

## Syllabus

### Theory of Probability Including Measure Theory, Math 8652, Spring 2013

Lectures:	1010-1100 MWF VinH 206
Instructor:	Nicolai Krylov, VinH 225, tel. 625-8338, krylov@math.umn.edu, <a href="http://www.math.umn.edu/~krylov">http://www.math.umn.edu/~krylov</a>
Office hours:	M 14:00-15:00, WF, 13:25-14:15
Textbook:	A modern approach to probability theory by B. Fristedt and L. Gray, Birkhauser, 1997
Prerequisites:	Math 8651
Final examination:	10:30 a.m.12:30 p.m., Friday, May 17.

The intention is to cover

- Ch 14, Convergence in distribution
- Ch 15, Distributional limit theorems for partial sums
- Ch 18, Convergence in distribution on Polish spaces
- Ch 19, The invariance principle and Brownian Motion
- Ch 20, Spaces of random variables
- Ch 21, Conditional probabilities
- Ch 23, Conditional expectations
- Ch 24, Martingales
- Other sections of the book can be treated upon request.

A few homeworks will be assigned and will form part of the final grade.