



$$\int_M d\omega = \int_{\partial M} \omega$$

Week 1: January 4-5

- **Lecture 1** - 1.1, 1.2 (introduction, types of data)
- **Lecture 2** - 2.1, 2.2, start 2.3 (frequency distributions, histograms, stem-and-leaf plots, visualizing data)

Week 2: January 8-12

- **Lecture 3** - Research Ethics
- **Lecture 4** - finish 2.3, 3.1 (measures of center)
- **Lecture 5** - 3.2 (measures of variation)

Week 3: January 15-19

- **Lecture 6** - 3.3 (measures of relative standing, quartiles and percentiles, boxplots)
- **Lecture 7** - 4.1, start 4.2 (basic concepts of probability, addition rule)
- **Lecture 8** - finish 4.2, 4.3 (multiplication rule, conditional probability)

Week 4: January 22-26

- **Lecture 9** - 5.1, start 5.2 (probability distributions, binomial distribution)
- **Lecture 10** - finish 5.2
- **Lecture 11** - 5.3 (Poisson distribution), 6.1 (standard normal distribution)

Week 5: January 29 - February 2

- **Lecture 12** - 6.2 (applications of normal distributions)
- **Lecture 13** - 6.4 (Central Limit Theorem)
- **Lecture 14** - 6.5 (assessing normality)

Week 6: February 5-9

- **Lecture 15** - 7.1 (estimating a population proportion)
- **Lecture 16** - 7.2 (estimating a population mean)
- **Lecture 17** - start 8.1 (basics of hypothesis testing)

Week 7: February 12-16

- **Lecture 18** - 8.1 (continued)
- **Lecture 19** - finish 8.1, start 8.2 (testing a claim about a population proportion)
- **Lecture 20** - finish 8.2

Week 8: February 19-23 (Midterm Recess)

Week 9: February 26 - March 2

- **Lecture 21** - start 8.3 (testing a claim about a population mean)

- **Lecture 22** - finish 8.3, 9.1 (inferences about two proportions)
- **Lecture 23** - 9.2 (inferences about two means)

Week 10: March 5-9

- **Lecture 24** - start 12.1 (analysis of variance)
- **Lecture 25** - 12.1 (continued)
- **Lecture 26** - finish 12.1

Week 11: March 12-16

- **Lecture 27** - 10.1 (correlation)
- **Lecture 28** - start 10.2 (regression)
- **Lecture 29** - finish 10.2, start 10.3 (variation and prediction intervals)

Week 12: March 19-23

- **Lecture 30** - finish 10.3
- **Lecture 31** - start 10.4 (multiple regression)
- **Lecture 32** - 10.4 (continued)

Week 13: March 26-29 (no classes on March 30)

- **Lecture 33** - finish 10.4
- **Lecture 34** - 11.1 (goodness of fit)

Week 14: April 2-6

- **Lecture 35** - start 11.2 (contingency tables)
- **Lecture 36** - finish 11.2
- **Lecture 37** - 13.1 (basics of nonparametric statistics)

(Classes end on April 9th)