Workshop: Teaching a Shared/Hybrid/Online Course using Zoom

Jingchen (Monika) Hu

Vassar College

Blended Learning in the Liberal Arts Conference 2019

Course Sharing Project

Liberal Arts Collaborative for Digital Innovation

- a 10-college consortium
- share classes to supplement and keep small liberal arts flavor

	2016-2018 (pilot phase)	2018-2019	2019-2020
Bayesian Statistics	Fall 2017 16 Vassar students + 1 Swarthmore student	Spring 2019 16 Vassar students + 1 Amherst + 1 Carleton + 4 Swarthmore students	Fall 2019 16 Vassar students + 1 Amherst + 1 Swarthmore students
Other courses	Spring 2017 **Putnam Problem Solving** (S. Miller, Williams College) Fall 2017 **Advanced Real Analysis** (S. Garcia, Pomona College)	Summer 2019 **Intro to Data Science** 5 instructors from 4 colleges 32 students from 4 colleges	Fall 2019 **Operations Research** (S. Miller, Williams College)

Vassar's Bayesian Statistics

- An upper-level Statistics course

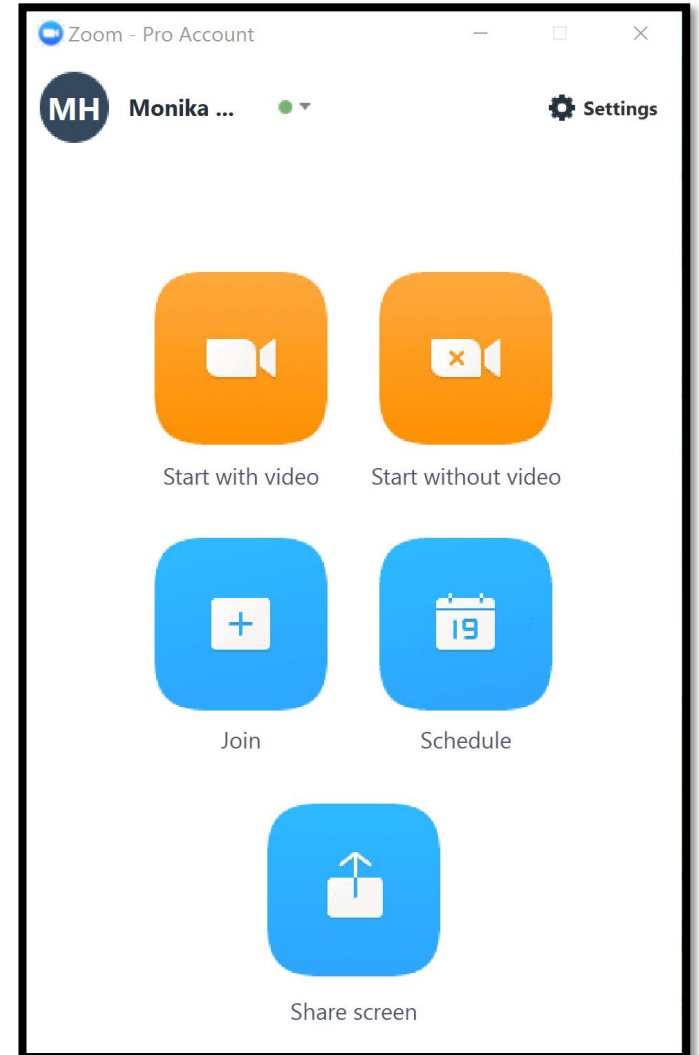| Component	Focus	Challenge when shared/online
Inference	Theoretical and methodological derivations Reading research paper	High-quality video for board work Online and in-class discussion
Computation	Statistical programming Labs	High-quality video for programming demos Teaching programming online
Applications	Case studies, student projects	Online learning community Cross-campus group work

What are your teaching and learning focuses?

- Theoretical and methodological derivations
- Programming and labs
- Case studies
- Student projects (individual vs group)
- Online discussion
- In-class discussion
- Anything else?

Zoom functions

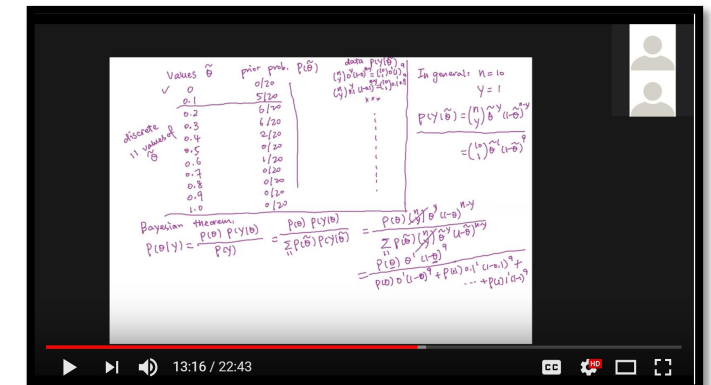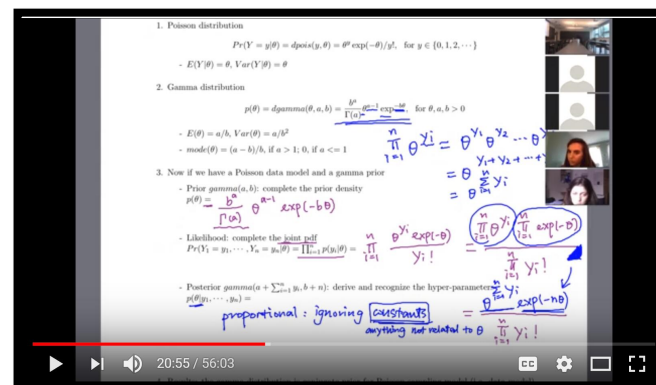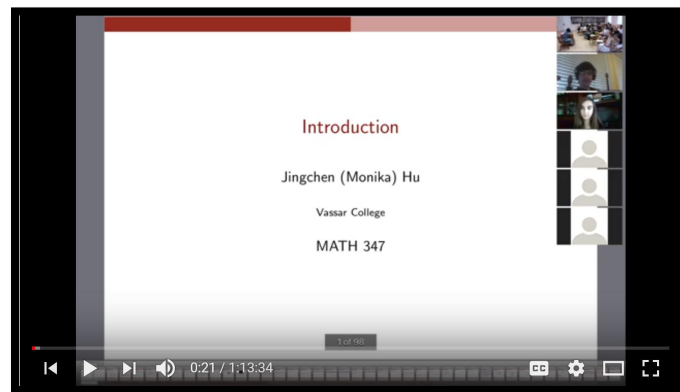| Challenge when shared/online	What Zoom offers
Synchronous and asynchronous access	Record a Zoom meeting
Automatic edits: deleting unwanted recording	Pause and restart an existing Zoom recording
Automatic edits: breaking a long video into smaller chunks	Stop and start a new Zoom recording within the same Zoom meeting
High-quality video for board work	Use Zoom whiteboard, write on the slides (screensharing)
High-quality video for programming demos	Use Zoom to share RStudio interface (screensharing)
Teaching programming online	Use Zoom to record short demo videos Take control of student's computer (screensharing)
Online office hours	Use Zoom for meeting
Online learning community Cross-campus group work Online and in-class discussion	Use Zoom breakout room for small group discussion Use Moodle's discussion forum Require students' video submission of their projects

Zoom demo #1

- Start a Zoom meeting and share meeting ID

- Record a Zoom meeting

- Pause and restart an ongoing recording
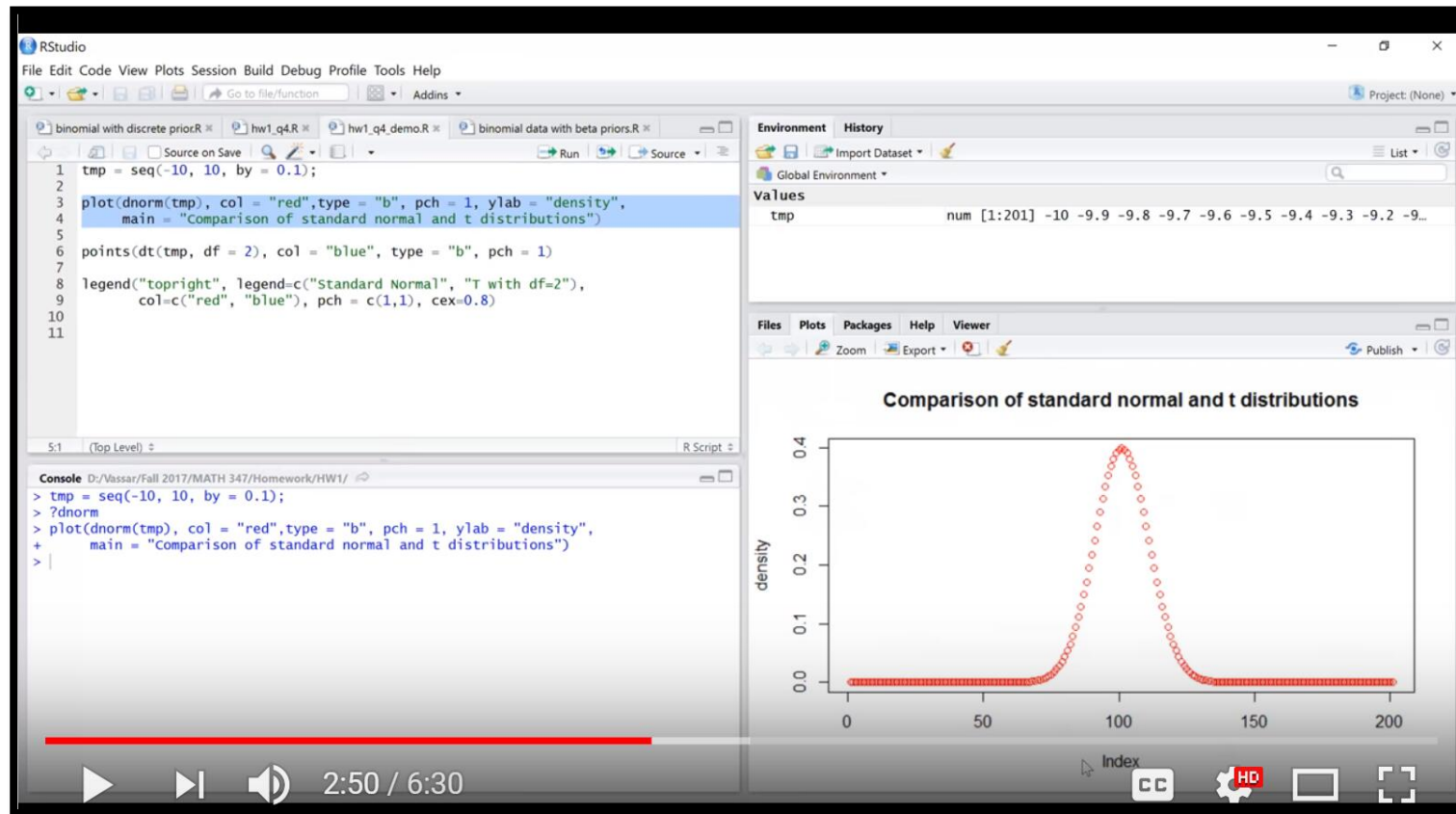
- Stop and start a new recording

Zoom demo #2

- Use a tablet (e.g. iPad)

  - Show lecture slides (through Dropbox, Google Drive)
  - Use a stylus (e.g. Apple pencil) to write on the slides
  - Use whiteboard to perform detailed theoretical derivations

Zoom demo #3

- Use a laptop to share screen of programming demo

Zoom demo #4

- Use breakout rooms to have small group discussion

Zoom demo #5

- Take control of student's computer

  - Screensharing

  - Edit programming scripts

Small group practice!

- Recall your teaching and learning focuses

Focus	Zoom function(s)
e.g. theoretical and methodological derivations	Use stylus to write on slides and whiteboard
e.g. programming and labs	Use screenshare to show laptop programming demo
?	?
?	?
?	?

- Practice giving a 2-3 min lecture to your group members
  - Try to record the lecture if you can

Thank you very much!

Jingchen (Monika) Hu

Mathematics and Statistics
Vassar College

Course Sharing Project
Liberal Arts Collaborative for Digital Innovation (LACOL)

jihu@vassar.edu