



QUALIFYING EXAM/MASTER PROCEDURES CHECKLIST

To qualify to continue in the PhD program, all students will be expected to write a proposal for their pre-qualification research by the end of the Autumn quarter in their second year. All students will also be expected to produce a “culminating product” that is a short summary of the student’s research and a presentation to their committee. The submission of the research summary and presenting and successfully completing an oral qualifying exam with the student’s MS committee, which is led by one additional department faculty member appointed by the department chair and Graduate Program Coordinator (GPC), qualifies students to continue in the PhD program.

Students may opt to take the qualifying exam earlier if they enter the program with an MS degree already. It is also possible that students may want to receive a thesis-based MS at some point after taking the qualifying exam. In this case, students can submit an MS thesis to the UW Graduate School. Note that under UW rules, material submitted as an MS thesis cannot be reused in a PhD thesis. (See the following link about policy 1.1.4.5 in the first paragraph for reference: <https://grad.uw.edu/policies/1-1-graduate-degree-requirements/>.)

Qualifying Exam Evaluation Criteria

The Qualifying Exam evaluates the student’s readiness to conduct PhD-level research. The evaluation criteria are three-fold:

- 1) foundational knowledge in atmospheric and climate science
- 2) potential for conducting independent high-quality research in atmospheric science
- 3) ability to communicate new knowledge and to place it into a broader context

These criteria are judged based on the following pieces of evidence:

- 1) the student’s graduate academic record (selection of graduate courses and performance in those courses)
- 2) the clarity and content of a student’s MS proposal draft and written research report
- 3) the clarity and content of the student’s research oral presentation
- 4) the quality of a student’s responses to questions about their research by a broad subset of atmospheric and climate science faculty (i.e., their MS committee plus one additional department faculty member appointed by the department chair and GPC)
- 5) the recommendation and evaluation of the student’s research advisory committee (i.e., Master’s committee)

YEAR One

☐ **Winter Quarter:** Students form an MS committee. To set up your MS committee, the Academic Adviser will send you a survey. The committee should include a minimum of three members (and no more than four), such as:

- 1 faculty adviser/chair and 2 other Graduate faculty in or affiliated with the Department of Atmospheric and Climate Science
- 2 faculty adviser co-chairs and one other Graduate faculty member in the Department of Atmospheric and Climate Science

- **Spring Quarter:** Student meets with their MS committee to brief on research progress
- **End of Year 1, September:** End of first-year presentations. Rising second years will give a short presentation on their research thus far.

Year Two

- **Autumn Quarter:** Student drafts a two-page MS research proposal. By mid-November, the student should meet with their committee to discuss the proposal. By the end of the first week of December, the student submits a PDF copy of the MS research proposal to the Academic Adviser, approved in writing by the MS Committee.
- **Winter Quarter:** The MS committee shares a short list of papers (no more than 3) of relevant background information that the student should be familiar with. Students are encouraged to solicit input for reading materials from their committee members.
 - By the end of the winter quarter, students should work with the GPC, who will appoint a faculty member not already on the student's MS committee to run the Qualifying Exam. Please email a list of your MS committee members to the GPC, including any desired time restrictions to facilitate scheduling. Following this appointment, the student should schedule the Qualifying Exam for Spring Quarter as soon as possible.
- **Spring Quarter: Qualifying Exam**
 - Prior to the Qualifying Exam (no less than 3 weeks), students submit a written report to the MS committee.
 - The report should include title, abstract, introduction, methods, preliminary results or plan for results and should be approximately 10-15 pages in length (4,000-6,000 words).
 - Depending upon the commitments required of the students in their first two years (e.g. fieldwork, availability of data, etc.), the report can contain original results or could be more of a literature review.
 - The student should prepare a 20-30-minute presentation on the paper described above, which will be presented to the committee. The remainder of the exam will consist of questions designed to test the student's background knowledge in their area of research.
 - Student takes an **Oral Qualifying Exam** consisting of an approximately 1.5-hour closed-door oral exam with the MS committee. The Qualifying Exam satisfies the culminating experience requirement of the non-thesis MS degree.
 - The aim of the Qualifying Exam is to assess student progress on, and foundational knowledge of, their research project.
 - Prior to the exam, students need to submit their Master's Degree request (**non-thesis option**) online once the exam time has been approved by the committee members and the space has been reserved by the students: <https://grad.uw.edu/mygrad-program/>
 - Notify the Academic Adviser when you have submitted your Master's Degree request (please

give the Academic Advisor 1-3 business days to verify and approve the exam request).

- ☐ Once the Adviser approves the Master's Degree request online, the student will pick up the Committee Signature Form from the Academic Adviser. It's the student's responsibility to bring the Committee Signature Form to the oral exam.
- ☐ The Qualifying Exam will be facilitated by a faculty member who is not part of the student's MS committee (and typically outside the disciplinary area of the student/advisor) whose role is to ensure a consistent and fair process. This facilitator will be selected by the GPC or department chair. The outcome of the Qualifying Exam is determined by the facilitator together with the student's MS committee other than the advisor.
- The advisor of the student will be asked to leave the room for the final deliberations of the committee.
- ☐ The student's MS committee chair will have until the last day of the spring quarter to register the degree recommendation by collecting committee signatures and returning the Signature Form to the Academic Adviser.
- Once the signature form is returned to the Academic Adviser, the recommendation will be entered online at which time a system-generated email will be sent to the student.
- The committee produces a written summary (<1 page) of the outcome of the exam, including an evaluation of progress and feedback to the student on any area for future focus or additional coursework to help increase research productivity.
- The outcome of the Qualifying Exam will be shared with the student at the close of the exam. Possible outcomes: pass, conditional pass with additional requirements, re-examination, or fail.
- Students who entered the program with an existing MS degree may be able to complete the required coursework for the nonthesis MS more rapidly (e.g., by transferring some credits from the prior institution).
- ☐ **If a student chooses not to sit for the Qualifying Exam**, a final committee meeting (culminating experience) is required to be eligible to receive the MS degree. The culminating experience results from the student's independent study. It consists of a short oral presentation (30 minutes) followed by 30 minutes of Q&A, plus a short summary (~10 pages) of the student's research in the form of a written report. The report must be approved by the student's MS committee. This option results in a terminal non-thesis MS degree.
- ☐ **If a student decides to complete the MS thesis,**
 - ☐ Submit their Master's Degree request (**thesis option**) online once the exam time has been approved by the committee members and the space has been reserved by the students: <https://grad.uw.edu/mygrad-program/>.
 - ☐ MS Supervisory Concurrence
 - Upon receipt of a student's finalized thesis the student's supervisory committee will confirm support of the student's thesis.
 - The student's committee chair is responsible for turning in the MS Committee signature form to the Academic Adviser by the last day of the spring quarter.

- Submit final thesis to Graduate School:
 - Follow the instructions on the Grad School website for submitting your MS thesis: <https://grad.uw.edu/current-students/enrollment-through-graduation/graduation-requirements/>.
 - Deadline: end of quarter when the MS degree request is submitted
 - Review Graduate School thesis submission policies carefully before preparing your final thesis document: <https://guides.lib.uw.edu/research/etds>.
 - If you would like to use the LaTeX template, it can be found here: <http://staff.washington.edu/fox/tex/thesis.shtml>
 - Submit a PDF copy of the final MS thesis to the Department [online](#).

YEAR THREE

□ **End of Winter Quarter (at the latest):** Present public seminar – usually given in a regularly scheduled seminar (ATM S 521/523), but may be a special seminar if no available slots exist in the regular seminars. Student presents work completed at UW. Most often this will be research from the student's first (MS) project, which in most cases will be submitted to a journal as a research manuscript in year 3.

- You are responsible for finding a date that your MS supervisory committee members can attend. You are required to confirm that a minimum of two members of your committee (one must be your chair) will attend.
- Contact the seminar coordinator at least one month before the quarter in which you will present and ask that the date be tentatively reserved, pending confirmation of attendance.
- Send the finalized date/time to supervisory committee members and ask for confirmation of attendance.
- Once attendance is fully confirmed, email the seminar coordinator (cc the Academic Adviser) with a request to finalize the reservation.
- NOTE: Please notify the **Chair's Assistant** of any special seminars so they can be added to the Atmos events calendar.

□ **Winter Quarter:** The student meets individually with each committee member to discuss preparation for the general exam.

□ **Spring (at latest): Student takes General Exam**

- No changes are being proposed to the form or requirements of the General Exam. Only the timing is being revised. It will be a programmatic requirement to take the General Exam by the end of the Spring quarter of Year 3. A letter from the committee to the GPC will be required to delay the General Exam past the Spring of Year 3.
- See the General Exam Checklist for details of the General Exam procedure.

YEAR FOUR

Year 4, Spring (at the latest), and annually thereafter until final examination: Student has a progress meeting with their committee.

Year 4 onwards: Students are strongly encouraged to sign up to present their work in a departmental seminar each year through to graduation.