Transcript: Demystifying the thesis defence at University of Waterloo

Section 1: The Thesis Defence – What is it?
Congratulations! You’re preparing for your thesis defence! But what exactly is the thesis defence, and what do you need to know about it? In this video, we’ll talk about what the defence is, who’s there, what happens, and the deliberation and range of possible outcomes.

The thesis defence is a unique opportunity to share with other experts what you did as part of your PhD research, what you found or discovered, and why it’s important.

Although there are a lot of regulations guiding the defence process, remember that this process is really about you and your work.

Sometimes PhD candidates forget the overarching goals of the thesis defence:

- to allow you to show your mastery of the subject matter
- to prove you are the author of the work
- to demonstrate your ability to engage in scholarly discourse in your research area.

Sometimes, PhD candidates see the defence as a way for others to challenge their research through interrogation.

While the defence does allow your work to be subject to scholarly criticism, remember that the thesis defence is about scholarly discourse, or discussion, rather than interrogation.

Section 2: Who’s There?
As you think about your defence day, you may be wondering who is on your committee or in the audience at your defence. You will likely know most of those in attendance, but some you may not know.

So, who will you see?

First, every thesis defence has a Chair.

- The defence Chair is an impartial faculty member from outside your department. They are well versed in the rules and proceedings of thesis examinations, and their role is to ensure proper conduct of the examination. The Chair does not question you, and does not assess your work.
- The chair is appointed by Graduate Studies and Postdoctoral Affairs, so it’s not your responsibility to make any arrangements for the chair.

Next, you will see the members of your examining committee, which will consist of at least five members attending either virtually or in person. These members include:

- Your supervisor or co-supervisors
• An internal member, who is a member of your department and typically part of your advisory committee
• An internal-external member, who is “internal” to the university but normally “external” to the home department. This person has suitable knowledge of the subject matter, even though they are from another discipline.
• Another member, typically a member of your advisory committee
• And finally, an external examiner. An external examiner is an arms-length person with a doctoral degree and expertise in the subject matter. Their role is to evaluate the thesis from a fair and impartial perspective. Because their role is to be impartial, there cannot be any conflict of interest. There’s lots of information about what is considered a conflict of interest in the PhD thesis examination regulations.

Each member of the examining committee is assessing your thesis and has a vote. However, if you have co-supervisors, they will share one vote.

• Because the chair is not a member of the examining committee, the chair does not have a vote.

At University of Waterloo, it is also standard to have defences open to the public, so you can invite your friends, family and colleagues to be there! Check with your department to figure out what options are available to you.

In some cases, such as when there are intellectual property concerns, a closed thesis examination can be requested. This means that all those in attendance at the thesis examination, including the examining committee members, must sign a non-disclosure agreement.

• Closed examinations must be requested as early as possible, and, at the latest, one week prior to the submission of the thesis.

As you’re surrounded by all these people at your defence, remember that this day is about you and your work, and that everyone around the table and in the audience wants you to succeed!

Section 3: What Happens?
If you’ve never been to a thesis defence, or haven’t been to one in a while, you may also be wondering “what happens at a thesis defence?”

There are three major components to every thesis defence:

The first is the welcome.

• The Chair will open up the defence, go over the order of proceedings, and welcome all attendees.
• The Chair will also introduce the various members of the examining committee.

After the welcome, the examination will formally begin with your oral presentation.

• The presentation is no more than 30 minutes, but the exact length expected can vary by department or discipline. The format and expectations for the presentation can differ by
When you’re preparing your presentation, ensure that it focuses on your main contributions and conclusions. The committee has already read your thesis, so there’s no need to go over every detail.

The final component of the defence is the questioning period.

1) This is the part of the defence that candidates most often worry about because they think of it as an interrogation. However, it’s important to remember that the defence should actually be more of a discussion amongst colleagues.

Here’s how it works:

- The examination Chair monitors the question period, which goes in “rounds”.
- During the first “round” of questioning, each committee member will have 15 minutes to ask their questions, provide comments, and discuss these comments or questions with you.
- After each committee member has their turn to ask questions, there may be additional rounds for more questions. The Chair and the committee then decide when the committee’s questions will end.
- Typically, the Chair will reserve some time at the end to accept questions from non-committee members.

While there is no set time for defences at University of Waterloo, they typically range from two to three hours. If the defence is taking longer than this, the Chair can ask the committee to begin to wrap up.

After the question period, your work is done – it’s now up to the committee to deliberate.

Section 4: Deliberation and Outcomes

Once your formal defence has concluded, the examination Chair will arrange for a private deliberation – without you or the audience in attendance.

The examination committee’s decision is ultimately based on your written thesis, as well as your ability to defend it, and the decision is determined by majority vote.

In the event of a tie decision, or if the external examiner’s vote is not in the majority, the decision will be deferred to the Associate Vice President (AVP), Graduate Studies and Postdoctoral Affairs. The AVP will consult the Faculty Associate Deans and come to a final decision. But don’t worry about this – it happens very rarely!

Once the deliberation has concluded, the Chair will inform you of your examining committee’s decision.

There are three possible outcomes:

1) Accepted
   - This means that the thesis is completed to the satisfaction of the examining committee.
While it is normal to still have revisions required, they are typically minor and typographical or editorial in nature. In this case, you would have one month to complete all revisions and submit your approved thesis to UWspace.

2) Accepted conditionally
   - This means that the oral presentation is satisfactory and the thesis is acceptable, but content changes are required.
   - A re-examination is not required, but revisions are slightly more time intensive. In this case, you will have four months to complete revisions to the approval of your committee and submit the final version to UWspace.

3) The third and final possible outcome is Re-Examination, which is very rare.
   - This means that the oral presentation is not to the satisfaction of the committee or substantial changes need to be made to the thesis. In this case, the candidate must be re-examined within 1 year.

Are you surprised that “failed” wasn’t one of the options? Contrary to popular opinion, there is no outcome that could see you fail on your first examination!

The vast majority of candidates have their thesis accepted at their first examination. So you should definitely plan to celebrate your successful thesis defence, hopefully both with the examining committee, as well as with your friends and family after everything has wrapped up for the day.

As you think about your defence, remember that it’s all about you. And take advice from a recent PhD graduate who said:

“Have fun! This is a chance for 3-4 hours to be entirely focused on you and your research with a table of experts on your topic. Comprehensive exams and defences are likely the only time this will ever happen - EMBRACE IT.”