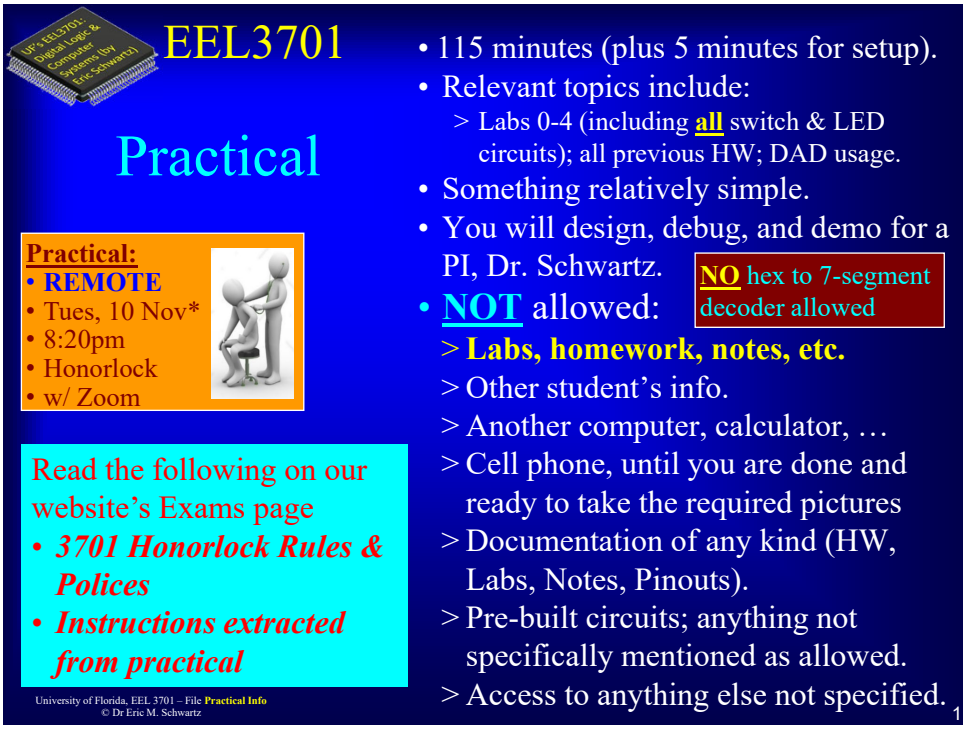
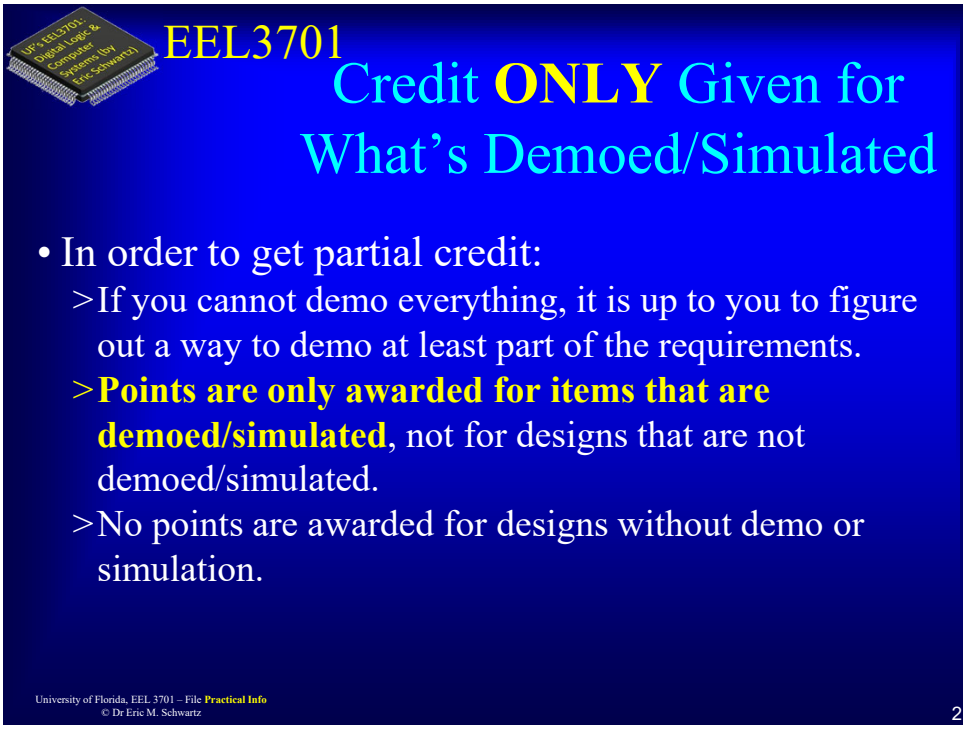
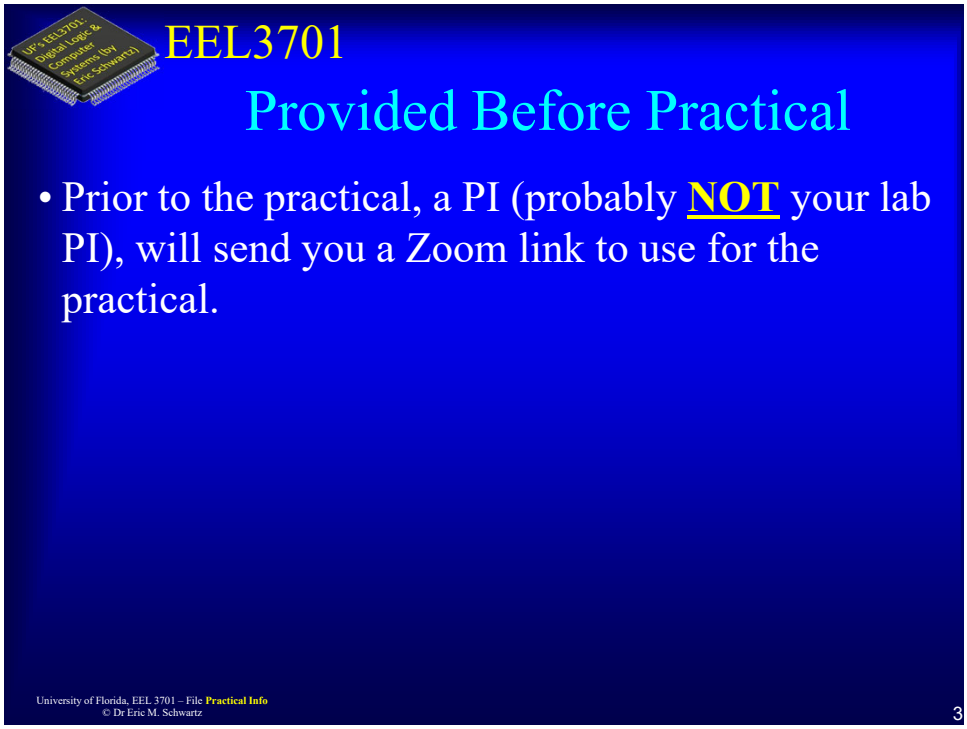

EEL3701
Practical
Practical:
• REMOTE
• Tues, 10 Nov*
• 8:20pm
• Honorlock
• w/ Zoom
Read the following on our website's Exams page
• 3701 Honorlock Rules & Polices
• Instructions extracted from practical
• 115 minutes (plus 5 minutes for setup).
• Relevant topics include:
> Labs 0-4 (including all switch & LED circuits); all previous HW; DAD usage.
• Something relatively simple.
• You will design, debug, and demo for a PI, Dr. Schwartz.
• NOT allowed:
NO hex to 7-segment decoder allowed
> Labs, homework, notes, etc.
> Other student's info.
> Another computer, calculator, …
> Cell phone, until you are done and ready to take the required pictures
> Documentation of any kind (HW, Labs, Notes, Pinouts).
> Pre-built circuits; anything not specifically mentioned as allowed.
> Access to anything else not specified.
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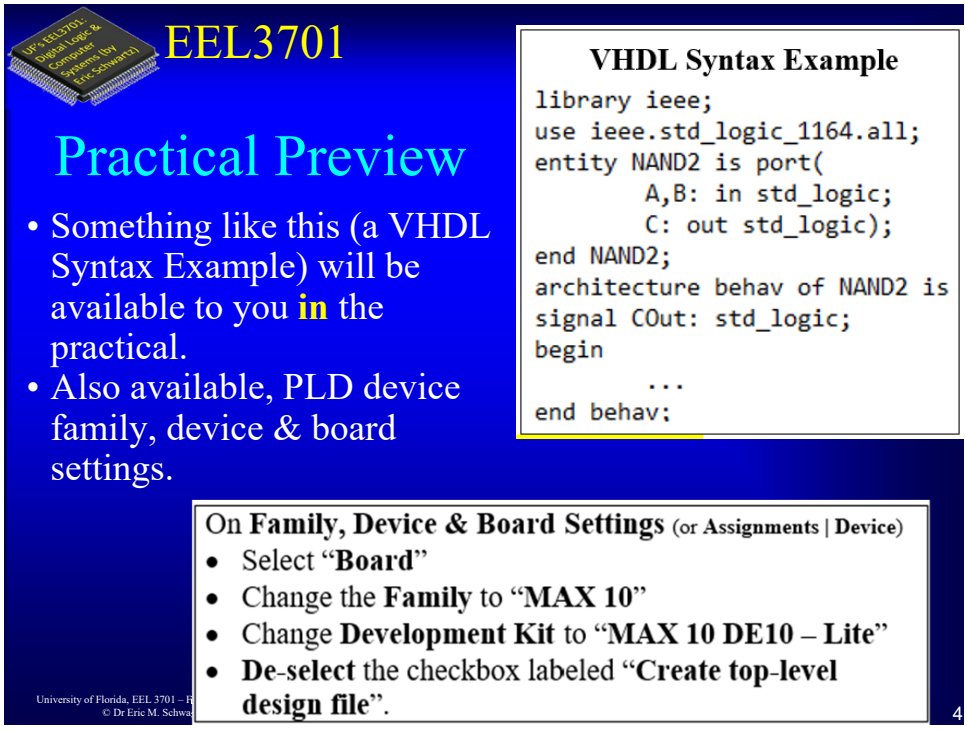
•1


EEL3701
Credit ONLY Given for What's Demoed/Simulated
• In order to get partial credit:
>If you cannot demo everything, it is up to you to figure out a way to demo at least part of the requirements.
>Points are only awarded for items that are demoed/simulated, not for designs that are not demoed/simulated.
>No points are awarded for designs without demo or simulation.
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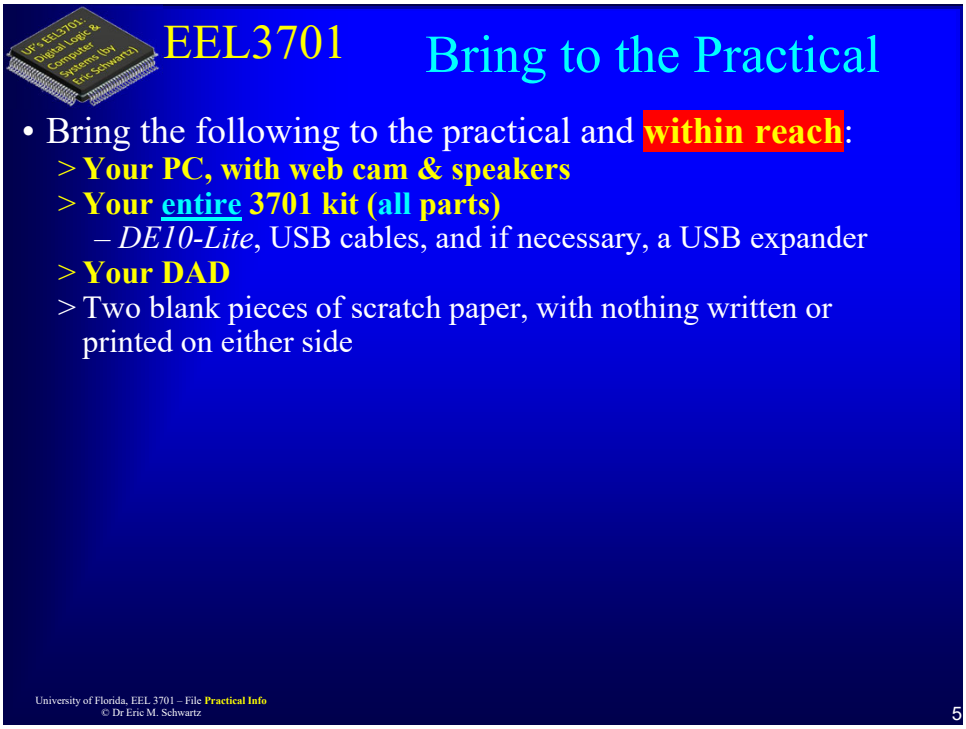
•2


EEL3701
Provided Before Practical
• Prior to the practical, a PI (probably NOT your lab PI), will send you a Zoom link to use for the practical.
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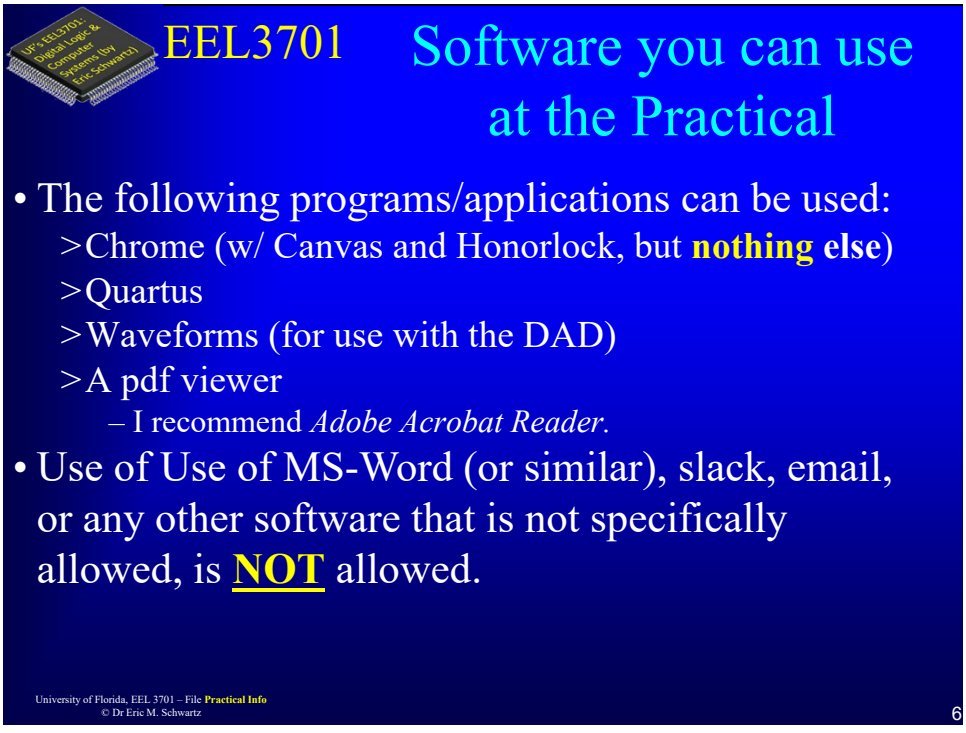
•3


EEL3701
Practical Preview
• Something like this (a VHDL Syntax Example) will be available to you in the practical.
• Also available, PLD device family, device & board settings.
VHDL Syntax Example
library ieee;
use ieee.std_logic_1164.all;
entity NAND2 is port(
A,B: in std_logic;
C: out std_logic);
end NAND2;
architecture behav of NAND2 is
signal COut: std_logic;
begin
...
end behav;
On Family, Device & Board Settings (or Assignments | Device)
• Select "Board"
• Change the Family to "MAX 10"
• Change Development Kit to "MAX 10 DE10 – Lite"
• De-select the checkbox labeled "Create top-level design file".
4

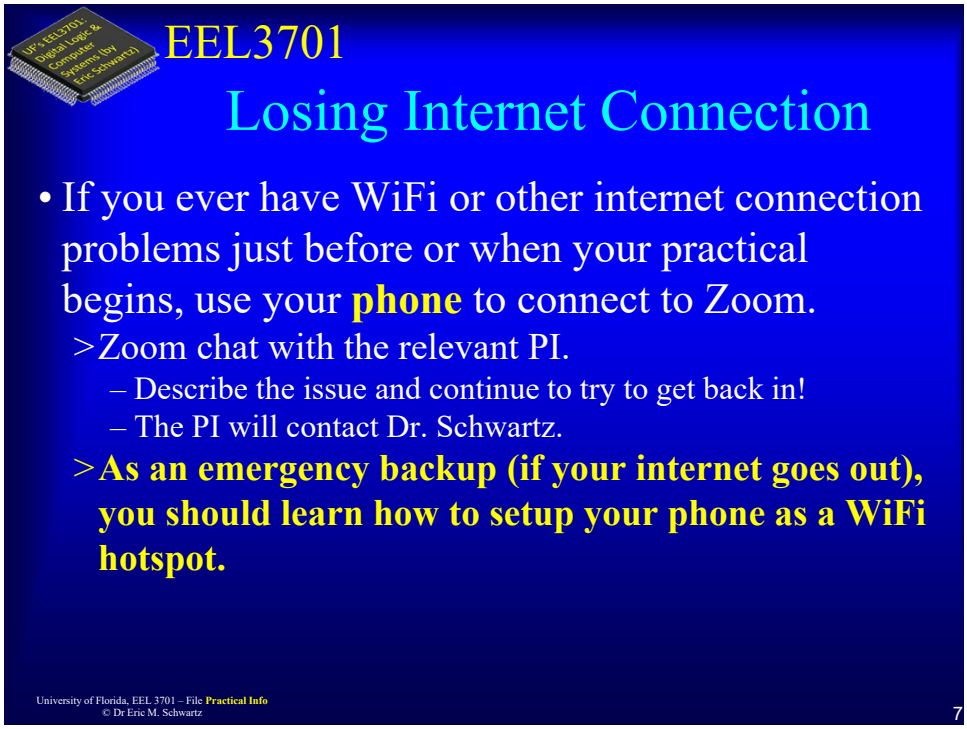
•4


EEL3701
Bring to the Practical
• Bring the following to the practical and within reach:
> Your PC, with web cam & speakers
> Your entire 3701 kit (all parts)
– DE10-Lite, USB cables, and if necessary, a USB expander
> Your DAD
> Two blank pieces of scratch paper, with nothing written or printed on either side
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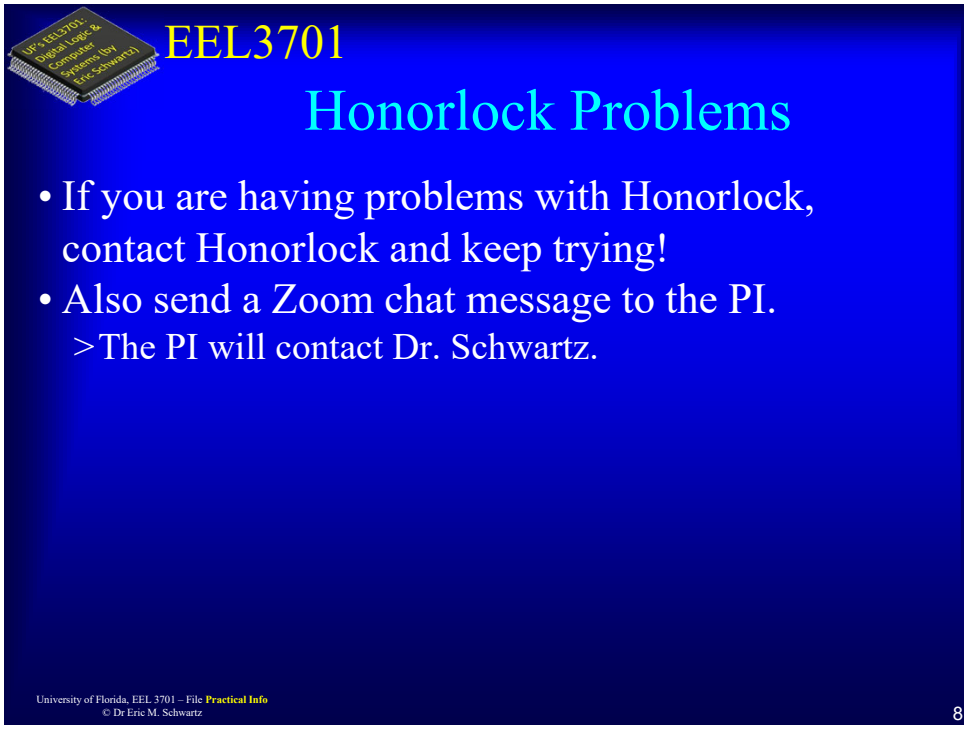
•5


EEL3701
Software you can use at the Practical
• The following programs/applications can be used:
>Chrome (w/ Canvas and Honorlock, but nothing else)
>Quartus
>Waveforms (for use with the DAD)
>A pdf viewer
– I recommend Adobe Acrobat Reader.
• Use of Use of MS-Word (or similar), slack, email, or any other software that is not specifically allowed, is NOT allowed.
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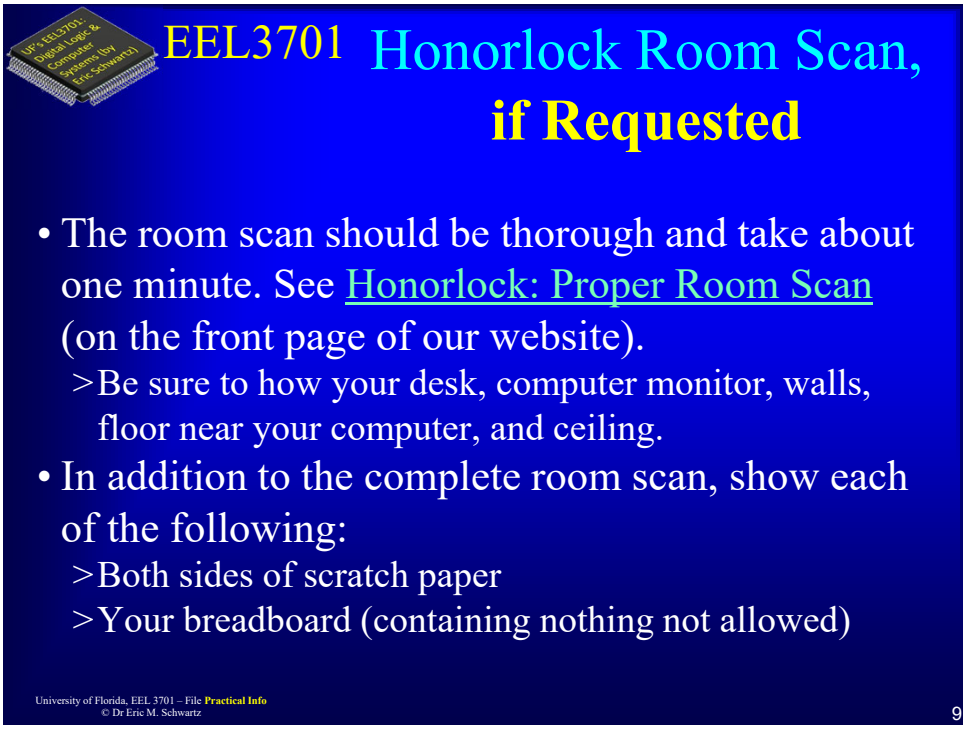
•6


EEL3701
Losing Internet Connection
• If you ever have WiFi or other internet connection problems just before or when your practical begins, use your **phone** to connect to Zoom.
>Zoom chat with the relevant PI.
– Describe the issue and continue to try to get back in!
– The PI will contact Dr. Schwartz.
>**As an emergency backup (if your internet goes out), you should learn how to setup your phone as a WiFi hotspot.**
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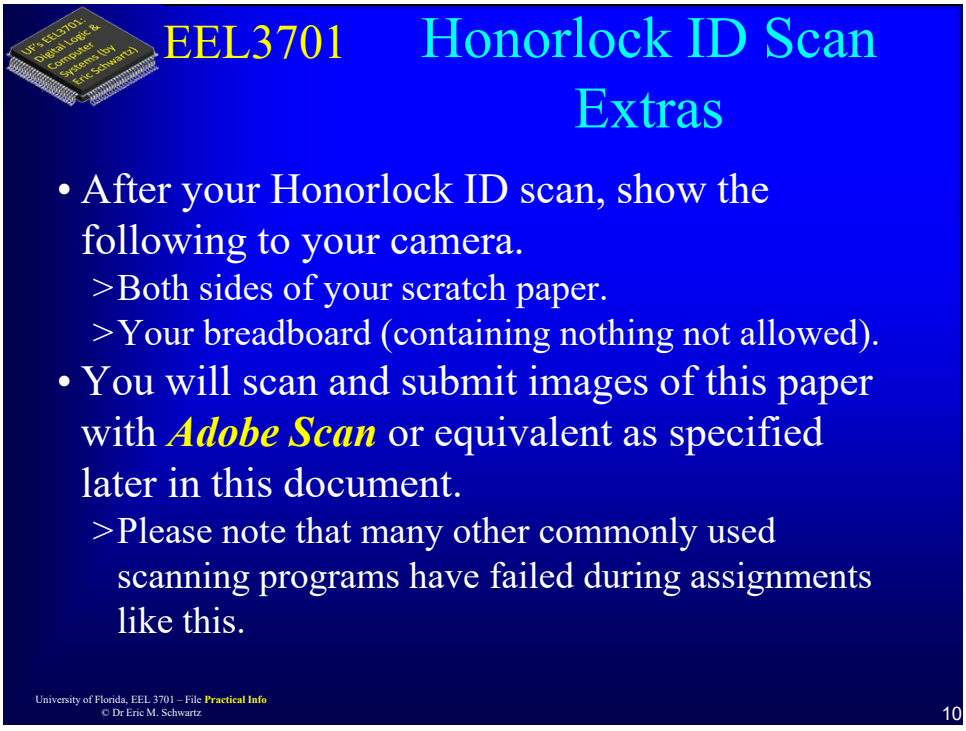
•7


EEL3701
Honorlock Problems
• If you are having problems with Honorlock, contact Honorlock and keep trying!
• Also send a Zoom chat message to the PI.
>The PI will contact Dr. Schwartz.
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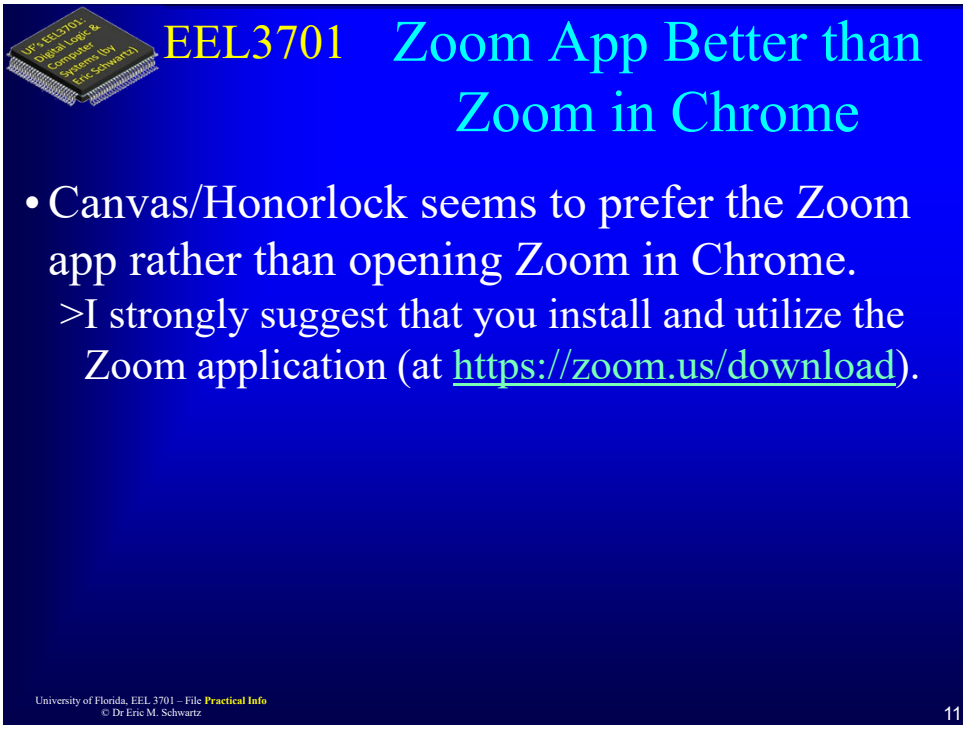
•8


EEL3701 Honorlock Room Scan, if Requested
• The room scan should be thorough and take about one minute. See Honorlock: Proper Room Scan (on the front page of our website).
>Be sure to how your desk, computer monitor, walls, floor near your computer, and ceiling.
• In addition to the complete room scan, show each of the following:
>Both sides of scratch paper
>Your breadboard (containing nothing not allowed)
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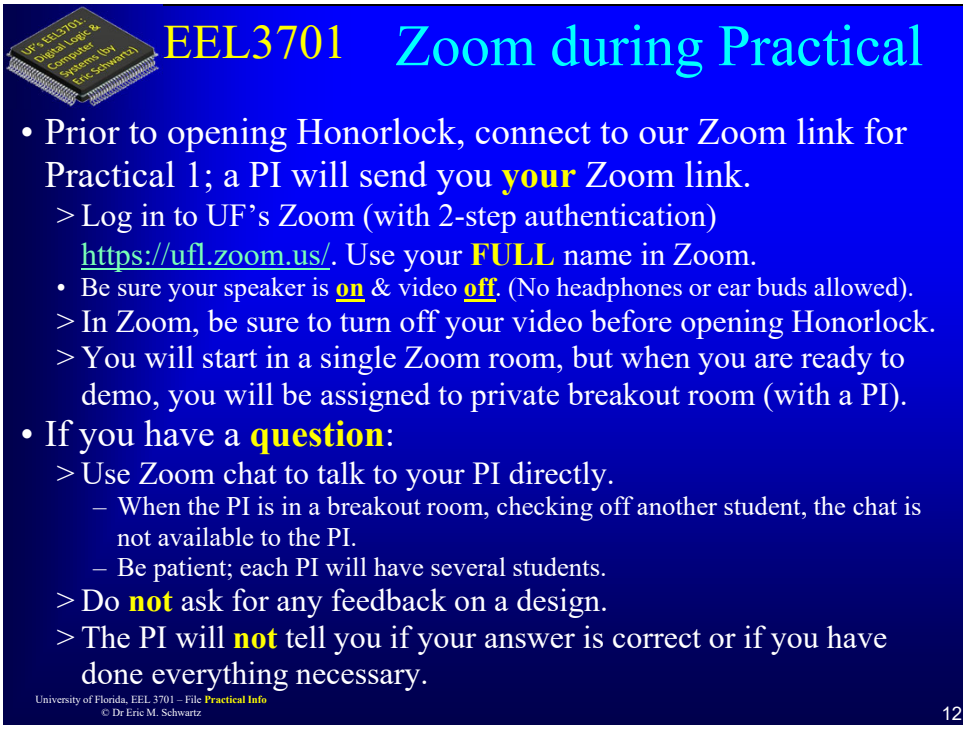
•9


EEL3701 Honorlock ID Scan Extras
• After your Honorlock ID scan, show the following to your camera.
>Both sides of your scratch paper.
>Your breadboard (containing nothing not allowed).
• You will scan and submit images of this paper with Adobe Scan or equivalent as specified later in this document.
>Please note that many other commonly used scanning programs have failed during assignments like this.
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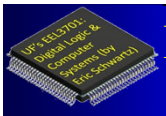
•10


EEL3701 Zoom App Better than Zoom in Chrome
• Canvas/Honorlock seems to prefer the Zoom app rather than opening Zoom in Chrome.
>I strongly suggest that you install and utilize the Zoom application (at https://zoom.us/download).
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EEL3701 Zoom during Practical
• Prior to opening Honorlock, connect to our Zoom link for Practical 1; a PI will send you your Zoom link.
> Log in to UF's Zoom (with 2-step authentication) https://ufl.zoom.us/. Use your FULL name in Zoom.
• Be sure your speaker is on & video off. (No headphones or ear buds allowed).
> In Zoom, be sure to turn off your video before opening Honorlock.
> You will start in a single Zoom room, but when you are ready to demo, you will be assigned to private breakout room (with a PI).
• If you have a question:
> Use Zoom chat to talk to your PI directly.
– When the PI is in a breakout room, checking off another student, the chat is not available to the PI.
– Be patient; each PI will have several students.
> Do not ask for any feedback on a design.
> The PI will not tell you if your answer is correct or if you have done everything necessary.
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•12

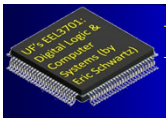


EEL3701

More Info

- **DURING** the practical
  - >Use of MS-Word (or similar), slack, email, or any other software that is not specifically allowed, is **NOT** allowed.
  - >No physical phone connection to your computer is allowed.
  - >No printer/scanner is allowed.
- Be sure to **view** the file on your phone **before** submission to assure that it is **complete and clear**.
- Bring **two** completely blank pieces of paper and pens/pencils.

•13

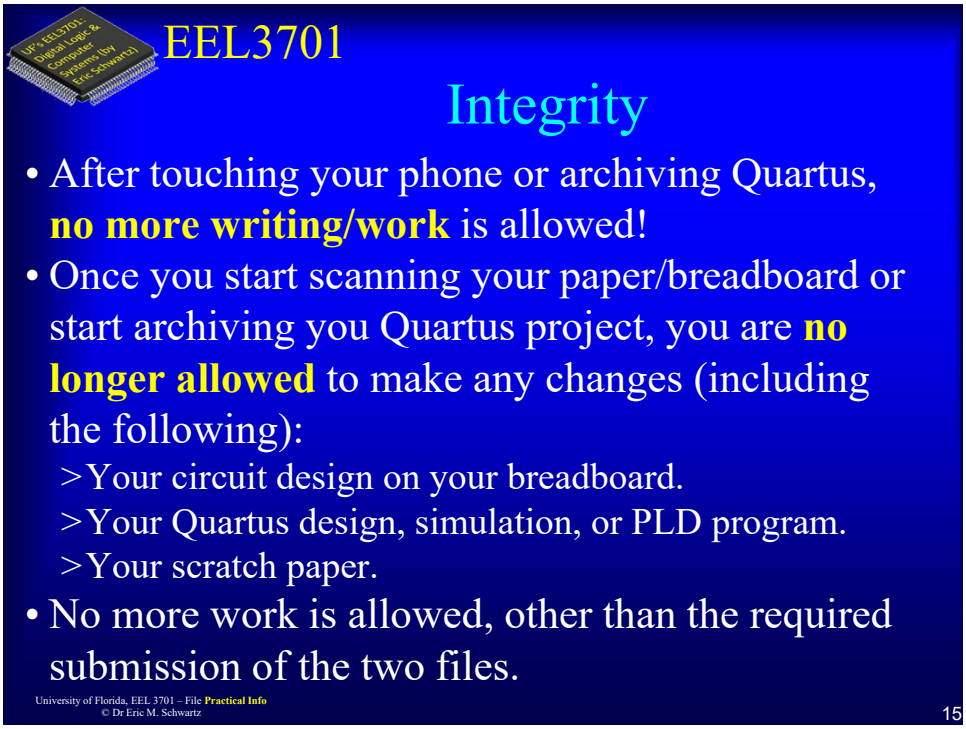


EEL3701

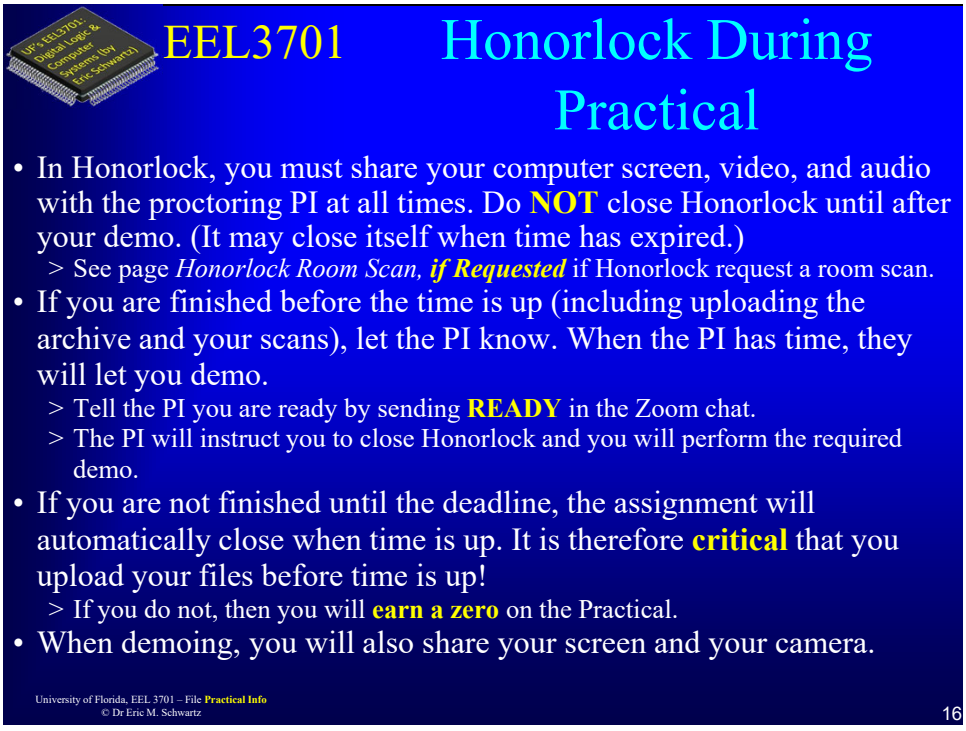
Paper Submission at End of Practical

- Only after you are completed the rest of the exam (or when 5 minutes are remaining), do the following.
  - >**Archive** your work in **Quartus**.
    - – Upload the Quartus archive to your Canvas/Honorlock quiz.
  - >Use your cell phone and *Adobe Scan* (or similar) to create a **SINGLE PDF** file.
    - – After picking up your phone, **no more writing/work** is allowed!
    - – Take a clear picture of your breadboard, w/ DE10, and DAD **from the top**, so that all wiring is visible.
    - – Take a clear picture of each utilized side of your scratch paper.
      - ▪ The scratch paper must include the **switch/LED legends**.
    - – All of this should be in a **SINGLE PDF** file. View the file on your phone before submission to assure that it is complete.
    - – Upload this **SINGLE** file to the ***Pr1 – PHONE*** Canvas assignment.

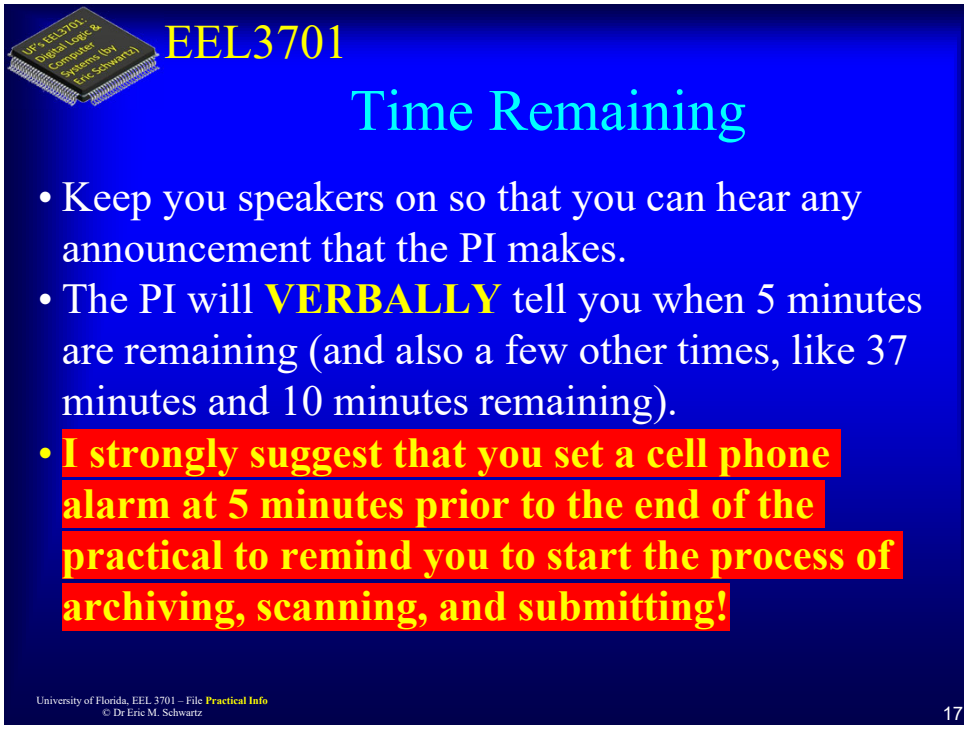
•14


EEL3701
Integrity
• After touching your phone or archiving Quartus, no more writing/work is allowed!
• Once you start scanning your paper/breadboard or start archiving you Quartus project, you are no longer allowed to make any changes (including the following):
>Your circuit design on your breadboard.
>Your Quartus design, simulation, or PLD program.
>Your scratch paper.
• No more work is allowed, other than the required submission of the two files.
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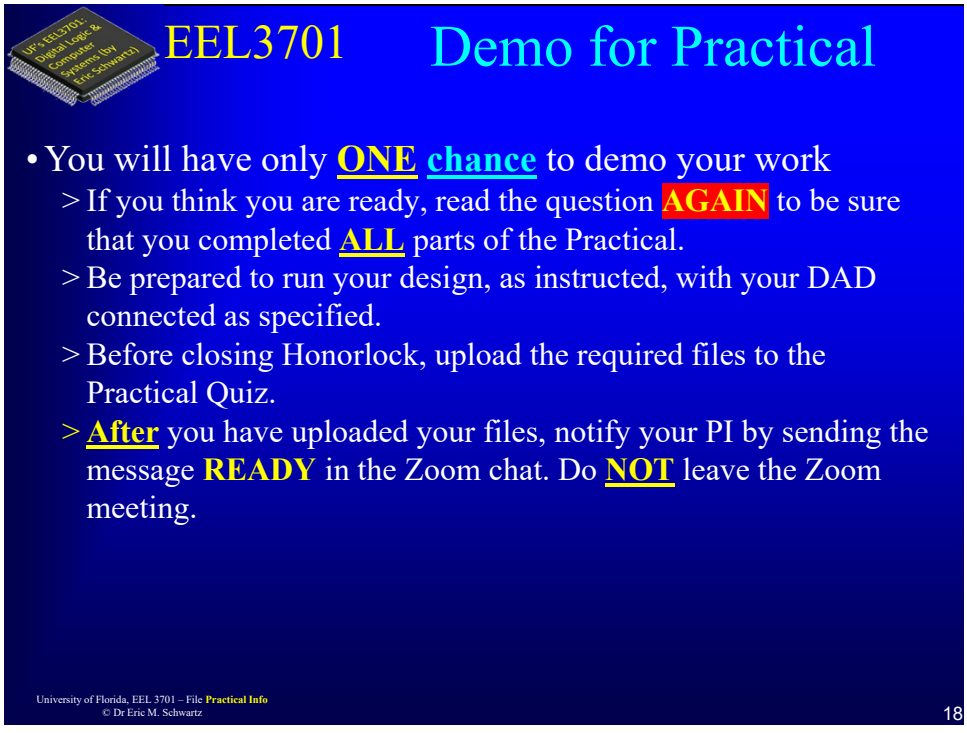
•15


EEL3701
Honorlock During Practical
• In Honorlock, you must share your computer screen, video, and audio with the proctoring PI at all times. Do NOT close Honorlock until after your demo. (It may close itself when time has expired.)
> See page Honorlock Room Scan, if Requested if Honorlock request a room scan.
• If you are finished before the time is up (including uploading the archive and your scans), let the PI know. When the PI has time, they will let you demo.
> Tell the PI you are ready by sending READY in the Zoom chat.
> The PI will instruct you to close Honorlock and you will perform the required demo.
• If you are not finished until the deadline, the assignment will automatically close when time is up. It is therefore critical that you upload your files before time is up!
> If you do not, then you will earn a zero on the Practical.
• When demoing, you will also share your screen and your camera.
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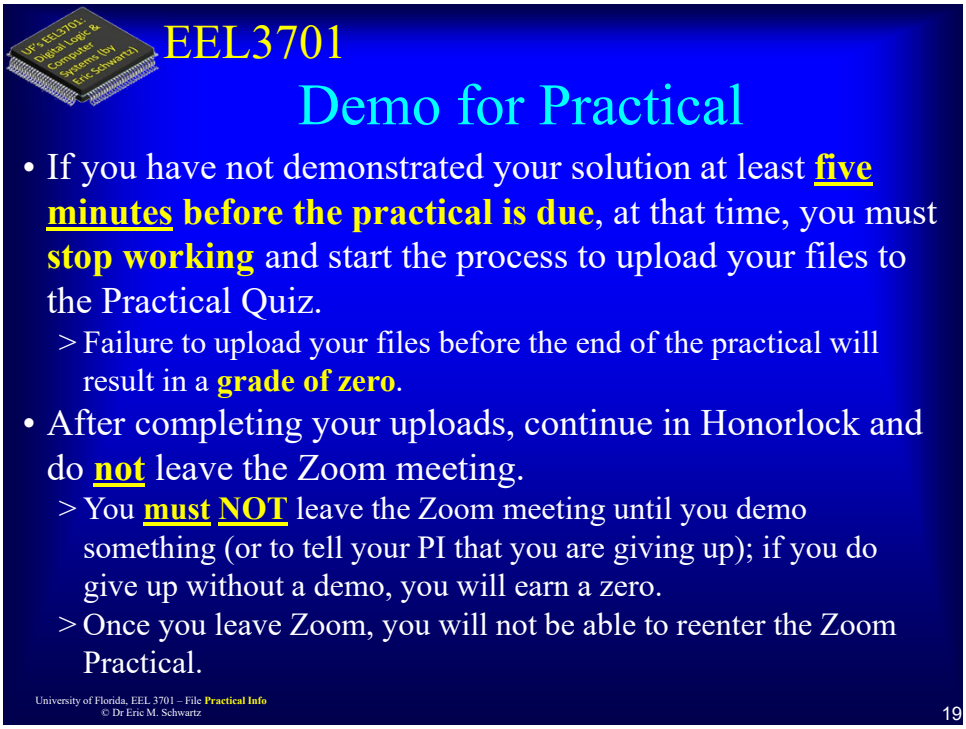
•16


EEL3701
Time Remaining
• Keep you speakers on so that you can hear any announcement that the PI makes.
• The PI will VERBALLY tell you when 5 minutes are remaining (and also a few other times, like 37 minutes and 10 minutes remaining).
• I strongly suggest that you set a cell phone alarm at 5 minutes prior to the end of the practical to remind you to start the process of archiving, scanning, and submitting!
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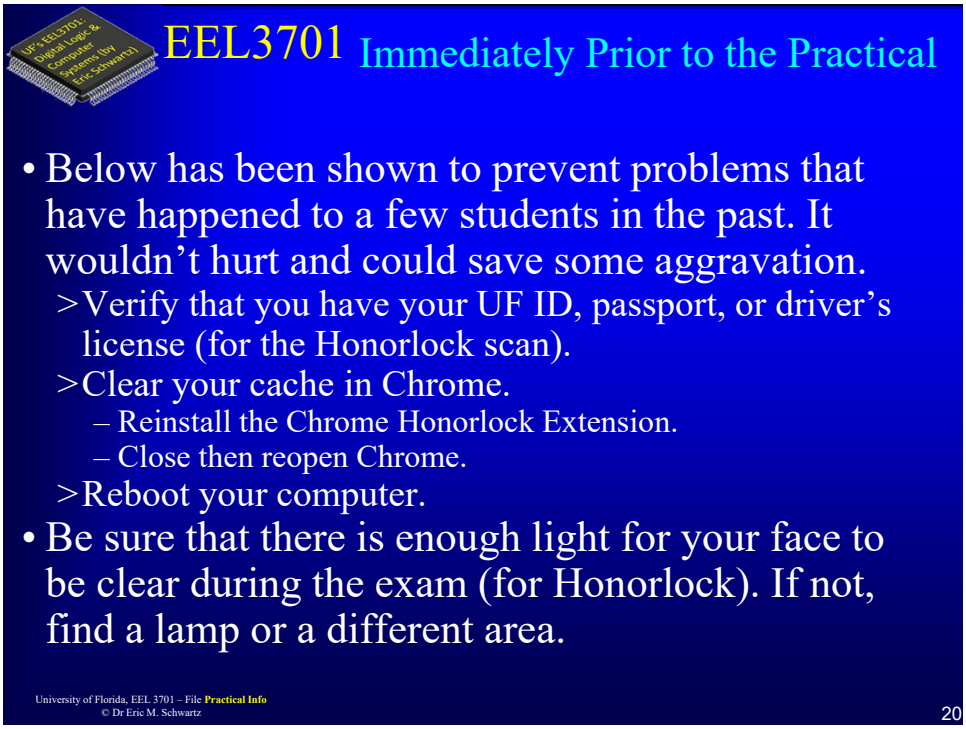
•17


EEL3701
Demo for Practical
• You will have only ONE chance to demo your work
> If you think you are ready, read the question AGAIN to be sure that you completed ALL parts of the Practical.
> Be prepared to run your design, as instructed, with your DAD connected as specified.
> Before closing Honorlock, upload the required files to the Practical Quiz.
> After you have uploaded your files, notify your PI by sending the message READY in the Zoom chat. Do NOT leave the Zoom meeting.
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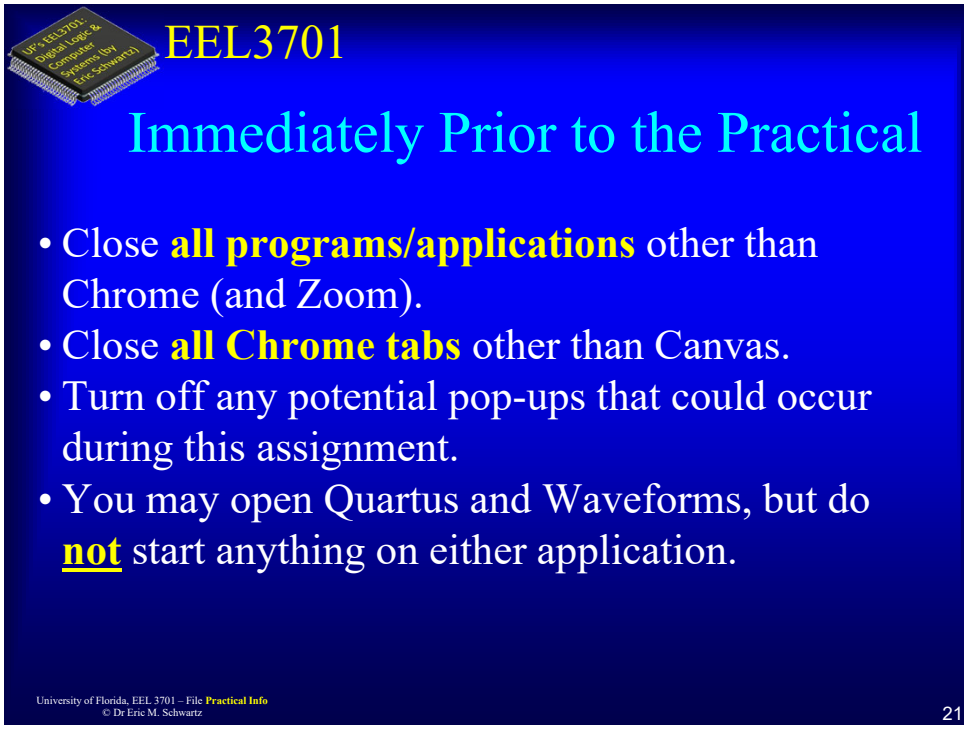
•18


EEL3701
Demo for Practical
• If you have not demonstrated your solution at least five minutes before the practical is due, at that time, you must stop working and start the process to upload your files to the Practical Quiz.
> Failure to upload your files before the end of the practical will result in a grade of zero.
• After completing your uploads, continue in Honorlock and do not leave the Zoom meeting.
> You must NOT leave the Zoom meeting until you demo something (or to tell your PI that you are giving up); if you do give up without a demo, you will earn a zero.
> Once you leave Zoom, you will not be able to reenter the Zoom Practical.
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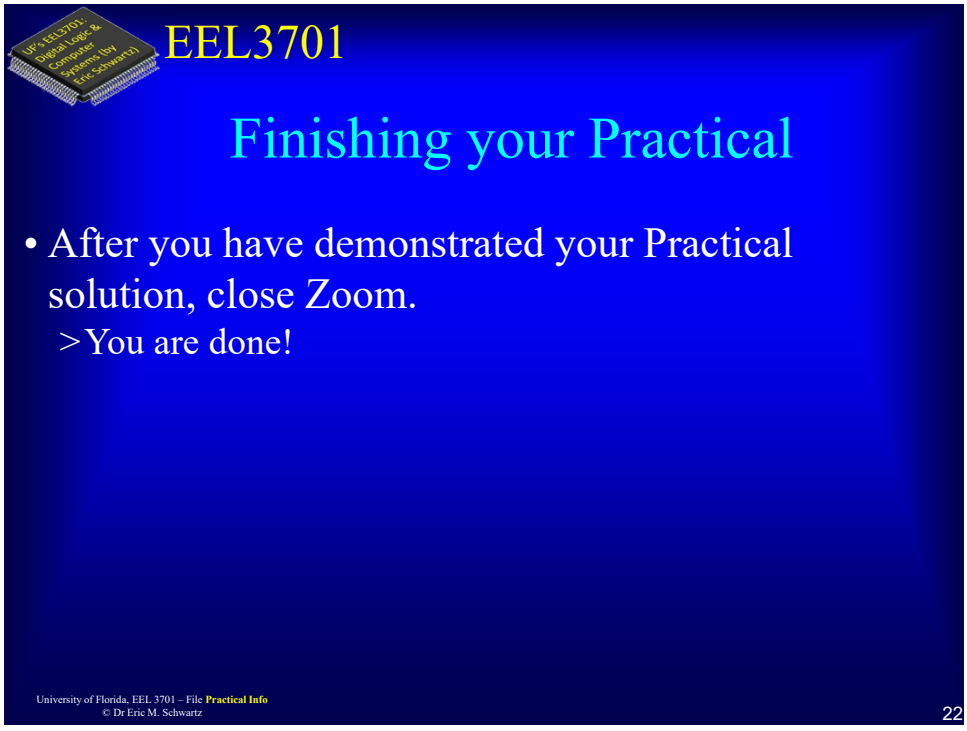
•19


EEL3701 Immediately Prior to the Practical
• Below has been shown to prevent problems that have happened to a few students in the past. It wouldn't hurt and could save some aggravation.
>Verify that you have your UF ID, passport, or driver's license (for the Honorlock scan).
>Clear your cache in Chrome.
– Reinstall the Chrome Honorlock Extension.
– Close then reopen Chrome.
>Reboot your computer.
• Be sure that there is enough light for your face to be clear during the exam (for Honorlock). If not, find a lamp or a different area.
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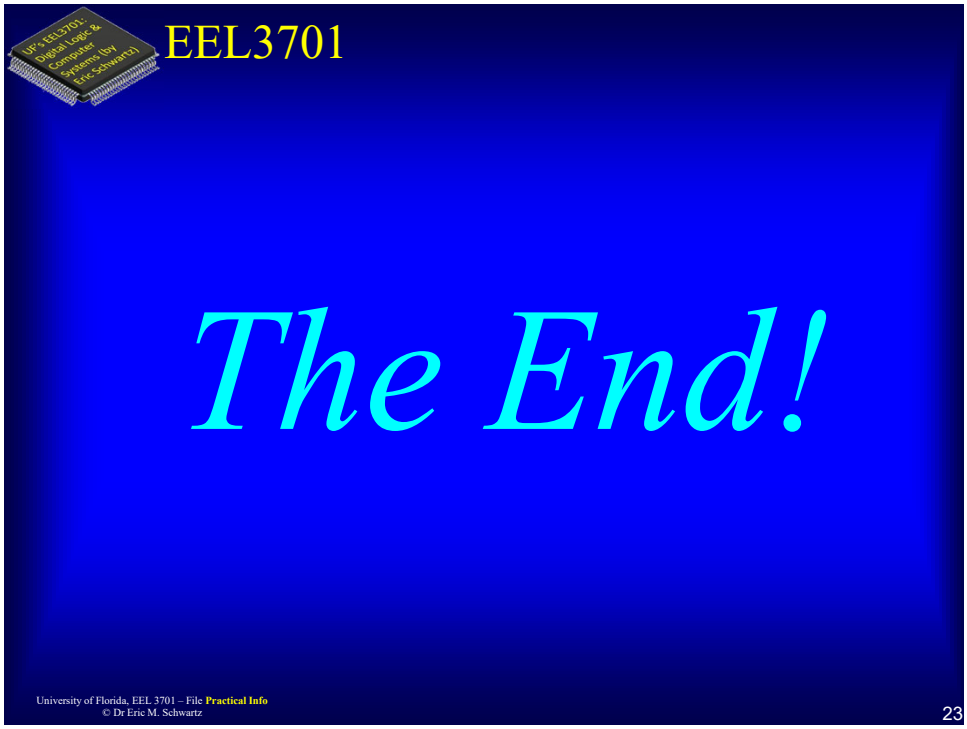
•20


EEL3701
Immediately Prior to the Practical
• Close all programs/applications other than Chrome (and Zoom).
• Close all Chrome tabs other than Canvas.
• Turn off any potential pop-ups that could occur during this assignment.
• You may open Quartus and Waveforms, but do not start anything on either application.
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EEL3701
Finishing your Practical
• After you have demonstrated your Practical solution, close Zoom.
>You are done!
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UF's EEL3701: Digital Logic & Computer Systems (by Eric Schwartz)
EEL3701
The End!
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