MATH 154 - PROBABILITY THEORY, SPRING 2018
TENTATIVE SCHEDULE

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 5 out** Random walks (3.9, 3.10)
F, Feb 23	**HW 4 due** Random walks (3.9, 3.10)
M, Feb 26	Continuous r.v.: independence and expectation (Chapter 4)
W, Feb 28	**HW 5 due, HW 6 out** Continuous r.v.: independence and expectation (Chapter 4)
F, Mar 2	Continuous random variables: examples (Chapter 4)
M, Mar 5	**Midterm out (due March 6)** Continuous r.v.: joint distributions (Chapter 4)
W, Mar 7	**HW 7 out** Continuous r.v.: conditional distributions (Chapter 4)
F, Mar 9	**HW 6 due** Functions and sums of continuous r.v. (Chapter 4)
Mar 12-16	**Spring break: no class.**
M, Mar 19	Generating functions (Chapter 5)
W, Mar 21	**HW 7 due, HW 8 out** Generating functions (Chapter 5)
F, Mar 23	Generating functions (Chapter 5)
M, Mar 26	Applications of generating functions (5.2, 5.3)
W, Mar 28	**HW 8 due, HW 9 out** Branching processes (5.4)
F, Mar 30	The limit theorems
M, Apr 2	The limit theorems
W, Apr 4	**HW 9 due, HW 10 out** The limit theorems
F, Apr 6	The limit theorems
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 (Chapter 6)
W, Apr 18	**HW 11 due, HW 12 out** Markov chains (Chapter 6)
F, Apr 20	Markov chains (Chapter 6)
M, Apr 23	Probabilistic algorithms
W, Apr 25	**Final out (due April 26)** Probabilistic algorithms
F, Apr 27	**HW 12 due, extra credit HW due** (no class)