

LEVEL 3 STRICTEST DETERRENCE

Guidelines for Exam Proctors (Instructor/TA)

Type of exam:	Closed books, student computer screen captured
No. of participants per Zoom exam room:	Maximum of ONE student per room recommended
No. of TA support:	1 Proctor: 6 Students
Proctor views:	Student headshot, workspace, and computer desktop screen views
Device requirements per student:	(1) Computer desktop <i>OR</i> laptop, webcam, speaker and microphone (2) mobile device with a built-in camera

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I. INTRODUCTION

Level 3 is the strictest option which you can monitor a student through the headshot, workspace, and screen-shared views. This setting is recommended if you need to capture the student screen activity.

What are some limitations for Level 3 Strictest Deterrence?



- It requires extensive back-end set-up and front-end TA support because you need to schedule ONE Zoom Exam Room for ONE student. With this requirement, **proctors can only monitor maximum of 6 students effectively on one desktop, which is less, compared to Levels 1 and 2.**
- It requires a substantial amount of time to setup and test the procedure, conduct dry run, and communicate with students. Please make sure you have enough time and manpower to prepare for this level of proctoring.

Note: If it is not essential to view the students' screen activity, or you do not have enough time and manpower to carry out the setup required for this level, you may consider [Level 2 – Stricter Deterrence](#).

II. ZOOM EXAM PROCTORING ACCOUNT

Online exam proctoring should be implemented using Zoom Exam Proctoring account(s). ITSC provides these proctoring accounts upon request. It is important that you confirm the number of proctors and exam rooms needed and assign a proctor-in-charge (PIC) for each exam room.

What is a Zoom Exam Proctoring Account?

A Zoom Exam Proctoring account refers to an ITSC project account specifically used for conducting live online proctoring for high-stake exams. ITSC provides access **ONLY** upon request. The recordings captured from these designated accounts are available for the course team to review.

Why do I need to request for Zoom Exam Proctoring account when I already have my personal HKUST Zoom account?

You should request a Zoom Exam Proctoring account specifically for live online exam proctoring because required Zoom settings differ from regular Zoom meetings. It requires specific global settings configuration to effectively monitor and manage the exam students. Also, exam room recordings are stored in a designated exam account for the course team to review after the exam date. After the exam period, ITSC will manage all video recordings from these designated accounts according to the privacy ordinance.

When should I request for Zoom Exam Proctoring account(s)?

It is important to plan weeks before the exam. (1) Confirm the number of exam rooms and (2) the number of proctors you need before requesting the account(s). This will give you sufficient time to test out the process and settings in Zoom. For example, you might need to request 30 proctoring accounts for a class of 30 students.

How to request a Zoom Exam Proctoring Account?

[Click to request](#). The online application form will **be available around 1 month before the final exam period starts**. For any request before the form is available, please submit your request to ITSC at cchelp@ust.hk.

III. ZOOM SETTINGS CONFIGURATION FOR THE LIVE ONLINE EXAM PROCTORING

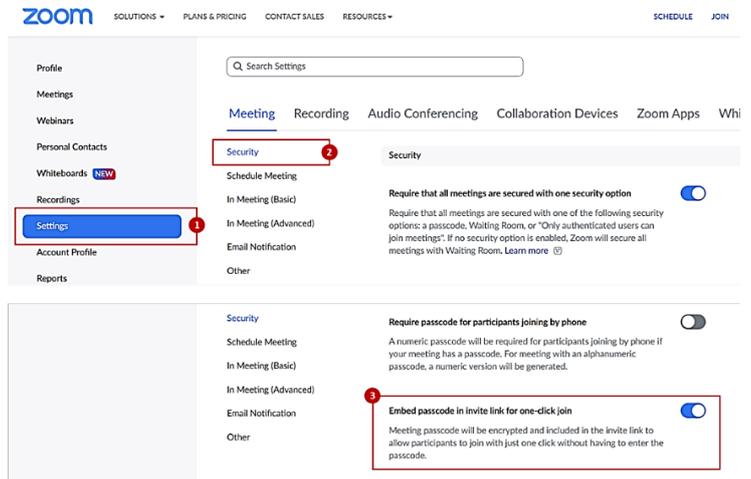
Step 1: Sign in to Zoom using your Zoom Exam Proctoring account

- On a web browser, go to <https://hkust.zoom.us/>.
- Click on **Sign in**.
- On the HKUST authentication login page, sign in using your ITCS account.

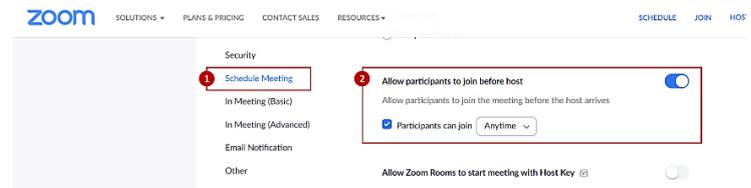
Note: Always sign in with SSO and log in to the usual HKUST authentication login page.

Step 2: Configure your Zoom global settings.

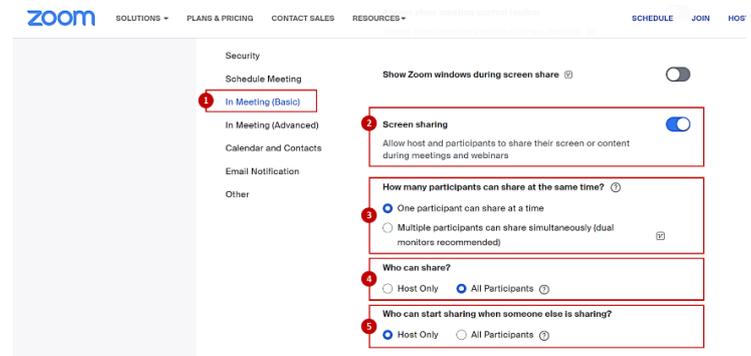
a. On **Settings – Security**, enable **“Embed passcode in invite link for one-click join”**.



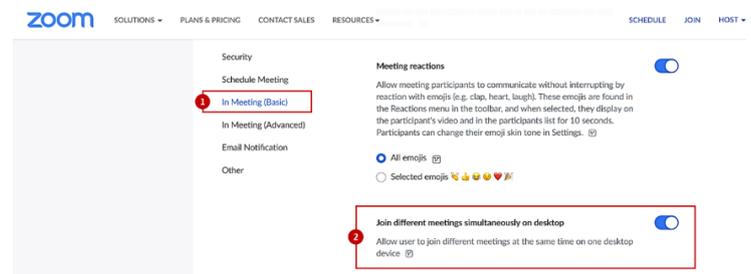
b. On **Settings – Schedule Meeting**, enable **Allow participants to join before host**.



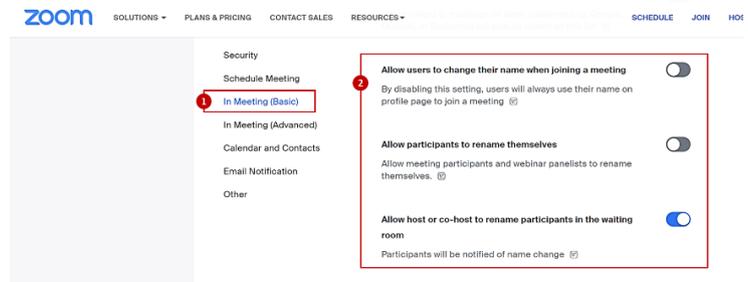
c. On **Settings – In Meeting (Basic)**, enable **screen sharing for all participants**.



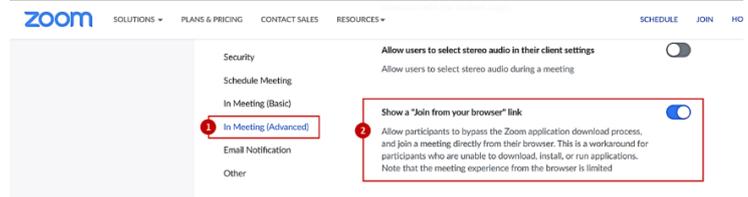
d. On **Settings – In Meeting (Basic)**, enable **“Join different meetings simultaneously on desktop”**. It allows the proctor to join two or more exam rooms (meetings) at the same time on one desktop.



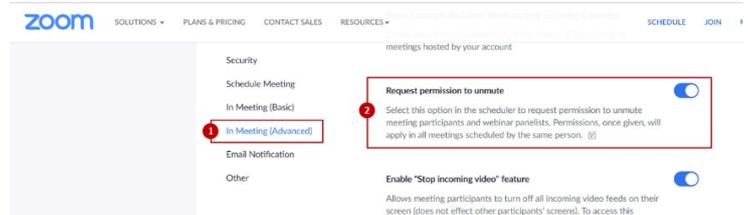
e. On **Settings – In Meeting (Basic)**, do not allow participants to rename themselves and only allow Host/Co-host to rename participants.



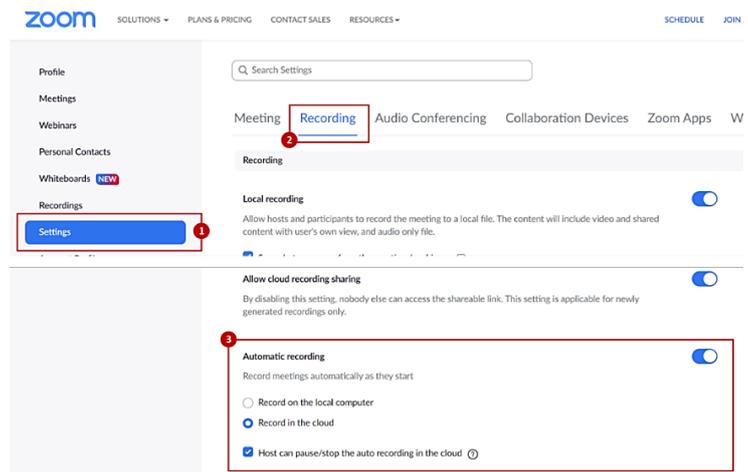
f. On Settings – In Meeting (Advanced), enable **Show a “Join from your browser” link**.



g. Then proceed to enable **Request permission to unmute**. This will prompt the student to grant the proctor permission to unmute the student during the exam.

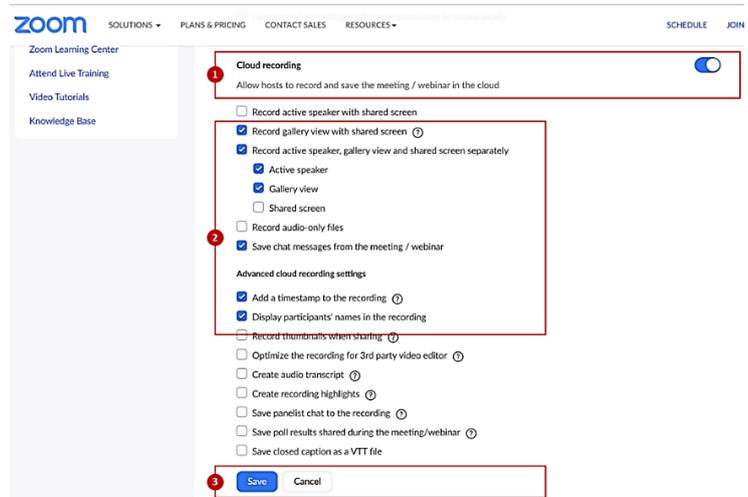


h. On Settings – Recording section, enable **Automatic recording**.



i. Still on the Recording section, enable **Cloud recording**, enable the other options below and then save the settings.

- Record gallery view with shared screen
- Record active speaker and gallery view separately
- Save chat messages from the meeting
- Add a timestamp to the recording
- Display participants’ names in the recording



Step 3: Schedule a meeting for the Exam Room

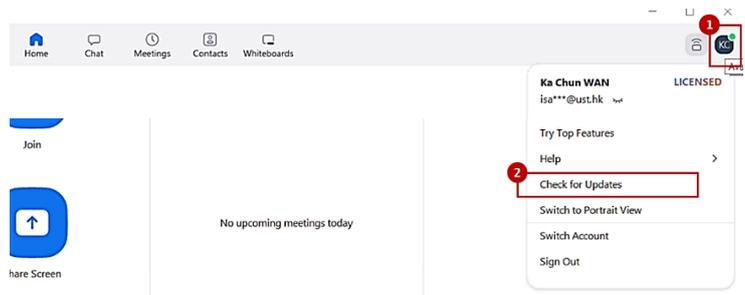
Go to **Meetings**, click on **Schedule** and set the following requirements.

- Name the exam meeting rooms using [PIC initials]_[Student name]_[Student ID]
- Set to **Recurring meeting – No Fixed Time**
- **Require authentication to Join** > ensure **HKUST** domain is selected
- **Mute participants upon entry**
- **Request permission to unmute participants**
- **Automatically record meeting** > select **In the cloud**
- Allow participants to join anytime
- Add a PIC, instructor, and other proctors as alternative hosts (so whoever listed will be able to start the zoom meeting session and others will auto assigned as co-host when joined)

Note: Schedule ONE exam room with ONE Zoom Exam Proctoring Account only.

Step 4: Update your Zoom desktop application

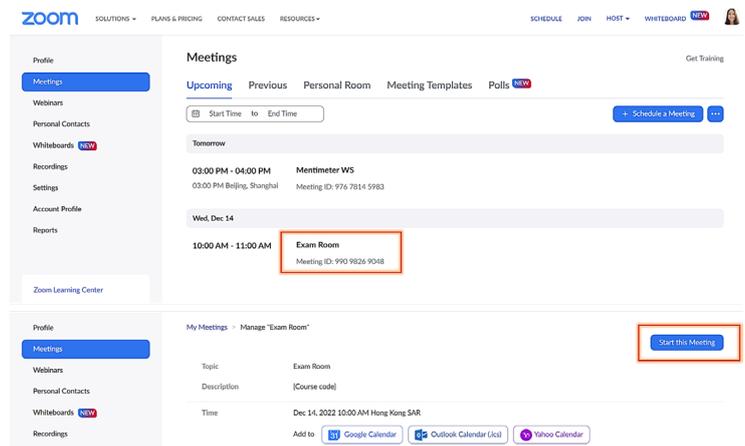
Using your Zoom Exam Proctoring Account, update your Zoom desktop app to the latest version by clicking on the user icon at the top right corner of the Zoom desktop app window.



Step 5: Test out the Zoom Exam Room meeting scheduled

a. Launch via Zoom desktop app

1. Sign in to the Zoom web portal.
2. Go to Upcoming meetings and select the exam room meeting you want to test.
3. Click on **Start this Meeting** in the top-right corner.
4. The Zoom exam room meeting should launch automatically on your desktop.



b. Launch via a web browser

1. Sign into the Zoom web portal.
2. Go to Upcoming meetings and select the exam room meeting you want to test.
3. Click on **Start this Meeting** in the top-right corner.
4. If prompted to open the Zoom desktop client, click **Cancel**.
5. Click the **Join from your Browser** link.

Note: Please restart your computer after configuring the Zoom global settings before testing out the exam room meeting scheduled.



TIP!

Clear cache if there are any issues launching Zoom in browsers. Click on the link [for PC](#) | [for MAC](#) instructions.

IV. INTERNET BROWSER SETTINGS

You will need to access Canvas during the exam, so prepare your browser for smooth access.

- It is recommended to use Chrome or Firefox.
- Always use the latest version of the Internet browser. [Disable cross-site tracking](#) (iOS - Safari) or you might not be able to download files or view images.
- Check out Canvas's latest browser and computer requirements by clicking [here](#).
- If you experience issues with your browser, try to clear your cache. Click on the link [for PC](#) | [for MAC](#) instructions.



How can you secure your Zoom exam rooms from unauthorized users?

DO NOT share the Zoom exam room links or meeting IDs with others or other public sites. Instead, post them on Canvas through the Announcements.

V. ON EXAM DAY

Before the exam starts

For Proctor-in-charge (PIC):

Using the Zoom Proctor account provided by ITSC, PIC should follow the instructions below. Afterwards, other proctors may join the exam room using their Zoom Proctor accounts.

A. Publish the exam materials and the Honor Code Declaration in Canvas. Instructors should ensure that:

1. the relevant **Canvas Modules and exam items** are published.
2. the due date and time are correct, with some buffer time in case some technical issue occurs during the exam.
3. the Assignment setting on submission attempts allows resubmission in case some technical issue occurs during the exam.
4. the **Honor Code grade is not hidden**. Kindly refer to the [Honor Code setup instructions](#).

B. Set up your workspace:

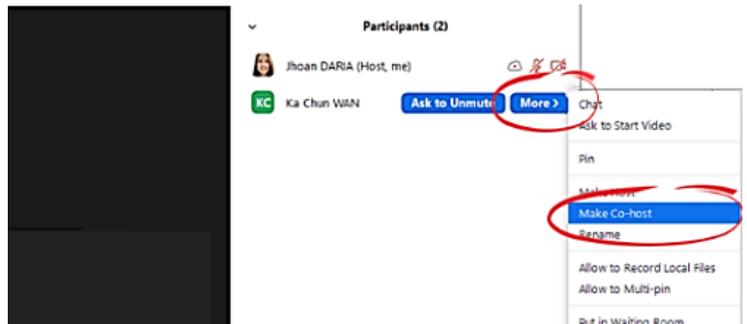
1. Make sure your devices are working properly – computer desktop, webcam, speaker, and microphone.
2. It is recommended to use a **wired Internet connection** for a more stable connection throughout the exam.
3. The computers should be able to join 6 Zoom Exam Rooms concurrently.
4. It is recommended to use a **desktop computer**. Laptops are NOT suitable due to the smaller screen size and limited processing capacity to handle concurrent Zoom Exam Rooms.

C. Start the Zoom exam room 15 – 30 minutes before the scheduled exam:

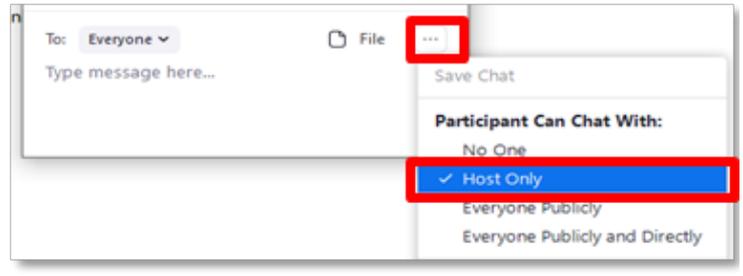
1. Sign into the Zoom web portal.
2. In the navigation menu, click **Meetings**.
3. Click the meeting you want to start.
4. Click **Start this Meeting** in the top-right corner.
5. Launch the exam room meetings in browser by clicking the **Join from your Browser** link.
6. It is recommended that you arrange the browsers in a grid to monitor multiple students on one screen.

D. Check the settings of the Zoom exam room:

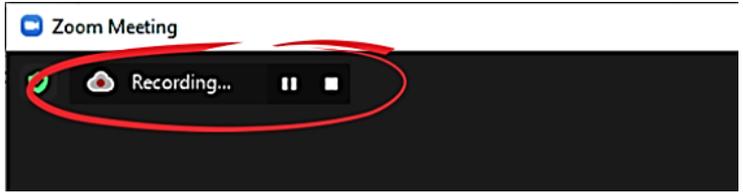
1. Assign other proctors to be **Co-hosts**. Click **More>** on the selected proctor, then select **Make Co-host**.



- Set the Zoom chat to **Host Only**. The Host will receive all messages or inquiries from students.



- Check the recording. Ensure that the **Zoom meeting recording** is in progress. Check the upper left corner of the Zoom window.



- Check the students' camera setup. Students may improvise with what is available to them.



E. Check on the student's identity and video setup:

- Ask students to show their Student IDs to the webcam. Ask students to cover their ID numbers with their fingers.
Note: This is due to privacy concerns.
- Depending on the quality of their webcam, details may not be clear.
Note: You can review the recording later for suspicious cases.
- The student's name in the Zoom exam room must be their official name.
- Ask students to turn on their cameras to show the head and workspace views. Ask them to move their cameras to ensure that nothing is blocking the view.

Headshot view

The virtual background must be **turned OFF**. You should see the student's face and the real background of the working space.



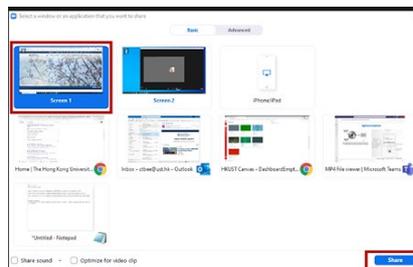
Workspace view

The video **MUST** show the student sitting and the actual background. You should see the student's hands, computer monitor, and answer sheet.

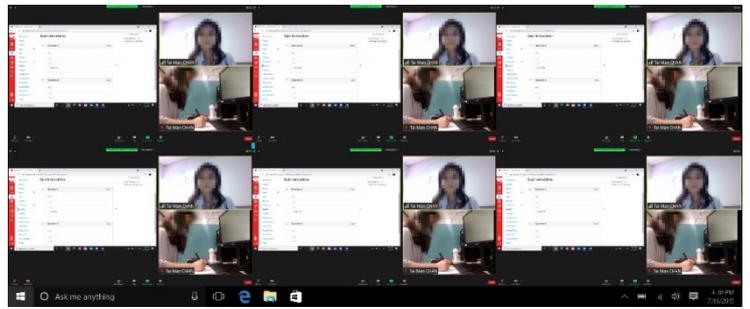


- Ask the student to share "Screen", and NOT an application.

Note: One way to verify is to look for the OS taskbar.



6. **Arrange the browsers in grid** to monitor multiple students on one screen.



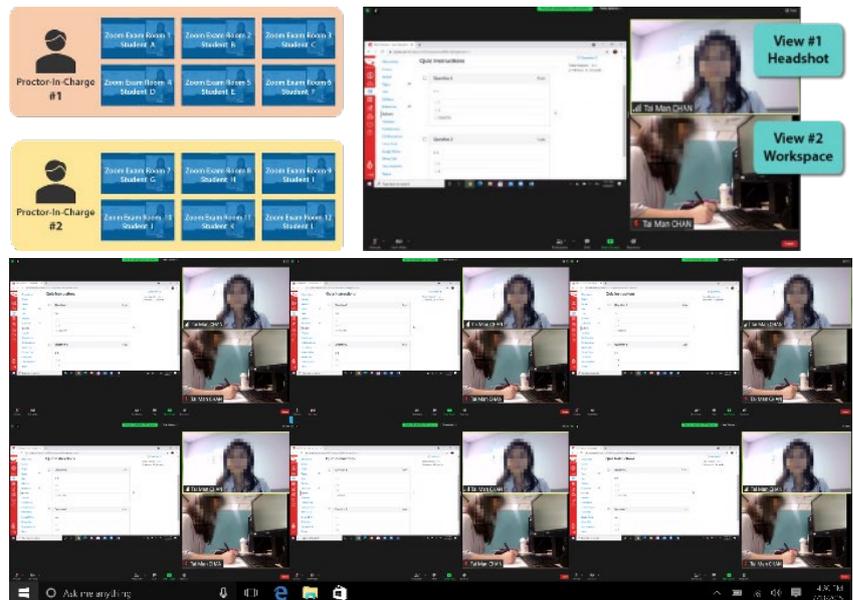
F. The PIC can proceed to make the necessary critical announcements to students:

- **Keep the speaker ON** for receiving instructions/announcements during the exam.
- **Put the student ID near them** for proctors to check the identity.
- **Make inquiries through Zoom Chat** during the exam and be patient while waiting for the response.
- Inform students of the **exam start time and end time and key ground rules** verbally.
- Ask students to **complete the Honor Code Declaration in Canvas** before obtaining the exam paper.

During exam

1. All proctors should closely monitor the students.

- ✓ **Arrange ONE Zoom exam room for ONE student.** Each proctor may proctor up to 6 Zoom Exam Rooms on one computer.
- ✓ Closely monitor students' shared screens and their webcam videos side-by-side
- ✓ Monitor Zoom Chat to communicate with the student when necessary



2. Handle suspicious behaviors observed during the exam.

- ✓ Communicate with suspicious students through Zoom Chat and verbally ask them to check the messages.
- ✓ Request the suspicious students to do another identity and workspace check.
- ✓ Refer to [ARO's Guidelines](#) in handling cheating cases.

3. Collect all exam submissions required.

- ✓ When the exam ends, request students to stay in the Zoom Exam Room.
- ✓ Give 5-10 minutes for students to submit their work to Canvas.
- ✓ You can ask the students to take a photo of their handwritten solutions or drawing, so they can submit them to Canvas after completing the exam. However, this would mean students will need to turn off their cameras (if the student is using a mobile phone). You may need to request them to turn their cameras ON again after submitting to Canvas.
- ✓ Remind the students that it is their responsibility to make sure that all submissions are clear and readable.
- ✓ Check submissions in Canvas to make sure all are received before dismissing students.

After exam

- If you use Canvas Quizzes as the assessment tool, you may obtain students' actions in Canvas Quizzes during the exam using the [Canvas quiz log](#).
- Review the Zoom recordings in the Zoom Exam Proctoring Accounts. **For privacy concerns, the Zoom recordings that reside in these accounts will automatically be deleted one month from the end of the exam period.**
- To comply with the data privacy policy, the Zoom recordings from the online exam with students' official names shown on them shall be used for invigilation purposes only.

VI. SUMMARY

Here is a quick checklist for proctoring online exams.

1. Request **Zoom Exam Proctoring accounts** from ITSC as soon as possible.
2. Prepare a **work procedure document** with the following information for all the proctors.
 - PIC of each Exam Room
 - [Zoom Meeting links with embedded Passcode](#)
 - Meeting IDs and Meeting Passcodes
 - Names and SIDs of students in each exam room
 - Prepare script, timing, and instructions for proctors
 - **Back-up Plan:** Arrange a backup proctor who is required to be present on the exam day in case any proctor is late or unable to attend due to sickness or personal reasons.
 - Zoom Exam Proctoring Account Username and Password (for troubleshooting purposes).
3. Set up an effective communication protocol
 - [Reserve](#) a **venue** for proctors to gather in one place for ease of coordination and communication.
 - If a [central](#) venue is not possible, have all proctors communicate with **Instant Messaging** to check in and quickly report issues on exam day.
4. Prepare the **exam instructions and ground rules** for students
 - Send all exam instructions and ground rules to students via Canvas ([See sample message](#)).
 - Distribute Zoom Meeting Links with embedded Passcode to students before the exam.
 - Remind students to [update their Zoom Desktop](#) App, and restart their computers before the dry-run/exam.
5. Schedule a **dry-run testing**, 1 week before the exam, to determine any potential issues.
 - Instructors can iron out logistic issues with the proctoring venue, equipment, computers, support, or unforeseen front-end student issues.
6. Contact relevant parties for technical support:
 - Zoom Exam Proctoring Account: cchelp@ust.hk
 - Exam Settings, Honor Code, Canvas, Zoom Meetings: canvas@ust.hk

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