Welcome to STAT371-L3

Teaching staff

- Instructor:
  Duzhe Wang, dwang282@wisc.edu
  Office hour: Wednesday 3-4pm,
  Office location: R1475 Medical Sciences Building(MSC)
- TAs:
  Hao Chen, Discussion TA of Section 331, hchen434@wisc.edu
  Muhong Gao, Support TA of Section 331, mgao55@wisc.edu
  Yuetian Luo, Discussion TA of Section 332 and 333, yluo86@wisc.edu
  Ning Fan, Support TA of Section 332 and 333, nfan@wisc.edu
  (TAs' office hours and office locations will be announced soon)

Discussion sections

1. Actual discussion sections: 351, 352, 353.
2. Attend the section you signed up for. If there's a time conflict, just choose a new one, stick to it and **inform both TAs**.
3. bring your laptop and calculator.
4. discussion sheets will be posted at LearnUW(D2L) before the class by your discussion TA.
5. Discussion TA will lead the discussion section and support TA will grade homework.

Syllabus

You are responsible for reading syllabus to understand the course policies. **If you email me a question that is answered by Syllabus, I may respond with only one word: "Syllabus".**

Textbook and Calculator

1. There is no required textbook. The recommended text is **An Introduction to Statistical Methods** by R.Lyman Ott and Michael Longnecker.
2. A scientific calculator is necessary, need it for exams, become familiar with it before the exam.

Websites

1. Check https://dzwang91.github.io/stat371/ for syllabus, slides, notes, code, homework assignments, homework solutions, exam practice.
2. Check D2L at https://learnuw.wisc.edu/ for discussion sheets and grades.
3. Use Piazza: https://piazza.com/wisc/spring2018/stat37103/home to ask questions and communicate with your classmates.

Email

1. **If you email me, have "stat371" in the subject line. Example: "stat371 Midterm"**
2. sometimes I'll send the group email by classlit.
3. Email is not good for detailed HW questions. **I won't answer such questions over email. Come to my office hour and TAs' office hours for help**

Homework

1. Check the timetable page in course website to download.
2. **Submit your homework to your Support TA's mailbox at Medical Science Center building(at 1300 university ave).**
3. No credit for late homework.
4. **Write your name and discussion section number clearly on the front page**.
5. **Staple your assignment together with real metal staples**.
6. For questions when R is used, make sure to attach your R code.
7. Show all your work to receive full credits.
8. Graded homework will be returned during discussion section.
9. Read syllabus for detailed homework submission policies.

Exams

1. Midterm 1: 3/1/2018, in class
2. Midterm 2: 4/12/2018, in class
3. Final: 5/9/2018, 5:05-7:05pm, location TBA
4. No makeups.
5. Exams will be closed book. Students will be allowed to use a scientific calculator without internet access. They will be allowed one (1) 8.5" $\times$ 11" sheet of notes for Midterm 1, two (2) 8.5" $\times$ 11" sheets for Midterm 2, and three (3) 8.5" $\times$ 11" sheets of notes for the Final Exam. Cell phones and any other internet-ready device must be turned off and out of sight at all times during the exam. Students found using an internet-ready device during an exam will receive a **zero.**

Grading

Items	Points
Homework	120
Midterm 1	80
Midterm 2	80
Final Exam	120
Total	400

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BONUS: if you could find mistakes from my slides and notes, email me, you'll get 1 point each time.

Grading scale

A	90 - 100%
AB	85 - 89%
B	80 - 84%
BC	75 - 79%
C	70 - 74%
D	60 - 69%

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“Do we have a curve? ”
“It depends...and I’m nice. ”

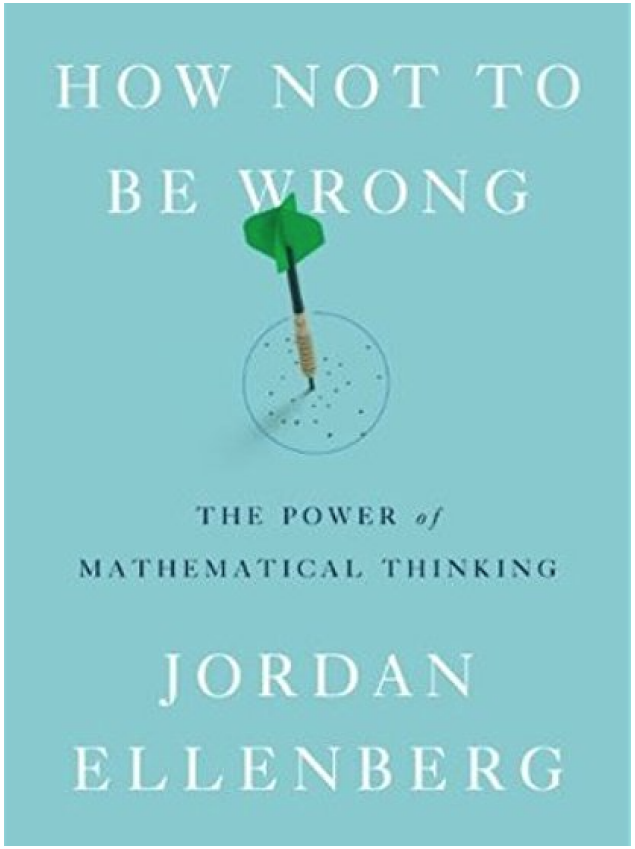
Free tutoring

The department of Statistics offers free tutoring. The Tutorial Center is open 9am-4pm Monday through Friday for your convenience and is located in the main hallway of the Medical Sciences Center, room 1274.

Concerns so far

1. Where is the syllabus?
2. Will you post slides and notes ahead of time?
3. Will you always use slides?

Course objective



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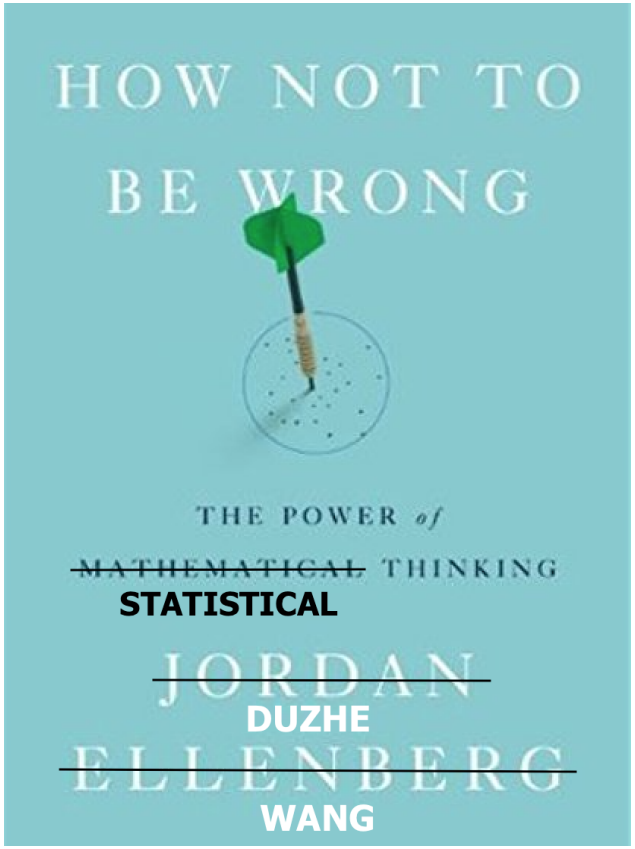

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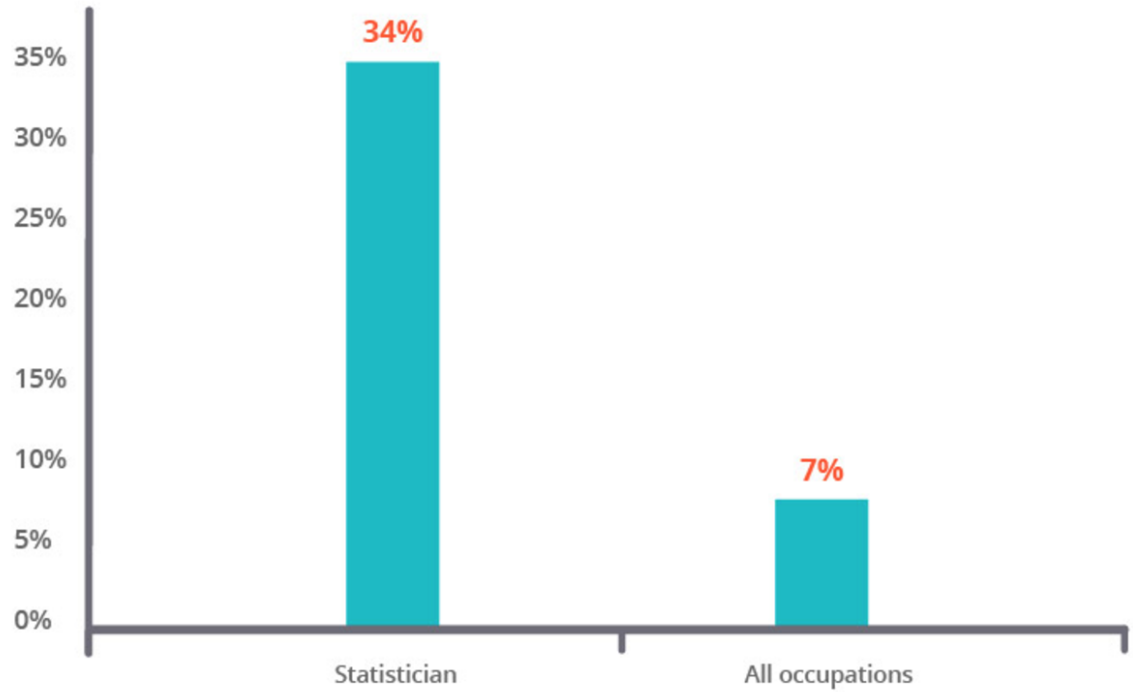
3. Make money.
   Demand for statisticians is growing, and so are their salaries. The median salary for data scientists with less than three years of experience is $\$80,000$, and $\$150,000$ for those with nine or more years of experience.

Jobs in statistics are expected to grow faster than average for all occupations

Source: U.S. Bureau of Labor Statistics. Covers employment growth from 2014 to 2024.



Mean annual salaries of statisticians in 2015

Source: U.S. Bureau of Labor Statistics

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1. Summarizing data in "useful" ways, that could potentially reveal interesting patterns. This is a branch of Statistics known as **Descriptive Statistics.**
2. Determining if and to what extent patterns observed in data are "real," and generalize to a larger context. This is known as **Inferential Statistics.** In inferential statistics, the data form a **sample**, a smaller subset of some well-defined collection of things called a **population**. The idea is to use the sample to learn about the population–the process of inference.

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- Categorical: data that aren't numbers. E.g. undergraduate and graduate

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Course objectives revisited

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- Basic knowledge of probability and statistics, and why they are important.
- The ability to summarize data graphically and numerically.
- In some simple situations, the ability to identify and carry out the appropriate statistical analysis.
- The ability to carry out simple analyses using a statistical computing package.