Abdullah: I don't know how he actually emails, but I heard from doctor Johnson that he might like not that much active with the emails. So, when you send them EMAIL, just CC DR. Johnson, get back to the doctor Johnson. If you like, you can also CC me. And then I'll try to go to the lab. And check with him. Because he's mainly working in and as a RA not TA. I don't know actually, but he is working with the project, you need to keep like urging him by your emails. This is the best way, because the one like know everything about the lab and the equipment.

Yuhao Li: We invite him to today's meeting, but we not sure I know I he was you.

Abdullah: Just you know, keep knocking the door and CC doctor Johnson. I lost EMAIL from Harry. I see, he's like has made the set up for your equipment. Right?

Yifan Zhu: Yes.

Docotor Li: It seems everyone is here. So, we can start the meeting.

Yifan Zhu: Hi, doctor Johnson. We have we have received your message that Harry China will be our TA who help us implement the lab remotely.

Doctor Johnson: But he'll be one of Abdullah said he was gonna help also.

Yuhao Li: Shall we schedule the left hand and set up the things like connection?

Doctor Johnson: You should work with Abdullah and Hari to set things up.

Yuhao Li: I can we set up the time today that.

Doctor Johnson: Hari is not on. If you want, I can walk down to the lab and see if he's there. In my mind, I'm about the meeting.

Yuhao Li: 4thFor the labs. We have several concerns. I know it's better for us to perform as after three, perhaps in pacific standard time. But I think and also okay with the time in the morning like 8 or 9

o'clock. If we do labs, is it necessary to have any grading standards or just to make students familiar with the equipment.

Doctor Johnson: Now usually for the labs, the students will be getting familiar with the equipment they are gonna need to connect the system, have it run through a set of tasks. But then they also have to write a lab report. In the lab report is usually where the grade is coming from. The base of the lab report is whether things worked right or not. But in part of it is how well they write up and describe their results. That's one of the things we grade the lab reports on.

Yuhao Li: Yeah, if we do lab remotely that we could do it step by step. But what about the instruction?

Doctor Johnson: If you look at what the previous team did last year, they put down steps. They had a handout for the TA so TA guides, but they also had a set of steps for the students taking in the lab.

Yuhao Li: Yeah, I mean, for TA and students. Do we need to schedule a time that they finish the lab at a specific time?

Doctor Johnson: No. Not really part of your project. Because your team aren't the TA as you're developing a lab that the TA would be able to do with the students or the students would be able to do.

Yuhao Li: So, we don't need to consider the time when how long it takes to finish?

Doctor Johnson: You do wanna think about how long it's gonna take to do it.

Yuhao Li: For every lab and for each student and TA, I mean one student to finish. And how long does it take?

Doctor Johnson: Yeah, I would like to shoot for these labs to be ones that could be done in about 30 minutes to maybe 50 or 55 minutes. So, this isn't something that's supposed to be 3 hour labs like the that's Junior level classes.

Yuhao Li: For the procedure like connecting the wire. What if we skip these parts?

Doctor Johnson: A paramount of the wiring would have to be done by the TA, right? There may be things where they may remotely, we may have some switch contacts. They could close. But for the most part, there to a degree that has to be wired before they get there.

Yuhao Li: Do they have pre-labs?

Doctor Johnson: No, I so you can define what they would be, what they should do before they come to the lab.

Yuhao Li: Yeah, I think that's we could make some make sense to have some preparations for relapse. Right? My things all making well and considering the senior design team last year they main object was to make students get familiar with the equipment, but we will improve a little bit like do some wire connection, practice or this kind of things. To avoid, say. Don't know. We don't know about the one connection.

Doctor Johnson: Not only they want to have pictures of how the wiring is has been done.

Yuhao Li: I think the picture is not clear enough for me. I checked several lab steps, and procedures. For me, I don't think I 100 % to understand what's they are connecting. So, is that necessary to show a video to how to connect the wires?

Doctor Johnson: I we could supplement it. Since the remote students aren't gonna be able to connect the wires. In having a video showing the TA connecting the wires, it might be a useful learning experience. Some of that is learning the connect of wires is that what we want students to learn from the lab like the ECE 420 lab, for example, for the on-campus students, in a normal year without COVID. Normally, what we would do is the TA would have the experiments set up for the students when they come to class, then they would actually have a set of experiments that they would run and record data, because the purpose of the labs is to learn about three phase transformers or the learn about synchronous machines or learn about induction machines. And so, wiring

them is not necessarily is an important part of the learning on that one as seeing how the machine behaves and taking the results. So, the lab one, you might want to change it. You may have this free lab video that they watch to see how things are wired. But the lab one, probably the main thing that I have one is gonna learn how to interact with the equipment remotely. Because the last year, even though didn't have some wire in the wiring, was not the important part of lab one. Lab one was really more learning how to you how do get the data and how to interpret the data.

Yuhao Li: Is it complex? Complex to connect the VPN to the others? I'm not sure.

Doctor Johnson: Once we get everything set up, right? It's probably not gonna be that difficult. But it is a first step for the remote lab so that people have something so that people can verify as connected, right? Even if it's something where all they're gonna do, if they're doing remote desktop, just show that they can open a window or manipulate something in the window. They'll know what, they have connected successfully.

Yuhao Li: What if we want to do the labs, how many times we can do in a week?

Doctor Johnson: Some of these ones that remote desktop is set up if you don't need the TA there for doing or need Abdullah or a Hari in the room, there may be some of the things you can do without them connected. They are set up and enabled. They may be able to leave some of the things set up for you.

Yuhao Li: If Abdullah is assisting with us and what time is convenient for you to engaging us?

Abdullah: Actually, I have somehow free time to meet with you, but we need first to confirm with Hari. It's better to send to hurry EMAIL. What is his free time than I can accommodate my time to match with his time?

Doctor Johnson: Let me go if he's in the lab right now, because there's a good chance if he is.

Abdullah: So, I think we need Hari because he's the important person in the specific task. So, when we get a confirmation from him, I can accommodate my time somehow. Move my time from here to here. Because usually what I think Hari is most probably is free. I don't know. I would let us hear from him, but most probably like afternoon, he's free afternoon. I think this time would work with you even at night. He works at night. Usually when I go to the university at night. I see him there. Let's hear from him. So, how is your preparation for expo and design review?

Yuhao Li: We are thinking about it. And since we don't start the labs. Actually we are very confused.

Abdullah: Let us finish this matter like with Harry this week, like set up a time. And then, try to manage that.

Yuhao Li: That's good.

Abdullah: Best of luck.

Yuhao Li: Yeah, thank you.

Doctor Li: The 24th, you have like 3 weeks. I think 24th. Would it be okay to do a review?

Yuhao Li: Yeah, I think so

Yifan Zhu: Yeah, I think so.

Abdullah: Yeah. Actually, if we set a time and somehow succeed in the first lab. Then this is a good progress.

Doctor Li: How was your connection? I remembered you tried to connect to your computer. Yeah, this is the work you're talking about. I remembered in your first design review, you wanted to make a connection between two computers. Firstly, we test between you are two computers and then connect computer university. Have you done so?

Yifan Zhu: The connection between like between Yuhao and me is successful. However, we haven't tested the connection between here and the university of Idaho.

Doctor Li: How about you? Like, have I should be similar? I just mean, should be similar. That's the one just connected to UI VPN the other one, and doesn't connect to your VPN. It should' ve worked. It's the same thing.

Yifan Zhu: Like the X2GO, the software we connected in ECE445 labs. The distance should not be a problem, I think.

Doctor Li: So, for ECE445, have you tried for it? So, do you experience a lot of delays or it's just pretty quick?

Yifan Zhu: A little bit delay, I think, but I don't think that kind of delay will not affect us.

Doctor Li: I guess here, you should use windows, right?

Yifan Zhu: Yes.

Doctor Li: So, you're going to. Yeah. Johnson comes in.

Doctor Johnson: The door for the lab was open, but he wasn't in there. There's no one in there when the door was open. So, I don't know if he left it open or someone else did. He's not there right now. Once you guys send an EMAIL to him and copy me. I will also remind him.

Yuaho Li: I think all the things we want to discuss today, and do you have any questions for us?

Doctor Johnson: Another part of your work, this spring was also gonna be the stuff using the network emulator. I thought you were also gonna be using network emulator software. You talked about that in your last design review.

Yuaho Li: But we want to first leave us remotely control if it's successful we want to do all these labs by using this method.

Doctor Johnson: So, would you just be trying to do the labs from the group last year and not the 444 labs?

Doctor Li: So good question, maybe for doctor Johnson. So, there's a computer in the power lab with IP for students to connect. I have a similar problem. So, firstly, I know like VISL design. So, this kind of

we connect to a virtual machine. And the thing on a senior design, not this one. First, I try to build an IP connection, but it looks like, I'm not sure it looks like to me. They don't want to offer it to me. Because they haven't got an answer to me. In your power lab, is there an external kind of IP or a general IP?

Doctor Johnson: I did for the team. Did you guys get any EMAIL from the university help desk, specifically from a person named Mike?

Yuaho Li: Let me check.

Doctor Li: You mean the Mike in the ECE?

Doctor Johnson: Yes. So, he's the one that's setting up the remote desktop on the computer. He asked for the EMAIL addresses for the students on the team.

Yuaho Li: I don't receive any EMAIL from the name, Mike.

Yifan Zhu: Yeah. me neither.

Doctor Johnson: Okay, so it sounds like I need to send him a reminder too. I'm putting the IP address for the computer in the chat, but until he has the remote desktop stuff turned on, it's probably not gonna be what's good.

Doctor Li: So, is this the IP that student can connect?

Doctor Johnson: That's the one he's gonna set up for it.

Doctor Li: Nice. So, is this for windows or UNIX?

Doctor Johnson: Windows 10. The older versions of windows, we weren't allowed to connect to the campus network anymore. Unless you turn off the features of windows that identify what operating system is.

Doctor Li: So, for UNIX, we just can connect looks like several always on and connect any times. So, does windows take the same thing? Nice. So, have you tried? I mean, the team.

Doctor Johnson: This is the first time they know about it. They didn't know the IP address for the computer.

Doctor Li: Sorry, you are right. So, for ECE445 and ECE465, other of only students connect UNIX virtual machines. They should be pretty familiar with the procedure. They know they can't. They need it there. No special account needed, right? So just the vandal account so that they should be able to log in.

Doctor Johnson: Yeah. So, it's just there are some permissions that have to be set to the computer and it will answer if somebody starts from the remote desktop. You can remember the users have access to it.

Yifan Zhu: By the way, what's Mike's EMAIL? Shall we just send a message to Mike directly or we sent to Mike personally?

Doctor Johnson: I'm actually writing an EMAIL to him while we're talking.

Yifan Zhu: Thank you.

Doctor Li: Maybe you can talk a little bit about their plan for design review. So, we have put the final design review on the 19th, February. Guess we need an extra time, because I was in the design particularly. Yes, they plan for the February 24th hopefully.

Doctor Johnson: At this time then or?

Doctor Li: The same time right the same. One day, 3:30, team, set a deadline. This at least for you which can push you too. Work hard. And what else in your agenda? No more things?

Yifan Zhu: I think that's all.

Doctor Li: Yeah. Get in touch,

Yifan Zhu: Thank you for your time.

Doctor Li: Yeah, see you next week.

Doctor Johnson and Abdullah: Yeah, see you next time.

Yuhao Li, Yifan Zhu and Yi Ding: Bye