

**MATH 154 - PROBABILITY THEORY, SPRING 2018**  
**TENTATIVE SCHEDULE**

Day	Topic
M, Jan 22	<b>HW 1 out</b> Administrivia, introduction
W, Jan 24	Events and probability spaces (Chapter 1)
F, Jan 26	Events and probability spaces (Chapter 1)
M, Jan 29	<b>HW 1 due, HW 2 out</b> Random variables (Chapter 2)
W, Jan 31	Discrete random variables (Chapter 2)
F, Feb 2	Continuous random variables (Chapter 2)
M, Feb 5	<b>HW 2 due, HW 3 out</b> Joint distributions, Monte-Carlo simulations (Chapter 2)
W, Feb 7	Probability mass functions, independence (Chapter 3)
F, Feb 9	Expectation of a random variable (Chapter 3)
M, Feb 12	<b>HW 3 due, HW 4 out</b> Indicators, some examples (Chapter 3)
W, Feb 14	Joint and conditional distributions (Chapter 3)
F, Feb 16	Random walks (Chapter 3)
M, Feb 19	<b>President's Day: no class.</b>
W, Feb 21	<b>HW 4 due, HW 5 out</b> Continuous r.v.: independence and expectation (Chapter 4)
F, Feb 23	Continuous random variables: examples (Chapter 4)
M, Feb 26	<b>HW5 due, HW 6 out</b> Continuous r.v.: joint distributions (Chapter 4)
W, Feb 28	Continuous r.v.: conditional distributions (Chapter 4)
F, Mar 2	Functions and sums of continuous r.v. (Chapter 4)
M, Mar 5	<b>HW 6 due, HW 7 out, Midterm out (due March 6)</b> Generating functions (Chapter 5)
W, Mar 7	Generating functions (Chapter 5)
F, Mar 9	Generating functions (Chapter 5)
Mar 12-16	<b>Spring break: no class.</b>
M, Mar 19	<b>HW 7 due, HW 8 out</b> Chebyshev's inequality
W, Mar 21	Central limit theorem
F, Mar 23	Central limit theorem
M, Mar 26	<b>HW 8 due, HW 9 out</b> More on the central limit theorem
W, Mar 28	More on the central limit theorem
F, Mar 30	More on the central limit theorem
M, Apr 2	<b>HW 9 due, HW 10 out</b> Markov chains (Chapter 6)
W, Apr 4	Markov chains (Chapter 6)
F, Apr 6	Markov chains (Chapter 6)
M, Apr 9	<b>HW 10 due, HW 11 out</b> Markov chains (Chapter 6)
W, Apr 11	Markov chains (Chapter 6)
F, Apr 13	Markov chains (Chapter 6)
M, Apr 16	<b>HW 11 due, HW 12 out</b> Markov chains or further topics
W, Apr 18	Markov chains or further topics
F, Apr 20	Markov chains or further topics
M, Apr 23	<b>HW 12 due</b> Markov chains or further topics
W, Apr 25	<b>Final out (due April 26)</b> Markov chains or further topics

*Date:* January 10, 2018.