

Master's Presentation Guidelines

Revised January, 2023

Students completing a Master's degree have three options to satisfy the final examination required for all graduate degrees:

1. Write and defend a Master's thesis.
2. Pass two Ph.D. preliminary examinations.
3. Give a Master's Presentation.

This document provides the guidelines for Master's Presentations.

General Description: The purpose of the Master's Presentation is to develop your professional communication skills. If you move on to a business or industrial environment, presenting your work or ideas to your supervisor or clients will be a vital part your job skills. The importance of good communication should be obvious in academic and teaching careers. In any professional occupation, the quality of your work will be wasted if you cannot communicate it to others effectively. Master's Presentations are intended to provide an opportunity for you to develop your professional communication skills in a supportive environment. You should view it as perhaps your first opportunity to present yourself as a professional to your colleagues. View this not just as a hoop to be jumped through, but as an important part of your professional training.

A student choosing the presentation option should find a faculty member who will consent to supervise their Master's Presentation. (Faculty members may decline if they so choose.) The student's topical interests will probably guide the selection of faculty member. An academic advisor is not responsible for serving as the default supervisor if an advisee is unable to locate a supervisor. It is the student's responsibility to identify a potential supervisor and seek their consent. A student who has trouble with this may seek their advisor's suggestions for possible supervisors. Any unresolvable cases should be discussed with the Graduate Program Director.

The student and supervisor together should then identify the content of the presentation. A one-page description of the proposed project (a "project proposal") must be given to the Graduate Coordinator at least six weeks prior to the presentation. The student and the supervisor must sign the proposal. The presentation itself is to consist of a 50-minute oral exposition, delivered to an audience of faculty, including the student's advisory committee, and fellow graduate students, accompanied by a professional quality written summary. The content might be based on reading a journal article (current or of historical significance), perhaps appropriate chapters from a book, or a project that the student has carried out while in the graduate program. The basic idea is that the presentation represents some mathematical learning accomplished outside of formal course work, either through some reading or project-related work. The supervisor is the final authority on what is acceptable and what is not.

The written summary need not be a fully-written treatment of the presentation topic. Again the supervisor will determine what level of detail and completeness is appropriate, and insure that professional standards for attributing credit and providing references are followed. However the written summary should be of professional quality, produced with TeX, LaTeX or other publication quality resources. We anticipate that the summary will be 2 - 12 pages in length. The student will give copies of the written summary to advisory committee members before or at the presentation.

The preparation of the presentation is not intended to be a project of the magnitude of a Master's thesis. The student should exhibit some independence in learning Master's level mathematical material in quantity and depth sufficient for an interesting 50-minute talk. There will not be a panel of judges at the presentation to decide if the student passes or fails. Each supervisor sets the standard of acceptability individually. Instead, the purpose of the presentation is to insure that our graduates have some experience with independent learning and with professional communication skills. In considering what might constitute a failure of the presentation requirement, the GPC can only imagine situations in which students simply do not prepare in earnest. We hope to prevent that from happening by periodic checks with supervisors.

Scheduling and Attendance. A student should identify the faculty supervisor in the semester prior to the presentation. We expect each student intending to give a presentation to be able to identify their faculty supervisor and give some initial indication of the topic by the end of the semester, on their annual Graduate Student Activity Report, if not sooner. The faculty supervisor will be expected to confirm consent with a signature. Students who have not identified a supervisor by that point will be considered to be behind schedule. This is to insure that the holiday break is available for preparing presentations.

The presentations will be announced and open to the public. Students giving presentations are expected to attend the presentations given by others, except where class conflicts prevent such attendance.

Because the presentation constitutes the Graduate School's formal final exam, the student must officially register for the final exam with the Graduate School by submitting a request for final exam form at least two weeks prior to the official exam date: <https://ess.graduateschool.vt.edu/pages/login.php>. The student must complete both the oral presentation and written summary by the official exam date.

The Master's Presentation falls within the non-thesis degree option, not the thesis option. Thus students using a Master's Presentation to satisfy the final examination requirement may not use 5994 hours on their program of study.

Any concerns or questions associated with these Master's Presentations should be brought to the Graduate Program Director.

Summary Timeline

- **The semester before the presentation:** Arrange for a faculty member to be your supervisor and choose a topic. Report this progress on your GSAR if this is done in the Fall semester.
- **Six weeks before the presentation:** Submit a one-page description of the proposed presentation to the Math Graduate Coordinator. You and your supervisor should sign the proposal.
- **Two weeks before the presentation:** Submit the "request for final exam form" through the Math Graduate Coordinator to the Graduate School, giving your presentation date as the date of the exam: <https://ess.graduateschool.vt.edu/pages/login.php>
- **The day of the presentation:** The final exam card will have been emailed to your advisor. Give your oral presentation. Submit your written report to your advisor and advisory committee.