

Course Outline STA347H1

from the private notebook
of
David Brenner

Jan 11, 2023

contact info:

Prof. David Brenner
Hydro Bldg (9th fl)

brenner@utstat.toronto.edu

office: Wed 3-4

lectures:

Wed 1 - 2	SF 1105
Fri 12 - 2	ditto

ref./text:

Brenner, David :
FROM THE PRIVATE NOTE BOOK OF
Illustrated adventures in very (very) mathematical
stochastic modelling & statistical inference, 2004-23

Ash, Robert B. :
BASIC PROB THEORY (1970/2008)

Ross, Sheldon M. :
INTRO TO PROB MODELS (1972/2000/3)

Grimmett, Geoffrey & Stirzaker, David :
PROBABILITY & RANDOM PROCESSES (1982/2004/5)

topics:

caution: all contents subject to shuffling, merging, expansion
& (really serious) modification

- probability, expectation & the LLN;
the CLT & slusky
- the elementary distributions of statistical practice;
binomial, poisson and gaussian processes
- the (extremely) general linear model:
means, variances, correlation & regression;
conditional expectation & the bayes theorem
- moment generating functions, characteristic functions
& the multivariate normal
- probability generating functions, random walks, markov
chains, markov processes and martingales

grading (G) :

test (T) = 40 – Fri. Feb. 17

final (F) = 60 – Apr. 11 - 28

$$G = T + F$$

(NOTE: test T will be held during class time.)