A.   Technology requirements:

1. Ensure you have the devices needed for your exam a laptop or desktop computer with a working webcam and microphone, and possibly a tablet computer with stylus for whiteboard work. If you need to borrow a laptop contact IET.
2. You will need an active Zoom account (free version is sufficient).
3. Each device you use needs to have the Zoom app installed.
4. Check your internet connection in the room you plan to use prior to the exam, it will need to be strong and stable enough to handle the exam.
5. Headphones are recommended but not required. They will help to avoid audio feedback /echoes.
6. Check with your program if you are allowed to use a virtual background or not.
7. Please ensure all devices and wireless headphones are fully charged before the meeting and, if possible, stay plugged in during the meeting.
8. Please arrange the lighting in the room to properly light your face and work area during the exam, and minimize back-lighting (lights or windows behind you).

B.   Setting up Zoom:

1. You only need the free version of Zoom. If you have not used Zoom, you will need to set up an account and install it on both devices.
2. If you would like to better familiarize yourself with Zoom and its many settings and functions, below are links to several useful tutorials:
    a. Getting started with Zoom
    b. Zoom meeting controls
    c. Sharing your screen
    d. Create and personalize your own virtual meeting room
3. The exam committee Chair should be the one scheduling and hosting the Zoom meeting

C.   Basic instructions for Zoom:

You will need to set up **your devices** to take of the exam:

1. A laptop or desktop **computer** with a webcam, which will be used as the main device, which you will use to face and speak with committee members
2. If needed, a **tablet and stylus** (either your own or borrowed iPad, check with your college), with the Zoom app loaded. From this tablet, you will also join the meeting, (as another guest, eg "Emily's Kindle"). Once the Chair has allowed screen sharing, you will be able to select "Share Screen" and select the "Whiteboard" option on the tablet. The whiteboard will provide drawing and sketching functions.

Please **arrange the lighting in the room** to properly light your face and work area during the exam, and minimize back-lighting (lights or windows behind you)

1. You should schedule a time with your exam committee Chair to practice connecting your various devices into the meeting at least one day prior to the exam

2. Click on the link provided by your committee chair. Click on Open Zoom.us or Open Zoom Meetings. The Zoom app will open. The Chair will set up a "Waiting room" that you will go into first. **Make sure to log into the meeting at least 15 minutes before the exam starts in case you experience technical difficulties.**
3. You will have to log into the meeting on each of your devices. It is also critical that you select the following audio and video settings on each device:
   a. Computer- Allow both audio and video (default).
   b. Tablet- Do not allow either audio or video. If audio is allowed, you will hear echoes and feedback.
4. To further avoid audio feedback/echoes, it is advised that you use headphones, though this is not a requirement. If you use wireless headphones, make sure they are fully charged!
5. The Chair of your committee/ meeting host will place you in the "Waiting room" anytime the committee members need to deliberate in private. This will usually occur 2-3 times during the exam.

Your exam should not be recorded.

E. Troubleshooting

To avoid unnecessary delays due to technical issues, we recommend that you 1) schedule a practice session with your committee members a minimum of one day before the exam, and 2) on the day of the exam everyone should log into the meeting a minimum of 15 minute before the scheduled start time.

If Zoom crashes or has trouble starting up more than once, quit Zoom and try turning your computer off and back on again.

If you are experiencing **audio or video issues** (i.e. other participants cannot see or hear you), first, try leaving and re-entering the room.

If your **connection is poor** or video is not working well (freezing, etc.), try:

1. Moving closer to your wireless router
2. Turning off your video
3. Turning off all video except the person questioning the candidate
4. If suggestions 1-3 above do not resolve the issue, consider asking other members of your household to avoid high-bandwidth activities, i.e. Netflix, other video calls, Fortnite, etc. during the exam.
5. Leave the Zoom meeting and re-join using your phone

If there is substantial audio feedback / echoes, mute your microphones when not speaking and/or switch to headphones.

F. Covid-related Mental Health Services:

Finally, the time preparing for your exam is one of the more stressful times of graduate school under the best of circumstances, not to mention during a global pandemic! Please do not hesitate to reach out to a professional if you need someone to talk to. COVID-related mental health resources can be found [here](#), and the counseling services at the Student Health Center can be reached [here.](#)