# Teaching Resources

Dr. Matthew Beckman

## Online Resources for Teaching Statistics

Website with materials from today's session: https://mdbeckman.github.io/PSU-Grad-Orientation/

#### General Resources

## Guidelines for Assessment and Instruction in Statistics Education (GAISE)

2016 GAISE College Report: http://www.amstat.org/education/gaise

Recommended best practices for Statistics Education. Short description of 6 recommendations accompanied by concrete implementation strategies, sample resources, references, etc.

## Consortium for the Advancement of Undergraduate Statistics Education (CAUSE)

http://www.causeweb.org (Now hosted by Penn State!)

The resources tab provides lots of useful materials sorted by topic, such as applets, cartoons, powerpoint slides, tutorials, data, suggested interactive activities, and more.

#### ASA's Collection of Useful Links

https://www.amstat.org/education/resourcesforundergradteachers.cfm

Useful links for undergraduate teachers of statistics. Clicking on "Useful Web Sites for Teachers" will bring up many more useful links.

## **Data Repositories**

#### Chance News Wiki:

http://test.causeweb.org/wiki/chance/index.php/Main Page

Reviews current stories in the news that involve probability or statistical concepts.

## Chance Magazine's "Taking a Chance in the Classroom"

http://chance.amstat.org/category/columns/taking-a-chance-in-the-classroom/

Datasets and corresponding papers with suggestions classroom use. ASA login required.

#### Journal of Statistics Education Data Archive

 $http://www.amstat.org/publications/jse/jse\_data\_archive.htm$ 

More data, although not sorted by statistical topic so a bit harder to find appropriate data.

#### Robin Lock's Website:

http://it.stlawu.edu/~rlock/maa51/data.html

Links to other data sources

## Data and Story Library (DASL)

http://lib.stat.cmu.edu/DASL/

Lots of real data, searchable by real-world topic or statistical method.

#### StatLib - Datasets Archive

http://lib.stat.cmu.edu/datasets/

One of the original sources for archived data

## **Applets**

## $Lock^5$ StatKey

http://www.lock5stat.com/statkey

Sampling distributions, bootstrapping, randomization tests, theoretical distribution "tables"

## online statbook.com

http://onlinestatbook.com/stat\_sim/index.html

Lots of applets, all searchable by statistical topic.

## Rossman and Chance Applets

http://www.rossmanchance.com/applets/

Website for applets, many of which coincide with interactive activities.