

Geosciences Department Ph.D. Policies

Approved May 16, 2019

Credit Requirements. Ph.D. students must complete 72 credit hours beyond those required for the bachelor's degree or 42 credit hours beyond the M.S. degree. For students pursuing a Ph.D. after completion of an M.S. degree, a minimum of 21 credits must be earned at the 500-level or higher. For Ph.D. students without an M.S. degree, 37 credits at the 500-level or higher are required. Courses fulfilling these (21 or 37) credit requirements include dissertation, research, group study, independent study, supervised college teaching, and seminar credits, as well as credits earned in regular courses. At least 10 credits beyond the M.S. degree must be earned in regular courses at the 500-level or above (i.e., courses numbered 500-581, 600-681, and 700-781). Ph.D. students must satisfy a breadth requirement, approved by the advisor, by taking a six-credit upper-division (300- or 400-level) or graduate-level (500-level or higher) course sequence outside of the student's discipline. Most students will use courses from outside of the department to satisfy the breadth requirement. The advisor and Ph.D. committee may mandate additional coursework not specified by the Graduate School or general department requirements.

Ph.D. Committee and Committee Meetings. The student and advisor will constitute a Ph.D. committee (see Ph.D. Committee membership section below) before the end of the student's second semester at CSU. Ph.D. students are strongly encouraged to meet with their committee at least once a year. Required meetings of the committee are: (1) presentation of a dissertation proposal during their second year in the program, (2) preliminary examination by the beginning of their sixth semester, and (3) dissertation defense two or more semesters following the preliminary examination. At the discretion of the committee, the deadlines in (1) and (2) can be extended, in which case the advisor must provide timely written justification to the Department Head.

Dissertation Proposal. A dissertation proposal is required of all students in the Ph.D. program, typically during their second year in the program. The advisor will work closely with the student to ensure that the proposal is sufficiently comprehensive to effectively review relevant existing literature and describe the student's unique contribution to the subject. The proposal will normally include explicit objectives and/or hypotheses, and will summarize field sites, data collection etc. (as appropriate) in sufficient detail so that the committee can evaluate the impact of the proposed research and prospects for timely completion. A typical Ph.D. proposal will be 10-15 pages long (plus references). The dissertation proposal must be circulated to the Ph.D. committee members at least one week prior to the proposal presentation.

Preliminary Examination. Ph.D. students are expected to take a preliminary (qualifying) examination prior to their sixth semester in the program. The exam format will be coordinated with the advisor and committee and will typically consist of both written and oral segments. The detailed form of the preliminary examination will be determined by the advisor and committee. The preliminary examination will cover topics that the committee considers to be broadly appropriate for a Ph.D. candidate in Geosciences, in addition to detailed knowledge of their sub-discipline. A typical oral examination will last between two and three hours. Participation in oral preliminary examinations and/or dissertation defense by the student and/or one or more members of the

examining committee may be via electronic link so long as all are participating simultaneously, and all committee members and the student have agreed to this in advance.

The Ph.D. committee members within the department are required to provide questions for the student's written part of the examination. Outside committee members may, but are not required to, provide examination questions. The total written exam time will not exceed five working days. The examination will be evaluated by the Ph.D. committee on a pass/fail basis. In the event that the student fails the preliminary exam, a brief summary of the committee's rationale to fail the student is required and will be submitted to the Department Head.

Successful completion of the preliminary examination will advance the student to Ph.D. candidacy. In accordance with CSU Graduate Policies, the student may subsequently defend their dissertation after at least two subsequent semesters.

Teaching Requirement. Ph.D. students are expected to assist in teaching during at least one semester of their graduate program. This expectation may be satisfied by preparing and presenting lectures, by serving as a Graduate Teaching Assistant, or otherwise at the discretion of the advisor.

Ph.D. committee membership. The committee consists of a minimum of four members, with all holding a Ph.D. at the time they join the committee. The committee must include a) the departmental advisor, b) an additional faculty member from the department, c) a faculty member from another CSU department to represent the graduate school, d) a fourth faculty member as specified below. CSU faculty members on transitional appointments are eligible as advisors and committee members. Committee members a, b, and c must have 50% or greater tenure or tenure-track appointments.

The fourth committee member may be i) a faculty member from within the department; ii) a CSU faculty member from another department; iii) a member from outside CSU. In the case of (iii), the individual must hold affiliate status with the department. Thus, one (but only one) of the four mandatory committee members may come from outside of CSU.

Additional Ph.D. committee members (optional; maximum of 2). NTT faculty in the department may serve in addition to the members prescribed above in a co-advisor or general capacity. An additional outside member can also generally be added if they bring relevant expertise for the progress of the student's project. All outside members without primary CSU affiliation must hold affiliate status in the department. A member employed at CSU who does not have a faculty title can also be appointed as an extra committee member following the procedure outlined in the Graduate and Professional Bulletin (see: <http://catalog.colostate.edu/general-catalog/graduate-bulletin/graduate-study/procedures-requirements-all-degrees/#advisory-system>).