EECS3030 (02): Probability, Spring 2020

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(0) 93 students remained in this class

(1) Quiz 1 was finished on April 1

(2) Exam 1 was done in class on May 6 (10:10-11:45 am)

(3) Quiz 2 was done on May 29 (11:00-12:00 am)

(4) Exam 2 will be given on Wednesday, June 17 (10:10-11:45am)

Topics You Have Learned Before 2020.04.29

- 1. Axioms of Probability
- 2. Combinatorial Methods
- 3. Conditional Probability and Independence
- 4. Distribution Functions
- 5. Discrete Random Variables and p.m.f. and c.d.f.
- 6. Continuous Random Variables and p.d.f. and c.d.f.
- 4~6: Expectation, Variance, and Moment-Generating Functions
- Bernoulli, Binomial, Poisson, Geometric, Negative Binomial, Hypergeometric, Uniform Discrete Distributions (11.1)
- Uniform, Exponential, Gamma, χ^2, Normal Continuous Distributions (11.1)

Topics You Learned After April 29, 2020

- 8.1 Joint Distributions of Two Random Variables
- 8.2 Independent Random Variables
- 8.3 Conditional Distributions
- 9.1 Multivariate Distributions
- 9.2 Order Statistics
- 10.1 Expected Values of Sum of Random Variables
- 10.2 Covariance
- 10.3 Correlation
- 11. Sums of Independent Random Variables and Central Limit Theorem

11. Sums of Independent Random Variables and Central Limit Theorem (P.483~P.535)

11.1 Moment-Generating Functions

11.2 Sums of Independent Random Variables

11.3 Markov's and Chebyshev's Inequalities (11.8, 11.9 on P.502)

11.4 Laws of Large Numbers (11.10, 11.11 on P.511-513)

11.5 Central Limit Theorem (11.12 on P.520)