Statistics 970: Mathematical Statistics
Fall 2016

Professor: Dylan Small
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Office: 464 Huntsman Hall

Class hours: Tuesday and Thursday, 10:30-11:50.
Office hours: Thursday, 12-1; by appointment.

Teaching assistant: Zijian Guo, zijguo@wharton.upenn.edu , 476 Huntsman Hall (office hours will be held in 452 Huntsman Hall).   Office hours: Tuesday, 4-5; Thursday, 1-2.

Text: *Mathematical Statistics: Basic Ideas and Selected Topics, Volume I*, Second Edition, P.J. Bickel and K.A. Doksum.

Additional references: The following two books are slightly less advanced than Bickel and Doksum: *Statistical Inference*, Second Edition, G. Casella and R. Berger; *Introduction to Mathematical Statistics*, Sixth Edition, R. Hogg, J. McKean and A. Craig. The following books are on a roughly similar level as Bickel and Doksum but are more complete: *Theory of Point Estimation*, Second Edition, E. Lehmann and G. Casella; *Testing Statistical Hypotheses*, Third Edition, E. Lehmann and J. Romano.

Course description: This is a course in statistical theory. We will cover Chapters 1-4 of the textbook.

Course web site: https://canvas.upenn.edu/courses/1335987

Course Prerequisites: Introductory courses in probability theory (430 or 510 at Penn) and statistical methodology (431, 512 or 520 at Penn). Real analysis (508 at Penn).

Homework: There will be weekly homework assignments.

Exams: There will be a take home midterm and a take home final.   The take home midterm will be handed out on October 13th and will be due on October 21st.   The take home final will be handed out on December 6th and will be due on December 15th.

Grading: Grades will be based one third on homework, one third on the take home midterm and one third on the take home final.