

	Lecture Monday 12:15-13:45		Practical Course Thursday 10:15-11:45
07.09.2020	Intro examples, Bertrand paradox, event space, measures	10.09.2020	Combinatorics, Sieve formula, event space
14.09.2020	Sieve formula, Conditional probability, Bayes' Theorem, independence	17.09.2020	Bayes' Theorem, conditional probability, independence
21.09.2020	Independent experiments, conditional independence, random variables, discrete distributions (Binomial, geometric)	24.09.2020	Discrete random variables: Binomial, neg. Binomial, hypergeom
28.09.2020	Expected value, properties, variance, examples, Bernoulli law of large numbers, Poisson distribution, approximation of POI	01.10.2020	Discrete random variables: Expected value, variance, Poisson dist
05.10.2020	Poisson process, negative binomial, hypergeometric dist.,	08.10.2020	Poisson process, distribution function, density function
12.10.2020	I. midterm Distribution function, absolute cont. Dist., density function, uniform distribution,	15.10.2020	uniform dist. Normal dist, approx POI with BIN
19.10.2020	Singular but cont. Measure, Normal distribution, exponential dist., moments, renewal, connection with POI	22.10.2020	Exponential dist., Poisson process again
26.10.2020	De Moivre-Laplace, Stirling, transformations, Cauchy dist., marginals	29.10.2020	de Moivre-Laplace, exponential dist., Cauchy dist, transforms
02.11.2020	Buffon-needle problem, convolution, sum of normal dist., higher dimensional dist, densities,	05.11.2020	higher dimensional distributions
09.11.2020	covariance, variance of sum, Cauchy-Schwartz, correlation, conditional expectation	12.11.2020	TDK
16.11.2020	application of cond. Expectation, estimations,	19.11.2020	convolution, conditional distribution, conditional expectation
23.11.2020	Markov, Chebisev inequalities, Steiner's Theorem,	26.11.2020	covariance, correlation, exp. Value and variance of sums
30.11.2020	II. midterm Weak law of large numbers, Strong law of large numbers, examples	03.12.2020	higher dimensional normal dist. And correlations
07.12.2020	moment-generating function, Central Limit Theorem,	10.12.2020	practice