

Recommendations for Conducting Online Exams

Zoom session
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Agenda

- Before the exam
- Using video and audio
- Structuring and administering the exam
- Submitting the answers
- Miscellaneous points
- Q&A

First and foremost

- Consider alternative arrangements to a traditional closed book exam
 - open-book take-home style
 - project
 - brief term paper
 - The deadline should be no later than the end time of your scheduled exam
- Having an open book exam removes many concerns
 - However, it is not advisable for the exam to exceed the allotted duration.
- If a real time online exam is unavoidable, here are some recommendations:

Before the exam

- The instructions should be communicated to students at least one week before the exam, and they should be told that **any deviations from the recommended protocol could render the exam void** for the student(s) concerned.
- Whatever procedure is followed, **carry out a dry run a few days in advance** so that students and proctors both get familiarized with the protocol and possible pitfalls are identified early.
 - Consider holding 2 or 3 mock exam sessions, each lasting maybe 5 minutes but on different days, that students can “attend” at their convenience.
 - During this session, you will give out a practice “question” (e.g., “what is your name?”) which students have to “answer” and then upload the answer following the protocol.
 - You may even penalize students who do not attend any practice session.
- Inform students that **you reserve the right to contact any student after the exam to ask them to explain their answer to any given question**. Students who cannot provide satisfactory responses to these follow-up orals risk voiding their entire exam.
- Students should **work on the exam alone in a room**. If students are found sitting together in a room doing the exam (or with anyone who is not an exam participant), they may be considered as having cheated and their exam may be void.

Using audio and video

- **Record the exam** using Zoom (in Gallery view, 7x7 mode).
 - Make sure you have informed the students that the entire session will be recorded.
- Ask students to change their Zoom account name to their Official Name + Student ID.
- Use Zoom in meeting mode in “gallery view”, so you and TAs can keep an eye on ~25 students at a time (and they don’t know whether you are watching or not).
- Ensure that **all students have their microphones on** (so you can hear any conversation at their end).
 - Students should not speak at any time during the exam. Any suspicious activities (including reading the questions aloud) may lead to voidance of the exam.
- Instruct students that they should **show their faces clearly** on the camera at all time.
 - Some students may have Zoom on their phones, and the phone may not be aimed directly at the face. They should ensure the phone actually shows their face.
- Students should **check for messages from the instructor from time to time**. You might want to contact them because their camera is off or misdirected, and they should not be able to give the excuse that they did not know the instructor was trying to contact them.
 - You might want to ask students (randomly selected, or those you suspect) to lean back and move their camera from side to side to show that they really are alone.

Proctoring of online exams with Zoom

(Prof. Brad Foreman, SSCI)

- Host can focus attention on problem cases using Pin or Spotlight
- Pinning someone makes them the Active Speaker, but only on the host's computer, and only in a Local Recording
- Participants have no name labels in Local Recordings
- Spotighting someone makes them the Active Speaker for everyone, including in the Cloud Recording
- Participants have name labels in Cloud Recordings
- Record active speaker and gallery view separately (for exams)

hkust.zoom.us > Settings > Recording > Cloud recording > Record active speaker, gallery view and shared screen separately

Structuring and administering the exam

- Right at the beginning of the exam, all students should **sign an honor code** declaring that their work is solely their own and they have not communicated with anyone other than the instructor and proctors in any way during the exam. If they have, their exam will be void.
- The two best options to administer the exam are Qualtrics (the online survey system) and Canvas. Qualtrics is more powerful, but Canvas may be more familiar.
- **Create different versions of the exam**, containing nominally different questions
- **Randomize the order of questions**, across the exam as a whole, and/or within subsets of questions, so that the question numbers are different for different people.
- **Administer the exam question by question**
 - If you want to release questions using passcodes, write the passcodes in big letters on a sheet of paper and hold the paper up to your camera.
- **Reduce the length of the exam**, so students have less “free time” to share answers.
 - You may need to reduce the number of questions and increase the points-value of each question.

Submitting the answers

- Get students to **submit the answers as they go**, rather than all the answers at the end of the exam.
 - Unfortunately, on Canvas, all files submitted previously must be submitted again, so this is a problem.
- Ask students to do their calculations by hand on blank sheets of paper, and write their student ID (or some other randomly generated ID, or put their ID card) on the paper.
 - They will need to take photos (but see next point) of these pages and upload / share with you. Thus, even if they share the image with a friend, the friend will need to spend time copying everything down.
- Instead of photos, ask students to **install and use a scanner app** (e.g., tinyscanner) on their phones.
 - This creates pdfs which are have **much smaller file sizes** than jpegs, greatly reducing problems in transmission of answers (especially for students who have poor wifi).
 - **This should be rehearsed beforehand**, because you do not want late submissions. There is no way to tell a late submission caused by poor wifi from late submission due to unauthorized collusion.

Miscellaneous points

- Take screenshots or photos or videos of the screen if you see anything unusual, as these may be used as evidence for cheating.
- Some students may express a concern that others may hire another person to do the exam for him/her by connecting two monitors and mouses. You may instruct students to share their screens besides showing their faces in front of the camera so that all suspicious activities are recorded in case of problems. Also, you may ask the students to show their handwritten papers to the screen to confirm that it is their handwriting and work before uploading.
- If you have essay questions, inform students that all answers may be run through a professional plagiarism detector.
- *If you have any additional tips and recommendations, please share!*

Good luck!

