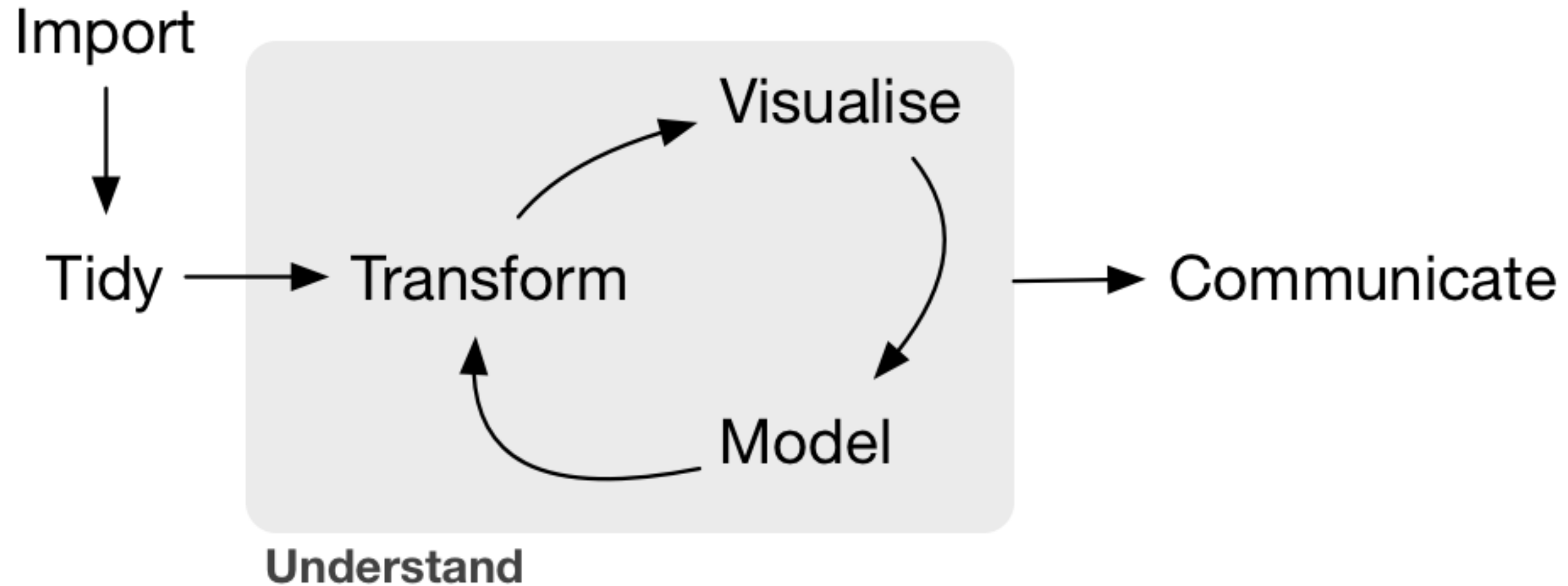


Math 107

Elementary

Statistics

What are we going to learn in this course?



Federal Election Committee Data

- 2016 presidential election independent expenditures reported to the FEC**
- Independent expenditures: "spending by individual people, groups, political committees, corporations or unions expressly advocating the election or defeat of clearly identified federal candidates"**
- Information: who was paid, purpose, date, amount, for/against whom**

Spender Name	Candidate Name	Support/ Oppose	State	Dist	Office	Party	Filing Date	Expend Date	Expend Amount	Purpose
AAPI VICTORY FUND	TRUMP, DONALD J.	Oppose		00	President	Republican	08/31/2016	08/29/2016	\$10,000.00	Online Advertising - Trump's America - Non-Contribution Account
AAPI VICTORY FUND	TRUMP, DONALD J.	Oppose		00	President	Republican	08/31/2016	08/29/2016	\$5,000.00	Ad Production - Trump's America - Non-Contribution Account
AMERICAN FEDERATION OF STATE COUNTY AND MUNICIPAL EMPLOYEES AFL-CIO	CLINTON, HILLARY RODHAM	Support	PA	00	President	Democratic	08/25/2016	08/23/2016	\$18.92	T-SHIRTS
AMERICAN FEDERATION OF STATE COUNTY AND MUNICIPAL EMPLOYEES AFL-CIO	CLINTON, HILLARY RODHAM	Support	PA	00	President	Democratic	08/25/2016	08/23/2016	\$1,075.12	T-SHIRTS
AlternativePAC	Johnson, Gary	Support		00	President	LIBERTARIAN PARTY	08/26/2016	08/26/2016	\$50,000.00	Digital ad distribution
AlternativePAC	Johnson, Gary	Support		00	President	LIBERTARIAN PARTY	08/26/2016	08/26/2016	\$329,000.00	Ad and Website Production
AlternativePAC	Johnson, Gary	Support		00	President	LIBERTARIAN PARTY	08/16/2016	08/14/2016	\$30,000.00	internet web memes
AlternativePAC	Johnson, Gary	Support		00	President	LIBERTARIAN PARTY	08/26/2016	08/26/2016	\$50,000.00	Digital ad distribution
AlternativePAC	Johnson, Gary	Support		00	President	LIBERTARIAN PARTY	08/30/2016	08/30/2016	\$130,000.00	Online ads
AlternativePAC	Johnson, Gary	Support		00	President	LIBERTARIAN PARTY	08/30/2016	08/30/2016	\$20,000.00	email communication
AlternativePAC	Johnson, Gary	Support		00	President	LIBERTARIAN PARTY	08/30/2016	08/29/2016	\$2,631.60	social media ads
AlternativePAC	Johnson, Gary	Support		00	President	LIBERTARIAN PARTY	08/26/2016	08/23/2016	\$827.51	digital ads
BEND THE ARC JEWISH ACTION INC	TRUMP, DONALD J.	Oppose		00	President	Republican	08/24/2016	08/11/2016	\$250.00	Estimated Cost: Online Advertising
BEND THE ARC JEWISH ACTION INC	TRUMP, DONALD J.	Oppose		00	President	Republican	08/24/2016	08/08/2016	\$9,084.74	Staff Salaries and Benefits
BEND THE ARC JEWISH ACTION INC	TRUMP, DONALD J.	Oppose		00	President	Republican	08/24/2016	08/22/2016	\$1,015.26	Staff Salaries and Benefits
CASA IN ACTION INC.	Clinton, Hilary	Support		00	President		09/02/2016	08/11/2016	\$2,663.95	Tablets
CASA IN ACTION INC.	Clinton, Hilary	Support		00	President		09/02/2016	08/11/2016	\$2,557.40	Tablets
CASA IN ACTION INC.	Clinton, Hilary	Support		00	President		09/02/2016	09/01/2016	\$1,395.00	Flyers ,Pledge cards
CASA IN ACTION INC.	Clinton, Hilary	Support		00	President		09/02/2016	09/01/2016	\$567.50	Flyers ,Pledge cards
CASA IN ACTION INC.	Clinton, Hilary	Support		00	President		09/02/2016	08/23/2016	\$153.98	Printer

**What questions might we
ask this data set?**

**How do these questions
guide our analysis?**

Syllabus

Prerequisites

High school algebra + Sophomore standing

math107-lu.github.io

Piazza

Question-and-answer system designed to streamline class discussion outside of the classroom

Great first place to ask about the course, lecture/reading, or the assignments

Moodle

Check your grades

Take reading quizzes

STATISTICS

UNLOCKING THE POWER OF DATA



Robin H. Lock Patti Frazer Lock

Kari Lock Morgan Eric F. Lock Dennis F. Lock

Textbook

***Statistics: Unlocking the Power of Data*, Lock et al., 2013, John Wiley & Sons, ISBN 978-0-470-60187-7.**

Homework

Assigned on Mondays (due Fridays by 4 pm) and Fridays (due Tuesdays by 4 pm).

No late work will be accepted.

20% of grade. Lowest two dropped.

Exceptionally messy, hard to read, or unstapled homework will receive a 20% penalty. This penalty can be lifted by turning in a cleanly written copy, or a photo of you holding a stapler.

Homework Grading Scale

Points	Characteristics
5	Almost all problems are essentially correct with no major conceptual flaws. There may be some minor errors or calculation mistakes.
4	One problem is incomplete or contains a major conceptual flaw, but most problems are essentially correct. There may also be some minor errors or calculation mistakes.
3	At least two problems are incomplete or contain a major conceptual flaw, but most problems are essentially correct. There may also be some minor errors or calculation mistakes.
2	More than half the problems are incomplete or contain a major conceptual flaw, but there is evidence that the student made a serious attempt to solve most problems. Some parts of some problems are correct.
1	The assignment shows little progress toward a correct solution on any problem, but there is evidence that some serious effort was put forth on at least one problem.
0	The assignment is not turned in or contains no evidence of serious effort on any problem.

Quizzes

There will be required reading/viewing to complete before a new topic is introduced in class.

Moodle quizzes will focus on the big ideas and key vocabulary, etc.

5% of the final grade

Lab days

Focused on doing statistics using R

Approximately weekly

Completed in groups that I will assign

10% of the final grade

Exams + Final

Exam 1 (tentative) - Friday, October 2

Exam 2 (tentative) - Wednesday October 28

Final - Tuesday, November 22

- @ 8 a.m. (11:10 section)**
- @ 11:30 a.m. (1:50 section)**

Final grade
Maximum of the following two weighting schemes

Component	Scheme 1	Scheme 2
Quizzes	5%	5%
Labs	10%	10%
Homework	25%	25%
Exam 1	10%	20%
Exam 2	20%	20%
Final	30%	20%

Honor Code

You may collaborate on homework but you must submit your own assignment that reflects your own thinking, work and organization.

To check if your homework meets this standard, imagine I asked you to explain your reasoning for each problem—you should be able to do so with ease.

All assignments are considered to be pledged to this

Honor Code

Cell phones should neither be heard nor seen during an exam.

Office Hours

410 Briggs Hall

Monday 3:10-5:00

Tuesday 1:50-3:20

Thursday 1:50-3:20

Friday 3:10-4:20

Computing

We will use the statistical language R to achieve our computational goals in this course.



Install R and RStudio today so that you can resolve any issues before you need it for an assignment.

rstudio.lawrence.edu



Sign in to RStudio

Username:

Password:

☐ Stay signed in

Sign In



File Edit Code View Plots Session Build Debug Tools Help

cismay

Sessions



Go to file/function



Addins



Project: (None)

R 3.3.1

Console ~/

>

Environment

History



Import Dataset



List



Global Environment



Environment is empty

Files

Plots

Packages

Help

Viewer



New Folder



Upload



Delete



Rename



More



Home



Name

Size

Modified



R



test