Welcome! As you enter the room, please…
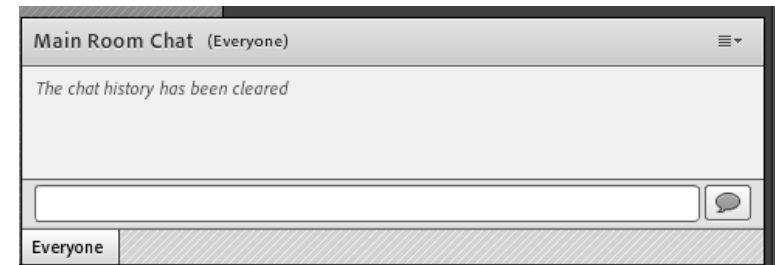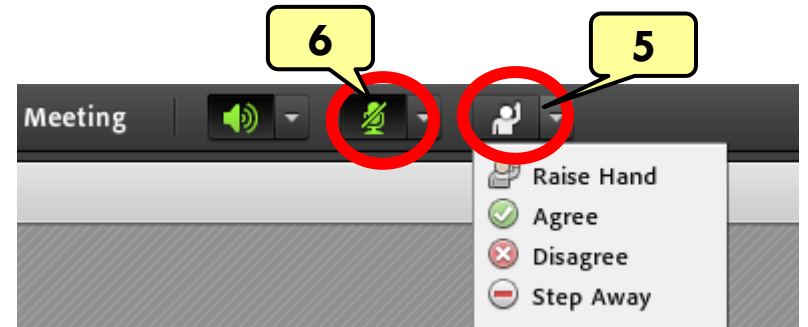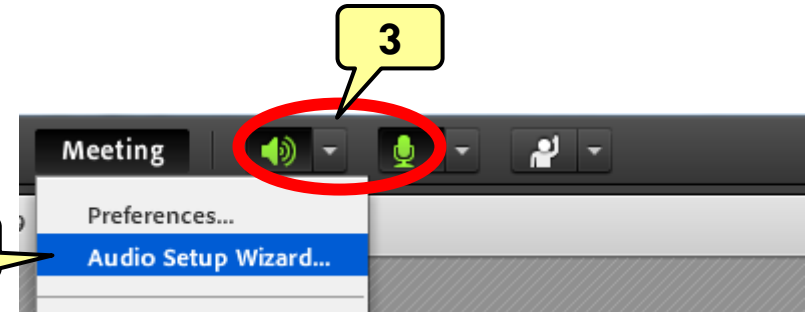
☐ Plug in your headset (if available).

☐ Enable your speakers and mic (the icons on the top bar should be green).

☐ Run the audio setup wizard (see the "Meeting" menu on the left of the screen).

☐ "Raise your hand" by clicking the icon to let the hosts know you are ready to test your mic.

☐ After testing your mic, mute yourself by clicking the mic icon (to avoid background noise).

Feel free to use the chat at any time!

Meeting **2**

Meeting **3**

Preferences…
4 Audio Setup Wizard…

Meeting **6** **5**
Raise Hand
Agree
Disagree
Step Away

Main Room Chat (Everyone)

The chat history has been cleared

Everyone

Start Recording!

ECE Virtual Community of Practice

Session 3

Bloom's Taxonomy and Learning Objectives

November 12, 2013

Tentative Agenda

- Logging in, welcome, session goals (5 minutes)
- Responding to the readings (15 minutes)
  - Breakout (#1) to address reading discussion questions
- Learning from each other's syllabi (30 minutes)
  - Breakout (#2) to discuss homework, report outs
- Learning objective development (30 minutes)
  - Breakout (#3) to discuss LOs you developed, report outs
- Plans for Session 4 (10 minutes)

Rules of Engagement

Create your own bubble of solitude:

- ☐ Close your office door

- ☐ Use a "Do Not Disturb" sign

- ☐ Turn off e-mail

- ☐ Silence or forward phone

- ☐ Avoid any other potential distractions

ECE VCP Session 3 Goals

- Continue building our Community of Practice (CP)
  - As a whole (ECE VCP)
  - Within each of the 4 working groups
- Discuss Bloom's Taxonomy / LO readings, including
  - Most useful insights
  - Unanswered questions
- Reflect on what makes a "good" syllabus
- Obtain feedback to further refine our learning objective(s)

Homework Readings

Websites:

- cft.vanderbilt.edu/teaching-guides/pedagogical/blooms-taxonomy/

- www4.uwsp.edu/education/lwilson/curric/newtaxonomy.htm

- www.celt.iastate.edu/pdfs-docs/teaching/RevisedBloomsHandout.pdf

Books/Articles:

- Appendix D of *How Learning Works*: What are learning objectives and how can we use them?

- M. Besterfield-Sacre et al., Defining the Outcomes: A Framework for EC-2000, *IEEE Transactions on Education*, 43(2), 2000.

Poll: Homework Readings

☐ Which of the websites was most useful to you?

☐ Which of the book/article readings was most useful to you?

Homework for Session 3:
Bloom's Taxonomy and Learning Objectives

- Deadline: 12 pm EST Monday (11/18).

- Post to blog **one thing you learned** from the reading and **one question** you have.

- Review each other's syllabi in your working group (posted to portal under Evaluation)
  - For each syllabus, list 1 thing you learned or found interesting.
  - For each syllabus, provide 1 suggestion for improvement.

- Prepare a learning objective for your Spring 2014 course related to the active learning exercise you considered in Breakout Session 2.

Post your homework (your syllabus reviews and your learning objective) to the portal!

ECE VCP Working Groups

- **Group 1**
  - Nuri Emanetoglu, Electronics
  - Puteri Megat Hamari, Electronics
  - Nisha Kondrath, Electronics
  - Harry Powell, Electronics

- **Group 2**
  - Shiny Abraham, Circuits
  - Liz Brauer, Circuits
  - Alisa Gilmore, Controls
  - Raghu Mudumbai, Circuits
  - Aurenice Oliveira, Signals & Systems

- **Group 3**
  - Kennedy Aganah, Energy Conversion
  - Tim Kane, E&M
  - Nathalia Peixoto, Circuits
  - Nur Sisworahardjo, Circuits
  - Sandra Soto-Caban, Circuits/Electronics

- **Group 4**
  - Danai Chasaki, Computer
  - Mary Knox, Signals & Systems
  - Faramarz Mossayebi, DSP
  - Matthew Watkins, Digital

Breakout Group Tasks: #1

- Roles for today: Person with last name
  - Third alphabetically is the scribe to record discussion on electronic notepad
  - Fourth alphabetically is the reporter to share important points in report out

- In your group, discuss one or more of the following (first person alphabetically leads discussion):
  - As a rule, do students master levels in a linear fashion, or do they jump around? Does jumping have an impact on their grasp of higher levels? Are there ways we teach that support and/or inhibit "level jumping"?
  - How do we assess students' achievement of outcomes? Should each outcome be evaluated multiple times? What frequency of success indicates that an outcome has been met? How does approach to assessment inform our development of outcomes?
  - How can Bloom's taxonomy best be used to support ABET? What can faculty do to craft their learning objectives to align with ABET? Would your colleagues be willing to learn about Bloom's taxonomy and apply it?

- Time allotted: 15 minutes

Poll on Thanksgiving Week Session

- Will you be able to join us on Tuesday, 11/26?
  - Yes, of course!
  - Sadly, no, but I promise to use pedagogies of engagement at the Thanksgiving dinner table.
  - I have to ask Siri. I'll let you know via email by Friday.

Breakout Group Tasks: #2

- Roles for today: Person with last name
  - **Third** alphabetically is the **scribe** to record discussion on electronic notepad
  - **Fourth** alphabetically is the **reporter** to share important points in report out

- Each member of the group should share (start with **scribe**)
  - One interesting thing they saw on another syllabus and want to include on their own syllabus
  - What are critical items to include on a syllabus?
    - Should learning objectives be on a syllabus? Are they critical?

- Time allotted: 20 mins in groups, 10 mins for report out

Breakout Group Tasks: #3

- Roles for today: Person with last name
  - Third alphabetically is the scribe to record discussion on electronic notepad
  - Fourth alphabetically is the reporter to share important points in report out

- Each member of the group should (start with reporter)
  - Share the learning objective (LO) you developed for your Spring 2014 class. Get feedback from your group on
    - Strengths of your LO
    - How your LO could be improved

- Time allotted: 20 mins in group, 10 mins for report out

Plan and Assignments for Session 4: Promoting Teamwork

◻ Review the following website about building teams

 ◼ www.catme.org

◻ Watch the following two videos

 ◼ http://web.mit.edu/edtech/casestudies/teal.html#video

 ◼ http://youtu.be/IfT_hoiuY8w

◻ Read (posted on portal) and be prepared to discuss

 ◼ C. Finelli et al., Student Teams in the Engineering Classroom and Beyond: Setting up Students for Success, Center for Research on Learning and Teaching, University of Michigan, 2011.

Homework for Session 4: Promoting Teamwork

- Deadline: 12 pm EST Monday (11/18).
- Post a file to the portal answering the following questions (number them, please!):
  1. one insight from the reading
  2. one question you have from the reading
  3. Do you already use teams in class? If so, what is one thing you do with teams? Did the readings give you any new ideas?
  4. In your view, what is the biggest challenge to incorporating teams in engineering classes?
     A. For students?
     B. For faculty?

Post your homework to the portal!