

MATHEMATICAL STATISTICS FALL 2019

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| Instructor: | Prof. Ruibin Xi |
| Office: | 理科一号楼 1525 |
| TA: | 肖非依 (xiaofeiyi1217@pku. edu. cn) |
| Website: | http://www.math.pku.edu.cn/teachers/xirb/Courses/MatStat2019.xht |
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| Office hour: | TBA |
| Lecture: | 周一: 3-4 节 (三教 204) 周三: 1-2 节 (双周) (三教 204) |
| Text book: | Mathematical Statistics (Jun Shao) |
| Topics covered: | This is a graduate level statistics course, which covers decision theory, point estimation, hypothesis testing and confidence sets. The course also introduces students to large sample/asymptotic theory. Other topics covered include asymptotic efficiency of estimates, exponential families, regression models, and Bayesian statistics. |
| Prerequisite: | We assume familiarity of calculus and linear algebra. Students should also have basic knowledge about statistics and probability theory. |
| Homework: | One homework every other week |
| Exams: | One midterm + one final |
| Final Score: | Homework 15%; Midterm 25%; Final 60% |
| Reference Books: | Theory of Point Estimation (E.L. Lehmann and G. Casella) Testing Statistical Hypotheses (E.L. Lehmann and J. P. Romano) Probability and Measure (P. Billingsley) A Course in Probability Theory (K.L. Chung) |