

Proposed outline for Stat 201 with R

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November 18, 2018

1 Week 1: Statistics and data

Section 1.1 - 1.5

- What is statistics
- Populations/Samples
- Investigative process
- Types of data
- Types of studies
- Intro to R

2 Week 2: Probability

Sections 2.1 - 2.2

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3 Week 3: Examining numeric data

Section 1.6

- Plots of numerical data
- Summary statistics: mean, median, mode, variance, sd, IQR
- Plots and summary statistics in R

4 Week 4: Examining categorical data and critical consumption of statistic

Section 1.7

- Plots of categorical data (bar, pie, pareto)

- Contingency tables
- Good and bad plots
- Common problems with practicing and reporting statistics

5 Week 5: Random variables and distributions

Sections 2.4, 3.1, 3.3

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6 Week 6: Midterm review, introduction of presentation and advanced topics

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7 Week 7: Midterm

8 Week 8: Foundations for Inference: CLT and confidence intervals

Sections 4.1, 4.2, 4.4

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9 Week 9: Foundations for Inference: Hypothesis testing

Sections 4.3

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10 Week 10: Inference for numerical data

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11 Week 11: Inference for categorical data

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12 Week 12: Regression

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- 13 Week 13: Presentations**
- 14 Week 14: Final review**
- 15 Week 15: Final**