis supervisor will play a major role in providing feedback to the student as well.

In 2-4 months following successful defense of the project, the student will give a public lecture on the thesis proposal. The public lecture will be 40-45 minutes in length followed by questions from the floor. The public lecture is an opportunity to receive, from all faculty and students, useful input regarding the proposed study. It is hoped that, in the lecture, the student will disclose some of the details of the examination process. This serves an educational function for other students preparing for the process. It also helps demystify the process in that, if a major revision is required, students understand why. The public lecture also gives students experience at preparing and giving a seminar. Delivering public presentations is a normal and expected part of academic life.

9. Should a Pilot Study be Done Before the Proposal Defense?

This is a question that can only be answered with "it depends." Benefits of conducting a pilot include the obvious advantage that, at the time of proposal defense, the student will have some idea of study feasibility, availability of subjects etc. However, if it takes a significant investment of time and resources to conduct the pilot study, then it may be prudent to wait until after the proposal defense in order to ensure that the topic itself is acceptable.

Since almost all passing proposals will be subject to certain conditions and modifications, it is not unrealistic to assume that, in the latter case, the examination committee might pass the proposal conditional on the outcome of a pilot study.

10. What if the Proposal is Deemed as Unacceptable

If the project is not accepted, the student has another opportunity to try to produce a defensible proposal. A project is not accepted if the examiners feel that the study does not meet the requirements for a PhD. This is not necessarily a reflection on the quality of the candidate. A very good student can occasionally propose a project that, while well-designed, lacks the scope necessary to make it appropriate for a PhD thesis in this department.

Although unlikely, it is possible that a student may not produce a defensible PhD proposal on the second try (noting that this has not happened in all the years that we have had a proposal defense requirement!). An unacceptable second attempt may be considered evidence that a student is unable to generate a PhD level study within the discipline and is considered grounds to withdraw the student from the program. Continuation in the program will require the approval of the Departmental Graduate Affairs Committee.

PhD Thesis Proposal Defense Process

At least EIGHT (8) WEEKS before the anticipated date of the proposal defense, the student will meet with his/her supervisor and the full supervisory committee to ensure the readiness of the proposal. The student (with input from the supervisor) also submits suitable names for the examining committee using the Intent to Submit a PhD Proposal form.

Three examiners are required for the oral proposal defense. We recommend that two members be from within our department/program. To ease the difficult job of finding a time when three people can meet, the list of possible examiners should have enough names to allow for substitutions. The department website has a list of faculty members who hold primary and cross appointments in our department.

Up to a maximum of three proposal defense examiners may later serve as dissertation examiners providing they meet SGPS regulations for dissertation examiners. Proposal examiners and dissertation examiners **must not** be members of the student's supervisory committee. The department will arrange for an examination Chair and a suitable room for the defense, and will confirm the arrangements by letter or e-mail with all the members of the examining committee.

At least FOUR (4) TO FIVE (5) WEEKS before the anticipated date of the proposal defense, the student will submit upload a copy of his/her thesis proposal to the Academic Programs Coordinator for distribution to each of the three examiners and one to be held in the department for the Chair of the examining committee.

After a successful defense and once any corrections/revisions are complete, the student will submit a copy of the revised proposal to the Academic Programs Coordinator for the department library.

Failure to successfully defend the proposal may be followed by a second attempt at a later date. Following the second failure of a proposal defense, continuation in the program will require the approval of the Departmental Graduate Affairs Committee.

Students who have not successfully defended their proposal by the end of their third year will be required to withdraw from the program unless exceptional circumstances can be demonstrated. Failure at the proposal defense may be followed by a second attempt at a later date. Following a second proposal defense failure, continuation in the program will require the approval of the Departmental Graduate Affairs Committee.

PhD Thesis Defense Requirements

Please see the **School of Graduate and Postdoctoral Studies website for detailed and accurate information on all official Thesis Regulations:**
http://grad.uwo.ca/current_students/thesis/index.html.

The following information is a brief overview of Thesis requirements, examination, and submission. Please note that thesis processes are set by SGPS not the department. Refer to the SGPS website for any changes that may occur during your time in the program.

Thesis Format

A thesis based on the report of research findings may take one of two formats: Monograph (traditional or proposal style format) or Integrated-Article (manuscript format).

These formats are well described on the SGPS website (available at http://grad.uwo.ca/current_students/regulations/8.html), which **MUST** be followed by all PhD students. The student is reminded that, regardless of the format adopted, a thesis in Epidemiology and Biostatistics needs to contain a chapter devoted to a detailed, critical review of the literature.

Thesis Timelines

When PhD students are ready to defend their thesis, and after consultation with the supervisor and supervisory committee, an Intent to Submit Thesis form must be completed and given to the Academic Programs Coordinator **at least eight (8) weeks** prior to the earliest proposed examination date.

Given that defenses are often clustered near the end of a term, the deadline to submit this form will be enforced. For the fall term (September- December), the form must be submitted no later than November 1; for the winter term (January-April), no later than March 1; and for the summer term (May-August), no later than July 1. For specific details concerning the thesis examination process, and deadlines, please refer to http://grad.uwo.ca/current_students/thesis/.

Please note that revisions and final thesis submission are due six weeks after a successful thesis examination.

If revisions continue into a new term, registration and related fee charges will also continue into the new term until the final copy of the thesis is submitted. To avoid registration and charges in the following term, the final thesis submission must take place by the official final day of the current term (April 30 for Winter term, August 31 for Summer term, and December 31 for Fall term) unless the student has obtained Thesis Defense Only status.

For example, the current timeline is as follows:

Final Date for Programs to Submit Thesis Examination Request Form to SGPS	Final Date for Candidate to Submit the Thesis for Examination to SGPS	Final Date for Thesis Examination	Final Date for Final Submission of the Thesis*	Notes	Convocation Eligibility
November 3, 2017	November 10, 2017	December 15, 2017	December 31, 2017	Last Term of Registration is Fall 2017	Awarded Degree in Absentia, February 2018
March 10, 2017	March 17, 2017	April 21, 2017	April 30, 2017	Last Term of Registration is Winter 2017	Eligible for Spring Convocation 2017
July 13, 2017	July 20, 2017	August 24, 2017	August 31, 2017	Last Term of Registration is Summer 2017	Eligible for Fall Convocation 2017

*If this day falls on a weekend or holiday, please note that the submission will be reviewed on the next business day.

PhD Thesis Examination

Preliminary Examination of the Thesis

An e-mail instructing how to access your thesis will be sent to each examiner one business day after your submission is received. Examiners are given a digital copy of your work in PDF format and the option to request a paper copy of your thesis should they choose. Paper copies are available at the examiner's expense.

All examiners are required to perform a preliminary examination of your thesis. Examiners may identify issues in form or content for exploration or clarification at the oral examination. The results from preliminary examinations are not shown to you or your supervisory team in advance of the oral examination.

Preparing for the Examination

Preparation for the oral examination should be given via your supervisory team. Your supervisory team should ensure that you understand the requirements and purpose of the oral examination and that you are adequately prepared for the oral examination and if necessary arrange practice in oral examination techniques.

Be prepared to be able to summarise your main arguments and to explain your choice of approach and methodology. Ask your supervisory team for guidance concerning the questions that your examiners are likely to ask.

Examination of the Thesis and the Candidate

Public Lecture

Effective May 2012, public lectures are mandatory for all Doctoral programs.

Candidates are required to present a Public Lecture on their thesis research within twenty-four hours before the Thesis Examination, normally immediately prior to the Thesis Examination. The Graduate program sets the time and place for the lecture. SGPS announces the public lecture on its website and in the Western News. The lecture is open to all members of the community. The Examiners attend the Public Lecture and Thesis Examination.

The Thesis Examination and Public Lecture may be postponed or cancelled if any step in the examination process is not completed on schedule (e.g. the candidate fails to submit the Thesis for Examination on schedule, or the Examiners fail to submit evaluations on time).

Note: The thesis examination is normally a closed event unless the student and program, by mutual agreement, request that the defense be open to the university community (e.g. faculty, academic colleagues, and students).

The Thesis Examination

The Tasks of the Examiners are to:

- Determine if the thesis and the candidate meet recognized scholarly standards for the degree
- Appraise the thesis for content - its underlying assumptions, methodology, findings, and scholarly significance of the findings
- Appraise the thesis for form - its organization, presentation of graphs, tables, and illustrative materials, and its use of accepted conventions for addressing the scholarly literature
- Evaluate the candidate's skill and knowledge in responding to questions and defending the thesis
- Ensure authenticity of authorship

The Examiners do their work in a two-stage process.

Stage 1

The Preliminary Evaluation of the Thesis

Each Examiner must independently and without consultation, decide whether the thesis meets the scholarly standards for the discipline and degree in form and content.

There are 2 possible outcomes that the examiners may consider:

1. Acceptable to go to defense with revisions/modifications
2. Unacceptable to go forward to defense

Stage 2

- The Chair presides over the Thesis Examination
- The Examination Begins
- The Thesis Examination Board Deliberates and Renders a Decision
- Communicating the Decision to the Candidate
 - When the Chair and the Examiners have completed the documentation, the Chair invites only the candidate back into the room and informs him/her of the result.
 - Following a positive decision that is subject to revisions/modifications, the Supervisor(s) must meet with the candidate, to ensure that he/she understands the revisions/modifications required by the Thesis Examination Board.

For detailed and up to date information on these outcomes, visit
http://grad.uwo.ca/current_students/regulations/8.html,
Section 8.4, Doctoral Candidate
Completion of the Thesis Degree Requirement.

Final Submission of the Thesis

Submitting the Final Copy of Your Thesis

Once your examination is successful you must update your original work and resubmit the revised thesis to Scholarship@Western.

Please note that revisions and final thesis submission are due **six (6) weeks** after a successful thesis examination.

In addition, you are required to submit the following to the School of Graduate and Postdoctoral Studies before publication can occur:

- Library and Archives Canada Theses Non-Exclusive License
- The signed Certificate of Examination (scanned copy is acceptable)

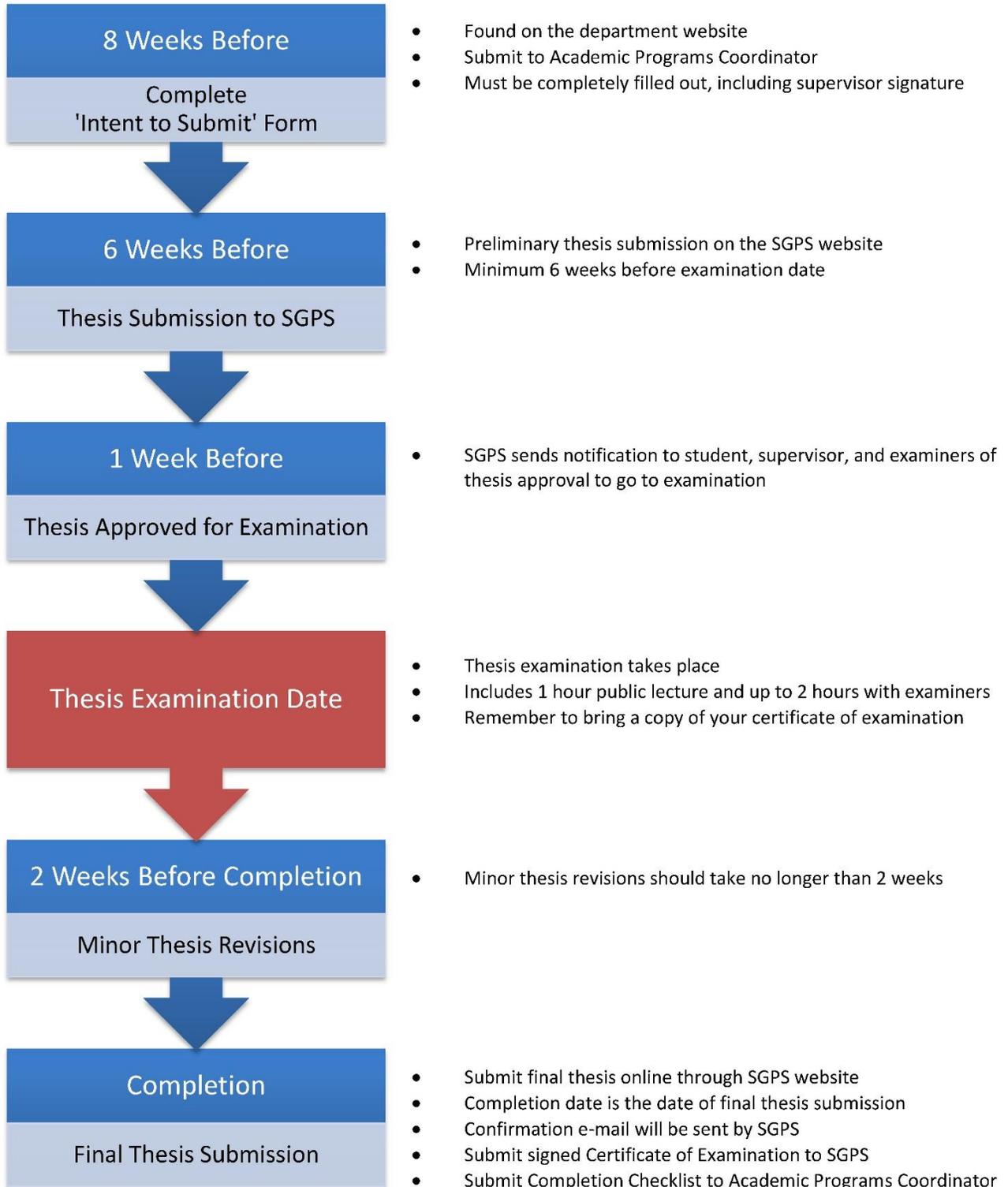
Additional instructions are available at

http://grad.uwo.ca/current_students/thesis/submission.html.

Reviewing Your Final Submission

The Thesis and Membership Coordinator will audit your final submission to ensure it meets all regulations pertaining to thesis formatting. Once approved, the work will immediately be published within the repository and you will be informed of the publication via email. Confirmations will also be sent to your supervisor and program administrator. Once the thesis is published, you have officially completed the thesis requirement of your degree. Subject to approval by the University Senate, your names placed on the convocation list. Should you require proof of completion of all degree requirements you should contact the Thesis Coordinator in SGPS.

PhD Thesis Examination Process Timeline to Program Completion



Departmental Completion Checklist

All students who have received confirmation of completion from the School of Graduate and Postdoctoral Studies must submit a signed copy of the Completion Checklist (available at http://www.schulich.uwo.ca/epibio/graduate/documents_forms). This checklist summarizes the various loose ends a student is expected to wrap up before leaving the university. It also contains very important information requests for post-graduation contact and success.

Change of Status Requests

Request to Change Status from Full-Time to Part-Time

For registered full-time PhD students, a change to part-time study may be considered if:

- the student has full-time employment in hand;
- the student has been accepted in another full-time university program;
- the student has medical circumstances that make it impossible to devote full-time attention to the thesis.

Official documentation is required in order to grant a change of status request. Financial circumstances alone are not grounds for a change from full-time to part-time status (e.g. the student has gone beyond the eligible funding period but has not finished the requirements for the degree). The part-time registration should not give the student undue relative academic or financial advantage in comparison with students enrolled full-time.

In all cases, a request to change to part-time status will not normally be considered before the student has completed four years in a Doctoral program. As well, the student must have completed all research and data collection and expect to defend within one year. Part-time status can be granted for a maximum of one year (three terms) and is not renewable. Students registered part-time may take no more than two courses in a term. Undergraduate courses taken as extra courses or as degree requirements are to be included in the totals above.

If you would like to apply for part-time studies, you can do so through the secure Graduate Student Web Services Portal (<https://grad.uwo.ca/student/>) under Change of Registration. You will receive an email confirmation when your request has been approved by the department and SGPS. Please ensure you have initiated this action **AT LEAST four (4) weeks BEFORE** the beginning of the term that you wish to be registered part-time (i.e. Fall term: August 1; Winter term: December 1; Summer term: April 1).

Request a Leave of Absence

A leave of absence is normally only granted on medical and compassionate grounds. It must be approved by your Supervisor, the Graduate Chair, and the Vice-Provost of Graduate and Postdoctoral Studies. If you would like to apply for a leave, you can do so through the secure Graduate Student Web Services Portal (<https://grad.uwo.ca/student/>) under Change of Registration. Requests may only be granted in full term amounts, not partially or monthly.

You will receive an email confirmation when your request has been approved by the department and SGPS. Please ensure you have initiated this **action AT LEAST four (4) weeks BEFORE** the beginning of the term that you wish to be on leave (i.e. Fall term: August 1; Winter term: December 1; Summer term: May 1).

Thesis Defense Only Status

If you have completed all degree requirements (including thesis submission), but have not defended your thesis prior to the end of the current term, you are eligible to continue your registration into the subsequent term in Thesis Defense Only (TDO) status. This additional term makes the completion of your thesis possible while not requiring you to pay tuition fees. (Please note: you will still be responsible to pay part-time ancillary fees and UHIP fees where applicable.) This status may apply for a maximum of one term.

In order to be considered for TDO status for the subsequent term:

- You must submit an Intent to Submit Thesis by End of Term form (available to download from http://grad.uwo.ca/current_students/change_status/TDO_status.html), signed by your supervisor(s), normally five weeks prior to the end of the current term.
- You must upload your defense-ready preliminary thesis electronically by the final official day of the current term. Your uploaded preliminary thesis must be your final version for the examining committee – no further revisions will be permitted after your submission.¹

After meeting the above two requirements, you will be registered in TDO status in the subsequent term. If you submit the Intent form and fail to upload your defense-ready thesis by the deadline, your registration will return to its previous status.

In order to maintain TDO status, you must:

- Successfully complete your thesis examination.
- Complete all required thesis revisions.
- Submit your final thesis to the School of Graduate and Postdoctoral Studies prior to the end of your TDO term.²

If you do not meet these conditions, you will be required to pay part-time tuition retroactively for the TDO term, and will continue to be registered until your final thesis is submitted.

Important Notes

¹ Please note that the required timelines for thesis submission are still in effect to allow for review by the examining committee. Doctoral preliminary thesis submission: six weeks prior to thesis exam.

² Although revisions and final thesis submission may be permitted six weeks after a successful thesis examination, the deadline for final thesis submission to maintain TDO status is the final day of the TDO term.

Guidelines for a Student Appeal

The appellant has a right a) to be heard (and to be heard in person if possible), b) to be made aware of any information that may adversely affect his or her case, and c) to have the case judged by an unbiased decision-making body.

- i. A course grade should be appealed to the instructor, then to the Graduate Chair. A negative decision in a thesis defense, comprehensive examination or thesis proposal defense should be appealed to the Graduate Chair.
- ii. The student must submit his/her appeal in writing (complete with all necessary documentation) within six weeks of the decision/grade/requirement under appeal. The program will provide a written decision (including the reasons for making the decision) within six weeks of receiving the written appeal and complete documentation.
- iii. Final responsibility for decisions on appeals at the departmental level rests with the Graduate Chair; however, he/she may delegate responsibility to another faculty member or to a standing or ad hoc Appeals Committee. The composition and membership of such a committee will be specified in advance of the particular appeal. The size of the committee will be restricted to the number needed for a fair hearing. The committee will not include any member who might have a conflict of interest (the course instructor, in the case of an appeal of a course grad; a thesis supervisor, etc.). An appeals committee will include one graduate student.
- iv. The proceedings of the appeal hearing will be confidential.
- v. In the event of a negative decision, the candidate will be advised of his/her further avenues of appeal at a higher level. Legal counsel is not permitted below the level of Senate Review Board Academic (SRBA). However, a student may be accompanied to a meeting or hearing by a colleague or any other person of choice (i.e. partner or spouse).
- vi. For information on how to appeal a scholastic offense, Section 10 of the Graduate Student Academic Calendar:
http://grad.uwo.ca/current_students/regulations/index.html.
- vii. For information on how to appeal a scholastic decision, Section 11 of the Graduate Student Academic Calendar:
http://grad.uwo.ca/current_students/regulations/index.html.