

So you think you can do statistics? Spring 2020

Course Syllabus, Expectations etc.



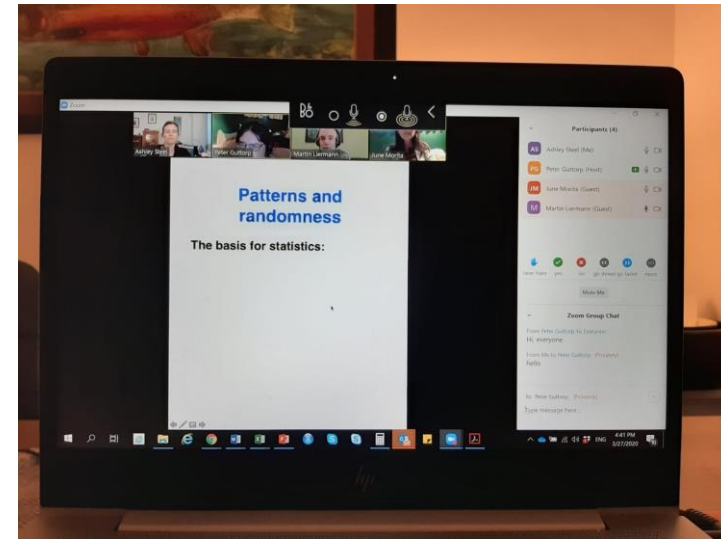
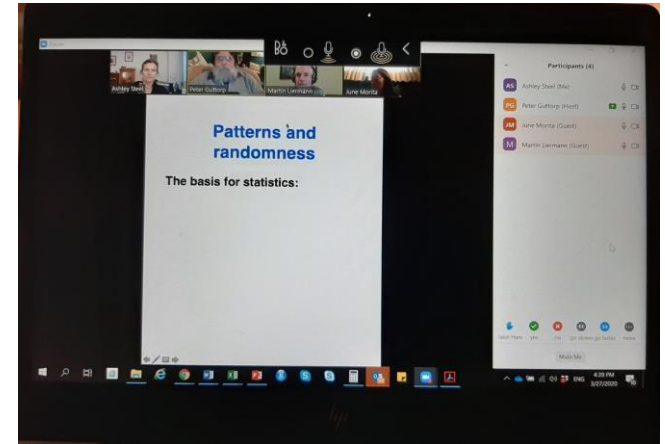
Some instructions

Open meeting participants (click on box on bottom of screen). A row of reactions appear.

Also open Chat (another box on bottom).

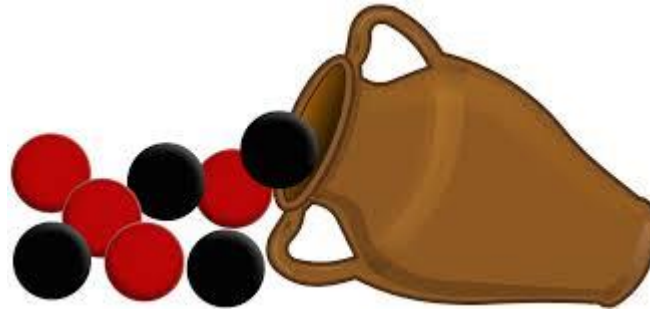
By default your microphone will be muted. When you “raise your hand” we will unmute you so you can make your comment.

Sometimes you will be put in breakout rooms. Then what you say can only be heard by others in the room.



Week	Topic	Activity
1	Our brains and scientific reasoning	Analog and digital simulations
2	Coincidences and patterns	R tutorial
3	Comparing two populations	Permutation tests
4	Problems with testing	Chocolate
5	Populations and samples	Sampling distribution Bootstrap
6	The life cycle of science	Air quality standards
7	Research examples	Group project consulting
8	Scientific communication	Uncertainty of rankings
9	Big data	Google trends
10	Student presentations	Student presentations





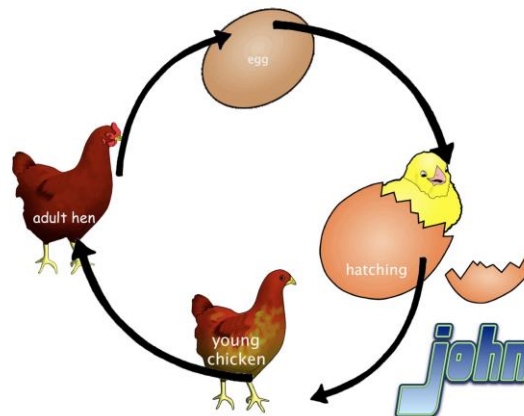
Course Themes

Simulations

Uncertainty as Information

Communicating Data, Statistics, and Science

Lifecycle of Science



Expectations & requirements:

Attendance and participation = **40%** of grade

Signed on and present during class hours (On time. No coffee breaks.)

Cameras on (this is simulating an in person class)

Participate in class discussions and hands-on activities

Let us know in advance if you can't make it

Complete the readings / videos as assigned

Print out the "Manipulatives" handout on the Canvas page and follow the instructions

Think!

Grading:

40% Class discussion participation and in-class activities

20% Homework assignments

40% Final project

Groups using Breakout Rooms:

Group activities are central to this class

Groups will be assigned to encourage everyone to get to know each other and to bring students together with different skills and backgrounds

Groups will change for each activity

If you are watching from the same location as other students in the class you will all have to be capable of using your own screens for breakout rooms

Homework:

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Readings:

Week 1 posted today. Complete *before* class this Thurs.
Other reading/video assignments posted this Thursday.

Every week

Short written responses to assigned prompts from readings.
Material may be different from what is presented in lecture.
The intent is that you think about how it all fits together.

Weeks 1-5

Data homework assigned on Thursdays to be completed by
Monday night (8pm). Required programming will be provided
through in-class activities &/or with assignments.
Late assignments not accepted.

Weeks 6-10

Group Project – readings, data manipulation, thinking,
communication, creativity

Course resources

Website: <https://canvas.uw.edu/courses/1374176>

Terminology list

R programming quick sheet

Presentation tips

Discussion board (right now you can introduce yourself there)

Big Ideas (to appear)

Best Practices Sheet (to appear)

[Statistics Online Tutoring Center](#)

Things to make this course go more smoothly

A

Think!

If we have bandwidth issues, you may need to turn off your video.

Mute your audio except when asking questions.

Technical problems? Keep trying, & let us know on chat, then email.

E-mail any or all of us faculty directly. (Links on course home page)

“Reply all” to a course email will go to the entire course e-mail list.

Keep up with the course e-mails. This course is like life. Important things are sent by e-mail.

Canvas: links to all readings, manipulatives, homework assignments, course resource sheets, R programming resources, discussions etc.

Bring questions. Contribute examples & news articles.

THINK about why we assigned two seemingly unrelated readings.

CONNECT our course material & discussions with the rest of your life!

Think!