

STAT 502: Probability Theory (II)
Spring 2020

Lectures: MWF: 12:00-12:50pm, Taft Hall 309

Instructor: Cheng Ouyang

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Personal course webpage: <http://www.math.uic.edu/~couyang/STAT502.html>

Textbook: Sidney I. Resnick, *A Probability Path*, Birkhäuser, 1999.

Course Content:

Convergence concepts, Laws of large numbers, Convergence in distribution, Characteristic functions, Central limit theorem, Conditional expectation, Martingale.

Prerequisite:

Stat 501, or Real Analysis, or consent of instructor.

Course Requirements

1. Homework: Due on every Wednesday before class; half of the grade counts for completeness; half of the grade counts for correctness of one selected problem.

Homework assignments and corresponding due dates for each week are posted on course webpage. No late homework will be accepted.

2. Exams: There will be two midterm exams (take-home) and one final (take-home). The dates are to be announced and will be available on the course webpage. No make-up exams.

Grading:

Grading: Homework 30%, Midterm 20% each, Final exam 30%.

Grading Scale: $\geq 90\%$ A; $\geq 83\%$ B; $\geq 73\%$ C, $\geq 50\%$ D

Others: Check the course webpage regularly.