

PMath 651/451 Course Outline

Course Title: Measure and Integration

This is a second course in measure theory. It is assumed that students are familiar with the basics of Lebesgue measure. Topics to be covered include: sigma algebras, various families of measures, ways to construct measures, product measures, measurable functions, integration, Radon-Nikodym theorem, Lebesgue decomposition theorem, complex and signed measures, the Riesz representation theorems, the dual of $C(X)$, the L^p spaces.