STAT 200B 2019 reading materials

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- Generally covers topics in statistical theory, Classics [4, 5]
- Generally covers topics in statistical theory, Modern [1, 7, 6]
- Glivenko Cantelli theorem: Theorem 20.6 in [2]
- Generalized method of moments: Section B.2 in [1]
- Notes for a graduate-level course in asymptotics for statisticians [3]

References

[1] Peter J Bickel and Kjell A Doksum. *Mathematical statistics: basic ideas and selected topics, volume I*, volume 117. CRC Press, 2015.

[2] Patrick Billingsley. *Probability and measure*. John Wiley & Sons, 2008.

[3] David R Hunter. Notes for a graduate-level course in asymptotics for statisticians. *Penn State University, Pennsylvania*.

[4] Erich L Lehmann and George Casella. *Theory of point estimation*. Springer, 2006.

[5] Erich L Lehmann and Joseph P Romano. *Testing statistical hypotheses*. Springer, 2006.

[6] John A Rice. *Mathematical statistics and data analysis*. China machine press Beijing, 2003.

[7] Jun Shao. *Mathematical Statistics*. Springer, 2007.

Week1	Probability review	Ch 5, [3]
Week2	inference, Empirical CDF	Ch 7, Ch 4 in [2]
Week3	Bootstrap, Point estimation	9-9.3, [6]
Week4	MLE, delta method	9.4-9.8, 9.9-9.12
Week5	Midterm1, hypothesis testing	10-10.1
Week6	Likelihood ratio tests, p-values and testing history	10.6, 10.2
Week7	Multinomials, multiple testing, Bayesian inference	10.4, parts of 15.1-15.2, 10.7-10.8, 11-11.3
Week8	Bayesian models, Choice of priors	11.4,24.1-24.3, 11.5-11.9
Week9	Decision theory	12.1-12.3, 12.4-12.7
Week10	no class	10-10.1,
Week11	Linear regression	13-13.4,
Week12	Midterm2	9.4-9.8, 9.9-9.12,
Week13	Model selection, GLM	13.5-13.6, 13.7
Week14	Nonparametric curve estimation	20-20.2, 20.3
Week15	Nonparametric regression, classfication	20.4, 21.1, 21.3, 22.1-22.4