
PROCEDURES AND INSTRUCTIONS FOR THE EXAMINATION OF PhD THESES:
Conducting the Examination Online

1. Purposes of the Examination

It is the examiners' task to determine whether the student has met the University's thesis requirement that each doctoral candidate must present and successfully defend a thesis that embodies the results of original research and mature scholarship. The examiners represent Graduate Council and through it the Senate of the University and are therefore responsible for the standard of the PhD in this University.

The oral defence at McMaster University is an examination of a PhD Candidate's ability to defend his/her written work. Therefore, questions having to do with the detailed content, or the general argument of the thesis are relevant, as are questions regarding the relation between the matter of the thesis and the body of knowledge to which it contributes. (The more general judgment of the candidate's proficiency in his/her discipline and particular area of specialization is presumed to have been made at the time of the comprehensive examination.)

The committee of examiners, both of the written thesis and of the oral defence, will not likely all be expert in the candidate's specialty, or even in his/her discipline. It is the particular responsibility of the external examiner and the supervisory committee to ensure that the thesis does indeed present an original and significant contribution to knowledge. Other examiners may reasonably be expected to exercise their judgment as members of the University faculty, keeping in mind the standards of excellence expected by the University of its PhD graduates.

The examiners (who volunteer) are expected to judge whether the defence is satisfactory or unsatisfactory. The examiners have previously read and reported on the written thesis and they must now give their final judgment on it, and the oral defence of it. Examiners are expected to exercise their judgment on these questions and only in exceptional circumstances should they abstain from voting.

2. Before the Oral Examination – NEW effective March 16, 2020

If the defence location is not identified as online in the Admin Tools system, the SGS Thesis Coordinator will send an email to the student, Chair and Examining Committee members, excluding the External Examiner, to confirm that they want to proceed with the defence in an online format using one of the designated web meeting tools. The expectation is that the defence

PROCEDURES AND INSTRUCTIONS FOR THE EXAMINATION OF PhD THESES:
Conducting the Examination Online

will be online and the host of the defence, either the Supervisor or the Chair, will use the web meeting tools to facilitate the defence.

The SGS Thesis Coordinator will send an announcement to the examining committee 3-4 days in anticipation of the defence that will include the email addresses for all participants to help with communication and conducting the meeting.

Normally, the Chair of the oral defence will host the web meeting. If this is not feasible, the Supervisor may serve in this capacity. A staff representative from the department, for example a Graduate Administrator, is permitted to participate in the defence to assist with the technology with the understanding that all conversations held 'in camera' are confidential.

McMaster faculty and staff have access to several tools through UTS: <https://cto.mcmaster.ca/it-updates/it-continuity-tools-services>. Under "Video and audio calls", you will find links to request licenses for Zoom and Cisco WebEx which are the options recommended for an online PhD defence.

- a. Additional resources for WebEx:
https://wiki.mcmaster.ca/webex/training_centre_support_resources
- b. Zoom Quick Start Guide: <https://cto.mcmaster.ca/app/uploads/2020/03/Zoom-Quick-Start-Guide.pdf>

It is recommended that the Chair and Supervisor finalize the web meeting **2-3 business days** ahead of the defence. It is strongly recommended that a practice or test web meeting is scheduled, preferably with the candidate, to confirm how to use the required functionality.

In an effort to maintain the integrity of the defence, the decision to invite audience members to the defence will be left to the Chair and Supervisor as the controls remain with the "Host". If additional viewers will be invited to the defence, **a meeting password is required to avoid uninvited attendees.**

PROCEDURES AND INSTRUCTIONS FOR THE EXAMINATION OF PhD THESES:
Conducting the Examination Online

3. Oral Examination Procedure

- a. The Chair of the oral defence (or Supervisor) will host the web meeting and verify that all required participants have joined the meeting online.
- b. When the Chair confirms that all required participants are online, the Chair will introduce those committee members not known by the candidate, if any.
- c. The Chair should explain to those present the composition of the examining committee. There will be a **minimum of four members on the examining committee, but not exceeding 5 voting members**. All examining committee members are required to attend. In anticipation of the defence, the Chair for the defence and Supervisor will receive a set of scenarios to address possible participation or connectivity issues. If an examining member is not able to attend at the last minute and it is not addressed in the scenarios, approval from the Vice-Provost and Dean of Graduate Studies is required to proceed.
- d. The Chair will select the candidate and use the option of moving them to the “Lobby” (WebEx) or “Waiting Room” (Zoom) while the order of questioning is established by the examining committee. Once the discussion is finished, the Chair will “Admit” them back into the room.
 - i. Instructions for moving attendees to and from the “Lobby” in WebEx: <https://help.webex.com/en-us/nsq9s2h/Move-Attendees-to-and-from-the-Lobby-in-Cisco-Webex-Meetings>
 - ii. Instructions for managing participants in Zoom: <https://support.zoom.us/hc/en-us/articles/115005759423-Managing-participants-in-a-meeting>
 - i. Using the “Waiting Room”: <https://support.zoom.us/hc/en-us/articles/115000332726-Waiting-Room>
 - iii. If the Chair and Supervisor have decided to invite audience members to the defence, audience members should not be “Admitted” to the defence until the student is ready to present their findings. To maintain the quality of the web meeting, the “Host” should ensure that all audience members lines are muted, and video turned off. The Chair should cue the examining committee member to

PROCEDURES AND INSTRUCTIONS FOR THE EXAMINATION OF PhD THESES:
Conducting the Examination Online

unmute to ask questions. They should also ensure that all examining committee members are muted when it is not their turn to speak.

- e. The Chair will then have the student present an oral statement about his/her thesis of approximately 15 minutes duration (in no case more than 20 minutes). Controls in the web meeting can be shared to the student to allow them to navigate their presentation for the committee. **The student should stress the main points of the contribution to knowledge and the principal technical difficulties either of an experimental or theoretical nature which he/she has overcome. A simple summary of the thesis is neither necessary nor desirable.**
- f. Individual examiners will question the candidate according to the order established by the Chair. **All members of the examining committee are expected to put questions to the candidate.** Issues that have been raised by members of the supervisory committee in the course of composition of the thesis may nevertheless be profitably brought up now, when the candidate will have to respond in the presence of others.
- g. If present, the external examiner should be given full opportunity to question the candidate. If the external examiner is not present, **it is the Chair's responsibility to see that questions raised in the external examiner's report are put to the candidate by some member of the examining committee, preferably the supervisor.**
- h. Candidates who are unwilling or unable to respond to questions should be cautioned that such an action may cause the examination to be adjourned, or in extreme cases, could lead to failure on one of both questions put to the committee about the thesis and its defence.
- i. If audience members have been permitted, the Chair can ask for questions once the Committee's questions have been satisfied. To maintain the quality of the web meeting, audience members should either:
 - i. "Raise their hand" and be prompted to unmute their line to ask the question
 - ii. Type their question into the "Chat" feature to be read by the Chair

PROCEDURES AND INSTRUCTIONS FOR THE EXAMINATION OF PhD THESES:
Conducting the Examination Online

- j. When there are no further questions, the Chair should move the candidate and any attendees (if applicable) to the “lobby” or “waiting room” using the corresponding feature to prevent access to the conversation and any recording functionality.
- k. After a discussion of the examination, the Chair will ask for a vote on the success or failure of the **oral defence**. If there are two or more negative or abstaining votes, with at least one of these votes being from a member of the supervisory committee, adjournment is mandatory and a decision must be reached at this time as to whether a reconvened oral defence may be held at a later date. If, in the judgment of the examiners, the defence is to be reconvened, the candidate should be told as clearly as possible what he /she must do to improve his/her defence of the thesis. In the event the written thesis is approved conditionally, the Chair is responsible for ensuring that (1) the candidate is advised of the conditions in writing, (2) the conditions are met before the thesis is submitted to the School of Graduate Studies, and (3) the SGS Thesis Coordinator is informed of the conditions.
- l. Following the committee's decision, the Chair will email gthesis@mcmaster.ca with a CC to the examining committee members, including the External, to request the written vote of each examiner for the completion of the report form.
- m. The Chair will then “admit” the candidate back into the web meeting to inform him/her of the committee’s decision(s), and for any congratulations or discussion appropriate to the circumstances.
- n. The examination will be formally adjourned and the web meeting ended. Normally, examination of the candidate will not take more than two hours. In no case should it take more than three.
- o. If the student has failed or if the oral defence is to be reconvened, the Chair of the examining committee should discuss the situation as soon as possible with the SGS Thesis Coordinator.
- p. If the oral defence is reconvened, no new examining committee members will be added, except for necessary replacements. It is the duty of the examiners to attend the reconvened examination, and no subsequent defences may be held.