

Specific Requirements for Ph.D. Candidates

V. Specific Requirements for Ph.D. Candidates

1. **Advisory and Dissertation Committees:** Prior to enrollment at Baylor University, the Graduate Program Director (GPD), in consultation with the Department Chair, will appoint an Advisory Committee. The entire Faculty will provide input on selection of an Advisory Committee for the incoming student. The Advisory Committee will consist of three members from the Department of Geology that are selected from areas of specialization complimentary to the dissertation research project(s) that the student intends to work on. At the beginning of the first semester of enrollment, the Advisory Committee will meet with the student to develop a preliminary coursework curriculum and research plan, and review with the student the departmental requirements and their recommended timetable for completion. Note that both the coursework curriculum and research plan are subject to modification pending results from the dissertation proposal review (see item 3 below). Once the student has established a basic concept for a Ph.D. project (normally in the first semester at Baylor University) the student will ask a member of the Geology Department faculty to serve as the primary dissertation advisor. Then the student and the faculty member who has agreed to serve as dissertation advisor will select a Dissertation Committee that will guide the student through the remainder of their tenure in the Ph.D. program. The Dissertation Committee must consist of no fewer than five (5) members, of which one must be from the faculty of Baylor University external to the Department of Geology. In each year following the dissertation proposal defense, the Dissertation Committee will evaluate Ph.D. student progress. The Dissertation Committee will review and evaluate all aspects of the dissertation.
2. **Semester hour requirements:** Semester hour requirements for the Ph.D. include 60 hours beyond the B.S. degree, and 30 beyond the M.S. degree (including 12 dissertation hours in both cases). At least 12 semester hours must be earned from 5000-level courses. All remaining hours must be earned from 4000-level courses. GEO 511X (5V90, *Grant Writing seminar) is required of all Ph.D. students. 3000-level (or lower) course deficiencies that are required by the Advisory or Dissertation Committee to be completed do not count toward the semester hour requirements. A student can only sign up for dissertation hours, if approved for candidacy (see item 5 below); all course work must be completed.

**The primary product of the Grant Writing seminar will be a comprehensive “peer-review” style grant proposal that will also serve as a draft of the dissertation proposal. GEO 511X will be offered during the first semester of enrollment.*
3. **Dissertation proposal:** Near the end of the second semester of year one, the student will provide Dissertation Committee members with a written dissertation proposal (see * in item 2 above) no less than two weeks in advance of a meeting to review the proposal (*Note that all faculty members within the Department of Geology may attend this meeting if they choose*). This proposal may, at the discretion of the committee and the student, be developed into a formal grant proposal submitted to an external funding agency (e.g., National Science Foundation, Petroleum Research Fund, US Department of Agriculture, Environmental Protection Agency, US Geological Survey). At the review, the student will provide a formal 30-40 minute presentation that summarizes the objectives, methodology, timetable, and budget that will result in the submittal of three manuscripts for peer-review and publication in an approved journal. Following the presentation, the Dissertation Committee will provide guidance to enhance/improve the dissertation project(s), and will examine the student’s knowledge of the literature, analytical techniques and concepts, and nature of the geology relevant to the dissertation project(s). Results from the review and examination will be evaluated by the Dissertation Committee, and a pass, provisional pass, or fail decision rendered by the Dissertation Committee and recorded in writing. A “provisional pass” decision will require the student to satisfy a specified deficiency as directed

by the Dissertation Committee. A “fail” decision may result in either termination of the student from the Ph.D. program, or the Committee may choose to provide the student with a second opportunity to propose and defend within a specified time limit. When a student passes the proposal defense and examination, the Dissertation Committee and student will establish goals for research and coursework completion for the upcoming year. These goals will be documented in writing, and placed in the student’s file in the departmental office.

4. **Annual progress report and examination:** Near the end of the spring semester in all years subsequent to the proposal defense, the student will meet with the Dissertation Committee and provide an oral presentation that summarizes progress made toward completion of the requirements over the previous year. The Dissertation Committee will evaluate the progress to date (as compared to the “goals” established during the dissertation proposal; see paragraph 2, item 3 above), and will examine the student’s knowledge of the literature, analytical techniques and concepts, and nature of the geology relevant to the dissertation project(s). Based upon both the progress toward completion of the degree requirements to date and examination results, a pass, provisional pass, or fail decision will be rendered by the Dissertation Committee. A “provisional pass” decision will require the student to satisfy a specified deficiency as directed by the Dissertation Committee. A “fail” decision may result in termination of the student from the Ph.D. program. Students who pass the annual review will confer with the Dissertation Committee to establish research goals for the student to achieve during the upcoming year. These goals will be documented in writing, and placed in the student’s file in the departmental office.
5. **Admission to candidacy:** Students are recognized as candidates for the doctoral degree only after they have completed all course work requirements, have satisfied the requirements outlined for the dissertation proposal (item 3 above), and received approval by the Graduate School of their formal application for admission to candidacy. An application for admission to candidacy must be filed with the Graduate School upon successful completion of the above requirements, but should be filed no later than five months prior to the date on which the degree is to be conferred.
6. **Dissertation requirement:** The Geology Department requires that its dissertators conduct doctoral-level scientific research that is new and original. The dissertation consists of three papers, each of which is submitted for peer review to a journal listed as an approved journal by the Geology Department, and for each of which the dissertator is first author. (Exceptions to the list of approved journals may be approved by the Dissertation Committee.) Typically, the three papers that comprise the dissertation are broadly related in subject area, but exceptions may be granted with approval of the dissertator’s Dissertation Committee. If there are any variations from the dissertation requirements specified herein, those variations must be clearly described in a written contractual agreement between the dissertator and the corresponding Dissertation Committee, completed within one week after the dissertation proposal defense. Any such agreement must be reviewed and approved by the Graduate Program Director (GPD) or, if the GPD is a member of the Dissertation Committee, the Geology Department Chair, with a copy retained on file in the Geology Department Office. Later modifications to this contract, if justifiable, can only be made by written agreement between the parties to the original agreement. Disputes or differences that arise among the parties involved in the dissertation (e.g., the dissertator, the Dissertation committee, the GPD) will be brought to the Geology Department faculty for resolution. Each of the three dissertation manuscripts must be approved by all of the Dissertation Committee members before it is submitted to a journal for peer review. By approving a manuscript for submission to a journal for review, the Dissertation Committee certifies that the manuscript is satisfactory for inclusion in the dissertation. Upon receipt of a dissertation manuscript, each Dissertation Committee member must decide, within three weeks, whether he/she approves submission of the manuscript to the journal for peer review. It is the dissertator’s responsibility to ensure that all members of the Dissertation Committee actually receive the manuscript. The manuscript will be considered acceptable by any member of the

Dissertation Committee who does not provide the dissertator with an evaluation of the manuscript within three weeks after that committee member is known to have received the manuscript. (Default approval is not granted during summer breaks, when members of the Dissertation Committee may be unavailable.) Before the dissertator is allowed to defend the dissertation, two of the three dissertation papers must be accepted for publication in an approved journal, and the third manuscript must have been submitted to an approved journal. After the dissertation has been successfully defended, the three approved papers will be combined into a satisfactory document in accordance with Graduate School specifications.

7. **Dissertation defense:** The dissertation defense is an approximately 45-minute, formal oral presentation of the dissertation research results before the Dissertation Committee, other Geology Department faculty and Baylor students, after which the dissertator will answer questions from the general audience about the dissertation research presented, and about other matters deemed appropriate by members of the faculty. The faculty members in attendance will then examine the candidate further in closed proceedings after the public presentation. When there are no more questions, the dissertator will be excused and the examining faculty members will evaluate the dissertation defense in closed session. A dissertator will have successfully defended the dissertation if a simple majority of the faculty members who were present for the defense vote to pass the candidate. Completion of the publication requirements (item 5 above) and successfully passing the dissertation defense are both necessary to qualify to receive the Ph.D. degree. If a student does not successfully defend the dissertation, the Geology Department faculty may provide the student with an opportunity for another defense within a specified time limit.