



Using Zoom for Exam Proctoring

Zoom can be set-up for the purpose of invigilating online exams in real-time. There are specific settings that should be enabled/disabled for the Zoom meeting if it is used for invigilation purposes as opposed to an online lecture.

Communication to Students

The following note should be included in your Exam Invigilation Instructions to students:

Exam Invigilation Instructions

This is an invigilated exam. You must turn on your camera and leave it on throughout the examination. You will be asked to hold up your student card for identification purposes, and an invigilator may also ask you to share your screen at any point during the exam.

Your privacy is important to us. The camera feed will not be recorded.

Roles & Permissions in Zoom

- **Host** – dedicate one person to be the host who will be responsible for the following:
 - Set-up the Zoom meeting.
 - Admit participants from the waiting room (if enabled).
 - Create and start breakout rooms; co-hosts can create and assign students to breakout rooms.
 - Oversee and manage the session during the exam.

Important: Only **one person** can be assigned as the host per meeting. With the recent versions of Zoom (version 5.4.6 and 5.4.7 and beyond), the host and co-hosts can now create and assign students to breakout rooms.

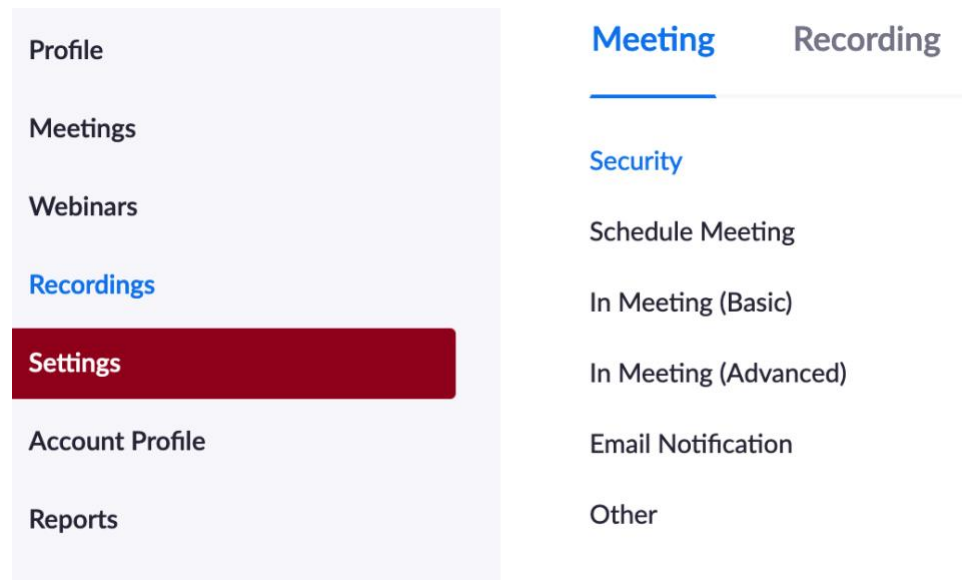
- **Co-host:** TAs/Invigilators/Instructors will stay in the main room or breakout rooms and invigilate the students.

- **Participants** – Students stay in the waiting room until they are admitted and assigned to the main room or a breakout room by the host.

Note: waiting room and breakout rooms can be enabled/disabled, depending on how you want your exam to be invigilated.

Step 1: Zoom Settings

The host should review the default Zoom meeting settings set for your account. There are a couple settings that we recommend disabling/enabling for exam invigilation purposes. To access your Zoom Settings, log into Zoom at: <https://zoom.us/signin>. Click on **Settings** from the left-hand menu.



Under the MEETING tab:

- **Private chat:** disable this option so participants cannot send a private message to another participant. Private messages are not visible to the host or co-host.
- **Always show meeting control toolbar:** enable this option so you always have access to the controls on the toolbar.
- **Remote control:** disable this option to prevent participants from controlling the shared content.
- **Virtual background:** disable this option so participants cannot hide what is in their background when taking the exam (e.g. another person in the room, notes on the wall).
- **Show a “Join from your browser” link:** enable this option so participants who have difficulties downloading/installing the Zoom application can still join the meeting from their browser. Joining via the Zoom application is recommended, but

if the participant is unable to, they can join via the browser. It is recommended to use Chrome if joining through an Internet browser. **Note:** there are some limitations with joining from the browser, see [here](#).

Step 2: Host sets up the Zoom meeting and adds to Brightspace

In theory, the Host is the instructor. If you are planning to have your exam invigilated by other invigilators, you must add them as “**alternative hosts**”. Make sure to inform them of the process and ask them to conduct a practice exam.

- Log into Zoom at: <https://uottawa-ca.zoom.us/>
- Under **Meetings**, click on **Schedule a Meeting**.
- Fill in all the meeting information. All the settings should be kept as default except for the following:
 - **Topic:** enter a name for your meeting
 - **When:** specify the date of the exam and the start time (**set the start time to be at least 30 minutes before the exam start time to account for set-up and identity checks, more details below**)
 - **Duration:** indicate how long the exam will be
 - **Meeting Password:** check this option and require students to enter a password before joining the meeting for added security
 - **Meeting Options:** check the following options:
 - **Mute participants upon entry:** participants’ audio will be turned off by default.
 - **Enable waiting room:** participants will be put in a “waiting room” until the host admits them. This option allows the host to know if anyone is late since the students will be in the waiting room, and the host can decide to admit them or not.
 - **Alternative Hosts:** anyone with a uOttawa Zoom account. Enter their uOttawa email.

Your meeting is now set up. Copy the **Join URL**. This is the URL that you will share with your teaching team and students in order for them to join the session (it includes the meeting ID and meeting passcode). You can share the link with the students by email.

Step 3: Teaching Team Joins Meeting (~20 minutes before exam)

There are certain settings that can only be done within the meeting, so it is recommended that the teaching team joins 15 to 20 minutes before the exam start time.

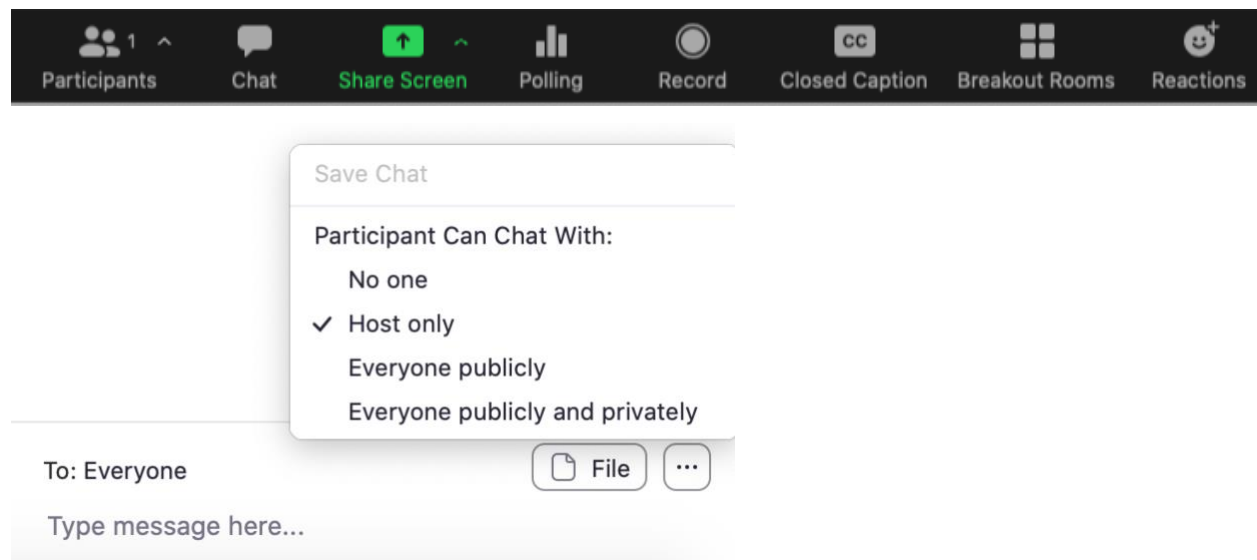
Important: We recommend you set up a practice exam few days prior the exam, to let students familiarize themselves with the invigilation process and Zoom options, especially if you are planning to use breakout rooms or have students share their screen during the exam.

3.1. Start the meeting and disable chat

The host (or alternative host) will need to log into Zoom and start the meeting first. If this is your first-time using Zoom, you should download the Zoom desktop application. If you already have the application installed, click on **Open zoom.us** when prompted to.

Important: it is recommended that you use the Zoom desktop application instead of joining using the browser, as the browser does not provide you with all the features.

The host should disable the ability for participants to message everyone in the main room. Click on **Chat** from the bottom of the meeting screen and a chat window will appear on the right.



Click on the three dots beside **To: Everyone** and check **“Host only”**.

Tip: keeping the setting as host only allows students to still be able to message the host/co-hosts privately in the main room if they have questions or experience any issues.

Important: the chat functionality in the **breakout rooms** is different from the main room

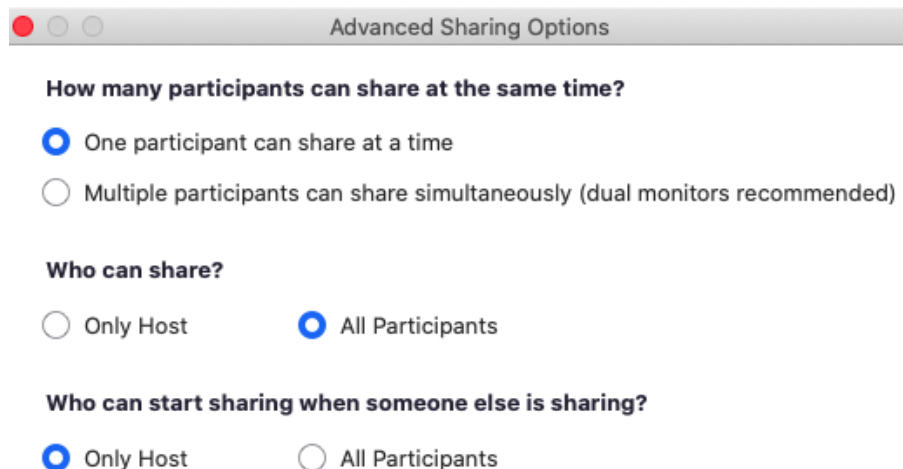
- Students still have the ability to send a message that is visible to **Everyone** in the breakout room (this cannot be disabled).
- If the private chat option is disabled at the Zoom Meeting settings level (see Part 1), this will prevent students from privately messaging other students in the same breakout room during the exam (highly recommended). Private messages are not visible to the host/co-host.
- **Students can only private message the Host/Co-host in the breakout room if they joined the meeting through a browser. If the student joined using the Zoom desktop application, they won't be able to message the Host/Co-host privately.**
- You may want to provide students with an alternative way for to contact the Instructor/TA (e.g. email, Brightspace discussion) outside of Zoom.

3.2. Make teaching team co-hosts

- The teaching team (Instructors/TAs/Invigilators) will join the meeting by going to the **Join URL** provided by the host.
- After everyone joins, the Host needs to change everyone to “Co-hosts” (they join as “participants” by default).
 - In the participant list, hover over the **name** > click on **More** > choose **Make Co-Host**. Repeat this for everyone in the teaching team. (You can have up to 50 co-hosts).

3.3 Invigilation of the Breakout Rooms

- If the breakout rooms are used, confirm with the Teaching Team how they will be invigilated and by whom.
- Confirm the breakout rooms options (e.g. allow participants to return to main session at any time, auto-close breakout rooms after 60 minutes).
- By default, students cannot share screen when in breakout rooms. You will need to click the little arrow near the Share Screen button and select Advanced Sharing Options:
 - Under **How many participants can share at the same time?**, select **One participant** can share at a time
 - Under **Who can share?**, select **All participants**.
 - Leave the last option with **Only Host**.

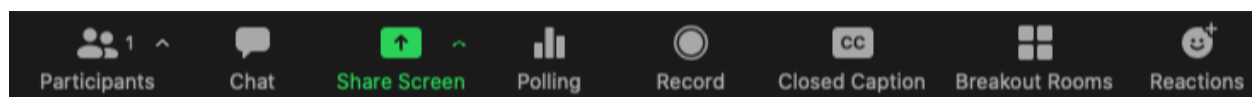


Step 4: Students Join Meeting (~15 minutes before exam)

Students should join the meeting at least 15 minutes before the exam so the Host can assign them to breakout rooms.

- Students log into Brightspace and click on the link to the meeting.
- Students will be directed to Zoom to connect to the meeting and be asked to enter their name. Ask students to use their **preferred first name and last name** when joining the meeting.
- If the “waiting room” feature is used, they will stay in the “waiting room” until the host/co-host(s) admits them. The student will see a default message when they are in the waiting room. This message can be customized by following the instructions [here](#).
- If the **Breakout Rooms** are used, the Host or Co-host need to check the options (e.g. allow participants to return to main session at any time, auto-close breakout rooms after 60 minutes) **before** assigning students to their breakout rooms.

The host/co-host will click on **Participants** at the bottom of the meeting screen to see a list of participants in the main room as well as the people in the waiting room.



Students will appear in the order they join, with the first one on the list being the first to join. The host or co-hosts can click on **Admit** to admit the students individually or **Admit all** to admit everyone at once.

Tip: If you are using the waiting room to take attendance, you should decide with your teaching team who is/are the one responsible for admitting the students and taking attendance. Both the host and the co-host(s) can admit students.

Identity Check 2: Match the students' names in the waiting room with your class list.

Key Recommendations

- If you are using Zoom to invigilate a large group (100 students or more), you should consider splitting the group in 2 or 3 depending on the number of invigilators available and create separate Zoom meetings. **Note:**
 - You can run **two concurrent Zoom sessions** at the same time.
 - You can have up to 25 webcams in the gallery view, and it is easy to flip from one group to another.
- If you are planning on recording the Zoom session, make sure to:
 - Schedule the Zoom session from the Zoom portal (**not Brightspace, otherwise students will have access to the recording**);
 - Select the option **Cloud recording** and not Local recording. The recording will be available only to you from the Zoom web portal.
- If you have an open book exam, you could allow students to have access to a cheat sheet during the exam and ask them to upload a copy of the cheat sheet before the exam (e.g. 3 hours before). You could also request the cheat sheet to be handwritten, to make sure it is not made of content that is copied and pasted from another source. Students can use an app to submit a copy of the cheat sheet as a PDF.
- If you are planning having students take the exam (Quiz) on Brightspace, you could put them individually in a breakout room and ask them to share their screen, so that you can monitor what they are doing on their computer.