## $\begin{array}{c} \text{MATH 154 - PROBABILITY THEORY, SPRING 2018} \\ \text{TENTATIVE SCHEDULE} \end{array}$

Day	Topic
M, Jan 22	Administrivia, introduction
W, Jan 24	HW 1 out Events and probability spaces (Chapter 1)
F, Jan 26	Events and probability spaces (Chapter 1)
M, Jan 29	Product spaces, worked examples (1.6, 1.7)
W, Jan 31	HW 1 due, HW 2 out Random variables and the law of averages (2.1, 2.2)
F, Feb 2	Discrete and continuous random variables (2.3)
M, Feb 5	Examples, Joint distributions, Monte-Carlo simulations (2.4-2.6)
W, Feb 7	HW 2 due, HW 3 out Probability mass functions, independence (Chapter 3)
F, Feb 9	Expectation of a random variable (Chapter 3)
M, Feb 12	Indicators, some examples (Chapter 3)
W, Feb 14	HW 3 due, HW 4 out Joint and conditional distributions (Chapter 3)
F, Feb 16	Random walks (Chapter 3)
M, Feb 19	President's Day: no class.
W, Feb 21	HW 4 due, HW 5 out Continuous r.v.: independence and expectation (Chapter 4)
F, Feb 23	Continuous random variables: examples (Chapter 4)
M, Feb 26	Continuous r.v.: joint distributions (Chapter 4)
W, Feb 28	HW5 due, HW 6 out Continuous r.v.: conditional distributions (Chapter 4)
F, Mar 2	Functions and sums of continuous r.v. (Chapter 4)
M, Mar 5	Midterm out (due March 6) Generating functions (Chapter 5)
W, Mar 7	HW 6 due, HW 7 out Generating functions (Chapter 5)
F, Mar 9	Generating functions (Chapter 5)
Mar 12-16	Spring break: no class.
M, Mar 19	Chebyshev's inequality
W, Mar 21	HW 7 due, HW 8 out Central limit theorem
F, Mar 23	Central limit theorem
M, Mar 26	More on the central limit theorem
W, Mar 28	HW 8 due, HW 9 out More on the central limit theorem
F, Mar 30	More on the central limit theorem
M, Apr 2	Markov chains (Chapter 6)
W, Apr 4	HW 9 due, HW 10 out Markov chains (Chapter 6)
F, Apr 6	Markov chains (Chapter 6)
M, Apr 9	Markov chains (Chapter 6)
W, Apr 11	HW 10 due, HW 11 out Markov chains (Chapter 6)
F, Apr 13	Markov chains (Chapter 6)
M, Apr 16	Markov chains or selected topics
W, Apr 18	HW 11 due, HW 12 out Markov chains or selected topics
F, Apr 20	Markov chains or selected topics
M, Apr 23	Markov chains or selected topics
W, Apr 25	HW 12 due, Final out (due April 26) Markov chains or selected topics

 $Date \hbox{: January 24, 2018.}$