

Department of Human Genetics, Faculty of Medicine Requirements for completing a Doctoral Degree

Program Requirements

A Doctoral Degree in Human Genetics requires the student to:

- Complete a minimum of 9 or 18 course credits at the 500+ level, which includes HGEN 692 (mandatory). **Note:** *Students entering the doctoral program, having completed a Master's degree are required to complete 9 credits. Students entering the doctoral program directly from undergrad are required to complete 18 course credits.*
- Complete their [Ph.D. Qualifying Exam \(QE\)](#) within the first 18-24 months of study.
- Present their work as part of the Department of Human Genetics seminar series. [See presentation requirements.](#)
- Submit a thesis based on their research that is passed by an internal and an external examiner. [See thesis requirements.](#)
- Successfully present and defend their thesis/work at a Ph.D. Oral Defence. [See oral defense proceedings.](#)

NOTE: A thesis for the Doctoral degree must constitute original scholarship and must be a distinct contribution to knowledge. It must show familiarity with previous work in the field and must demonstrate ability to plan and carry out research, organize results, and defend the approach and conclusions in a scholarly manner. The research presented must meet current standards of the discipline; as well, the thesis must clearly demonstrate how the research advances knowledge in the field.

Time Requirement

- The Doctoral Program at McGill University requires a minimum residence of six full-time terms, i.e. 3 years, upon entry as a Ph.D. 2, with a previous Master's degree. If a student enters as a Ph.D. 1 directly from undergraduate, they will be required to complete an additional 3-semester in order to complete the program.
- The Doctoral Program's current average time to completion is approximately 4 years.
- After the residency period, students register for additional sessions at reduced fees.

Course Requirements

- HGEN 692 for 3-credits, must be completed during the first available Fall term of registration.
- If entering the program with a Master's, the remaining 6-credits may be selected in consultation with the primary supervisor, at the 500+ level. If eligibility for degree credit remains uncertain, please contact the [Graduate Program Coordinator](#).
- If entering the program from undergrad, the remaining 15-credits may be selected in consultation with the primary supervisor, at the 500+ level. If eligibility for degree credit remains uncertain, please contact the [Graduate Program Coordinator](#).
- A supplementary list of Human Genetics courses may be found under "[Graduate Courses](#)".

Thesis Requirements

- The Doctoral Thesis must be prepared following the guidelines and requirements outlined on the [Graduate and Postdoctoral Studies website](#).
- A detailed outline of the [departmental submission process](#).

Presentation Requirements

All Ph.D. students must give a research seminar of their thesis research as a requirement for graduation. The seminar has two main purposes:

- To help students solidify their aims, data and interpretations before a friendly, informed audience prior to submitting their thesis, and as a preparatory exercise for their Ph.D. Oral Defense.
- To keep the community, especially other graduate students, aware of the current research being conducted in the Department. This seminar is not an exam. Nevertheless, it is a degree requirement and a grade of “incomplete” will be recorded on the student’s transcript until it is delivered.

Additional Details:

- The supervisor and student must contact with the [Graduate Program Coordinator](#) approximately 3-6 months before the thesis is to be submitted, to schedule and complete the seminar requirement.
- The student’s supervisor is required to attend the seminar.
- The student’s Supervisory Committee should be strongly encouraged to attend.
- The department will not allow students to make their initial submission unless their Ph.D. seminar has been held.
- The seminar is expected to be 35-45 minutes in length.

NOTE: Graduate students are expected to attend all Ph.D. seminars, as part of their academic development and as a courtesy to fellow graduate students. Presentations should be comprehensible to geneticists in specialties other than their own.

Qualifying Exam

The Qualifying Examination (QE) is a formal evaluation of the student's ability to proceed to the Ph.D. level. The examination will focus on the student's proposed research subject. The student should show adequate knowledge of relevant background information, as well as in allied areas. Students preparing for the examination should become familiar with all areas of science that might be relevant to an effective pursuit of the proposed research. Questioning can cover technical and strategic issues as well as substantive knowledge. Although the QE is not intended as an assessment of the student's research accomplishment, those students who have accumulated useful results should present them. Questions arising from these results may then form part of the examination. It is not necessary for the student to take one month off prior to the QE to study.

All Ph.D. students must successfully complete the QE within the first 18-24 months of study.

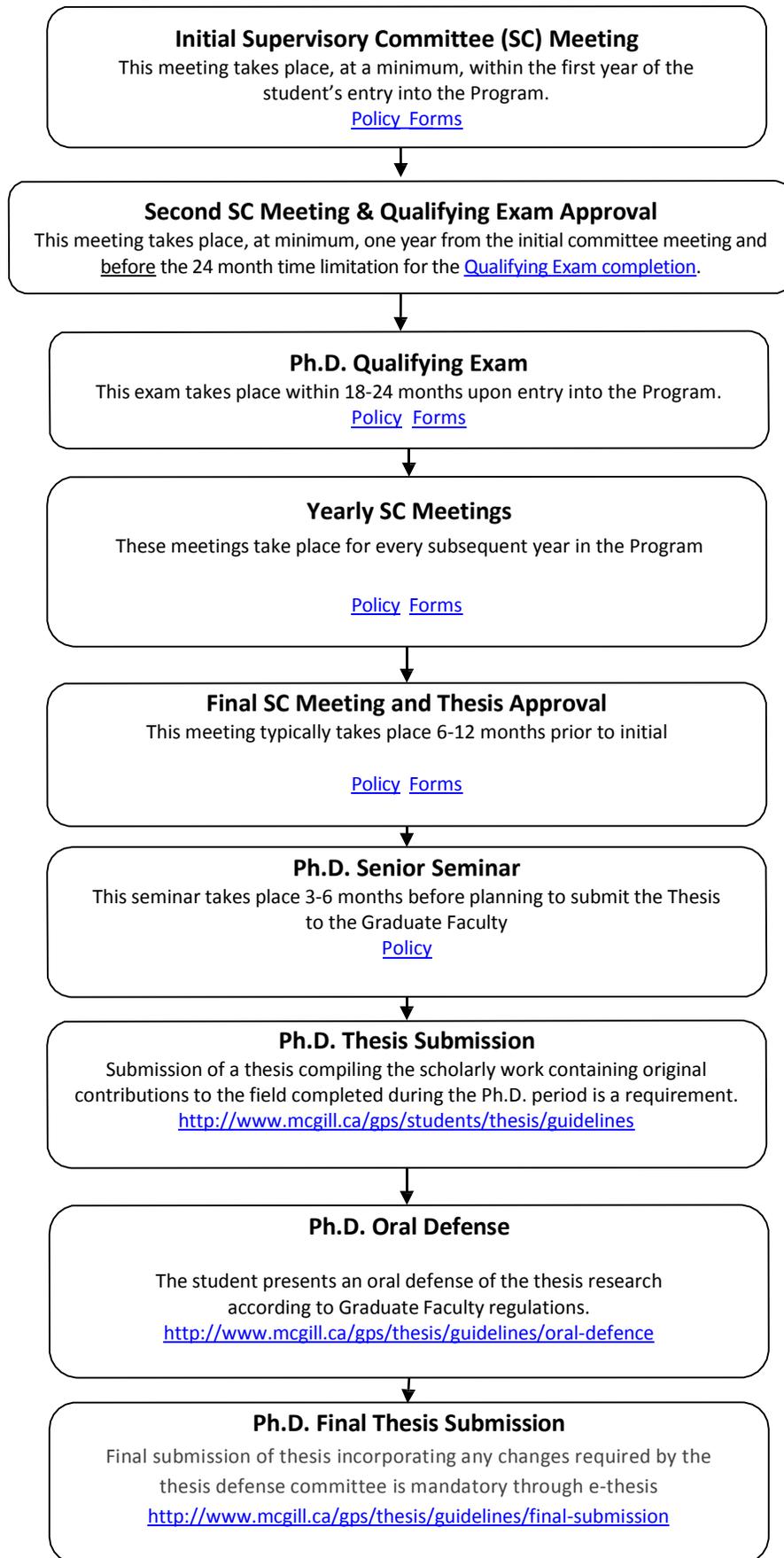
For a detailed breakdown of what to prepare for prior to the Qualifying Exam, the proceedings and the subsequent rating criteria, please visit the [Qualifying Exam Guidelines](#). The Qualifying Exam form may be [downloaded here](#).

Supervisory Committee Composition

During the first term of study, both the student and supervisor are required to appoint a Supervisory Committee. This committee consists of the supervisor and two additional faculty members, one of whom must hold at least an adjunct appointment in the Department of Human Genetics.

Progress Tracking

Subsequently, the flowchart on the following page illustrates the progression of stages a student must undertake to complete a Ph.D. in Human Genetics.



Supervisory Committee (SC) Meetings

- The **student** and **supervisor** are responsible for calling SC meetings and arranging a time and place suitable for all members of the committee.
- The initial SC meeting must take place, and the SC form must be completed and signed, within one year of student's entry into the program and yearly thereafter, following satisfactory progress. SC forms are to be delivered electronically to the [Graduate Program Coordinator](#).
- Following a meeting where progress was deemed to be unsatisfactory, a supplementary SC meeting must be held within six months.
- A student will be asked to withdraw from the Program following two consecutive SC meetings where progress is deemed to be unsatisfactory.

More information:

- [Supervisory Committee Guidelines](#)
- [Compulsory Research Progress Tracking Form \(The SC Form\)](#)
- [Simple Steps for Completing the SC Form](#)
- Support for students with unsatisfactory progress, as well as, details on the report and presentation can be found under [Supervisory Committee Guidelines](#).

Other Supervisory Committee Functions

A number of situations may arise in a student's career in which the consultative process of the SC may be helpful.

- The most important function of the SC is to provide both the student and supervisor with some necessary perspective on the student's progress.
 - Has the student or supervisor chosen a problem, which is intrinsically too difficult?
 - Could failure of a single approach mean the end of the project?
 - Is there a difference of opinion between the student and supervisor as to whether the student already has enough data for a thesis?
- Members of the SC are expected to provide constructive criticism of at least one draft of the M.Sc. or Ph.D. thesis prior to initial submission.
- The student should view the SC as a resource for dealing with any problems that may occur during their study.

The Graduate Program Coordinator and Director are willing to assist students in dealing with problems arising in their research. However, the first line of approach to resolving such problems should be the members of the student's SC.